

CURRICULUM VITAE

PROF. DR. ISMAT BEG, CMath.

HEC Distinguished National Professor
Fellow Pakistan Academy of Sciences
Fellow Institute of Mathematics and Its Applications
Fellow International Artificial Intelligent Industry Alliance
Fellow The International Core Academy of Sciences and Humanities



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Web Pages; [School](#), [ResearchGate](#), [Mathscinet](#), [zbMATH](#), [Orcid](#), [Publon](#), [Scopus](#), [GoogleScholar](#)

DISTINCTIONS /SCHOLARSHIPS:

1. Distinguished National Professor, Higher Education Commission, Pakistan.
2. Fellow, Pakistan Academy of Sciences, Pakistan.
3. Fellow, Institute of Mathematics and Its Applications (IMA) - England.
4. Fellow, International Artificial Intelligent Industry Alliance, Hong Kong.
5. Fellow, The International Core Academy of Sciences and Humanities – Hong Kong
6. Senior Member, London Mathematical Society.
7. Honorary Full Professor, Institute for Basic Research, Florida, USA.
8. Chartered Scientist, The Science Council, UK.
9. Chartered Mathematician, UK.
10. Research Productivity Award for the years 2010, 2011 & 2012 from Ministry of Science and Technology, Government of Pakistan for the published research work.
11. Pakistan Academy of Sciences Gold Medal 2008 in the field of Mathematics in recognition of outstanding research work.
12. First prize for published work in Mathematics, Lahore University of Management Sciences, Lahore, Pakistan 2005-6 & 2006-7.
13. First prize from National Book Council of Pakistan, Government of Pakistan, for best published research work in mathematics during the year 1986.

14. Academic Roll of Honor, from Government College, Lahore, Pakistan for the year 1972.
15. Scholarship for Doctorate in Mathematics 1978-1981.

RESEARCH APPOINTMENTS:

1. Higher Education Commission (HEC) Approved Supervisor in Mathematics 1988-now.
2. Fellowship (TWAS, Italy)/Visiting Faculty Member Nankai University, People's Republic of China and Chinese Academy of Sciences (P. R. China) June 27 - August 1, 1987.
3. Visiting Mathematician, International Centre for Theoretical Physics, Trieste (Italy) June 6 - August 1, 1990
4. Group Associate Member, International Centre for Theoretical Physics, Trieste (Italy) 1992-1998.
5. Senior Mathematician, International Centre for Theoretical Physics, Trieste (Italy) Jan. 23 - Feb.3, 1997.
6. Senior Guest Scientist, International Centre for Theoretical Physics, Trieste (Italy) July 26 – Aug 4, 2002.
7. Senior Guest Scientist, International Centre for Theoretical Physics, Trieste (Italy) June 18-26, 2006
8. Member, Institute of Advanced Scientific Research, Irvine, CA, (USA) 2009 – now.

AREAS OF INTEREST:

1. Preference modelling, order, lattices, order algebraic structure
2. Fixed point theory and its applications.
3. Multi-criteria decision making problems.
4. Artificial intelligence, big data analysis
5. Best approximations and expansions.
6. Fuzzy sets and systems

EDUCATION:

1. PhD (Mathematics) 1982 Bucharest University, Bucharest, Romania.
2. MSc (Mathematics) 1972 Punjab University, Lahore, Pakistan.
3. BSc 1970 Punjab University, Lahore, Pakistan.

EXPERIENCE:

1. At Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan.
 - (i) Associate Professor; *Sept. 29, 1991 to Oct.7, 1996.*
 - (ii) Assistant Professor; *Feb. 1, 1984 to Sept. 28, 1991.*
 - (iii) Lecturer; *Jan. 28, 1982 to Jan. 27, 1983.*
2. Associate Professor, Department of Mathematics, Pakistan Naval Engineering College, Karachi (now part of NUST), Pakistan; *Feb. 1, 1983 to Jan. 31, 1984.*
3. At Department of Mathematics, Kuwait University, Kuwait.
 - (i) Professor; *Jan. 18, 1998 to Aug. 31, 2001.*
 - (ii) Associate Professor; *Oct. 9, 1993 to Jan. 17, 1998.*
4. At Lahore University of Management Sciences (LUMS), Lahore, Pakistan.
 - (i). Scientific Director, Centre for Advanced Studies in Mathematics (CASM), School of Science and Engineering, *July 1, 2004 – May 31, 2011.*
 - (ii). Head, Department of Mathematics, School of Science and Engineering, *Aug. 21, 2001 – June 30, 2004.*
 - (iii). Professor, Department of Mathematics, School of Science and Engineering, *Aug. 21, 2001 – May 31, 2011.*
5. Professor & Director, Centre for Applicable Mathematics and Statistics, UCP Business School, University of Central Punjab, Lahore, Pakistan. *July 11, 2011 – April 15, 2013.*
6. Professor, Centre for Mathematics and Statistical Sciences, Lahore School of Economics, Lahore, Pakistan; *April 17, 2013 – Now.*

RESEARCH PROJECTS (completed as Principal Investigator):

1. Fixed point theory and applications, sponsored by Quaid-i-Azam University, research grant No. DFNS /23-2 / 86-860 (1986-87).
2. Fixed point theory and applications, sponsored by Quaid-i-Azam University research grant No. DFNS / 23 - 2/87-1502 (1987-88).
3. Fixed point theory and applications, sponsored by National Scientific Research and Development Board of Pakistan research grant No. M.SC.(5)/QAU/90 (1991-94).
4. Random fixed point theory and its applications, sponsored by Kuwait University research grant No. SM-108 (1994-95).
5. Some random approximation theorems with applications in fixed point theory, sponsored by Kuwait University research grant No. SM-119 (1995-96).

6. Fuzzy ordered relations, sponsored by Kuwait University research grant No. SM-130 (1996-97).
7. Fuzzy multifunctions, sponsored by Kuwait University research grant No. SM-156 (1997-98).
8. Continuous fuzzy multifunctions, sponsored by Kuwait University research grant No. SM - 169 (1998-99).
9. Random multivalued functions, sponsored by Kuwait University research grant No. SM – 03/00 (2000-01).
10. Study of random fixed points, 9 months project grant sponsored by Lahore University of Management Sciences, (2004-05).
11. Fixed point theory and its applications, sponsored by Higher Education Commission, Islamabad (2008-2011) research grant No. 20-918/R&D/07.
12. Judgement aggregation and belief merging in fuzzy setting, sponsored by Higher Education Commission, Islamabad research grant No. 20-1709/NRPU/R&D/HEC/11 (Grant approved in 2011, but not able to avail it as I moved to UCP which was at that time not in HEC approved list).

EDITORSHIP OF JOURNALS:

1. Member, Editorial Board, Gulf Journal of Mathematics (2024-now)
2. Member, Editorial Board, Proceedings of the Pakistan Academy of Sciences - A (2021 – now).
3. Member, Editorial Advisory Board, Topological Algebra and its Applications (2021 – 2023).
4. Associate Editor, Journal of Function Spaces (2020 – now).
5. Member, Editorial Board, Mathematics and Computational Sciences (2020 – now).
6. Member, Editorial Board, Journal of Mathematical Sciences and Modelling (2018 – now).
7. Member, Editorial Board, Journal of Universal Mathematics (2018 – now).
8. Member, Editorial Board, Journal Vojnotehnicki Glasnik (2017 –2020).
9. Member, Editorial Advisory Board, Proceedings of the Pakistan Academy of Sciences (2015 – 2020).
10. Member, Editorial Board, Punjab University Journal of Mathematics (2015 – now).
11. Member, Editorial Board, Frontiers in Applied Mathematics and Statistics: Fixed Point Theory (2015 – 2020).

12. Member, Editorial Board, Journal of Function Spaces (2013 – now).
13. Member, Editorial Board, International Scholarly Research Notices - Probability and Statistics (2012 – 2017).
14. Member, Editorial Board, Financial Mathematics and Applications (2010 – now).
15. Member, Editorial Board, Journal of Advanced Research in Fuzzy and Uncertain Systems (2009 –2019).
16. Member, Editorial Board, Journal of Advanced Research in Pure Mathematics (2009 – 2019).
17. Member, Editorial Board, Scientific World Journal - Mathematical Analysis (2013 – 2016).
18. Member, Editorial Board, Journal of Nonlinear Sciences and its Applications (2008 – 2015).
19. Member, Editorial Board, Journal of Nonlinear Analysis and its Applications (2008 – 2015).
20. Member, Editorial Board, Set-Valued Mathematics and Applications (2007 – now).
21. Member, Editorial Board, International Journal of Mathematics Sciences (2007 –now).
22. Member, Editorial Board, Advances in Fuzzy Mathematics (2006 – now).
23. Member, Editorial Board, Indian Journal of Mathematics (2006 – 2018).
24. Member, Editorial Board, International Journal of Computational Intelligence (2006 – now).
25. Member, Editorial Board, Applied and Computational Mathematics (2010 – 2012)
26. Member, Editorial Board, Journal Applied Mathematics and Stochastic Analysis (2001 – 2005).

SEMINARS/CONFERENCE TALKS/INVITED LECTURES DELIVERED (repeated seminars are excluded):

1. Spaces of Continuous Functions, Faculty of Mathematics, University of Bucharest (Romania) - 1979.
2. Linear Operators on Locally Convex Spaces, Faculty of Mathematics, University of Bucharest (Romania) -1980.
3. Regular Operators on Banach Lattices, Faculty of Mathematics, University of Bucharest (Romania) -1980.
4. Riesz Spaces, Mathematics Department, Quaid-i-Azam University, Islamabad, (Pakistan)- 1982.

5. An Isomorphism Type Theorem, Mathematics Department, Quaid-i-Azam University, Islamabad, (Pakistan)- 1984.
6. Integral Representation of Linear Operators, International Conference on Banach spaces and Classical Analysis, Kent State University (USA) - 1985.
7. Fixed Point Theorems and Their Applications, Mathematics Department, Quaid-i-Azam University, Islamabad, (Pakistan) - 1986.
8. Dual of a Locally Convex Space, All Pakistan Mathematical Conference, Sind University, Hyderabad, (Pakistan) - 1987.
9. Normal Subspaces of Directed Vector Spaces, Mathematics Department, Quaid-i-Azam University, Islamabad, (Pakistan) - 1987.
10. Ultraproduct and Finite Representability of Banach Lattices, Mathematics Department, Quaid-i-Azam University, Islamabad, (Pakistan)-1988.
11. Coincidence Point of Multivalued Mappings, International Conference on Fixed Point Theory, CIRM, Marseille (France) - 1989.
12. Banach Lattices Isometric with AL-spaces, Mathematics Department, Quaid-i-Azam University, Islamabad, (Pakistan) - 1989.
13. Fixed Points and Coincidence Points of Compatible Multivalued Mappings, International Centre for Theoretical Physics / SISSA, Trieste (Italy) - 1990.
14. Banach Type Fixed Point Theorems for Multivalued Mappings, Mathematics Department, Quaid-i-Azam University, Islamabad, (Pakistan) - 1990.
15. Application of Riesz Spaces in Economics, Second Chittagong Conference on Mathematical Economics and its Relevance for Development, Chittagong (Bangladesh) -1990.
16. Application of Functional Analysis in Economics, Second Regional Workshop on Applications of Mathematics, Bahawalpur (Pakistan) - 1992.
17. Mean Value Inequalities, International Centre for Theoretical Physics, Trieste (Italy) - 1993.
18. Random Fixed Points of Random Multivalued Operators, Department of Mathematics and Computer Science, Kuwait University, (Kuwait) - 1993.
19. Extension of Random Operators, Department of Mathematics and Computer Science, Kuwait University, (Kuwait)-1994.
20. Measurable Selections: In Random Approximations and Fixed Point Theory, 47th British Mathematical Colloquium, Edinburgh (UK) - 1995.

21. On Random Best Approximations, Department of Mathematics and Computer Science, Kuwait University, (Kuwait) - 1996.
22. Fuzzy Ordered Relations, International Centre for Theoretical Physics, Trieste (Italy) - 1997.
23. Random Fixed Point Theory, Department of Mathematics and Computer Science, Kuwait University, (Kuwait) - 1998.
24. Fuzzy Multifunctions, Al-Bairuni Forum 99, Kuwait University (Kuwait) - 1999.
25. Some Random Approximation Theorems with Applications, 4th International Conference on Functional Analysis and Approximation Theory, Acquafredda di Maratea, (Italy) - 2000.
26. Convex Structure in Metric Spaces, Department of Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) - 2001.
27. Convolution of Fuzzy Multifunctions and Applications, Conference in Mathematical Analysis and Applications, American University of Sharjah, (UAE) - 2001.
28. Some Applications of Fuzzy Ordered Relations, Summer Workshop and Colloquium on Mathematics, Government College University, Lahore, (Pakistan) - 2002.
29. Fuzzy Set Theory, Department of Mathematics, Government College University, Lahore, (Pakistan) - 2003.
30. Minimal Displacement of Random Variables under Lipschitz Random Maps, The 2003 UAE Mathematics Day, University of Sharjah, (UAE) - 2003.
31. Some Open Problems in Fixed Point Theory, LUMS Mathematics Day - 2003, Lahore University of Management Sciences, Lahore, (Pakistan) – 2003.
32. Impact Factors; Use and Abuse, Department of Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) – 2003.
33. Three Functions of Prices in an Economy, Mathematics Department, Lahore University of Management Sciences, Lahore, (Pakistan) – 2004.
34. Convergence of Iterative Algorithms to Common Random Fixed Points of Random Operators, International Workshop on Operator Theory and its Applications (IWOTA), Newcastle (UK) 2004.
35. Fuzzy and Rough Sets, Summer Workshop in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2004.
36. Fuzzy Relations, Summer Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2005.

37. Fixed Point Theory in Fuzzy Setting, Summer School in Fixed Point Theory, Lahore University of Management Sciences, Lahore, (Pakistan) 2005.
38. Fuzzy Transitive Relations, 27th Linz Seminar on Fuzzy Set Theory, Johannes Kepler University, Linz, (Austria) 2006.
39. Some Open Problems in Fixed Point Theory, International Conference on Mathematics, Quaid-i-Azam University, Islamabad, (Pakistan) 2006.
40. Averaging Operators, Workshop on Fuzzy Sets and Systems, Lahore University of Management Sciences, Lahore, (Pakistan) 2006.
41. Belief Functions and Belief Merging, Workshop on Fuzzy Sets and Systems, Lahore University of Management Sciences, Lahore, (Pakistan) 2006.
42. The Contraction Mapping Principle, Weekly Seminar, Centre for Advanced Studies in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2007.
43. Belief Merging and Belief Conversion, Winter Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2008
44. Fuzzy Mathematics; Methods, Models and Applications, Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore University of Management Sciences, Lahore, (Pakistan) 2009.
45. Fuzzy Logic: the concept of fuzziness, Summer Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2009.
46. Fuzzy Relational Calculus; Summer Undergraduate Research Program'10, Lahore University of Management Sciences, Lahore, (Pakistan) 2010.
47. Set-theoretic aspects of fixed point theory of multivalued operators: open problems, Weekly Seminar, Centre for Advanced Studies in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2010.
48. Nonlinear Operators; Six Selected Problems, Summer Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2010.
49. Three fixed point theorems: Some open problems, International Workshop on Nonlinear Problems in Mathematics, COMSTECH, Islamabad, (Pakistan) 2012.
50. Multi criteria group decision making with Choquet integral based TOPSIS, Second Conference on Mathematical Sciences, International Islamic University, Islamabad (Pakistan) 2013.
51. Intermediate value property and its applications, One Day International Symposia on Pure and Applied Mathematics, University of Sargodha, Sargodha (Pakistan) 2014.

52. Fixed points of multivalued mappings, Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, Lahore, (Pakistan) 2014.
53. Preference modeling in decision making, 1st UMT National Conference on Pure and Applied Mathematics, UMT, Lahore, (Pakistan) 2015.
54. Fuzzy logic in multi-criteria decision analysis, 1st UMT International Conference on Pure and Applied Science, University of Management and Technology, Lahore (Pakistan) 2016.
55. A fuzzy similarity measure, Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, Lahore, (Pakistan) 2017.
56. Beyond happiness: Optimum strategy, National Conference on Mathematical Sciences, International Islamic University, Islamabad, (Pakistan) 2017.
57. Decision making, Weekly Seminar, Department of Mathematics, Government College University, Lahore (Pakistan) 2017.
58. Fixed point, 2017 International Conference on Mathematics and its Applications, Government College University, Lahore (Pakistan) 2017.
59. Nadler's theorem on weak partial metric spaces, One Day Workshop on Nonlinear Analysis and its Application, Government College University, Lahore (Pakistan) 2018
60. Similarity measures for fuzzy sets, 2018 International Conference on Mathematics and its Applications, Government College University, Lahore (Pakistan) 2018.
61. S^{JS} – Metric and topological spaces, the Second International Sharjah Spring School in Mathematics, University of Sharjah, Sharjah (UAE), 2019.
62. LOVE: Human attitude analysis, Seminar, Centre for Mathematics and Statistical Sciences, Lahore School of Economics, Lahore, (Pakistan) 2019.
63. Generalized metric spaces, Workshop on Solution of Mathematical, Computational and Financial Problem for Scientists and Engineers, National College of Business Administration and Economics, Lahore, (Pakistan), 2019.
64. Fixed point, Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, Lahore, (Pakistan) 2019.
65. Analytic hierarchy process, Seminar, Centre for Mathematics and Statistical Sciences, Lahore School of Economics, Lahore, (Pakistan) 2019
66. Dissilient interpersonal influences, 3rd UMT Symposium on Fuzzy Analysis, Decision Making and Soft Sets, University of Management and Technology, Lahore, (Pakistan) 2020.

67. Capricious interpersonal influence theory, International Web Conference on Emerging Areas of Mathematics and Mathematical Sciences (IWCEAMMS-2020), Annual Conference of Calcutta Mathematical Society. Calcutta, (India) 2020.
68. Picking of social networking site, Seminar, Department of Mathematics and Statistical Sciences, Lahore School of Economics, Lahore, (Pakistan) 2021.
69. A discussion on innovative research methodology, Pi-Day Celebrations, Abdus Salam School of Mathematical Sciences, GC University, Lahore (Pakistan) 2022.
70. Modelling interpersonal influences, Zoom Seminar, Department of Mathematics, Yildiz Technical University, Istanbul (Turkey) 2022
71. Polytopic fuzzy sets and their applications, A workshop on Recent trends in Mathematical Analysis, Abdus Salam School of Mathematical Sciences, GC University, Lahore (Pakistan) 2022.
72. Fixed point theory of multivalued mappings, International Conference on Algebra, Mathematical Analysis & Simulation (ICAMAS 2022), Calcutta Mathematical Society, (India) 2022.
73. Core of a convex mixture set and convex functions, Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, Lahore, (Pakistan) 2023.
74. The fractional derivatives, Seminar, Department of Mathematics and Statistical Sciences, Lahore School of Economics, Lahore, (Pakistan) 2023.
75. Beyond happiness: Optimum strategy, Invited talk for Salam Session by LUMS Students' Mathematics Society, Lahore University of Management Sciences, Lahore (Pakistan) 2024
76. Fixed points on partially ordered quasi-metric spaces, Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, Lahore, (Pakistan) 2024.
77. Effective decision making, Mathematics Departments "'Echoes of Excellence'", NAMAL University, Namal (Pakistan) 2025

REVIEWING and REFEREEING:

1. Reviewer, Mathematical Reviews (USA).
2. Reviewer, Zentralblatt Fur Mathematik (Germany)..
3. Refereed, research projects submitted to Kuwait University, Kuwait.

4. Refereed, books submitted for publication to the Executive Bureau of Authorship, Translation and Publications, Kuwait University, Kuwait.
5. Reviewer for The Natural Sciences and Engineering Research Council of Canada (2007-12).
6. Reviewer for the research projects submitted to the Ministry of Science and Technology Development, Serbia (2010).
7. Reviewer for Post Doctoral Fellowship Program Phase-III (Mathematics), Higher Education Commission of Pakistan, Islamabad (2019).
8. Reviewer for National Research Program for Universities (NRPU), Higher Education Commission of Pakistan, Islamabad (2020).
9. Reviewer for grant applications submitted to the Deanship of Scientific Research at King Saud University, Saudi Arabia (2021)
10. *Refereed papers for the following journals:* (i). J. Fuzzy Sets & Systems (The Netherlands) (ii). J. Applied Mathematics & Stochastic Analysis (USA). (iii) J. Mathematical Analysis & Applications (USA). (iv). J. Nonlinear Analysis: Theory Methods & Applications (UK). (v). J. of Positivity (The Netherlands) (vi). J. Information Sciences (USA). (vii). Indian J. Pure & Applied Mathematics (India). (viii). Kuwait J. Science & Engineering (Kuwait). (ix). J. Natural Sciences & Mathematics (Pakistan) (x). Indian J. Mathematics (India). (xi). Revista Tecnica, Maracaibo (Venezuela). (xii). Publicationes Mathematicae Debrecen (Hungary). (xiii). Soochow J. of Mathematics (Taiwan). (xiv). Int. J. of Mathematics & Mathematical Sciences (U.S.A.). (xv). Science in China (P.R.China). (xvi) Italian J. of Pure & Applied Mathematics (Italy). (xvii) Radovi Matematicki. (xviii) Punjab University J. Mathematics (Pakistan). (xix) J. Computational & Applied Mathematics (UK). (xx) Fixed Point Theory (Romania). (xxi) Applied Mathematics Letters (USA). (xxii). Mathematics & Computer with Applications (USA). (xxiii). Fixed Point theory and Applications (USA). (xxiv) Int. J. Math. & Math. Sci. (USA) (xxv) Applications & Applied Mathematics: An Int. J. (USA). (xxvi) Mathematical & Computer Modelling (USA). (xxvii) Mathematical Communications (Czech Republic). (xxviii) Proceedings of the Pakistan Academy of Sciences (Pakistan) (xxix). Applied and Computational Mathematics (Azerbaijan) (xxx). ESAIM Probability & Statistics (xxxi). Advances in Operations Research (xxxii). Soft Computing (xxxiii). Applied Soft Computing

MEMBERSHIP OF PROFESSIONAL SOCIETIES:

1. Senior Member, London Mathematical Society.
2. Member, American Mathematical Society.
3. Member, European Mathematical Society.
4. Member, Asian Council of Science Editors (ACSE)
5. Member, International Federation of Nonlinear Analysts.
6. Member, International Rough Set Society.
7. Chartered Member, Society for Mathematics of Uncertainty.
8. Member, The Creative Decisions Foundation.
9. Member, Belief Functions and Applications Society
10. Member, International Society on Multiple Criteria Decision Making
11. Life Member, Punjab Mathematical Society.
12. Life Member, All Pakistan Mathematical Association.
13. Life Member, Allahabad Mathematical Society.
14. Member, International Computational Intelligence Society.
15. Member, Research Group in Mathematical Inequalities and Applications.
16. Member, EUSFLAT Working group "Intuitionistic Fuzzy Sets: Theory, Applications and Related Topics".

CONFERENCES ATTENDED:

1. Romanian 1st National Symposium on 'Ordered Vector Spaces', Craiova University, (Romania) 1979.
2. Romanian 2nd National Symposium on 'Ordered Vector Spaces', Brasov University, (Romania) 1980.
3. International Conference on Banach Spaces and Classical Analysis, Kent State University, Kent, Ohio, (USA) 1985.
4. All Pakistan Mathematical Conference, Quaid-i-Azam University, Islamabad, (Pakistan) 1985.
5. All Pakistan Mathematical Conference, Sind University, Hyderabad, (Pakistan) 1987.
6. College on Global, Geometric and Topological Methods in Analysis, International Centre for Theoretical Physics, Trieste, (Italy) 1988.
7. International Conference on Fixed Point Theory and its Applications, International Centre for Mathematical Meetings (CIRM), Marseille (France) 1989.

8. Second Chittagong Conference on Mathematical Economics and its Relevance for Development, Chittagong University, (Bangladesh) 1990.
9. Second Regional Workshop on Application of Mathematics, Islamia University, Bahawalpur, (Pakistan) 1992.
10. Workshop on Representation Theory of Lie Groups, International Centre for Theoretical Physics, Trieste, (Italy) 1993.
11. 47th British Mathematical Colloquium, Edinburgh University, (UK) 1995.
12. Recent Advances in Applied Mathematics, Kuwait University, (Kuwait) 1996.
13. Spring School on Functional Analysis - 1996, Paseky, (Czech Republic) 1996.
14. School on the Mathematics in Economics, International Centre for Theoretical Physics, Trieste, (Italy) 1998.
15. Al-Bairuni Forum 99, Kuwait University, (Kuwait) 1999.
16. 4th International Conference on Functional Analysis and Approximation Theory, Acquafredda di Maratea, (Italy) 2000.
17. Conference in Mathematical Analysis and Applications, American University of Sharjah, (UAE) 2001.
18. LUMS Functional Analysis Day, Lahore University of Management Sciences, Lahore, (Pakistan) 2002.
19. Summer Workshop and Colloquium on Mathematics, Government College, Lahore, (Pakistan) 2002.
20. Negotiation Skills Programme, Rausing Executive Development Centre, Lahore University of Management Sciences, Lahore, (Pakistan) 2002.
21. 2002 South and Southeast Asia Regional meeting of Econometric Society, Lahore University of Management Sciences, Lahore, (Pakistan) 2002.
22. The 2003 UAE Mathematics Day, University of Sharjah, (UAE) 2003.
23. LUMS Mathematics Day-2003, Lahore University of Management Sciences, Lahore, (Pakistan) 2003.
24. LUMS Mathematics Day-2004, Lahore University of Management Sciences, Lahore, (Pakistan) 2004.
25. International Workshop on Operator Theory and its Applications (IWOTA), Newcastle (UK) 2004.
26. Summer Workshop in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2004.

27. Winter Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2004.
28. Workshop on Stochastic Calculus, Lahore University of Management Sciences, Lahore, (Pakistan) 2004.
29. Workshop on Particle Physics and The Early Universe, Lahore University of Management Sciences, Lahore, (Pakistan) 2005.
30. Workshop on Computational Number Theory and Cryptography, Lahore University of Management Sciences, Lahore, (Pakistan) 2005.
31. Workshop on Data Mining, Lahore University of Management Sciences, Lahore, (Pakistan) 2005.
32. Summer Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2005.
33. Summer School in Fixed Point Theory, Lahore University of Management Sciences, Lahore, (Pakistan) 2005.
34. Workshop on Leading a Doctoral Mathematics Department in 21st Century, Lahore University of Management Sciences, Lahore, (Pakistan) 2005.
35. LUMS International Conference on Mathematics and its Applications, Lahore University of Management Sciences, Lahore, (Pakistan) 2005.
36. 27th Linz Seminar on Fuzzy Set Theory: Preferences, Games and Decisions, Johannes Kepler University, Linz, (Austria) 2006.
37. Summer Conference in Mathematics, Centre for Advanced Studies in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2006.
38. Workshop on Fuzzy Sets and Systems, Centre for Advanced Studies in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2006.
39. International Conference in Mathematics, Quaid-i-Azam University, Islamabad, (Pakistan) 2006.
40. Winter Conference in Mathematics, Centre for Advanced Studies in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2006.
41. Learning Technologies and Mathematics Middle East Conference, Sultan Qaboos University, Muscat, (Oman) 2007.
42. Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore University of Management Sciences, Lahore, (Pakistan) 2007.
43. Summer Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2007.

44. All Pakistan Mathematical Conference, Pakistan Academy of Sciences, (Pakistan) 2007.
45. Conference on What Counts as an Educated Individual in This Day and Age, Lahore University of Management Sciences, Lahore, (Pakistan) 2008.
46. Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore University of Management Sciences, Lahore, (Pakistan) 2008.
47. Summer Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2008.
48. Winter Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2008.
49. Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore University of Management Sciences, Lahore, (Pakistan) 2009.
50. Summer Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2009.
51. Winter Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2010.
52. Conference on Recent Advances in Mathematical Methods, Models and Applications Lahore University of Management Sciences, Lahore, (Pakistan) 2010.
53. Summer Conference in Mathematics, Lahore University of Management Sciences, Lahore, (Pakistan) 2010.
54. Conference on Recent Advances in Mathematical Methods, Models and Applications Lahore University of Management Sciences, Lahore, (Pakistan) 2011.
55. Eighth Annual Conference on Management of Pakistan Economy, Lahore School of Economics, Lahore, (Pakistan) 2012.
56. International Workshop on Nonlinear Problems in Mathematics, COMSTECH, Islamabad, (Pakistan) 2012
57. Conference on Recent Advances in Mathematical Methods, Models and Applications University of Central Punjab, Lahore, (Pakistan) 2013.
58. Second Conference on Mathematical Sciences, International Islamic University, Islamabad (Pakistan) 2013.
59. One Day International Symposia on Pure and Applied Mathematics, University of Sargodha, Sargodha (Pakistan) 2014.
60. Conference on Recent Advances in Mathematical Methods, Models and Applications Lahore School of Economics, Lahore, (Pakistan) 2014.

61. National Science Conference, International Centre for Chemical and Biological Sciences, University of Karachi, Karachi (Pakistan) 2014.
62. Cross-Disciplinary Research Conference: Emerging Perspective for Research in Social Sciences, Management and ICT, Global Institute, Lahore (Pakistan) 2014.
63. First Annual Conference of Centre for Mathematics and Statistical Sciences, Lahore School of Economics, Lahore, (Pakistan) 2015.
64. 1st UMT National Conference on Pure and Applied Mathematics, U M T, Lahore, (Pakistan) 2015.
65. Conference on Recent Advances in Mathematical Methods, Models and Applications Lahore School of Economics, Lahore, (Pakistan) 2015.
66. International Conference on Recent Advances in Applied Mathematics, C I I T , Lahore (Pakistan) 2015.
67. Ist UMT International Conference on Pure and Applied Science, U M T, Lahore (Pakistan) 2016.
68. Conference on Recent Advances in Mathematical Methods, Models and Applications Lahore School of Economics, Lahore, (Pakistan) 2016
69. Understanding Salam, Abdus Salam School of Mathematical Sciences, G C University, Lahore, (Pakistan) 2017.
70. Conference on Recent Advances in Mathematical Methods, Models and Applications Lahore School of Economics, Lahore, (Pakistan) 2017.
71. National Conference on Mathematical Sciences, International Islamic University, Islamabad, (Pakistan) 2017.
72. International Conference on Mathematics and its Applications, Government College University, Lahore (Pakistan) 2017.
73. Conference on Recent Advances in Mathematical Methods, Models and Applications Lahore School of Economics, Lahore, (Pakistan) 2018.
74. One Day Workshop on Nonlinear Analysis and its Application, Government College University, Lahore (Pakistan) 2018.
75. 2018 International Conference on Mathematics and its Applications, Government College University, Lahore (Pakistan) 2018.
76. The Second International Sharjah Spring School in Mathematics, University of Sharjah, Sharjah (UAE), 2019

77. Workshop on Solution of Mathematical, Computational and Financial Problem for Scientists and Engineers,, National College of Business Administration and Economics, Lahore, (Pakistan), 2019.
78. Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, Lahore, (Pakistan) 2019
79. 3rd UMT Symposium on Fuzzy Analysis, Decision Making and Soft Sets, University of Management and Technology, Lahore, (Pakistan) 2020.
80. International Online Workshop on “New Trends in Fuzzy and Rough Set Theory and its Applications”, Department of Mathematics and Statistics, Manipal University Jaipur, (India) 2020.
81. Black Heroes of Mathematics Conference, British Society for The History of Mathematics, (UK) 2020
82. A workshop on Recent trends in Mathematical Analysis, Abdus Salam School of Mathematical Sciences, GC University, Lahore (Pakistan) 2022.
83. Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, Lahore, (Pakistan) 2023
84. Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, Lahore, (Pakistan) 2024
85. 11th Annual Conference of the Asian Council of Science Editors (ACSE), (UAE) 2025

CONFERENCES / WORKSHOPS / SCHOOLS ORGANIZED:

1. Member, Conference Committee, All Pakistan Mathematical Conference, Islamabad, Pakistan 1985.
2. Member, Organizing Committee, International Conference on Probability and Statistics, Islamabad, Pakistan 1991.
3. Member (i) International Scientific Committee and (ii) International Finance Committee, Fourth Islamic Countries Conference on Statistical Sciences (August 27-31, 1994) Lahore, Pakistan.
4. Member, International Program Committee of 8th Fuzzy Theory and Technology Conference (March 8-14, 2002), Durham, North Carolina, USA.
5. Organized, LUMS Functional Analysis Day, March 9, 2002, Lahore University of Management Sciences, Lahore, Pakistan.

6. Member, International Program Committee, the International Conference on Computational Intelligence (ICCI '2004) February 11-13, 2004, Canakale Onsekiz Mart University, Canakkale, Turkey.
7. Convener, Organizing Committee, Summer Workshop in Mathematics (August 16-20, 2004), Lahore University of Management Sciences, Lahore, Pakistan.
8. Member, International Program Committee of 10th International Conference on Fuzzy Theory and Technology (July 21-26, 2005), Salt Lake City, Utah, USA.
9. Convener, Organizing Committee, Winter Conference in Mathematics (December 3-4, 2004), Lahore University of Management Sciences, Lahore, Pakistan.
10. Organized Workshop on Particle Physics and the Early Universe (April 2-3, 2005), Lahore University of Management Sciences, Lahore, Pakistan.
11. Organized Summer School in Fixed Point Theory (Aug. 1-7, 2005), Lahore University of Management Sciences, Lahore, Pakistan.
12. Member, Organizing Committee, Workshop on Leading a Doctoral Mathematics Department in 21st Century” (September 24-25, 2005), Lahore University of Management Sciences, Lahore, Pakistan.
13. Member, Organizing Committee, LUMS International Conference on Mathematics (Nov. 27-30, 2005), Lahore University of Management Sciences, Lahore, Pakistan.
14. Organized Workshop on Financial Mathematics (Dec. 24-25, 2005), Lahore University of Management Sciences, Lahore, Pakistan.
15. Member, Program Committee, 11th International Conference on Fuzzy Theory and Technology (FTT) (Oct 8-11, 2006), Taiwan, China.
16. Organized Workshop on Randomness and Cryptography (April 29-30, 2006), Lahore University of Management Sciences, Lahore, Pakistan.
17. Organized Workshop on Mathematics of Risk Management (Nov. 28-29, 2006), Lahore University of Management Sciences, Lahore, Pakistan.
18. Organized Workshop on Fuzzy Sets and Systems (June 10-11, 2006), Lahore University of Management Sciences, Lahore, Pakistan.
19. Organized Workshop on Data Analysis (March 10-11, 2007), Lahore University of Management Sciences, Lahore, Pakistan.
20. Organized Workshop on Intelligent Data Analysis Methods in Functional Genomics (March 17-18, 2007), Lahore University of Management Sciences, Lahore, Pakistan.

21. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 28-29, 2007), Lahore University of Management Sciences, Lahore, Pakistan.
22. Member, Scientific Committee, 3rd National Conference on Statistical Sciences (May 28-29, 2007), NUES-FAST, Lahore, Pakistan.
23. Member Organizing Committee, All Pakistan Mathematical Conference (June 7-9, 2007), Pakistan Academy of Sciences, Islamabad, Pakistan.
24. Organized a workshop on Innovative Teaching Methodologies for Mathematics and Science Teachers (August 20-21, 2007), Lahore University of Management Sciences, Lahore, Pakistan.
25. Member Organizing Committee, Conference on What Counts as an Educated Individual in This Day and Age (April 18-19, 2008), Lahore University of Management Sciences, Lahore, Pakistan.
26. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 26-27, 2008), Lahore University of Management Sciences, Lahore, Pakistan.
27. Member, Program Committee, 13th International Conference on Fuzzy Theory and Technology (FT&T) (Dec. 15-20, 2008), Harbin Institute of Technology, Shenzhen, China
28. Member, Advisory Committee Fifth International Conference on Statistical Sciences, (Jan. 23-25, 2009), NCBA&E, Lahore, Pakistan
29. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 18-19, 2009), Lahore University of Management Sciences, Lahore, Pakistan.
30. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 17-18, 2010), Lahore University of Management Sciences, Lahore, Pakistan.
31. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 16-17, 2011), Lahore University of Management Sciences, Lahore, Pakistan.
32. Member Conference Executive Committee, 2nd International Conference on Contemporary Issue in Business Management (July 4-6, 2012), University of Central Punjab, Lahore, Pakistan.

33. Member Scientific Committee, International Conference on Nonlinear Modeling & Optimization (August 28-29, 2012), Shomal University, Amol, Iran.
34. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 13-14, 2013), University of Central Punjab, Lahore, Pakistan.
35. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 19-20, 2014), Lahore School of Economics, Lahore, Pakistan.
36. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 11-12, 2015), Lahore School of Economics, Lahore, Pakistan
37. Member Scientific Committee, 2nd International Intuitionistic Fuzzy Sets Conference (October 14-18, 2015), Mersin, Turkey.
38. Member, International Advisory Board, Ist UMT International Conference on Pure and Applied Science (March 05-07, 2016), UMT Lahore (Pakistan) 2016.
39. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 09-10, 2016), Lahore School of Economics, Lahore, Pakistan.
40. Member Scientific Committee, 3th International Intuitionistic Fuzzy Sets Conference (August 29 – September 01, 2016), Mersin, Turkey.
41. Member Technical Committee, SAI Intelligent Systems Conference 2016, (September 21-22, 2016), London, UK.
42. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 08-09, 2017), Lahore School of Economics, Lahore, Pakistan.
43. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 07-08, 2018), Lahore School of Economics, Lahore, Pakistan
44. Member Scientific Committee, 5th International IFS and Contemporary Mathematics Conference (IFSCOM2018) (September 05–09, 2018), Kahramanmaraş, Turkey.
45. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, (April 13-14, 2019), Lahore, (Pakistan) .

46. Member International Scientific Advisory Committee, Twenty-Eight International Conference of FIM on Interdisciplinary Mathematics, Statistics and Computational Intelligence Techniques (IMSCIT-2019), University of Chile, Santiago, Chile (19-21 November 2019).
47. Member Advisory Committee, 1st International Conference on Mathematical Modeling, Computational Intelligence Techniques and Renewable Energy, Pandit Deendayal Petroleum University, India (February 21-23rd, 2020).
48. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications (April 11-12, 2020), Lahore School of Economics, Lahore, Pakistan
49. Member Scientific Committee, International Conference of Analysis and Its Applications (ICAA_Nepal_2020), Kathmandu University, Nepal (May 29 –31, 2020).
50. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, (March 4-5, 2023), Lahore, (Pakistan) .
51. Member Organizing Committee, Conference on Recent Advances in Mathematical Methods, Models and Applications, Lahore School of Economics, (March 2-3, 2024), Lahore, (Pakistan) .

TEACHING and SUPERVISION:

A. Taught the following courses

Undergraduate

(i) Calculus, (ii) Linear Algebra, (iii) Set Theory, (iv) Foundation of Modern Mathematics, (v) Finite Mathematics, (vi) Fuzzy Mathematics, (vii) Real Analysis, (viii) General Topology, (ix) Functional Analysis, (x) Ordinary Differential Equations, (xi) Complex Variables, (xii) Statistics.

Graduate

(i) Real Analysis, (ii) Functional Analysis, (iii) General Topology, (iv) Measure Theory, (v) Topological Vector Spaces, (vi) Ordered Vector Spaces, (vii) Banach Lattices, (viii) Fixed Point Theory, (ix) Set Valued Analysis, (x) Best Approximations.

B. Graduate Students Supervised

HEC APPROVED PhD supervisor

Advisees

1. Ayesha Syed, Fuzzy Judgement Aggregation: Methods Based on Distance – 2016
MPhil
2. Tabasam Rashid, Multi-criteria Decision Making with Choquet Integral , 2015 PhD
3. Dr. Shams-ur-Rehman, Fixed Point on Fuzzy Metric/Normed Spaces, 2013, PhD
4. Dr. Asif Jamshed, 2010-11, Post Doc.
5. Dr. Asma Rashid Butt, 2010-11, Post Doc.
6. Asma Rashid Butt, Fixed Point of Set Valued Maps, 2010, PhD
7. Dr. Osinuga Idowu Ademola, 2010, Post Doc.
8. Dr. Khalid Mahmood Aamir, 2009-10, Post Doc.
9. Dr. Memudu Olaposi Olatinwo, 2009-10, Post Doc.
10. Dr. Samina Ashraf, 2009-10, Post Doc.
11. Dr. Kunle Oladeji Babalola, 2008-09, Post Doc.
12. Dr. Sarmad Abbasi, 2008-09, Post Doc.
13. Samina Ashraf, Fuzzy Relations, 2008, PhD
14. Dr. Tirivanhu Chinyoka, 2007-08, Post Doc.
15. Dr. Raouf Ghomrasni, 2006-07, Post Doc.
16. Mujahid Abbas, Solution of Random Operator Equations and Inclusions, 2005, PhD
17. Misbah-ul-Islam, Fuzzy Riesz Spaces, 1994, MPhil
18. Rashid Ali, Study of Probabilistic Spaces, 1994, MPhil
19. Naseer Shahzad, Random Fixed Points and Approximations, 1995, PhD
20. Muhammad Arshad, Fuzzy Almost Linear Sapces, 1993, MPhil
21. Farhat Bashir, Approximation in Probabilistic Normed Spaces, 1993, MPhil
22. Akbar Azam, Fixed Points of Mutivalued Maps, 1992, PhD
23. Muhammad Iqbal, Hahn-Banach Type Theorems for 2-Normed Spaces, 1992, MPhil
24. Naseer Shahzad, On Random Fixed Point Theorems and Applications , 1992, MPhil
25. Shafiq-ur-Rehaman, Fixed Point Theorems in Probabilistic Metric Spaces, 1991, MPhil
26. Tahira Yasmeen Minhas, Fixed Point Theorems for Generalized Contractions, 1989,
MPhil
27. Faryad Ali, Fixed Point Theorems in Vector Lattices, 1989, MPhil.

28. Nadeem Raza, Integral Representation of Linear Operators, 1987, MPhil.

29. Akbar Azam, Fixed Point Theorems, 1986, MPhil.

MEMBERSHIP OF COMMITTEES and HONORARY POSITIONS:

1. Member, Executive Council, Academic Staff Association, Quaid-i-Azam University, Islamabad, Pakistan (1982-83 & 1984-85).
2. Coordinator, Pre-print Series, Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan (1985-1987).
3. Professor Chuan-Gan Hu, Nankai University (PR China) visited me in (1988) on TWAS-fellowship.
4. Coordinator, Seminar Series, Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan (1988-1990).
5. Professor Gong Weibang, Chairman, Mathematics Department, Qufu Normal University (PR China) visited me in 1989 on TWAS-fellowship.
6. Associate Member, Third World Organization of Women in Sciences, Trieste, Italy (1990-2000).
7. Member, Graduate Committee, Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan (1990-1992).
8. Student Advisor (Academic), Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan (1990-1993).
9. Member, Board of Studies, Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan (1991-1993).
10. Member, Board of Faculty of Natural Sciences, Quaid-i-Azam University, Islamabad, Pakistan (1991-1993).
11. Acting Chairman, Department of Mathematics, Quaid-i-Azam University, Islamabad, Pakistan (June - September 1992).
12. Member Curriculum Committee, Department of Mathematics and Computer Science, Kuwait University, Kuwait (1993-1997).
13. My biography is included in (i). Marquis Who's Who in the world [15th Edition] for 1998. (ii). International Who's Who of Contemporary Achievement (Fourth Edition) [ABI]. (iii). International Directory of Distinguished Leadership (6) (1996).
14. Member Library & Text Books Committee, Department of Mathematics and Computer Science, Kuwait University, Kuwait (1998-1999).

15. Member Seminar Committee, Department of Mathematics and Computer Science, Kuwait University, Kuwait (1999-2000).
16. Member, Committee to study the possibility of starting double major in Mathematics and Economics, Department of Mathematics and Computer Science, Kuwait University, Kuwait (1999 – 2000).
17. Member, Committee to study the possibility of opening a new Master Program in Financial Mathematics, Department of Mathematics and Computer Science, Kuwait University, Kuwait (1999-2000).
18. Member, Comprehensive Exam Committee for graduate class, Department of Mathematics and Computer Science, Kuwait University, Kuwait (2000-2001).
19. Member, Faculty Appointment and Promotion Committee, Lahore University of Management Sciences, Lahore, Pakistan (2001 – 2004).
20. Member, BSc (Honors) Admission Committee, Lahore University of Management Sciences, Lahore, Pakistan (2001 – 2004).
21. Member, Steering Committee, School of Arts and Sciences, Lahore University of Management Sciences, Lahore, Pakistan (2001 – 2004).
22. Member, Academic Planning and Co-ordination Forum, Lahore University of Management Sciences, Lahore, Pakistan (2001 – 2004).
23. Member, Research Committee, Lahore University of Management Sciences, Lahore, Pakistan (2001 – 2003).
24. Participated in workshop on establishment of "School of Mathematical Sciences" (Sept. 22, 2001), Government College, Lahore, Pakistan.
25. Member, Committee for establishment of School of Mathematical Sciences, Government of Punjab, Lahore, Pakistan (2001 – 2002).
26. Convener, subcommittee on LUMS Press, Lahore University of Management Sciences, Lahore, Pakistan (2002).
27. Member, Board of Studies (Department of Mathematics), COMSATS Institute of Information Technology, Islamabad, Pakistan (2002 - 2008).
28. Member, Board of Governors, School of Mathematical Sciences, Lahore, Pakistan (2002 – 2004).
29. Member (expert), Selection Board, Government College, Lahore, Pakistan (2002).
30. Member, Administrative Planning Committee, Lahore University of Management Sciences, Lahore, Pakistan (2002 – 2004).

31. Member, Committee on Research and Teaching Model, Lahore University of Management Sciences, Lahore, Pakistan (2002 - 2003).
32. Member, Search Committee for Head Economics Department, Lahore University of Management Sciences, Lahore, Pakistan (2003).
33. Convener, Mathematics Graduate Committee, Lahore University of Management Sciences, Lahore, Pakistan (2003 – 2006).
34. Convener/member, PhD (Mathematics) Interview Committee, Lahore University of Management Sciences, Lahore, Pakistan (Convener 2003, 2004, 2006; member 2005, 2007, 2008, 2009).
35. Member, Pakistan Academy of Sciences Committee for Pakistan's membership in International Mathematical Union (IMU) (2004- 2005).
36. Focal Person, for federation agreement between International Centre for Theoretical Physics, Trieste, Italy and LUMS (2004 - 2011).
37. Member, Board of Studies for Mathematics, Balochistan University of Information Technology and Management Sciences, Quetta, Pakistan (2004- 2005).
38. Convener, LUMS Research Culture Committee to study initiative to develop research culture at Lahore University of Management Sciences, Lahore, Pakistan (2004).
39. Member, Scientific Council, Centre for Advanced Studies in Mathematics, Lahore University of Management Sciences, Lahore, Pakistan (2004 – 2011).
40. Member, Friends of Centre for Advanced Studies in Mathematics, Lahore University of Management Sciences, Lahore, Pakistan (2004 – 2011).
41. Member, Postgraduate Research Committee, Department of Mathematics, University of Engineering and Technology, Lahore, Pakistan (2004 – 2006).
42. Member, Disciplinary Appeals Committee (DAC), Lahore University of Management Sciences, Lahore, Pakistan (2004-2006).
43. Acting Dean, School of Arts and Sciences, Lahore University of Management Sciences, Lahore, Pakistan (July 2005).
44. Convener, Disciplinary Appeals Committee (DAC), Lahore University of Management Sciences, Lahore, Pakistan (2006).
45. Member, Dean's Council, School of Science and Engineering, Lahore University of Management Sciences, Lahore, Pakistan (2006 - 07).
46. Acting Head, Mathematics Department, Lahore University of Management Sciences, Lahore, Pakistan (July-August, 2006).

47. Member, Adhering Committee for Mathematics, Pakistan Academy of Sciences which represents Pakistan in International Mathematical Union (2006 - 2012).
48. Member, Faculty Search Committee, Mathematics Department, Lahore University of Management Sciences, Lahore, Pakistan (2006 - 2011).
49. Member, Mathematics Graduate Committee, Lahore University of Management Sciences, Lahore, Pakistan (2006 – 2011).
50. Member, Founding Steering Committee, Consortium of Universities for Research and Graduate Education (COURAGE), Kent State University, Ohio, USA (2007- now)
51. Vice President, All Pakistan Mathematical Association 2007-08.
52. Focal Person, for TWAS-UNESCO fellowship agreement between Academy of Sciences for Developing Countries, Trieste, Italy and LUMS (2007 - 2011).
53. Member, Graduate Committee, National University of Emerging Sciences - FAST, Lahore, Pakistan (2007-09).
54. Member, Board of Advanced Studies and Research, Department of Mathematics, Lahore University of Management Sciences, Lahore, Pakistan (2008).
55. Member, Undergraduate Admissions Committee, Lahore University of Management Sciences, Lahore, Pakistan (2009)
56. Member, Chairman Mathematics Search Committee, Lahore University of Management Sciences, Lahore, Pakistan (2009).
57. Member, Committee on the Status of Mathematics Major (BA/BSc), Lahore University of Management Sciences, Lahore, Pakistan (2010).
58. Knight, WWF - Pakistan (2010 - now).
59. Member, Convocation Committee, Lahore University of Management Sciences, Lahore, Pakistan (2011).
60. Subject Expert, Board of Studies in Mathematics, International Islamic University, Islamabad, Pakistan (2010 - now).
61. Member, Expert Committee (Mathematics), Pakistan Academy of Sciences, Islamabad, Pakistan (Biennium 2011- 2112 & 2113-2114).
62. Member, Academic Council, University of Central Punjab, Lahore, Pakistan (2011- 2013).
63. Member, Selection Committee, Faculty of Management Studies, University of Central Punjab, Lahore, Pakistan (2012 - 2013).
64. Member, Graduate Research Committee, Faculty of Management Studies, University of Central Punjab, Lahore, Pakistan (2012 - 2013).

65. Member, Assessment and Evaluation Committee, Faculty of Management Studies, University of Central Punjab, Lahore, Pakistan (2012 - 2013).
66. Member, Academic Committee, Lahore School of Economics, Lahore, Pakistan (2013 – now).
67. Member, Board of Studies of Center of Mathematics and Statistics, Lahore School of Economics, Lahore, Pakistan (2016 – now).
68. Member, Board of Faculty of Basic Sciences, Lahore School of Economics, Lahore, Pakistan (2018 – now).
69. Member, Tenure Review Committee, Department of Mathematics, Government College University, Lahore, Pakistan (2018 – now).
70. Reviewer for Post Doctoral Fellowship Program Phase-III (Mathematics), Higher Education Commission of Pakistan, Islamabad (2019).
71. Subject Member Selection Board, Government College University, Lahore (2019).
72. Domain Expert for Selection Board, Virtual University of Pakistan, (2019).
73. Member, Tenure Review Committee, Department of Mathematics, Lahore College for Women University, Lahore, Pakistan 2020 – 2021).
74. Reviewer for National Research Program for Universities (NRPU), Higher Education Commission of Pakistan, Islamabad (2020).
75. Reviewer for grant applications submitted to the Deanship of Scientific Research at King Saud University, Saudi Arabia (2021)
76. Reviewer for Post Doctoral Fellowship Program Phase-III (Batch 2) (Mathematics), Higher Education Commission of Pakistan, Islamabad (2021).
77. Reviewer for National Research Program for Universities (NRPU), Higher Education Commission of Pakistan, Islamabad (2021).
78. Reviewer for the Full Project Proposal Stage under the National Research Program for Universities (NRPU), Higher Education Commission of Pakistan, Islamabad (2022).

BOOKS/CHAPTERS:

1. *Book chapter; Cubic Analytic Hierarchy Process with application in decision making. Book Chapter in Decision Making under Uncertainty via Optimization, Modelling and Analysis.* (Edited by Laxminarayan Sahoo, Tapan Senapati and Ronald R. Yager) Studies in Systems, Decision and Control, book series 558 . Publisher Springer

- 2025** (co-authors M. Gulistan and M. Asif). https://doi.org/10.1007/978-981-96-0085-4_10
2. *Book chapter*; Interval-valued intuitionistic hesitant uncertain linguistic set and Choquet integral based TOPSIS method to MCGDM problems, Book Chapter in *Decision Making and Decision Support in the Information and AI Era - Dedicated to Academician Florin Gheorghe Filip* (Edited by Valentina Emilia Balas, Gintautas Dzemyda, Smaranda Belciug and Janusz Kacprzyk) Studies in Systems, Decision and Control, book series 534. Publisher Springer **2024** (co-authors D.K. Joshi and S. Kumar) https://doi.org/10.1007/978-3-031-62158-1_18.
 3. *Book chapter*; Bilevel Approach for E-Bidding auction with Regret Theory, Book Chapter in *Real Life Applications of Multiple Criteria Decision-Making Techniques in Fuzzy Domain* (Edited by Laxminarayan Sahoo, Tapan Senapati and Ronald R. Yager) ISBN 978-981-19-4928-9 Studies in Fuzziness and Soft Computing Series. Publisher Springer Nature Singapore Pte Ltd. **2023** (co-authors T. Rashid and A. Mehboob). https://doi.org/10.1007/978-981-19-4929-6_15
 4. *Book chapter*; A study of neutrosophic cubic finite state machines, subsystems and applications, Book Chapter in *Neutrosophic Operational Research: Methods and Applications*. (Edited by Florentin Smarandache and Mohamed A. Baset) ISBN 978-3-030-57197-9 (Chapter 24, 519-558) Publisher: Springer Nature Switzerland **2021** (co-authors M. Gulistan and M.J. Abbasi).
 5. *Book*; Solution of Random Operator Equations and Inclusions (ISBN 978-3-8443-1013-9), Lambert Academic Publisher, Germany **2011** (co author M. Abbas).
 6. *Book*; Fixed Points of Set Valued Maps (ISBN 978-3-8433-6652-6), Lambert Academic Publisher, Germany **2010** (co author A.R. Butt).
 7. *Book*; Fuzzy Relations (ISBN 978-3-8383-2069-4), Lambert Academic Publisher, Germany **2009** (co author S. Ashraf).
 8. *Book chapter*; Inequalities and fixed points in Menger convex metric spaces, Book Chapter in *Fixed Point Theory and Applications* Vol. 7 (ISBN 13 978-1-59454-877-2) (chapter II, pp. 5-15) (editors: Yeol Je Cho, Jong Kyu Kim and Shin Min Kang), Nova Science Publishers, Inc., New York, **2007** (co author M. Abbas).

RESEARCH PUBLICATIONS (in refereed professional journals):

1. I. Beg: Representation of (no)-continuous linear operators on the space $L_\mu(T, X)$, Annal. Univ. Bucuresti, (Mat)., 32(1983), 3-8.
2. I. Beg and A. Azam: A fixed point theorem for nonlinear mappings on convex metric spaces, Math. Stud., 51(1-4) (1983), 246-248.
3. I. Beg and G. Grigore: Representation of (no)-bounded linear operators on a measure space, Bull. Math. Soc. Sci. Math. Roumanie, 28 (76) (3) (1984), 227-234.
4. I. Beg: Representation of bounded operators by Hellinger integral, Honam Math. J., 7(1) (1985), 1-6.
5. I. Beg: Integral representation of bounded operators on the space $L_\mu^2(T, X)$, Indian J. Math., 28(1) (1986), 9-17.
6. I. Beg and A. Azam: Fixed point theorems for Kannan mappings, Indian J. Pure Appl. Math., 17(11) (1986), 1270-1275.
7. I. Beg and G. Grigore: A theorem of isomorphism type, Boll. Unione Matematica Italiana, (6) 5-A (3) (1986), 331-334.
8. I. Beg and A. Azam: On Kannan mappings, J. Natur. Sci. Math., 27(2) (1987), 17-21.
9. I. Beg and A. Azam: Fixed points on star-shaped subsets of convex metric spaces, Indian J. Pure Appl. Math., 18(7) (1987), 594-596.
10. D. Vuza, I. Beg and I. M. Popovici: Normal subspaces of directed vector spaces, Punjab Univ. J. Math., 21(1988), 65-69.
11. I. Beg and A. Azam: Existence of fixed points of nonlinear mappings, J. Natur. Sci. Math., 29(2) (1989), 149-158.
12. I. Beg and I. M. Popovici: Ultraproduct and finite representability of Banach lattices, Math. Japonica, 34(2) (1989), 163-167.
13. I. Beg and A. Azam: Fixed point theorems in normed spaces, Annal. Soc. Sci. Bruxelles, 104(I) (1990), 25-30.
14. I. Beg and A. Azam: Fixed points of multivalued locally contractive mappings. Boll. Unione Matematica Italiana, (7) 4-A (1990), 227-233.
15. C. G. Hu and I. Beg: Cauchy-Stieltjes integral in locally convex spaces, Complex Variables: Theory and Application, 15(3) (1990), 233-239.
16. I. Beg and T.Y. Minhas: A convexity in 2-metric spaces and nonexpansive mappings, Math Japonica, 36(1) (1991), 105-112.
17. I. Beg, A. Azam, F. Ali and T. Minhas: Some fixed point theorems in convex metric spaces, Rendiconti, Circolo Matematico Di Palermo, XL (2) (1991), 307-315.

18. I. Beg and A. Azam: Fixed points of asymptotically regular multivalued mappings, J. Austral. Math. Soc., (Series-A) 53(3) (1992), 313-326.
19. I. Beg, S. Rehman and N. Shahzad: Fixed Points of generalized contraction mappings on probabilistics metric spaces, Pak. J. Stat., 8(2) (1992), 35 – 52.
20. I. Beg, F. Ali and T.Y. Minhas: Fixed points theorems for 2-metric spaces, "Research Seminar" of Babes-Bolyai University "Seminar on Fixed Point Theory" (ed. I.A. Rus) 3(1992), 7-17.
21. I. Beg, N. Shahzad and M. Iqbal: Fixed point theorems and best approximation in convex metric spaces, Approx. Theory and its Appl., 8(4) (1992), 97-105.
22. I. Beg and N. Shahzad: Random fixed point theorems on product spaces, J. App. Math. Stochastic Anal., 6(2) (1993), 95-106.
23. I. Beg and A. Azam: Coincidence points of multivalued mappings, Punjab Univ. J. Math., (XXVI) (1993), 49-53.
24. I. Beg and M. Iqbal: Extension of linear 2-operators, J. Mathematica Montisnigri, 2(1993), 1-10.
25. I. Beg and F. Ali: Fixed points in vector lattices for generalized contractions, Punjab Univ. J. Math., XXVI (1993), 63-74.
26. I. Beg and N. Shahzad: Random fixed points of random multivalued operators on Polish spaces, Nonlinear Analysis: Theory, Methods & Applications, 20(7) (1993), 835 - 847.
27. I. Beg and A. Azam: Mean value inequalities and some fundamental results of calculus, Austral. Math. Soc., Gazette, 20(3) (1993), 73-79.
28. I. Beg and N. Shahzad: Random fixed points and approximations in random convex metric spaces, J. App. Math. Stochastic Anal., 6(3) (1993), 237-246.
29. I. Beg and N. Shahzad: An application of a fixed point theorem to best simultaneous approximation, Approx. Theory and its Appl., 10(3) (1994), 1-4.
30. I. Beg and M. Islam: Fuzzy Riesz spaces, J. Fuzzy Math., 2(1) (1994), 211-229.
31. I. Beg and N. Shahzad: Random approximations and random fixed point theorems, J. App. Math. Stochastic Anal., 7(2) (1994), 145-150.
32. I. Beg and N. Shahzad: Random fixed point theorems for nonexpansive and contractive type random operators on Banach spaces, J. App. Math. Stochastic Anal., 7(4) (1994), 569-580.
33. I. Beg and A. Azam: On iteration methods for multivalued mappings, Demonstratio Mathematica, 27(2) (1994), 493 - 499.

34. O. Sandru, I. Beg and I. M. Popovici: Banach lattices λ -lattice isometric with abstract Lp-spaces, Boll.Unione Matematica Italiana, (7) 8-A(2) (**1994**),153-155.
35. A. Latif, T. Husain and I. Beg: Fixed point of nonexpansive type and K-multivalued maps, Internat J. Math. & Math. Sci., 17(3) (**1994**), 429-436.
36. I. Beg and N. Shahzad: Random fixed points for random multivalued operators defined on unbounded sets in Banach spaces, Stochastic Anal. Appl., 13(3) (**1995**), 269-277.
37. I. Beg and N. Shahzad: Random fixed point theorems for multivalued inward random operators on Banach spaces, Adv. Math. Sci. Appl., 5(1) (**1995**), 31-37.
38. I. Beg and A. Azam: Fixed points of multivalued mappings in convex metric spaces, PanAmerica Math. J., 5(3) (**1995**), 63-70.
39. I. Beg and N. Shahzad: Random extension theorems, J. Math. Anal. Appl., 196(1), (**1995**), 43-52.
40. I. Beg and N. Shahzad: Common random fixed points of random multivalued operators on metric spaces, Boll. Unione Matematica Italiana, (7) 9-A (**1995**), 493-503.
41. I. Beg and M. Islam: Fuzzy ordered linear spaces, J. Fuzzy Math., 3(3) (**1995**), 659-670.
42. I. Beg and N. Shahzad: Random fixed point of weakly inward operators in conical shells, J. App. Math. Stochastic Anal., 8(3) (**1995**), 261-264.
43. I. Beg and N. Shahzad: Applications of proximity maps to random fixed point theorems in Hilbert spaces, J. Math. Anal. Appl., 196(2) (**1995**), 606-613.
44. I. Beg and A. Azam: Common fixed points for commuting and compatible maps, Discussiones Mathematicae , Differential Inclusions, 16 (**1996**) , 121-135.
45. I. Beg and A. Azam: Construction of fixed points of generalized nonexpansive mappings, Indian J. Math.,38(2) (**1996**), 161-170.
46. I. Beg and N. Shahzad: On random approximation and coincidence point theorems for multivalued operators, Nonlinear Analysis: Theory, Methods & Applications, 26 (6) (**1996**), 1035-1041.
47. A. Azam and I. Beg: Coincidence points of compatible multivalued mappings, Demonstratio Mathematica, 29(1) (**1996**), 17 - 22.
48. I. Beg and R. Ali: Some properties of the Hausdorff distance in probabilistic metric spaces, Demonstratio Mathematica, 29(2) (**1996**), 243-249.
49. I. Beg and N. Shahzad: On invariant random approximation, Approx. Theory and its Appl., 12(3) (**1996**), 68-72.

50. I. Beg, A. Latif and T. Y. Minhas: Some fixed point theorems in topological vector spaces, Demonstratio Mathematica, 29(3) (1996), 549-555.
51. I. Beg and N. Shahzad: On random approximation and a random fixed point theorem for multivalued mappings defined on unbounded sets in Hilbert spaces, Stochastic Anal. Appl., 14(5) (1996), 507 - 511.
52. I.M. Popovici, I. Beg and A. Petcu: Dual of a locally convex space of type (L), Indian J. Math., 38(3) (1996), 219 - 222.
53. I. Beg: σ -Complete fuzzy Riesz spaces, Resultate der Mathematik, 31(1997), 292-299.
54. I. Beg: Approximations in random normed spaces, Indian J. Pure Appl. Math., 28(10) (1997), 1435-1442.
55. I. Beg: Random fixed points of nonself maps and random approximations, J. App. Math. Stochastic Anal., 10(2) (1997), 127-130.
56. I. Beg: Random fixed points of random operators satisfying semicontractivity conditions, Math. Japon, 46(1) (1997), 151-155.
57. I. Beg and N. Shahzad: Measurable selection: In random approximations and fixed point theory, Stochastic Anal. Appl., 15(1) (1997), 19-29.
58. I. Beg and M. Islam: Fuzzy Archimedean spaces, J. Fuzzy Math., 5(2) (1997), 413-423.
59. I. Beg and N. Shahzad: A general fixed point theorem for a class of continuous random operators, New Zealand J. Math., 26 (1997), 21-24.
60. I. Beg, I.M. Popovici and R.M. Danet: Decomposition of the space of regular operators, Resultate der Mathematik, 32(1997), 281-284.
61. A. Latif and I. Beg: Geometric fixed points for single and multivalued mappings, Demonstratio Mathematica, 30(4) (1997), 791- 800.
62. I. Beg: Fixed points of fuzzy multivalued mappings with values in fuzzy ordered sets, J. Fuzzy Math., 6(1) (1998), 127 – 131.
63. I. Beg: Structure of the set of fixed points of nonexpansive mappings on convex metric spaces, Annal. Univ. Mariae Curie-Sklodowska (Sec.A)-Mathematica, LII(2)(1998), 7-14.
64. I. Beg: Extension of fuzzy positive linear operators, J. Fuzzy Math., 6(4) (1998), 849-855.
65. I. Beg: Fixed point theorems in 2-metric spaces with an application to variational inequalities, Math. Sci. Res. Hot-Line, 2(4) (1998), 1-7.

66. I. Beg, M. Arshad and M. Shabir: Fuzzy almost linear spaces, Atti Sem. Mat. Fis. Modena, XLVI (1998), 349 - 359.
67. H. K. Xu and I. Beg: Measurability of fixed point set of multivalued random operators, J. Math. Anal. Appl., 225(1) (1998), 62 - 72.
68. I. Beg: Continuity of fuzzy multifunctions, J. App. Math. Stochastic Anal., 12(1) (1999), 17 - 22.
69. I. Beg: On fuzzy Zorn's lemma, Fuzzy Sets & Systems, 101(1)(1999), 181-183.
70. I. Beg: Fixed points of expansive mappings on fuzzy preordered sets, J. Fuzzy Math., 7(2) (1999), 397 - 400.
71. I. Beg: Fixed points of fuzzy monotone maps, Archivum Mathematicum, 35(2) (1999), 141-144.
72. I. Beg: A characterization of random approximations, Internat. J. Math. & Math. Sci., 22(1) (1999), 209 - 211.
73. I. Beg and N. Shahzad: Some random approximation theorems with applications, Nonlinear Analysis: Theory, Methods & Applications, 35(1999), 609 - 616.
74. I. Beg and N. Shahzad: Common random fixed points of noncommuting random operators, Random Operators and Stochastic Equations, 7(4) (1999), 367 – 372.
75. I. Beg: Fuzzy closed graph fuzzy multifunctions, Fuzzy Sets & Systems, 115(3) (2000), 451 – 454.
76. I. Beg and N. Shahzad: An application of a random fixed point theorem to random best approximation, Archiv der Math., 74(2000), 298 – 301.
77. I. Beg: Inequalities in metric spaces with applications, Topological Methods in Nonlinear Anal., 17(1) (2001), 183-190.
78. I. Beg: A general theorem on selectors of fuzzy multifunctions, J. Fuzzy Math., 9(1) (2001), 97-101.
79. I. Beg: Linear fuzzy multivalued operators, J. Fuzzy Math., 9(1) (2001), 127-137.
80. I. Beg: Random Edelstein theorem, Bull. Greek Math. Soc., 45(2001), 31-41.
81. I. Beg: Fixed points of contractive mappings on probabilistic Banach spaces, Stochastic Anal. Appl., 19(3) (2001), 455-460.
82. I. Beg: Vector-valued fuzzy multifunctions, J. App. Math. Stochastic Anal., 14(3) (2001), 275-282.
83. I. Beg: Random fixed points of increasing compact maps, Archivum Mathematicum, 37(4) (2001), 329-332.

84. I. Beg: An iteration scheme for asymptotically nonexpansive mappings on uniformly convex metric spaces, Nonlinear Anal. Forum, 6(1) (2001), 27-34.
85. I. Beg: A Knaster-Tarski type fixed point theorem, CUBO, 3(2) (2001), 125-128.
86. I. Beg, A. Latif, R. Ali and A. Azam: Coupled fixed points of mixed monotone operators on probabilistic Banach spaces, Archivum Mathematicum, 37(1) (2001), 1-8.
87. I. Beg: Approximation of random fixed points in normed spaces, Nonlinear Analysis: Theory, Methods & Applications, 51(8) (2002), 1363-1372.
88. I. Beg: Extension of fuzzy Zorn's lemma to nontransitive fuzzy relations, J. Fuzzy Math., 10(3) (2002), 681-685.
89. I. Beg: Minimal displacement of random variables under Lipschitz random maps, Topological Methods in Nonlinear Anal., 19(2)(2002), 391-397.
90. I. Beg: Fuzzy ordering and completeness of fuzzy metric spaces, J. Fuzzy Math., 10(4) (2002), 789-795.
91. I. Beg and S. Gal: On the probabilistic domain invariance, J. App. Math. Stochastic Anal., 15(1) (2002), 29-37.
92. I. Beg: Fixed point set function of nonexpansive random mappings on metric spaces, Math. Inequalities Appl., 6(3) (2003), 545-552
93. I. Beg: An iteration process for nonlinear mappings in uniformly convex linear metric spaces, Czechoslovak Math. J., 53(2) (2003), 405-412.
94. I. Beg: Operations on fuzzy multifunctions and fuzzy maximal principle, J. Fuzzy Math., 11(4) (2003), 945-954.
95. I. Beg, N. Hussain and A.R. Khan: Fixed point, almost fixed point and best approximation of nonexpansive multivalued mapping in Banach spaces, Adv. Math Sci. Appl., 13(1) (2003), 83-111.
96. I. Beg: Convolution of fuzzy multifunctions and applications, J. Comp. Anal. Appl., 6(2) (2004), 125-137.
97. I. Beg: Some applications of fuzzy order relations, CUBO a Math. J., 6(1) (2004), 103-114.
98. I. Beg, A.R. Khan and N. Hussain: Approximation of *-nonexpansive random multivalued operators on Banach spaces, J. Australian Math. Soc., 76(2004), 51-66.
99. I. Beg: Extension of linear selectors of linear fuzzy multivalued operators, Italian J. Pure App. Math., 17(2005), 83-90.

100. I. Beg: Essential random fixed point set of random operators, Australian J. Math. Anal. and Appl., 2(2) (2005), 1-5.
101. I. Beg: Nearest point projection in uniformly convex metric spaces, Nonlinear Functional Anal. & Appl., 10(2) (2005), 251-256.
102. I. Beg: Common fixed points of expansive mappings on fuzzy ordered set, J. Fuzzy Math., 13(3) (2005), 515-517.
103. I. Beg: Random fixed points and iteration process for asymptotically nonexpansive random maps, J. Concrete and Applicable Mathematics, 3(4) (2005), 469-480.
104. I. Beg and M. Abbas: Fixed points and best approximation in Menger convex metric spaces, Archivum Mathematicum, 41(2005), 389-397.
105. I. Beg and M. Abbas: Iterative procedures for solution of random operator equations in Banach spaces, J. Math. Anal. Appl., 315(1) (2006), 181-201.
106. I. Beg and M. Abbas: Fixed point theorems for weakly inward multivalued maps on a convex metric space, Demonstratio Mathematica, 39(1) (2006), 149-160.
107. M. Abbas and I. Beg: Coupled random fixed points of random multivalued operators on ordered Banach spaces, Communication on Applied Nonlinear Analysis, 13(4) (2006), 31-42.
108. I. Beg and M. Abbas: Equivalence and stability of random fixed point iterative procedures, J. App. Math. Stochastic Anal., 2006(2006) Article ID 23297, pages 1-19.
109. I. Beg and M. Abbas: Common random fixed points of compatible random operators, Internat. J. Math. & Math. Sci., 2006(2006) Article ID 23486, pages 1-15.
110. I. Beg and M. Abbas: Coincidence point and invariant approximation for mapping satisfying generalized weak contractive condition, Fixed Point Theory and Appl., 2006(2006), Article Id. 74503, 7 pages.
111. I. Beg and M. Abbas: Convergence of iterative algorithms to common random fixed points of random operators, J. App. Math. Stochastic Anal. 2006(2006), Article ID 89213, pages 1-16.
112. I. Beg, M. Abbas and J.K. Kim: Convergence theorems of the iterative schemes in convex metric spaces, Nonlinear Functional Anal. & Appl., 11(3) (2006), 421-436.
113. I. Beg, D.R. Sahu and S.D. Diwan: Approximation of fixed points of uniformly R-subweakly commuting mappings, J. Math. Anal. Appl., 324(2) (2006), 1105-1114.
114. I. Beg: Fuzzy multivalued functions, Bull. Allahabad Math. Soc., 21(2006), pp. 41-104. (Survey).

115. I. Beg and M. Abbas: Random fixed point theorems for Caristi type random operators, J. Appl. Math & Computing, 25(1-2) (2007), 425-434.
116. I. Beg and M. Abbas: Common fixed points and best approximation in convex metric spaces, Soochow J. Math., 33 (4) (2007), 729-738.
117. I. Beg and S. Ashraf: Fuzzy similarity and measure of similarity with Lukasiewicz implicator, New Math. & Natural Computation, 4(2) (2008), 191-206.
118. I. Beg and M. Abbas: Convergence of multivalued mappings via approximable measurable selectors, Computers & Math. with Applications, 55(12) (2008), 2740-2745.
119. I. Beg and M. Abbas: Fixed point, approximate fixed point and Kantorovich-Rubinstein maximum principle in convex metric spaces, J. Appl. Math & Computing, 27(2008), 211-226.
120. D.R. Sahu and I. Beg: Weak and strong convergence of fixed points of nearly asymptotically non-expansive mappings, Int. J. Modern Math., 3(2) (2008), 135-151.
121. I. Beg and S. Ashraf: Fuzzy equivalence relations, Kuwait J. Sci. & Engineering, (35) (1A) (2008), 33-51.
122. I. Beg and M. Abbas: Random fixed point theorems for random operator on unbounded subset of a Banach space, Applied Math. Letters, 21(10) (2008), 1001-1004.
123. I. Beg and B.S. Thakar: General iteration scheme with perturbed mapping for common fixed points of a finite family of nonexpansive mappings, Fixed Point Theory, 9(2) (2008), 407-421.
124. I. Beg and M. Abbas: Random fixed points of asymptotically nonexpansive random operators on unbounded domains, Mathematica Slovaca, 58(6) (2008), 755-762.
125. I. Beg and M. Abbas: Common fixed point of weakly compatible and noncommuting mappings in Menger spaces, Int. J. Modern Math., 3(3) (2008), 261-269.
126. I. Beg and N. Hussain: Invariant approximation in Menger convex metric spaces, Nonlinear Functional Anal. & Appl., 13(4) (2008), 695-704.
127. A. Azam, M. Arshad, and I. Beg: Common fixed points of two maps in cone metric spaces, Rendiconti del Circolo Matematico di Palermo, 57(2008), 433-441.
128. I. Beg and M. Abbas: Random solution of nonlinear random multivalued operator inclusion, Boletin de la Sociedad Matematica Mexicana, 15(2) (2009), 179-186.
129. A. Azam and I. Beg: Common fixed points of fuzzy maps, Math. & Computer Modelling, 49(2009), 1331-1336.

130. I. Beg and B.S. Thakur: Solution of random operator equations using general composite implicit iteration process, Int. J. Modern Math., 4(1) (2009), 19-34.
131. I. Beg and A.R. Butt: Fixed point for weakly compatible mappings satisfying an implicit relation in partially ordered metric spaces, Carpathian J. Math., 25(1) (2009), 1-12.
132. I. Beg, A. Jahangir and A. Azam: Random coincidence and fixed points for weakly compatible mappings in convex metric spaces, Asian-European J. Math., 2(2) (2009), 171-182.
133. I. Beg and S. Ashraf: Fuzzy dissimilarity and distance functions, Fuzzy Information and Engineering, 1(2) (2009), 205-217.
134. I. Beg and A.R. Butt: Fixed point for set valued mappings satisfying an implicit relation in partially ordered metric spaces, Nonlinear Analysis: Theory, Methods & Applications, 71(9)(2009), 3699-3704.
135. I. Beg and S. Ashraf: Fuzzy inclusion and fuzzy similarity with Gödel implication operator, New Math. & Natural Computation, 5(3) (2009) 617-633.
136. I. Beg and M. Abbas: Existence of common fixed points in Menger spaces Communication on Applied Nonlinear Analysis, 16(4) (2009), 93-100.
137. I. Beg and S. Ashraf: Similarity measures for fuzzy sets, Applied and Computational Math., 8(2) (2009), 192-202.
138. I. Beg, A. Azam and M. Arshad: Common fixed points for maps on topological vector space valued cone metric spaces, Internat. J. Math. & Math. Sci., 2009(2009) Article ID. 560264, 8 pages
139. A. Azam, M. Arshad and I. Beg: Fixed points of fuzzy contractive and fuzzy locally contractive maps, Chaos, Solitons and Fractals, 42(5)(2009), 2836-2841.
140. A. Azam, M. Arshad and I. Beg: Common fixed point theorems in cone metric spaces, J. Nonlinear Sci. Appl., 2(4) (2009), 204-213.
141. A. Azam, M. Arshad and I. Beg: Banach contraction principle on cone rectangular metric spaces, Applicable Analysis and Discrete Math., 3(2) (2009), 236-241.
142. I. Beg, S. Sedghi and N. Shobe: Common fixed point of uniformly R-subweakly commuting mappings in fuzzy Banach spaces, J. Fuzzy Math., 18(1) (2010), 75-84.
143. I. Beg and A.R. Butt: Common fixed point for generalized set valued contractions satisfying an implicit relation in partially ordered metric spaces, Mathematical Communications, 15(1)(2010), 65-76.

144. I. Beg and M. Abbas: Random solution of random multivalued operator inclusions, Mathematica Slovaca, 60(3) (2010), 399-410.
145. I. Beg and M. Abbas: Fixed points and invariant approximation in random normed spaces, Carpathian J. Math., 26(1) (2010), 36-40.
146. I. Beg and S. Ashraf: On Poincare paradox, J. Fuzzy Math., 18(3) (2010), 631–640.
147. I. Beg, A.R. Butt and S. Radojevic: Contraction principle for set valued mappings on a metric space with a graph, Computers & Math. with Applications, 60(2010), 1214-1219.
148. I. Beg, N. Hussain and S.H. Khan: Strong convergence theorems for common fixed points of Banach operator pair, Indian J. Math., 52(3) (2010), 461-478.
149. I. Beg and N. Butt: (Im)possibility theorems in fuzzy framework, Critical Review; a publication of Society for Mathematics of Uncertainty, IV(2010), 1-11
150. I. Beg and A.R. Butt: Coupled fixed points of set valued mappings in partially ordered metric spaces, J. Nonlinear Sci. Appl., 3(3) (2010), 179-185.
151. I. Beg and S. Ashraf: Fuzzy transitive relations, Fuzzy Systems & Math., 24(4) (2010), 162-169.
152. I. Beg, M. Abbas and T. Nazir: Generalized cone metric spaces, J. Nonlinear Sci. Appl. 3(1) (2010), 21-31.
153. I. Beg, M. Abbas and T. Nazir: Common fixed point results in G-cone metric spaces, J. Advanced Research in Pure Math. 2(4) (2010), 94-109.
154. I. Beg, M. Abbas and A. Azam: Periodic fixed points of random operators, Annales Mathematicae et Informaticae, 37(2010), 39-49.
155. A. Azam, I. Beg and M. Arshad: Fixed point in topological vector space valued cone metric spaces, Fixed Point Theory and Appl., 2010(2010), Article ID 604084, 9 pages.
156. A. Azam, M. Arshad and I. Beg: Existence of fixed points in complete cone metric spaces, Int. J. Modern Math., 5(1) (2010), 91-99.
157. I. Beg and S. Ashraf: Numerical representation of product transitive complete fuzzy orderings, Math. & Computer Modelling, 153(2011), 617-623.
158. I. Beg and S. Ashraf: Fuzzy set of inclusion under Kleene's impicator, Applied and Computational Math., 10(1)(2011), 65-77.
159. I. Beg and M. Abbas: Invariant approximation for fuzzy nonexpansive mappings, Mathematica Bohemica, 136(1) (2011), 51-59.
160. I. Beg and M. Abbas: Coincidence and common fixed points of noncompatible maps, J. Appl. Math. & Informatics, 29(3-4) (2011), 743-752.

161. K. Jha, M. Abbas, I. Beg, R.P. Pant and M. Imdad: Common fixed point theorem for (ϕ, ψ) weak contraction in fuzzy metric space, Bull. Math. Anal. & Appl. 3(3) (2011), 149-158.
162. I. Beg and M. Abbas: Common fixed points of Banach operator pair on fuzzy normed spaces, Fixed Point Theory, 12(2) (2011), 285-292.
163. I. Beg, M. Abbas and T. Nazir: Fixed point results in generalized cone metric spaces, Acta Universitatis Apulensis, 28(2011), 215-232.
164. I. Beg and S. Ashraf: Numerical representation of a max-min transitive fuzzy ordering, J. Fuzzy Math., 19(4) (2011), 915-924.
165. A. Azam, M. Arshad and I. Beg: Common fixed point of fuzzy mappings under a contraction condition, Int. J. Fuzzy Systems, 13(4) (2011), 383-389.
166. I. Beg and M. O. Olatinwo: Fixed point of involution mappings in convex metric spaces, Nonlinear Functional Anal. & Appl., 16(1) (2011), 93-99.
167. I. Beg and M. Abbas: An iterative process for a family of asymptotically quasi nonexpansive mappings in CAT(0) spaces, Novi Sad J. Math., 41(2) (2011), 149-157.
168. I. Beg and M. Abbas: Fixed points of quasi (f, g) - nonexpansive multivalued mapping, Numerical Functional Anal & Optimization, 33(3) (2012), 255-263.
169. I. Beg and M. Abbas: Periodic points of random multivalued operators, Nonlinear Studies, 19(1) (2012), 87-92.
170. I. Beg and M. Abbas: Common fixed point and best approximation in CAT(0) spaces, Southeast Asian Bulletin of Math., 36 (1) (2012), 11-16 .
171. I. Beg and S. Ashraf: Gödel form of fuzzy transitive relations, Sarajevo J. Math., 8(2012), 3-14.
172. I. Beg and N. Butt: Belief merging and judgment aggregation in fuzzy setting, Advances in Fuzzy Systems , 2012 (2012) Article ID 635043, 5 pages.
173. I. Beg and H.K. Nashine: End-point results for multivalued mappings in partially ordered metric spaces, Internat. J. Math. & Math. Sci., 2012(2012) Article ID 580250, 19 pages.
174. I. Beg and S. Ashraf: Fuzzy inclusion and design of measure of fuzzy inclusion, ROMAI J., 8(1)(2012), 1-15.
175. I. Beg and A.R. Butt: Fixed point for mappings satisfying an implicit relation in ordered fuzzy metric spaces, J. Fuzzy Math., 20(3)(2012), 627-634.

176. I. Beg and A. Khalid: Belief aggregation in fuzzy framework, J. Fuzzy Math., 20(4)(2012), 911-924.
177. I. Beg, M. Abbas and T. Nazir: Common fixed point results for non commuting mappings in generalized cone metric spaces, Nonlinear Functional Anal. & Appl., 17(1)(2012), 57-70.
178. I. Beg and A.R. Butt: Common fixed point and coincidence point of generalized contractions in ordered metric spaces, Fixed Point Theory and Appl., 2012, (2012):229, 12 pages.
179. I. Beg: On fuzzy order relations, J. Nonlinear Sci. Appl., 5(2012), 357-378. (Survey).
180. I. Beg and M. Abbas: Fixed point in CAT(0) spaces, Functiones et Approximatio, 48(1) (2013) , 51-59.
181. A. Azam and I. Beg: Common fuzzy fixed points for fuzzy mappings, Fixed Point Theory and Appl., 2013(2013):14, 11 pages.
182. I. Beg, S. Sedghi and N. Shobe: Fixed point theorems in fuzzy metric spaces, Int. J. Anal., 2013(2013), Article ID 934145, 4 pages.
183. H.K. Nashine and I. Beg: Common fixed point for fuzzy mappings using generalized altering distance function in ordered metric spaces, J. Fuzzy Math., 21(1)(2013), 77-84.
184. I. Beg and A.R. Butt: Fixed point theorems for set valued mappings in partially ordered metric spaces, Int. J. Math. Sciences, 7(2) (2013), 66-68.
185. I. Beg and S. Chauhan: Related fixed point of set valued mappings in three Menger spaces, Int. J. Anal., 2013(2013), Article ID 736451, 6 pages.
186. I. Beg and S. Chauhan: Fixed point for compatible and subsequentially continuous mappings in Menger spaces and applications, Novi Sad J. Math., 43(1)(2013), 131-134.
187. I. Beg and M. Abbas: Common fixed point for mappings on non convex domain in fuzzy normed spaces, J. Fuzzy Math., 21(2)(2013), 471–478.
188. M. Arshad, A. Shoaib and I. Beg: Fixed point of a pair of contractive dominated mappings on a closed ball in an ordered dislocated metric space, Fixed Point Theory and Appl., 2013 (2013):115, 15 pages.
189. I. Beg and A.R. Butt: Fixed points of set valued graph contractions, J. Inequalities and Appl., 2013(2013):252, 7 pages.
190. I. Beg and S. Ashraf: Kleene's fuzzy similarity and measure of similarity, Annals Fuzzy Math. & Informatics, 6(2) (2013), 251–261.

191. I. Beg and T. Rashid: A democratic preference aggregation model, J. Uncertainty Anal. and Appl., 1:5 (2013) 11 pages
192. I. Beg and K.M. Aamir: Fuzzy wavelets, J. Fuzzy Math., 21(3) (2013), 623-638.
193. I. Beg and T. Rashid: TOPSIS for hesitant fuzzy linguistic term sets, Int. J. Intelligent Systems, 28 (2013), 1162–1171.
194. I. Beg and T. Rashid: A generalized model of judgment and preference aggregation, Fuzzy Economic Review, XVIII(1) (2013), 9-27.
195. A. Azam and I. Beg: Kannan type mapping in TVS-valued cone metric spaces and their application to Urysohn integral equations, Sarajevo J Math., 9(22) (2013), 243–255.
196. I. Beg and T. Rashid: Aggregation operators of interval-valued 2-tuple linguistic information, Int. J. Intelligent Systems, 29 (2014), 634–667.
197. I. Beg and M. Abbas: Common fixed point of multivalued mappings satisfying generalized ϕ - contractive condition in ordered G- metric spaces. Indian J. Math., 56(1) (2014), 77–95.
198. S. Chauhan, I. Beg and B. D. Pant: A related fixed point theorem in two Menger spaces, Gazi University J. Science, 27(1)(2014), 659–662.
199. I. Beg, C. Vetro, D. Gopal and M. Imdad: (ϕ, ψ) -Weak contractions in intuitionistic fuzzy metric spaces, J. Intelligent and Fuzzy Systems, 26(5)(2014), 2497–2504.
200. I. Beg and T. Rashid: Multi-criteria trapezoidal valued intuitionistic fuzzy decision making with Choquet integral based TOPSIS, OPSEARCH, 51(1) (2014), 98–129.
201. S. Chauhan, I. Beg and B.D. Pant: Impact of (CLR_{ST}) property and existence of fixed points using implicit relations, J. Indian Math. Soc., 81(1-2) (2014), 45–59.
202. I. Beg, M. Saha, A. Ganguly and D. Dey: Random fixed point of Greguš mapping and its application to nonlinear stochastic integral equations, Kuwait J. Science, 41(2) (2014), 1–14.
203. T. Rashid, I. Beg and S. M. Husnine: Robot selection by using generalized interval valued fuzzy numbers with TOPSIS, Applied Soft Computing, 21(2014), 462–468.
204. I. Beg and M.A. Ahmad: Fixed point for fuzzy contraction mappings satisfying an implicit relation, Matematicki Vesnik, 66(4)(2014), 351–356.
205. I. Beg and T. Rashid: Multi-criteria of bike purchasing using fuzzy Choquet integral, J. Fuzzy Math., 22(3) (2014), 677–694.
206. I. Beg, M. A. Ahmad and H. A. Nafadi: Common fixed point for hybrid pairs of fuzzy and crisp mappings, Acta Universitatis Apulensis, 38(2014), 311–318.

207. I. Beg and T. Rashid: An improved clustering algorithm using fuzzy relation for the performance evaluation of humanistic systems, Int. J. Intelligent Systems, 29(12) (2014), 1181–1199.
208. I. Beg and T. Rashid: Group decision making using intuitionistic hesitant fuzzy sets, Int. J. Fuzzy Logic and Intelligent Systems, 14(3)(2014), 181–187.
209. N. Mehmood, A. Azam and I. Beg: Fixed points of Edelstein-type multivalued maps, Rendiconti del Circolo Matematico di Palermo, 63(3) (2014), 399–407.
210. I. Beg and T. Rashid: Hesitant intuitionistic fuzzy linguistic term sets, Notes on Intuitionistic Fuzzy Sets, 20(3) (2014), 53–64.
211. I. Beg, D. Dey and M. Saha: Convergence and stability of two random iteration algorithms, J. Nonlinear Functional Anal., 2014 (2014), Article ID 17, 15 pages.
212. I. Beg and S. Ashraf: Fuzzy relational calculus, Bulletin of the Malaysian Mathematical Sciences Society (2) 37(1) (2014), 203-237. (Survey).
213. I. Beg and T. Rashid: A hybrid technique for order preference in decision making, Mathematical Problems in Engineering, 2015 (2015) Article ID 987972 (8 pages).
214. I. Beg, M. Arshad and A. Shoaib: Fixed point on a closed ball in ordered dislocated quasi metric spaces, Fixed Point Theory, 16(2)(2015), 195–206.
215. I. Beg and S. M. A. Aleomraninejad: Fixed points of Suzuki type multifunctions on metric spaces, Rendiconti del Circolo Matematico di Palermo, 64(2) (2015), 203–207.
216. I. Beg and T. Rashid: A geometric aggregation operator for decision making, Vietnam J. of Computer Science, 2(4)(2015), 243–255.
217. I. Beg and T. Rashid: Fuzzy distance measure and fuzzy clustering algorithm, J. Interdisciplinary Math., 18(5)(2015), 471–492.
218. I. Beg and T. Rashid: A system for medical diagnosis based on intuitionistic fuzzy relation, Notes on Intuitionistic Fuzzy Sets, 21(3) (2015), 80–89.
219. I. Beg, V. Gupta and A. Kanwar: Fixed point on intuitionistic fuzzy metric spaces using E.A. property, J. Nonlinear Functional Anal., 2015 (2015), Article ID 20, 15 pages.
220. I. Beg and T. Rashid: Group decision making using comparative linguistic expression based on hesitant intuitionistic fuzzy sets, Applications and Applied Mathematics: An International Journal, 10(2) (2015), 1082–1092.
221. M. Arshad, A. Shoaib and I. Beg: Fixed points of contractive dominated mappings in an ordered quasi partial metric space, Le Matematiche, LXX(II) (2015), 283–294.

222. I. Beg and T. Rashid: Hesitant 2-tuple linguistic information in multiple attributes group decision making, J. Intelligent and Fuzzy Systems, 30(2016), 109–116.
223. I. Beg and T. Rashid: Ideal solutions for hesitant fuzzy soft sets, J. Intelligent and Fuzzy Systems, 30(2016), 143–150.
224. A. Khalid and I. Beg: Incomplete interval valued fuzzy preference relations, Information Sciences, 348(2016), 15–24.
225. I. Beg and T. Rashid: Intuitionistic fuzzy similarity measure: Theory and applications, J. Intelligent and Fuzzy Systems, 30(2016), 821–829.
226. T. Rashid and I. Beg: Convex hesitant fuzzy sets, J. Intelligent and Fuzzy Systems, 30(2016), 2791–2796.
227. I. Beg and T. Rashid: An intuitionistic 2-tuple linguistic information model and aggregation operators, Int. J. Intelligent Systems, 31(2016), 569–592.
228. M. Arshad, M. Nazam and I. Beg: Fixed point theorems in ordered dualistic partial metric spaces, Korean J. Math. 24(2) (2016), 169–179.
229. I. Beg, M. A. Ahmed and H. A. Nafadi: Common fixed point theorems for hybrid pairs of $\mathcal{E}$ -fuzzy and crisp mappings in non-Archimedean fuzzy metric spaces, J. Nonlinear Functional Anal., 2016 (2016), Article ID 35, 15 pages.
230. S.K. De and I. Beg: Triangular dense fuzzy sets and new defuzzification methods, J. Intelligent and Fuzzy Systems, 31(1) (2016), 469–477.
231. I. Beg, A.K. Laha and M. Saha: Coincidence point of isotone mappings in partially ordered metric spaces, Rendiconti del Circolo Matematico di Palermo, 65(2) (2016), 273–282.
232. I. Beg and T. Rashid: Approximations for soft fuzzy rough sets, Scientific Publications of the State University of Novi Pazar (Series A: Applied Mathematics, Informatics & Mechanics) 8(2) (2016), 161-175.
233. A. Syed, I. Beg and A. Khalid: Aggregation methods for fuzzy judgments, Fuzzy Economic Review, 21(1) (2016), 3-21.
234. S.K. De and I. Beg: Triangular dense fuzzy neutrosophic sets, Neutrosophic Sets and Systems (13) (2016), 25-38.
235. I. Beg, M. A. Ahmed and H. A. Nafadi: Common fixed point of $\mathcal{E}$ -fuzzy mappings on non-Archimedean ordered fuzzy metric spaces, J. Nonlinear Functional Anal., 2017 (2017) Article ID 15, 12 pages.

236. I. Beg and T. Rashid: Modelling uncertainties in multi-criteria decision making using distance measure and TOPSIS for hesitant fuzzy sets, J. Artificial Intelligence and Soft Computing Research, 7(2)(2017), 103-109.
237. I. Beg and T. Rashid: An extension of soft rough fuzzy sets, Korean J. Math., 25(1)(2017), 71-85.
238. A. Khalid and I. Beg: Incomplete hesitant fuzzy preference relations in group decision making, Int. J. Fuzzy Systems, 19(3)(2017), 637-645.
239. A.R. Butt and I. Beg: Fixed point in partially ordered metric spaces with a metric transform, J. Nonlinear Analysis and Application, 2017(1)(2017), 66-74.
240. I. Beg and S. M. A. Aleomraninejad: Random fixed point of multifunctions on metric spaces, J. Nonlinear Functional Anal., 2017(2017) Article ID 37, 10 pages.
241. I. Beg and T. Rashid: A fuzzy similarity measure based on equivalence relation with application in cluster analysis, Int. J. Computers and Applications, 39(3)(2017), 148-154.
242. I. Beg and T. Rashid: A clustering algorithm based on intuitionistic fuzzy relations for tree structure evaluation, Int. J. Applied and Computational Mathematics, 3(4)(2017), 3131- 3145.
243. D.K. Joshi, I. Beg and Sanjay Kumar: Hesitant probabilistic fuzzy linguistic sets with applications in multi-criteria group decision making problems, Mathematics 6(4)(2018), Article ID 47
244. A.R. Butt, I. Beg and A. Iftikhar: Fixed points on ordered metric spaces with application in homotopy theory, J. Fixed Point Theory and Applications, 20(2018), Article ID 21.
245. H.K. Pathak and I. Beg: Invariant Approximations in Banach Spaces, Communications in Optimization Theory, 2018 (2018), Article ID 5.
246. I. Beg, M.A. Ahmed and H. A. Nafadi: Fixed points of $\mathcal{F}$ -fuzzy mappings in ordered b-metric spaces, J. Function Spaces, 2018 (2018), Article ID 5650242, 9 pages
247. H.K. Pathak and I. Beg: Hybrid fixed point in CAT(0) spaces, J. Nonlinear Analysis and Application, 2018(1)(2018),34-47.
248. I. Beg, D. Gopal, T. Dosenovic and D. Rakic: α -type fuzzy H-contractive mappings in fuzzy metric spaces, Fixed Point Theory, 19(2)(2018), 463-474.
249. I. Beg and H.K. Pathak: A variant of Nadler's theorem on weak partial metric spaces with application to a homotopy result, Vietnam J. Mathematics, 46(3)(2018), 693-706.

250. I. Beg, T. Rashid and R. N. Jamil: Human attitude analysis based on fuzzy soft differential equations with Bonferroni mean, Computational and Applied Math., 37(3)(2018), 2632-2647.
251. I. Beg, M.A. Ahmed and H. A. Nafadi: (JCLR) property and fixed point in non-Archimedean fuzzy metric spaces, Int. J. Nonlinear Anal. Appl., 9(1)(2018) , 195-201.
252. I. Beg and H.K. Pathak: Coincidence point with application to stability of iterative procedure in cone metric spaces, Applications and Applied Mathematics: An International Journal, 13(2)(2018), 1018-1038.
253. I. Beg and A. Syed: An interactive fuzzy judgment aggregation model for consensus with partially undecided judges, J. Fuzzy Math., 26(4) (2018) , 809-815
254. T. Rashid, I. Beg and R.N. Jamil: Induced hesitant 2-tuple linguistic aggregation operators with application in group decision making, Applications and Applied Mathematics: An International Journal , 13(2)(2018), 1039-1075.
255. A. Khalid and I. Beg: Incomplete interval valued hesitant fuzzy preference relations in decision making, Iranian J. Fuzzy Systems, 15(6)(2018), 107-120.
256. I. Beg, R.N. Jamil and T. Rashid: Diminishing Choquet hesitant 2-tuple linguistic aggregation operator for multiple attributes group decision making, Int. J. Anal. Appl., 17(1)(2019), 76-104
257. M. Nazam, I. Beg and M. Arshad: Common fixed point of weakly increasing F-contractions on ordered partial metric spaces, Communications in Optimization Theory, 2019(2019), Article ID 3. pp. 1-13.
258. M. Gulistan, I. Beg and N. Yaqoob: Decision making problems under the environment of neutrosophic cubic soft matrices, J. Intelligent and Fuzzy Systems, 36(1) (2019), 295- 307.
259. A. Khalid and I. Beg: Soft pedal and influence based decision modeling, Int. J. Fuzzy Systems, 21(2) (2019), 620 - 629.
260. M. Abbas, I. Beg and B.T. Leyew: Common fixed point of (R, α) -generalized rational multivalued contractions in R-complete b-metric spaces, Communications in Optimization Theory, 2019(2019), Article ID 14, pp. 1-17.
261. A. Khalid and I. Beg: Influence model of evasive decision makers , J. Intelligent and Fuzzy Systems , 37(2)(2019), 2539-2548.
262. A. Khalid and I. Beg: Role of honesty and confined interpersonal influence in modelling predilections, Soft Computing, 24 (2020), 1497–1509.

263. K. Roy, I. Beg and M. Saha: Sequentially compact S^{JS} - metric spaces, Communications in Optimization Theory, 2020(2020), Article ID 4, pp. 1-7.
264. M. Khan, I. Beg and M. Gulistan: Exponential operational laws and aggregation operators on neutrosophic cubic sets, Int. J. Neutrosophic Science, 4(1) (2020), 47-71.
265. A. Singh, I. Beg and S. Kumar: Analytic hierarchy process for hesitant probabilistic fuzzy linguistic set with applications to multi criteria group decision making method, Int. J. Fuzzy Systems, 22(5)(2020), 1596 – 1606.
266. I. Beg, M. Tahir and F. Rashied: Completion of Complex Valued Strong b-Metric Spaces, Discussiones Mathematicae Differential Inclusions, Control and Optimization 40(1) (2020), 101-107.
267. M.A. Ahmed, I. Beg, S. Khafagy and H.A. Nafadi: Fixed points for a sequence of L-fuzzy mappings in non-Archimedean ordered modified intuitionistic fuzzy metric spaces, J. Nonlinear Sciences and Appl., 14(2)(2021), 97-108.
268. H. K. Pathak and I. Beg: Fixed point of multivalued contractions by altering distances with application to nonconvex Hammerstein type integral inclusions, Fixed Point Theory, 22(1) (2021), 327 – 342.
269. I. Beg, G. Mani and A.J. Gnanaprakasam: Fixed point of orthogonal F-Suzuki contraction mapping on O-complete b-metric spaces with applications, J. Function Spaces, 2021(2021) Article ID 6692112, 12 pages
270. K. Roy, M. Saha and I. Beg: Fixed point of contractive mappings of integral type over an S^{JS} metric space, Tamkang J. Math., 52(2) (2021) 267-280.
271. M.A. Ahmed, I. Beg, S. Khafagy and H.A. Nafadi: Convergence of a k+1-step iterative scheme with error terms for asymptotically quasi-non-expansive mappings in generalized convex metric spaces, Communications in Optimization Theory, 2021(2021), Article ID 5, pp. 1-9
272. I. Beg, S.K. Datta and D. Pal: Fixed point in bicomplex valued metric spaces, Int. J. Nonlinear Anal. Appl., 12(2)(2021), 717-727.
273. M. Gulistan, I. Beg and A. Malik: Numerical techniques for solving bipolar neutrosophic system of linear equations, J. Linear and Topological Algebra, 10(2)(2021), 101-116.
274. I. Beg, K. Roy and M. Saha, S^{JS} -metric and topological spaces, J. Math. Extension, 15(4) (2021), 1-16.

275. I. Beg, G. Mani and A.J. Gnanaprakasam: Best proximity point of generalized F-proximal non-self contractions, J. Fixed Point Theory and Appl. 23(4)(2021) Article ID; 49.
276. I. Beg: Ordered convex metric spaces, J. Function Spaces, 2021(2021) Article ID 7552451
277. I, Beg, K, Roy and M, Saha: Ekeland's variational principle in S^{JS} - metric spaces, Facta Universitatis (NIS) Series Mathematics and Informatics 36(5)(2021), 1117-1127
278. M. Gulistan, I. Beg and M. Asif: Neutrosophic cubic analaytic hierarchy process with applications , Theory Approximation Appl., 15(2)(2021), 75-95.
279. M.A. Ahmed, I. Beg, S. Khafagy and H.A. Nafadi: Fixed point on generalized dislocated metric spaces, Int. J. Nonlinear Anal. Appl., 13(1)(2022), 831-836.
280. I. Beg, A. Bartwal, S. Rawat and R.C. Dimri: Best proximity points in noncommutative Banach spaces, Computational and Applied Math., 41 (2022):41
281. I. Beg: Ordered uniform convexity in ordered convex metric spaces with an application to fixed point theory, J. Function Spaces 2022(2022), Article ID 8237943, 7 pages,
282. K. Roy, M. Saha and I. Beg: Fixed point of generalized contractive maps on S^{JS} - metric spaces with two metrics, Theory Approximation Appl., 16(1)(2022), 8 pages.
283. I. Beg, M. Abbas and M.W. Asghar: Polytopic fuzzy sets and their applications to multiple-attribute decision-making problems, Int. J. Fuzzy Systems, 24(6) (2022), 2969–2981.
284. I. Beg, K. Roy and M. Saha: Best S^{JS} - proximity point on an ordered sequential S^{JS} - metric space with an application to variational inequality problem, Discussiones Mathematicae Differential Inclusions, Control and Optimization 42(2) (2022),171-187.
285. I. Beg, M. Abbas and M.W. Asghar: Convergence of AA-iterative algorithm for generalized α - nonexpansive mappings with an application, Mathematics. 10 (2022) Id 4375
286. I. Nazeer, I. Beg and T. Rashid: Hyper Wiener index and connectivity index of a fuzzy graph, Theory Approximation Appl., 16(2) (2022), 37-42.
287. A. Singh, I. Beg and S. Kumar: A multi criteria group decision making method for picking of social networking site, Fuzzy Economics Review, 27(1)(2022), 35-55
288. I. Beg, M. Abbas and M.W. Asghar: Approximation of the solution of split equality fixed point problem for family of multivalued demicontractive operators with application, Mathematics, 11 (2023) Id. 959

289. I. Beg: Representation of a preference relation on convex metric spaces by a numerical function, Proc. Romanian Acad. Sciences, 24(1)(2023) 19-25.
290. A. Bartwal , S. Rawat, I. Beg: Best proximity point for q-ordered proximal contraction in noncommutative Banach spaces, Applied General Topology, 24(1)(2023), 101-113
291. Q. Noor, T. Rashid and I. Beg: Multi-attribute group decision making based on probabilistic dual hesitant fuzzy Maclaurin symmetric mean operators, Granular Computing 8(2023), 633-666.
292. I. Beg, A.J. Gnanaprakasam and G. Mani: Common coupled fixed point theorem on fuzzy bipolar metric spaces, Int. J. Nonlinear Anal. Appl.,14(4) (2023), 77-85.
293. A. Khalid, H. Chaudhry and I. Beg: Dissilient interpersonal influences in social network analysis, Fuzzy Sets Systems, 46(7) (2023), Article 108499.
294. I. Beg, M. Bisht and S. Rawat: Ranking approach for generalized intuitionistic fuzzy numbers and its application in transportation problems, Computational and Applied Math., 42(2023), Article 329
295. M. Bisht, I. Beg and R. Dangwal: Optimal solution of pentagonal fuzzy transportation problem using a new ranking technique. Yugoslavia J. Operational Research, 33(4)(2023), 509-529..
296. I. Beg: Core of a convex mixture set and convex functions, Gulf J. Math. 15(2) (2023), 15-24.
297. I. Beg: Faces in convex metric spaces, Proc. Romanian Acad. Sciences, 24(4) (2023), 321-327.
298. I. Beg, K. Roy and M. Saha: S^{JS} -metric spaces; A survey, J. Nonlinear Sci. Appl., 17(1)(2024), 30-69.
299. L. Rajput, I. Beg and S. Kumar: Spherical fuzzy analytic hierarchy process and linear assignment model based MCGDM method with its application in ranking of states for their business climate, Expert Systems With Applications, 238 (2024), Article 122247
300. T. Rashid, A. Mahboob and I. Beg: A novel technique for solving the uncertainty under the environment of neutrosophic theory of choice, Tran. Fuzzy Sets Systems 3(1) (2024), 1-14.
301. I. Beg, A.J. Gnanaprakasam and G. Mani: Fixed point on complex partial b-metric spaces with application to a system of Urysohn type integral equations, Novi Sad J. Math., 54(1)(2024), 29-39.
302. I. Beg, I. Eroglu and O. Valero: Fixed points on partially ordered quasi-metric spaces, Fixed Point Theory, 25(2) (2024),473-494.

303. M. Bisht, I. Beg and S. Rawat: A new method to solve matrix game with interval payoffs and its MATLAB Code, International Game Theory Review, 26(3)(2024), Article 2450001
304. I. Beg and I. Eroglu: Fixed point of multivalued maps on bicomplete partially ordered quasi-metric spaces Discussiones Mathematicae Differential Inclusions, Control and Optimization, 44(2024), 167-184.
305. I. Beg: Separating hyperplane theorems in convex metric space, J. Nonlinear Sci. Appl. 18(2025), 29-32.
306. I. Beg, M. Abbas and M.W. Asghar: Multi-entropy analysis for mega project contractor selection in q-rung orthopair fuzzy soft set framework, Computational and Applied Math., 44(2025), Article 152
307. I. Beg and I. Eroglu: Enriched rational type contractions in quasi-Banach spaces and modified convex b-metric spaces, Applied General Topology, 26(1)(2025), 385-407.
308. I. Beg: A characterization of the Lipschitz mappings on convex metric spaces, Proc. Romanian Acad. Sciences, 26(1)(2025), 21-26
309. I. Beg: Extreme points of convex compact sets on quasi-metric spaces, J. Nonlinear Sci. Appl. 18(2025), 193-197
310. I. Beg, T. Ermiş, O. Gelisgen and M. Abbas: Applications of asymptotic fixed point theorems in A-metric spaces to integral equations, J. Function Spaces, (2025).