

Dr. Nasreen Kausar
(PhD Mathematics)



As an organized and highly creative individual, I love the challenges of working within a dynamic and fast paced working environment.

Personal Profile:

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Technical University, Esenler 34210, Istanbul, Turkey*

Academic educational background

<i>Degree</i>	<i>Year of passing</i>	<i>Subjects</i>	<i>Marks %</i>	<i>Board / University</i>
PhD	Jun 2015	Mathematics	75.1%	QAU, Islamabad
MPhil	Sep 2010	Mathematics	78%	QAU, Islamabad
M.Sc.	July 2008	Mathematics	76.63%	PU, Lahore
B.Sc.	Aug 2006	Math A and B, Economics	60.2%	PU Board, Lahore
HSSC	2003	Math, Arabic, Education	56.6%	Faisalabad Board
SSC	2001	Arts	69%	Faisalabad Board

Computer skills:

- Scientific Workplace, Word, Excel, Power Point, Fortran Languages, Internet use and browsing etc.

Language proficiency:

- English, Turkish, Urdu, Punjabi

Academic & Sports Awards:

Academic Awards:

- Indigenous PhD Scholarship of HEC, Islamabad, Pakistan
- Interim Placement of Fresh PhDs Program of HEC, Islamabad, Pakistan
- Startup Research Grant Program of HEC, Islamabad, Pakistan (Rs. 235750/)

Sports Awards:

- Organizer in the 3rd Annual Sports Gala 2017, presented by University of Sargodha, Lyallpur Campus Faisalabad
- Organizer in the 4th Annual Sports Gala 2018, presented by University of Sargodha, Lyallpur Campus Faisalabad

Experience:

- **Assistant Professor**, University of Sargodha, Sargodha Pakistan (24/8/2015 --- 23/8/2016) under IPFP.
- **Assistant Professor**, University of Sargodha, Lyallpur Campus Faisalabad, Pakistan (27/8/2016 --- 20/1/ 2019).
- **Assistant Professor (HOD)**, University of Sargodha, Lyallpur Campus Faisalabad, Pakistan (20/4/2018 --- 20/1/ 2019).

- **Assistant Professor**, University of Agriculture Faisalabad, Faisalabad Pakistan
(1/09/2018 --- 8/15/2020).
- **Assistant Professor**, University of Agriculture Faisalabad, Pars Campus, Faisalabad
Pakistan (1/09/2019 --- 08/15/2020).
- **Assistant Professor**, Government College University Faisalabad, Faisalabad
Pakistan (1/09/2019 --- 02/15/2020).
- **Lecturer (CTIs)**, Govt. College for women's, Samna-abad Faisalabad, (02/02/2021 --
- 31/05/2021).
- **Assisociate Professor**, Yildiz Technical University Istanbul, Turkey (1/09/2022 ---).

Projects:

Project research title:

- Study on the characterization of non-associative and non-commutative algebraic structures in the concept of fuzzy sets (accepted in SRGP HEC, ISB, Pakistan, Rs. 235750/).

Research Projects (BS 4-years):

- Study on ring theory (Sumera Munir 2016)
- Some study on polynomial rings (Nayab Zafar 2016)

Membership

- Pakistan Mathematical Society
- The Institute of Research Engineers and Doctors

M.Phil and PhD Research Title:

M.Phil research title:

- On generalization of semigroups and rings

PhD research title:

- Fuzzy concepts in non-associative and non-commutative Algebraic structures

Research interest:

- Commutative and non-commutative Algebraic structures, Fuzzy (Intuitionistic) semigroup theory, Fuzzy (Intuitionistic) group theory, Fuzzy (Intuitionistic) ring theory, Fuzzy (Intuitionistic) topology, Fuzzy (Intuitionistic) lattice theory, Differential Equations, Numerical Analysis

Conferences

- "11th International Pure Mathematics Conference 2010", organized by Preston University, Quaid-i-Azam University and Pakistan Mathematical Society, Islamabad, Pakistan, August (6-8) 2010.
- "17th International Pure Mathematics Conference 2016", organized by Preston University, Islamia University Bahawalpur and Pakistan Mathematical Society, Islamabad, Pakistan, August (5-7) 2016.

PUBLICATIONS

- 1) *T. Shah, N. Kausar and I. Rehman, Intuitionistic fuzzy normal subrings over a non-associative ring, An. St. Univ. Ovidius Constanta, Vol. 20(2012) 369-386.*
- 2) *T. Shah and N. Kausar, Characterizations of non-associative ordered semigroups by their fuzzy bi-ideals, Theoretical Computer Science, Vol. 529(2014) 96-110.*
- 3) *N. Kausar and M. Waqar, Characterizations of non-associative rings by their intuitionistic fuzzy bi-ideals, European Journal of Pure and Applied Mathematics, Vol. 12, 1(2019) 226-250.*

- 4) **N. Kausar**, *Characterizations of non-associative ordered semigroups by the properties of their fuzzy ideals with thresholds*, *Prikladnaya Diskretnaya Matematika*, Vol. 43(2019) 37-59.
- 5) **N. Kausar**, *Direct product of finite intuitionistic anti-fuzzy normal subrings over non-associative rings*, *European Journal of Pure and Applied Mathematics*, Vol. 12(2019) 622-648.
- 6) **N. Kausar**, **B. Islam**, **M. Javaid**, **S. Amjad** and **U. Ijaz**, *Characterizations of non-associative rings by the properties of their fuzzy ideals*, *Journal of Taibah University for Science*, Vol. 13(2019) 820-833.
- 7) **N. Kausar**, **B. Islam**, **S. Amjad** and **M. Waqar**, *Intuitionistics fuzzy ideals with thresholds in LA-rings*, *European Journal of Pure and Applied Mathematics*, Vol. 12, 3(2019) 906-943.
- 8) **N. Kausar** and **M. Waqar**, *Direct product of finite fuzzy normal subrings over non-associative rings*, *International Journal of Analysis and Applications*, Vol. 17, 5(2019) 752-770.
- 9) **N. Kausar**, **M. Alesemi** and **Salahuddin**, *Anti-fuzzy interior ideals on ordered AG-groupoids*, *European Journal of Pure and Applied Mathematics*, Vol. 13, 1(2020) 113-129.
- 10) **N. Kausar**, **M. Alesemi** and **Salahuddin**, *Fuzzy ideals on ordered AG-groupoids*, *International Journal of Analysis and Applications*, Vol. 18(2020) 277-303.
- 11) **N. Kausar**, **M. Alesemi**, **Salahuddin**, and **M. Munir**, *Characterizations of non-associative ordered semigroups by their intuitionistic fuzzy bi-ideals*, *Discontinuity, Nonlinearity, and Complexity*, Vol. 9(2020) 257-275.
- 12) **N. Kausar**, **M. Alesemi**, **Salahuddin**, and **M. Munir**, *A study on ordered AG-groupoid by their fuzzy interior ideals*, *International Journal of Advanced and Applied Sciences*, Vol. 7(2020) 75-82.
- 13) **N. Kausar**, **M. Alesemi**, **Salahuddin**, and **M. Munir**, *Study on LA-rings by their intuitionistic fuzzy ideals*, *Mathematica Montisnigri*, Vol. 47(2020) 22-42.
- 14) **M. Munir**, **N. Kausar**, **Salahuddin** and **Tehreem**, *On the prime fuzzy m-bi ideals in semigroups*, *J. of Math. and Computer Sci.* Vol. 21, 4(2020) 357-365.
- 15) **R. Anjum**, **S. Ullah**, **Y. M. Chu**, **M. Munir**, **N. Kausar** and **S. Kadry**, *Characterization of ordered h-regular semirings by ordered h-ideals*, *Aim Mathematics*, Vol. 5(2020) 5768-5790.
- 16) **N. Kausar**, **M. Munir**, **B. Islam**, **M. Alesemi**, **Salahuddin** and **M. Gulzar**, *Fuzzy bi-ideal in LA-rings*, *Italian Journal of Pure and Applied Mathematics* 44(2020) 745-763.
- 17) **N. Kausar**, **M. Munir**, **B. Islam**, **M. Alesemi**, **Salahuddin** and **M. Gulzar**, *Ideal in LA-rings*, *Italian Journal of Pure and Applied Mathematics*. 44(2020) 731-744.
- 18) **N. Kausar**, **M. Munir**, **M. Gulzar**, **M. Alesemi** and **Salahuddin**, *Ordered LA-groups and ideals in ordered LA-semigroups*, *Italian Journal of Pure and Applied Mathematics*. 44(2020) 723-730.

- 19) M. Munir, N. Kausar, R. Anjum, A. Ali, and R. Hussain, **A characterization of semigroups through their fuzzy generalized m -bi-ideals**, *Korean J. Math.* 28(2020) 623-638.
- 20) N. Kausar, M. Munir, M. Gulzar, G. Mulat Addis and M. Gulistan, **Study on left almost-rings by anti-fuzzy bi-ideals**, *Int. J. Nonlinear Anal. Appl.*, 11(2020) 483-498.
- 21) N. Kausar and M. Munir, **A Polynomial linear regression approach to estimate parameters in the novel double diabetes model**, *International Journal of Analysis and Applications* 18(2020) 939-956.
- 22) M. Gulzar, D. Alghazzawi, M. Haris and N. Kausar, **A certain class of t -intuitionistic fuzzy subgroups**, *IEEE Access*, 8(2020) 163260-163268.
- 23) M. Gulzar, D. Alghazzawi, M. Haris and N. Kausar, **A Novel applications of complex intuitionistic fuzzy sets in group theory**, *IEEE Access*, 8(2020) 196075-196085.
- 24) M. Munir, N. Kausar, Salahuddin, A. Shafiq and M. Habib, **Characterizing semigroups through the properties of their fuzzy m -bi ideals**, *J. of Math. And Computer Sci.*, 23 (2020) 170–180.
- 25) M. Munir, N. Kausar, G. Addis, Salahuddin and R. Anjum, **Introducing fuzzy almost m -ideals, fuzzy generalized almost m -ideals and related objects in semigroups**, *Malaysian Journal of Mathematical Sciences*, 14(2020) 351-372.
- 26) N. Kausar, Meshari Alesemi, Salahuddin and Mohammad Munir, **Anti-fuzzy bi-ideals on ordered AG-groupoids**, *J. Indones. Math. Soc.*, 26(2020) 299-318.
- 27) G. Mulat Addis, N. Kausar and M. Munir, **Fuzzy homomorphism theorems on rings**, *Journal of Discrete Mathematical Sciences and Cryptography*, Vol. 23(2020) 1-20.
- 28) D. Alghazzawi, W. H. Hanoon, M. Gulzar, G. Abbas and N. Kausar, **Certain properties of ω - Q -fuzzy subrings**, *Indonesian Journal of Electrical Engineering and Computer Science*, Vol. 21, 2(2020) 822-828.
- 29) M. Munir, N. Kausar, B. Davvaz, M. Gulistan and M. Gulzar, **Studying semigroups using the properties of their prime m -ideals**, *Bulletin of Irkutsk State University, Series, Mathematics*, Vol. 34(2020) 109-125.
- 30) N. Kausar, M. Munir, M. Gulzar and G. M. Addis, **Characterizing the ordered AG-groupoids through the properties of their different classes of ideals**, *bulletin of the karaganda university. Mathematics series*, Vol. 100(2020) 101-112.
- 31) N. Kausar, M. Munir and K. Anitha, **Left regular ordered AG-groupoids**, *Advanced Mathematical Models & Applications*, Vol. 5(2020) 307-312.
- 32) G. Mulat Addis, N. Kausar, M. Munir and Yu-ming Chu, **The commutator of fuzzy congruences in universal algebras**, *International Journal of Computational Intelligence Systems*, Vol. 23, 7(2021) 1-20.
- 33) Z. Khan, M. Gulistan, N. Kausar and C. Park, **Neutrosophic Rayleigh model with some basic characteristics and engineering applications**, *IEEE Access*, 20(2021) 163260-163268.

- 34) S. Nawaz, M. Gulistan, N. Kausar, Salahuddin and M. Munir, **On the left and right Almost hyperideals of LA-semihypergroups**, *International Journal of Fuzzy Logic and Intelligent Systems*, Vol. 21(2021) 86-92.
- 35) M. Munir, N. Kausar, K. Anitha, G. Mani and Tehreem, **Exploring the Algebraic and topological properties of semigroups through their prime m -bi-ideal**, *Kragujevac Journal of Mathematics*, Vol. 48(2021) 407-421.
- 36) M. Munir, U. Saleem and N. Kausar, **Sensitivity analysis of solute kinetics for a four compartmental model in hemodialysis patients**, *Kuwait Journal of Science*, Vol. 48(2021) 1-10.
- 37) M. Munir, N. Kausar, Salahuddin, R. Anjum, X. Qingbing and W. Ahmad, **Hypergroupoids as Tools of Studying Blood Groups Genetics**, *Int. J. of Fuzzy Logic and Intelligent Systems*, Vol. 21(2021) 135-144.
- 38) N. Kausar, M. Munir, X. Qingbing, M. Gulistan and K. Anitha, **Characterization of non-associative ordered semigroups by the properties of F -ideals**, *Fuzzy Information and engineering*, (2021) 1-19.
- 39) M. Munir, N. Kausar, M. Shakil, G. Mulat, Addis and Y. U. Chu, **Parameter Identification for Multiperiodic Functions**, *Technological Forecasting and Social Change*, Vol. 173(2021) 121-134.
- 40) N. Kausar, M. Munir, Salahuddin, Z. Baharudin and B. Islam, **"Direct product of finite anti-fuzzy normal subrings over non-associative rings"**, *J. of Math. And Computer Sci.* 22(2020) 399-411.
- 41) K. Kalaiarasi, R. Soundaria, N. Kausar, P. Agarwal, H. Aydi and H. Alsamir, **Optimization of the Average Monthly Cost of an EOQ inventory model for deteriorating items in Machine Learning using Python**, *Journal of Thermal Sciences*.
- 42) A. Elmoasry, M. Shams, N. Yaqoob, N. Kausar and Y.U. Gaba, **Numerical scheme for finding roots of interval-valued fuzzy non-linear equations with application in optimization**, *Journal of Function Spaces*.
- 43) R. Anjum, F. Sarfraz, N. Kausar, Y. U. Gaba, H. Aydi, M. Munir and Salahuddin, **Some Studies in Hemirings by the Falling Fuzzy k -Ideals**, *Journal of Function Spaces* Vol. 48, 3(2021), 1-10.
- 44) N. Rafiq, N. Yaqoob, N. Kausar, M. Shams, N. Ahmad, U. Gaba, and N. Khan, **Computer-Based Fuzzy Numerical Method for Solving Engineering and Real-World Applications**, *Mathematical Problems in Engineering*, Volume 2021, Article ID 6916282, 13 pages.
- 45) M. Shams, N. Rafiq, N. Kausar, P. Agarwal, C. Park, and N. Ahmad, **On highly efficient derivative-free family of numerical methods for solving polynomial equation simultaneously**, *Advances in Difference Equations*, (2021) 2021:465.
- 46) F. Rasheed, S. Kousar, J. Shabbir, N. Kausar, D. Pamucar and U. Gaba, **Use of Intuitionistic Fuzzy Numbers in Survey Sampling Analysis with Application in Electronic Data Interchange**, *Complexity*, Volume 2021, Article ID 9989477, 12 pages.

- 47) K. Kalaiarasi, V. Manimozhi, N. Kausar, D. Pamucar, S. Kousar and U. Gaba, **Fuzzy Product KM-Subalgebras and Some Related Properties**, Complexity, Volume 2021, Article ID 3991871, 8 pages.
- 48) G. Mani, A. Joseph, N. Kausar, M. Munir and Salahuddin, **Orthogonal F-Contraction Mapping on O-Complete Metric Space with Applications**, I. J. of Fuzzy Logic and Intelligent Systems, 21(2021) 243-250.
- 49) M. Shams, N. Rafiq, N. Kausar, P. Agarwal, C. Park and N. Mir, **On iterative techniques for estimating all roots of nonlinear equation and its system with application in differential equation**, Advances in Difference Equations, (2021) 2021:480.
- 50) M. Shams, N. Rafiq, N. Kausar, P. Agarwal, C. Park and S Momani, **Efficient iterative methods for finding simultaneously all the multiple roots of polynomial equation**, Advances in Difference Equations.
- 51) M. Shams, N. Rafiq, N. Kausar, S. F. Ahmed, N. Ahmad Mir, and S. C. Saha, **Inverse Family of Numerical Methods for Approximating All Simple and Roots with Multiplicity of Nonlinear Polynomial Equations with Engineering Applications**, Mathematical Problems in Engineering, Volume 2021, Article ID 3124615.
- 52) S. Khan, M. Gulistan, N. Kausar, S. Kousar, D. Pamucar, and G. M. Addis, **Analysis of Cryptocurrency Market by Using q-Rung Orthopair Fuzzy Hypersoft Set Algorithm Based on Aggregation Operators**, Complexity Volume 2022, Article ID 7257449, 16 pages.
- 53) K. Kalaichelvan, N. Kausar, S. Kousar, Yeliz Karaca, D. Pamucar, and M. Abdullah Salman, **Economic Order Quantity Model-Based Optimized Fuzzy Nonlinear Dynamic Mathematical Schemes**, Computational Intelligence and Neuroscience Volume 2022, Article ID 3881265, 9 pages.
- 54) K. Kalaiarasi, P. Sudha, N. Kausar, Sajida Kousar, D. Pamucar, and Nasr Al Din, **The Characterization of Substructures of c-Anti Fuzzy Subgroups with Application in Genetics**, Discrete Dynamics in Nature and Society Volume 2022, Article ID 1252885, 8 pages.
- 55) Y. Liu, M. Munir, N. Kausar, Q. Xu, **On Jacobson radical of ternary Γ - semirings**, Southeast Asian Bulletin of Mathematics, Vol. 45(2022) 849-859.
- 56) Q. Xu, Y. Liu, M. Munir, N. Kausar, **Reduced rings and modules arising from Morita contexts**, International Journal of Algebra, Vol. 16 (2022) 97-108.
- 57) M. Shams, N. Rafiq, N. Kausar, N. Ahmad Mir and A. Alalyani, **Computer Oriented Numerical Scheme for Solving Engineering Problems**, Computer Systems Science & Engineering, DOI:10.32604/csse.2022.022269.
- 58) S. Kousar, A. Zafar, N. Kausar, D. Pamucar, and Kattel **Fruit Production Planning in Semiarid Zones: A Novel Triangular Intuitionistic Fuzzy Linear Programming Approach** Mathematical Problems in Engineering, Volume 2022, Article ID 3705244, 13 pages.

- 59) S. Kousar, U. Shafqat, N. Kausar, D. Pamucar and Y. U. Gaba, **Energy Source Allocation Decision-Making in Textile Industry: A Novel Symmetric and Asymmetric Spherical Fuzzy Linear Optimization Approach** *Mathematical Problems in Engineering*, Volume 2022, Article ID 2659826, 15 pages.
- 60) S. Hussain, N. Kausar, S. Kousar, P. Kattel and T. Shahzad, **Generalization of Tangential Complexes of Weight Three and Their Connections with Grassmannian Complex**, *Mathematical Problems in Engineering*, Volume 2022, Article ID 5746202, 11 pages.
- 61) S. Kousar, F. Aslam, N. Kausar, D. Pamuca and G. M. Addis, **Fault Diagnosis in Regenerative Braking System of Hybrid Electric Vehicles by Using Semigroup of Finite-State Deterministic Fully Intuitionistic Fuzzy Automata**, *Computational Intelligence and Neuroscience* Volume 2022, Article ID 3684727, 14 pages.
- 62) A. Khalid, N. Kausar, M. Munir, M. Gulistan, M. Al-Shamiri and T. Lamoudan **Topological Indices of Families of Bistar and Corona Product of Graphs**, *Journal of Mathematics* Volume 2022, Article ID 3567824, 8 pages.
- 63) S. Kousar, T. Saleem, N. Kausar, D. Pamuca, and G. M. Addis, **Homomorphisms of Lattice-Valued Intuitionistic Fuzzy Subgroup Type-3**, *Computational Intelligence and Neuroscience* Volume 2022, Article ID 6847138, 11 pages.
- 64) T. Naseem, U. Fatima, M. Munir, A. Shahzad, N. Kausar, K. S. Nisar, C. A. Saleel, and M. Abbas, **Joule heating and viscous dissipation effects in hydromagnetized boundary layer flow with variable temperature**, *Case Studies in Thermal Engineering*, 35 (2022), 102083.
- 65) K. Kalaiarasi, L. Mahalakshmi, N. Kausar, S. Kousar and P. Kattel, **Perfect Fuzzy Soft Tripartite Graphs and Their Complements**, *Discrete Dynamics in Nature and Society* Volume 2022, Article ID 1108887, 10 pages.
- 66) S. Syed Ahmad, S. M. Yung, N. Kausar, Y. Karaca, D. Pamucar and Nasr Al Din Ide, **Nonlinear Integrated Fuzzy Modeling to Predict Dynamic Occupant Environment Comfort for Optimized Sustainability**, *Scientific Programming*, Volume 2022, Article ID 4208945, 13 pages.
- 67) A. Riaz, S. Kousar, N. Kausar, D. Pamucar, and G. M. Addis, **An Analysis of Algebraic Codes over Lattice Valued Intuitionistic Fuzzy Type-3 R-Submodules**, *Computational Intelligence and Neuroscience* Volume 2022, Article ID 8148284, 13 pages.
- 68) N. Kausar, M. Munir, P. Agarwal, and K. Kalaiarasi, **The Characterization of Fuzzy and Anti Fuzzy Ideals in AG-groupoid**, *Thai Journal of Mathematics* Volume 20(2022) Pages 653–667.
- 69) R. Anjum, A. R. Lodhi, M. Munir and N. Kausar, **Soft intersection and soft union k-ideals of hemirings and their applications**, *Korean J. Math.* Vol. 30(2022) 263-281.
- 70) M. Shams, N. Rafiqe, N. Kausar, P. Agarwal, N. A. Mir and Yong-Min Li, **On Highly Efficient Simultaneous Schemes for Finding all Polynomial Roots**, DOI: 10.1142/S0218348X22401983.

- 71) K. Kalaichelvan, N. Kausar, S. Kousar, Y. Karaca, D. Pamucar and M. A. Salman, **Economic Order Quantity Model-Based Optimized Fuzzy Nonlinear Dynamic Mathematical Schemes**, *Computational Intelligence and Neuroscience*, Volume 2022, Article ID 3881265, 9 pages.
- 72) K. Kalaiarasi, P. Sudha, N. Kausar, S. Kousar, D. Pamucar and Nasr. Ide, **The Characterization of Substructures of c -Anti Fuzzy Subgroups with Application in Genetics**, *Discrete Dynamics in Nature and Society* Volume 2022, Article ID 1252885, 8 pages.
- 73) W. Fan, A. Mohammadzadeh, N. Kausar, D. Pamucar, and Nasr Al Din, **A New Type-3 Fuzzy PID for Energy Management in Microgrids**, *Advances in Mathematical Physics*, Volume 2022, Article ID 8737448, 15 pages.
- 74) S. Kousar, U. Shafqat, N. Kausar, D. Pamucar, Y. Karaca and M. A. Salman, **Sustainable Energy Consumption Model for Textile Industry Using Fully Intuitionistic Fuzzy Optimization Approach**, *Computational Intelligence and Neuroscience* Volume 2022, Article ID 5724825, 12 pages.
- 75) J. D. Madasi, S. Khan, N. Kausar, D. Pamucar, G. M. Addis and M. Gulistan, **A Novel Decision-Making Process in the Environment of Generalized Version of Fuzzy Sets for the Selection of Energy Source**, *Advances in Mathematical Physics*, Volume 2022, Article ID 7057639, 12 pages.
- 76) S. K. Prakasam, A. J. Gnanaprakasam, N. Kausar, G. Mani, M. Munir, and Salahuddin **Solution of Integral Equation via Orthogonally Modified F-Contraction Mappings on O-Complete Metric-Like Space**, *International Journal of Fuzzy Logic and Intelligent Systems* Vol. 22 (2022) 287-295.
- 77) N. Kausar, M. Munir, Sajida Kousar, A. Farajzadeh and B. Ali Ersoy, **Direct Product of Finite Intuitionistic Fuzzy Normal Subrings over Non-Associative Rings**, *Thai Journal of Mathematics* Vol. 20(2022) 1041–1064.
- 78) J. D. Madasi, S. Khan, N. Kausar, D. Pamucar, M. Gulistan, and B. Sorowen, **N-Cubic q -Rung Orthopair Fuzzy Sets: Analysis of the Use of Mobile App in the Education Sector**, *Computational Intelligence and Neuroscience* Volume 2022, Article ID 9984314, 24 pages.
- 79) F. Marisa, S. S. Ahmad, N. Kausar, S. Kousar, D. Pamucar and Nasr Al Din Ide, **Intelligent Gamification Mechanics Using Fuzzy-AHP and K-Means to Provide Matched Partner Reference**, *Discrete Dynamics in Nature and Society* Volume 2022, Article ID 8292991, 14 pages.
- 80) S. Khan, M. Gulistan, N. Kausar, S. Kousar, D. Pamucar and G. M. Addis, **Analysis of Cryptocurrency Market by Using q -Rung Orthopair Fuzzy Hypersoft Set Algorithm Based on Aggregation Operators**, *Complexity* Volume 2022, Article ID 7257449, 16 pages.
- 81) S. Khalil, S. Kousar, N. Kausar, M. Imran and G. I. Oros, ***Bipolar Interval-Valued Neutrosophic Optimization Model of Integrated Healthcare System**, *Computers, Materials & Continua Tech Science* Press DOI: 10.32604/cmc.2022.030547.
- 82) A. Taghieh, A. Mohammadzadeh, C. Zhang, N. Kausar and O. Castillo, **A type-3 fuzzy control for current sharing and voltage balancing in microgrids**, *Applied Soft Computing*, Vol. 129(2022), pages 17.

