



BIO-DATA

1. **Name** : **DR. MUKESH KUMAR SHARMA**
2. **Father's Name** : Sri Krishan Kant Sharma
3. **Date of Birth** : January 1, 1978
4. **Present Designation** : Associate Professor,
Department of Mathematics
Chaudhary Charan Singh University, Meerut
5. **Permenant- Address** : Vill.-Shyamnagar,
Post-Hapur
Hapur-245101, U.P. (India)
6. **Current Address** : A-21, Lakhmi Vihar Meerut
E-mail : drmukeshsharma@gmail.com
mukeshkumarsharma@ccsuniversity.ac.in
Phone: +91-9412632166, +91-94573961006.

<https://orcid.org/0000-0003-3071-5931>

<https://www.scopus.com/authid/detail.uri?authorId=57220992209>

<https://scholar.google.com/citations?user=XaRIH7gAAAAJ&hl=en>

https://www.researchgate.net/profile/Mukesh_Sharma20/publications?sorting=recentlyAdded&editMode=1

<https://www.mendeley.com/universal-claim/?routeTo=/profiles/me&referrer=sc%3C>

<https://publons.com/researcher/4544634/mukesh-kumar-sharma/>

<https://www.ccsuniversity.ac.in/ccsu/index.php#>

Web of Science Researcher ID: [AAS-6615-2021](https://orcid.org/0000-0003-3071-5931)

7. Academic Qualifications :

Year	Degree	Board/University	Specialization	Division	Marks Ob./M.Marks	Percentage
1991	X th	U.P. Board Allahabad	Maths, Science, Biology, Hindi, English, So.Science	I st	476/600	79.33
1993	XII th	--do--	Maths, Physics, Chemistry, Hindi, English	I st	372/500	74.40
1997	B.Sc.	C.C.S.University, Meerut	Mathematics, Physics and Chemistry	I st	1197/1450	82.64
1998	B.Ed.	C.C.S.University, Meerut	Physical Sciences & Mathematics	I st	480/600	60.00
2000	M.Sc.	--do--	Mathematics	I st	1207/1600	75.34
2002	M. Phil.	--do--	Mathematics Project: Software, Hardware & Fuzzy Reliability	I st	451/600	71.83
2007	Ph.D.	--do--	Topic: A Study of Fuzzy Aspect of System Reliability	Awarded		

8. Teaching Experience: More than 15 years

9. Administrative Experience: About 4 years in Entertainment Tax Department, U.P.

Government

10. Guest Faculty: Department of Mathematics C. C. S. University, Meerut, About 5 Years

Department of Computer Applications, C.C.S.University, Meerut, about 2 years

Department of Economics, C.C.S.University, Meerut, About One Year

11. Classes Taught : B.Sc., M.Sc., M.C.A., M.A., and M.Phil.

12. Courses Taught:

- i) Operations Research/ Optimization Techniques
- ii) Queueing, Information & Reliability Theories.
- iii) Differential Equations / Integral Equations.
- iv) Numerical Analysis (v) Complex Analysis
- vi) Discrete Mathematics (vii) Lebesgue Measure and Integration
- viii) Mathematical Methods (ix) Statistical Techniques
- x) Computer Fundamentals and applications in Economic Analysis

13. Research Specialization: Operations Research (Reliability Theory)& Fuzzy Reliability

14. Membership of Academic Bodies:

1. Life Member, Indian Mathematical Society.
2. Life Member, International Academy of Physical Sciences, Allahabad
3. Life Member, The Research Board of Advisors, American Biographic Institute

15. Administrative Experience:

(i) Worked as Assistant Controller, Deputy Controller in the Examination Central Evaluation in Ch. Charan Singh University, Meerut.

(ii) Worked as Deputy Controller in the moderation of objective type Question paper setting in Ch. Charan Singh University, Meerut.

(iii) Worked as University Observer in different examinations conducted by C.C.S. University, Meerut.

(iv) Worked in different committees in college i.e. in admission committee, student union election committee, U.G.C. Grant committee.

16. Research Supervision.

(a). Ph.D. Awarded

- | | | |
|------------------------|-----------------|---|
| 1. Mr.Navneet Kumar | Topic: - | “Role of Fuzzy Set Theoretic Approach in Reliability aspect of some complex Systems” |
| 2. Km. Anita | Topic: - | “A vague set theoretic approach to some problem Related to Healthcare.” |
| 3. Ms. Vintesh | Topic: - | “Vague Set Theoretic Approach To Systems Reliability.” |
| 4. Mr. Padmendra Singh | Topic: - | “A Fuzzy and Vague set approach to Multiobjective Optimization Problems.” |

(c). M.Phil. Projects Supervised

1. Vague Groups and its properties (2020)
2. Reliability Analysis of Complex Systems Using Fuzzy Sets and Vague Sets (2019)
3. Vague Set Theoretic Approach to System Reliability (2010)
4. Fuzzy Goal Programming and Its Applications (2008)
5. A Study of Vague Sets and Its Applications to Medical Diagnosis (2008)
6. A Study of Optimum Runge-Kutta Methods for Initial Problems (2008)
7. Some aspects of fuzzy matrices (2007)
8. Some applications of MATLAB in Neural Networks. (2007)

9. A study of Inventory models using different approaches (2007)
10. Two approaches of handling the uncertainty in game problems (2007)
11. A study of some aspects of fuzzy programming. (2006)11.

17. RESEARCH PAPERS (Papers published)

(A) Communicated Research Papers

1. Review of fuzzy logic analysis in COVID-19 pandemic and proposed a new technique through extended hexagonal intuitionistic fuzzy number in COVID-19 analysis in *International Journal of Advances in Engineering Sciences and Applied Mathematics* (Springer)
2. Post-symptomatic detection of COVID-2019 using Mediative fuzzy projection, *Computers and Electrical Engineering* (Elsevier)
3. Employee Retention and Attrition Analysis: A Novel Approach on Attrition Prediction Using Fuzzy Inference and Ensemble Machine Learning in *Materials Today Proceedings* (Elsevier)
4. Modified Round Robin CPU scheduling: A Fuzzy Logic Based Approach, *Alexandria Engineering Journal* (Elsevier)
5. A Fuzzy Knowledge Based Expert System On Z-Valuations for Medical Diagnosis, *International Journal Fuzzy Systems* (Springer)

(B) Accepted Research Papers

1. Emotional Intelligence and its management in the conflicting factors in the pandemic by using meditative fuzzy logic system submitted to " Emotional Intelligence for leadership effectiveness: Management Opportunities and Challenges during Times of Crisis " Apple academic Press, CRC & Taylor Francis Hard ISBN: 9781774911327, <https://www.appleacademicpress.com/emotional-intelligence-for-leadership-effectiveness-management-opportunities-and-challenges-during-times-of-crisis/97817749113273>.
2. Fuzzy Reliability of a Multi-State System Using Fuzzy Universal Generating Function” has been accepted for publication in the *Journal of Physics: Conference Series* (Scopus indexed).
3. Mediative Fuzzy Pythagorean Algorithm to Multi-Criteria Decision-Making and its Application in Medical Diagnostic, Springer Book Chapter 2021(<https://link.springer.com/book/9789811677229#bibliographic>)

(C) Published Research Papers

1. FACTOR ANALYSIS ON ISSUES OF TEACHING AND LEARNING MATHEMATICS FOR UG LEVEL STUDENTS OF KAMRUP(M) OF ASSAM, J. Math. Comput. Sci., Vol. 12-32, (2022), pp.1-19, DOI: <https://doi.org/10.28919/jmcs/6802> ISSN: 1927-5307. URL: (i) <http://scik.org/index.php/jmcs/article/view/5770> (ii) <http://scik.org/index.php/jmcs/article/download/5770/2900> (scopus)
2. A Fuzzy Optimization Technique for Multi-Objective Aspirational Level Fractional Transportation Problem, *Symmetry* 2021, **13(8)**, **1465**; <https://doi.org/10.3390/sym13081465> <https://www.mdpi.com/2073-8994/13/8/1465>, <https://www.mdpi.com/2073-8994/13/8/1465/pdf> (IF 2.7312)
2. Mediative Fuzzy Extension Technique and Its Consistent Measurement in the Decision Making of Medical Application, Hindawi Mathematical Problems in Engineering Volume 2021, Article ID 5530681, 1-9 pages <https://doi.org/10.1155/2021/5530681>, 2021(Scopus & WoS)
3. Intuitionistic Neuro-Fuzzy Optimization in the Management of Medical Diagnosis, Applied Mathematics, 2021, 12, 993-1020, ISSN-2152-7393, DOI: [10.4236/am.2021.1211065](https://doi.org/10.4236/am.2021.1211065) (WoS)
4. Fuzzy mathematical inference system and its application in the diagnosis of lung cancer (ref. no. 6016)" accepted for publication in Int. J. Agricult. Stat. Sci. Vol. 17, No. 2, 2021 www.connectjournals.com/ijass DocID: <https://connectjournals.com/03899.2021.17> . ISSN : 0973-1903, e-ISSN : 0976-3392.
5. A Genetic Algorithm Approach for Multi-Objective Transportation Problem with Hexagonal Fuzzy Number, Accepted for publication in Aligarh Journal of Statistics, Vol. 41(2021) 317-152, ISSN 0971-0388, <http://www.amu.ac.in/ajs>.
6. On a Couple Stress Rivlin-Ericksen Ferromagnetic Fluid Heating From Below with Varying Gravity and Suspended Particles Through a Porous Medium, in Journal of International Academy of Physical sciences, Vol. No. 25 (2) (2021), ISSN: 0974-9373, pp. 279-295. <http://www.iaps.org.in/journal/index.php/journaliaps/article/view/78>
7. A Note on the Numbers Constructed by Fibonacci Numbers, Turkish Journal of Computer and Mathematics, Vol. 12 (14), 2021, 1678-1682. (Scopus) <https://turcomat.org/index.php/turkbilmat/article/view/10507/7907>
8. Fuzzy Logic and its Implication to Conventional Artificial Intelligence to Computational Artificial Intelligence in the context of Machine Learning, Book chapter in edited book,

- published by Akhand Publishing House Delhi(India) ISBN: 978-93-90870-65-3, 2021, pp. 155-173 <https://www.akhandbooks.com/index.php>
9. Single-trait, multi-locus and multi-trait GWAS using four different models for yield traits in bread wheat. *Mol Breeding* **41**, 46 (2021). <https://doi.org/10.1007/s11032-021-01240-1> (IF2.589),
 10. Mediative fuzzy logic mathematical model: A contradictory management prediction in COVID-19 pandemic, *Applied Soft Computing* Volume 105, July 2021, 107285, <https://doi.org/10.1016/j.asoc.2021.107285>. (IF 5.431) <https://www.sciencedirect.com/science/article/pii/S1568494621002088#>
 11. Parameters influencing the attitude of students towards learning mathematics and of teachers towards teaching mathematics, *J. Math. Comput. Sci.*, Vol. 11, No. 4, (2021), pp. 4332-4350. DOI: <https://doi.org/10.28919/jmcs/5770>. ISSN: 1927-5307. URL: (i) <http://scik.org/index.php/jmcs/article/view/5770> (ii) <http://scik.org/index.php/jmcs/article/download/5770/2900> (scopus)
 12. Mediative Fuzzy Logic of Sugeno-TSK Model for the Diagnosis of Diabetes, *Journal of Physics: Conference Series* 1724 (2021) 012028 IOP Publishing doi:10.1088/1742-6596/1724/1/012028. <https://iopscience.iop.org/article/10.1088/1742-6596/1724/1/012028/pdf> (Scopus)
 13. A Mediative Fuzzy Logic Based Approach to the Goal Programming Problem: In the Context of Multi-Objective Solid Transportation Problem, *Soft Computing Techniques in Engineering, Health, Mathematical and Social Sciences*, CRC Press-2021 (Scopus), <https://www.routledge.com/Soft-Computing-Techniques-in-Engineering-Health-Mathematical-and-Social/Debnath-Mohiuddine/p/book/9780367750688>, ISBN 9780367750688 July 16, 2021 Forthcoming by CRC Press <https://books.google.co.in/books?hl=en&lr=&id=408zEAAAQBAJ&oi=fnd&pg=PA47&dq=info:NcDt-NV9X2EJ:scholar.google.com/&ots=S5bHJ7m7DQ&sig=m1ndQDfU8We-13ESm7YHb0nCVC4#v=onepage&q&f=false>
 14. Mediative Neuro fuzzy inference and expert system for the identification of severity diagnosis in dengue patients” has been accepted for publication in the AIP Conference Proceedings (Scopus & WoS indexed)-2021, 2364, 020029(2021); <https://doi.org/10.1063/5.0062862> pp. 1-17
 15. Fuzzy Reliability Evaluation of Complex Systems with Monte Carlo Simulation has been accepted for publication in the AIP Conference Proceedings (Scopus & WoS indexed)-2021, 2364, 020025(2021); <https://doi.org/10.1063/5.0062862> pp. 1-8.

16. Meditative Fuzzy Logic and Agricultural Production Planning: State Level Investigation of Wheat Crop in India, *Int. J. Agricult. Stat. Eci.* Vol. 16 No. 2 pp 889-900 (2020) (Scopus).
http://50.62.115.31/toc.php?aid=%20M.K.%20Sharma&&bookmark=CJ-033252&&volume=16&&issue_id=02&&month=December&year=2020
17. VAGUE GROUPS REDEFINED WITH RESPECT TO t-NORM” **Advances in Mathematics**: Scientific Journal 9 (2020), no.10, 8475–8483 ISSN: 1857-8365 (printed); 1857-8438 (electronic) <https://doi.org/10.37418/amsj.9.10.76> (Scopus)
18. Zero Point Maximum Allocation Method for Solving Intuitionistic Fuzzy Transportation problem" *International Journal of Applied and Computational Mathematics* volume 6, Article number: 115 (2020) <https://doi.org/10.1007/s40819-020-00867-6> Springer. (Scopus)
19. Calculus of new intuitionistic fuzzy generator: In generated intuitionistic fuzzy sets and its applications in medical diagnosis” in **International Journal of Advanced and Applied Sciences**, 7(10) 2020, Pages: 125-130, (Web of science). <http://science-gate.com/IJAAS/Articles/2020/2020-7-10/1021833ijaas202010014.pdf>
20. “Posfust Reliability of a Non-repairable Multi-State System with Posfust Failure Rate Estimation” **The Journal of Engineering and Exact Sciences – jCEC**, Vol. 06 N. 04 (2020) (Scopus). <https://periodicos.ufv.br/jcec/article/view/10607>
21. Vague Reliability Analysis of Standby Systems with an (N + 1) Units” **Strategic System Assurance and Business Analytics**, Springer Publication Isted. 2020, ISSN 2522-5120, ISBN 978-981-15-3647-2 XIII, pp. 146-155 in 2020 (Scopus).
<https://www.springerprofessional.de/en/vague-reliability-analysis-of-standby-systems-with-an-n-1-units/18102968>.
22. Round Robin CPU Scheduling with Dynamic Quantum using Vague Sets”, **International Journal of Advanced Sciences and Technology** ISSN: 2005-4238, Volume-29 Issue-3, 2020, pp.9940-9950.(Scopus).
<http://sersec.org/journals/index.php/IJAST/article/view/26969>
23. Fuzzy Logic Inference System for Identification and Prevention of Coronavirus (COVID-19)”, **International Journal of Innovative Technology and Exploring Engineering (IJITEE)** ISSN: 2278-3075, Volume-9 Issue-6, 2020, pp.1575-1580.(Scopus).
https://www.researchgate.net/profile/Nitesh-Dhiman-2/publication/340646072_Fuzzy_Logic_Inference_System_for_Identification_and_P

- [revention of Coronavirus COVID-19/links/5e96bf3e4585150839de7943/Fuzzy-Logic-Inference-System-for-Identification-and-Prevention-of-Coronavirus-COVID-19.](https://www.researchgate.net/publication/343229623)
24. A New Goal Programming Approach for Multi-objective Solid Transportation Problem with Interval –Valued Intuitionistic Fuzzy Logic” **Journal of International Academy of Physical Sciences**, ISSN: 0974-9373, Vol. 23(3), 2019 pp. 251-268. <https://www.researchgate.net/publication/343229623> **A New Goal Programming Approach for Multi-Objective Solid Transportation Problem with Interval-Valued Intuitionistic Fuzzy Logic.**
 25. MEDIATIVE MULTI-CRITERIA DECISION SUPPORT SYSTEM FOR VARIOUS ALTERNATIVES BASED ON FUZZY LOGIC” **International Journal of Recent Technology and Engineering (IJRTE)** ISSN: 2277-3878, Volume-8 Issue-4, 2019.(Scopus). <https://www.ijrte.org/wp-content/uploads/papers/v8i4/D4207118419.pdf>.
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 27. Health Status Index Using Sugeno’s Mediative Logic” © 2019 **IJRAR**, 2019, Volume 6, Issue 2 (E-ISSN 2348-1269, P- ISSN 2349-5138) pp. 970-984.(UGC Care List)
 28. Mediative Sugeno’s-TSK Fuzzy Logic based Screening Analysis to Diagnosis of Heart Disease” **Applied Mathematics**, 2019, 10, 448-467. ISSN Online: 2152-7393 ISSN Print: 2152-7385.(WOS). <http://www.scirp.org/journal/am>
 29. “Fuzzy Reliability Analysis of Heating Fans Using Mediative Fuzzy Logic” **IOSR Journal of Engineering (IOSRJEN)** www.iosrjen.org ISSN (e): 2250-3021, ISSN (p): 2278-8719 Vol. 09, Issue 6 (2019), ||V (IV) || PP 01-06.
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 31. Reliability Analysis of a system by using Sugeno (TSK) Fuzzy Model” **Bulletin of Pure and Applied Sciences** , Section E- Maths & Stat. Vol. 37E, NO.2, pp. 499-506, 2018 ISSN: 0970-6577 (Print) ISSN: 2320-3226 (Online)(UGC Care List)

32. Vague Reliability of a network using sugeno's fuzzy failure rates" IOSR Journal of Engineering (IOSRJEN) Vol. 08, Issue 12 (December. 2018), ||V (IV) || PP 38-48, ISSN (e): 2250-3021, ISSN (p): 2278-8719
33. Inventory Model For Non- Instantaneous Decaying items with partial Backlogging under Inflationary Environment" International Journal of Pure and Applied Mathematics, Vol. 118, No. 19 2018, pp. 2407-2417, ISSN: 1311-8080 (Print) ISSN: 1314-3395 (Online) : [url-https://www.ijpam.eu](https://www.ijpam.eu)
34. "Reliability Analysis of Water System Using Intuitionstic Fuzzy Correlation Coefficient" Applied Mathematical Sciences, Vol. 11, 2017, no. 12pp. 579-590, ISSN: 1312-885X (Print) ISSN: 1314-7552 (Online) : <https://doi.org/10.12988/ams.2017.7120>
35. Numerical Solution for Reliability and Availability analysis of a three unit standby system" International Journal of Engineering and Technology (IJET) Vol 9 No 3 Jun-Jul 2017 pp. 1804-1808 ISSN (Print) : 2319-8613, ISSN (Online) : 0975-4024 DOI: 10.21817/IJET /2017/ v9i3/170903060
36. "Possibility and Probability aspect to Fuzzy Reliability Analysis of a Network System"Global Journal of Pure and Applied Mathematics Volume-13, No.7 2017 pp. 3641-3655, ISSN 0973-1768.
37. "Fuzzy Mathematical Approach to Detect Micronutrient Deficiency Disorders by Using MATLAB Functions"Bulletin of Pure and Applied Sciences, Vol. 36 E (Math & Stat.), Issue (No.1) 2017Print version ISSN 0970 6577 Online version ISSN 2320 3226 DOI 10.5958/2320-3226.2016.00005.9
38. "Inventory Model Dependent upon Time and Price Function" International Journal of Advanced Research in Engineering Technology & Science ISSN 2394-2819 Volume-4, Issue-2 February- 2017 pp.37-44
39. "Fuzzy Reliability Analysis of a Summer Air Conditioning System" Advances in Fuzzy MathematicsVolume-12, No. -22017 pp 319-332, ISSN 0973-533X
40. "Inventory Model for Non-Instantaneous Decaying Items With Learning Effect under Partial Backlogging and Inflation" Global Journal of Pure and Applied MathematicsVolume-13, No. -62017 pp. 1999-2008, ISSN 0973-1768
41. "Mathematical Approach to Various Factors affecting Human Health By using Fuzzy Logic", International Journal of Education and Science Research review e-ISSN: 2348-6457 Volume 3, Issue 1 Feb. 2016 pp. 7-14.

42. "A Comparative study of health status index using vague sets and interval valued vague sets" **International Journal of Innovative Research in Science, Engineering and Technology** ISSN(Online): 2319-8753 ; ISSN (Print): 2347-6710 Vol. 5 (8) 2016 pp. 15024-15030.
43. "Reliability Analysis of A Network System " Proceedings of 2nd International Conference on **Recent Development in Computational and Information Technology [ICRDCIT '16]** ISBN: 978-93-84935-81-8, 2016 pp. 91-97
44. "Some Reliability Investigation for a Summer Air Conditioning System with the Boolean Function Expansion algorithm", **International Journal of Advanced Research in Engineering Technology and Sciences**, Vol. 3(2), ISSN 2394-2819 2016, no. 2, pp. 1 – 8.
45. Kapil Bansal & M.K. Sharma, "Study of Inventory Model for Decaying Items with Stock Dependent Demand, Time Importance of Money above Acceptable Delay in Payments", **International Journal of Engineering Research & Management Technology**, ISSN: 2348-4039 Vol. 3(1), 2015 pp. 116-122. 09
46. "Mathematical Approach to detect Micronutrient deficiency disorders in Human by using fuzzy logic" **International Journal of Engineering Research & Management Technology**, ISSN: 2348-4039 Vol. 3(1), 2016 pp. 89-102.
47. "Similarity Measure Using Interval Valued Vague Sets in Multiple Criteria Decision Making", **IOSR Journal of Mathematics (IOSR-JM)**, e-ISSN: 2278-5728, p-ISSN: 2319-765X Volume 11, Issue 6 Ver. V (Nov-Dec. 2015) pp. 46-55.
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49. "Failure Mode and Effect Analysis of Polluting Factors in Human Health using Fuzzy Logic", **International Journal of Education and Science Research Review** e-ISSN: 2348-6457 Volume 2, Issue 4 Aug. 2015 pp. 59-66.
50. "Vague Set Theoretic Approach to Reliability Analysis of A Cheese Making Plant", **International Journal of Advanced Research in Engineering Technology and Sciences**, Vol. 2(1), ISSN 2394-2819 2015, no. 1, pp. 8 – 19.
51. "A Comparative Study of Reliability Analysis of a Non-Series Parallel Network", **International Journal of Education and Science Research review** e-ISSN: 2348-6457 Volume II, Issue 6 Dec. 2015 pp. 13-21.

52. "Fuzzy Logic Approach to analysis of Anemia Reduction Impact on human Health" **International Journal of Education and Science Research review e-ISSN: 2348-6457 Volume II, Issue 4 Dec. 2015 pp. 67-78.**
53. "Vague Set Theoretic Approach to Reliability Analysis of a three Unit System" **International Journal of Advanced Research in Engineering Technology and Sciences, Vol. 2(11), ISSN 2394-2819 2015, no. 1, pp. 13 – 17.**
54. "Fuzzy Analysis of shortest Job First", **International Journal of Engineering Research & Management Technology, ISSN: 2348-4039 Vol. 2(3), 2015 pp. 124-128.**
55. "Analysis of various reliability procedures for a comparable redundant gas separator" **International Journal of Education and Science Research reviewe-ISSN: 2348-6457 Volume 2, Issue 1 Feb. 2015 pp. 132-142.**
56. "Reliability analysis of a gracefully degradable system using vague sets", **International Journal of Engineering Research & Management Technology, ISSN: 2348-4039 Vol. 2(4), 2015 pp. 219-225.**
57. "Vague Reliability Analysis for Fault Diagnosis of Cannula Fault in Power Transformer", **Applied Mathematical Sciences, Vol. 8, 2014, no. 18, 851 – 863. ISSN: 1312-885X (Print) ISSN: 1314-7552 (Online) <http://dx.doi.org/10.12988/ams.2014.310543>.**
58. "Reliability Analysis of a Non-series Parallel Network in fuzzy and Possibility Context", **International Journal of Education and Science Research Review, ISSN 2348-6457 Vol. 1(2), 2014 pp. 40- 46.**
59. "Vague Reliability Analysis for fault diagnosis in power transformers" , **Journal of International Academy of Physical Sciences ISSN 0974-9373 Vol. 18 (3) (2014) pp. 231-240**
60. " α - Generalized & α^* - Separation Axioms for Topological Spaces", **IOSR Journal of Mathematics (IOSR-JM), e-ISSN: 2278-5728, p-ISSN:2319-765X Volume 10, Issue 3 Ver. I (May-Jun. 2014) pp. 32-36.**
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63. "Vague Approach to Multiobjective Matrix Payoff", **International Journal of Education and Science Research Review, ISSN 2348-6457 Vol. 1(1), 2014 pp. 20- 24.**

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65. Reliability Analysis of Complex systems using Different types of Membership functions, **International Journal of Engineering and science Research**, e-ISSN 2277-2685, p-ISSN 2320-9763 Vol. 3(10) October 2013, pp. 583-593.
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67. Similarity Measure of interval Valued Vague Sets to Multiple attribute Decision Making, **International Journal of Application or innovation in Engineering & Management (IJAIEEM)**, ISSN:2319-4847 Vol.2(4), 2013 : pp. 318-330.
68. Generalization of Fuzzy Sets and Their Applications in HealthCare, **International Journal of Engineering Research & Management Technology (IJERMT)**, ISSN: 2320-7043 Vol.1 (2), 2013: pp.1-15.
69. Reliability Analysis of a System Using Intuitionistic Fuzzy Set, **International Journal of Soft Computing and Engineering(IJSCE)**, ISSN: 2231-2307 Vol.2(3), 2012: pp.431-440
70. Taylor Series Solution of Multi-Objective Linear Fractional Programming Problem by Using Vague sets, **International Journal of Fuzzy Mathematics and Systems**, ISSN 2248-9940 Volume 2, Number 3 (2012), pp. 245–253
71. Study of Water System Using Intuitionistic Fuzzy Correlation Coefficient, **International Journal of Engineering & Science Research**, ISSN: 2277-2685 Vol.2(6), 2012
72. On Duality In Linear Programming Under Vague Environment, **International Journal of Physics and Mathematical Sciences**, ISSN: 2277-2111 Vol.2(2), 2012: pp. 8-16
73. Reliability Analysis of a complex Power Supply System Using Different technique, **Bulletin of Pure and Applied Sciences** ISSN 0970-6577 Vol.30E (Math & Stat.)(No.2)2011:pp.217-230
74. Reliability Analysis of a Fuzzy Fault Tree Model Using Intuitionistic Fuzzy Sets, **Journal of Mountain Research**, ISSN 0974-3030 Vol.6 (2011) :9-18
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77. A Vague Set Theoretic Approach To Goal Programming, **International Journal of Physics and Mathematical Sciences ISSN : 2277-2111 Vol. 1(1) , 2011 pp. 80-85**
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79. A diagnostic decision model based on vague sets, **Journal of the Indian Mathematical Society, ISSN 0019-5839 Vol. 77, No. 1-4 (2010)**
80. Fuzzy Randomness in system reliability, In **Journal of The Assam Academy of Mathematics (JAAM) vol.1 (2010) pp. 78-90**
81. Fuzzy Reliability and Fuzzy Availability of a Three Unit Degradable System, **International J. of Math. Sci. & Engg. Appls. (IJMESA), ISSN 0973-9424, Vol.3 No. II (2009), pp.199-213.**
82. Reliability Analysis of a Multi State Fuzzy Fault Tree Model. **Mathematics Today Vol. 25 (2009) pp. 7-21**
83. Health Status Index Using Intuitionistic Fuzzy Approach, **Journal Mountain Research ISSN 0974-3030 Vol. 4 (2009) pp. 49-64**
84. Reliability Analysis: A Three unit standby System, In **Journal Mountain Research ISSN 0974-3030 Vol. 4 (2009) pp. 29-48**
85. CPU Scheduling: FCFS with Shorter Processes First, **International Journal of Engineering and Technology, Vol. (1 &2), (2008)pp 11-17.**
86. Fuzzy failure mode effects in a Cardiac Pacemaker. **J. Mountain Research ISSN 0974-3030, Vol. 3 (2008) pp. 95-111.**
87. Comparison of Two Wallman Compactifications. **In Bulletin of Pure and Applied Sciences ISSN 0970-6577 Vol.27E(No.1)2008:pp.177-181.**
88. Wallman Compactification on E-Compact Spaces. **In Acta Cinecia Indica ISSN 0970-0455 Vol. XXXIVM (04)(2008) pp. 2195-2199.**
89. Profust Reliability and Profust Availability of Computer Communication Network. **In International Journal of Agricultural and Statistical Sciences ISSN: 0973-1903 Vol.3 (2) (2007) pp. 431-439.**
90. Profust and Posfust Reliability of a Network System, **J. Mountain Research ISSN 0974-3030 Vol2 (2007)pp 97-112.**
91. Numerical solution of a three unit standby system, **Journal of Decision and Mathematical Sciences, Vol. 11, No.1-3, (2006)pp. 1-6.**

92. Randomness in System Reliability, **Proceeding of the National Seminar on Recent Trends in Advancement of Mathematical and Physical Sciences**, ISBN: 81.85126, 120-6 (2006) pp. **mathematics-164**.
93. Fuzzy Reliability and Availability of a Three Unit Degradable System, **Proceeding of the National Seminar on Mathematics and Computer Science**, ISBN: 81-8283-046-X (2005) pp. **179-188**.

18. Paper Presentation in Seminars/Conferences attended:

1. Attended a Conference on “Current trends in mathematical sciences.” Organized by Department of Mathematics, University of Allahabad, Allahabad (2002).
2. Presented a paper entitled, “Fuzzy Reliability of a three unit gracefully degradable system”, Sixth Conference of the International Academy of physical sciences, organized by D.D.U. Gorakhpur University, Gorakhpur (Feb.6-8, 2004)
3. Presented a paper entitled, “Fuzzy Reliability and Fuzzy availability of a three unit gracefully degradable system”, in National Seminar on NSCOM, Organized by S.D., College Muzzafarnagar., on (Nov. 29-30, 2005)
4. Attended in 8th Conference of *International Academy of Physical Science* and presented a paper entitled, “**Multistate Fault Tree Analysis using Fuzzy Set Theory**”, for YSA Organized by Ch.Charan Singh University Meerut (Dec.29-31, 2005)
5. Attended National Seminar on Emerging Trends in Network Technologies and presented a paper entitled, “**Reliability evaluation of a network system in the fuzzy and possibility context.**” Organized by CITM Faridabad (Sept 2, 2006)
6. Attended 1st National Conference on Computer Science and Information Technology and presented a paper entitled, “**Profust Reliability and Profust Availability of Computer Communication Network.**” Organized by K.I.E.T., Muradnagar (Ghaziabad) (Nov.11-12, 2006)
7. Participated in National Seminar on “**Recent Trends in Advancement of Mathematical and Physical Sciences**” and presented a paper entitled, “Fuzzy Randomness in System Reliability” Organized by D.N.College, Meerut (Nov. 6, 2006)
8. Attended National Conference on advancement in Informational Technology and presented a research paper entitled as “**FCFS with Shorter Processes First.**” Organized by Department of Computer science and Technology, Dr. B. R. Ambedkar university, Agra (Feb 16,2008)

9. Attended an International Seminar on “**Discourses in Public Policy and Governance in India.**” Organized by Department of Public Administration , Ch. Charan Singh University Meerut (January 27-28, 2008)
10. Attended in 11th Conference of *International Academy of Physical Science* and presented a paper entitled, “**Vague Set Theoretic Approach to Fault Tree Analysis**”, Organized by AllahabadUniversity, Allahabad (Feb.20-22, 2010)
11. Attended in 12th Conference of *International Academy of Physical Science* and presented a paper entitled, “**Reliability Analysis of a Network System using Intuitionstic Fuzzy Sets**”, Organized by University of Rajasthan, Jaipur-Jaipur-302004 (Dec. 22-24, 2010)
12. Attended in 3rd National Seminar on Recent Trends In Advancement of Mathematical and Physical sciences and presented a paper entitled, “**Reliability Analysis of a Fuzzy Fault Tree System Using Vague and Intuitionstic Fuzzy Sets**”, Organized by D.N. College, Meerut (Feb. 5-6, 2011)
13. Attended National Seminar on Environment Issue and Consumer Protection in India and presented a paper entitled, “**Analytic Approach to various aspects of Consumer behaviour in Present Environment**”, Organized by Department of Poltical Science, C.C.S.University, Meerut (March. 28-29, 2011)
14. Attended 14th Conference of *International Academy of Physical Science* and presented a paper entitled, “**Fuzzy Reliability Analysis of a Fault Tree Model Using Ranking of Intuitionstic Fuzzy Numbers**”, Organized by S.V.National Institute of Technology, Surat (Dec. 22-24, 2011)
15. Attended National Conference on Mathematical Analysis &Modelling(NCMAM) and presented a research paper entitled, “**Intuitionstic Fuzzy Management Model for Health Care Systems**”, Organized by SRM University, NCR Campus, Modinagar, Ghaziabad(30th – 31th March, 2012)
16. Attended 15th Conference of *International Academy of Physical Science* and presented a paper entitled, “**Reliability Analysis of Fuzzy systems Using Interval Valued Intuitionstic Fuzzy Numbers**”, Organized by Rajamangala University of Technology Thanyaburi, Thailand (Dec. 09-13, 2012)
17. Attended a national conference on Role of Mathematics and its application in development of science and Technology and presented a research paper entitled, “**Generalizations of fuzzy sets and their application in healthcare**”, organized

- byGOVT. P.G. College, Lansdowne (Jaiharikhakl), PauriGarhwal, Uttrakhand during (21-22) March, 2013.
18. Participated in National Environment awareness campaign Theme: Biodiversity Conservation sponsored by Ministry of Environment and Forests, Government of India at Aligarh Muslim University, Aligarh 19-20thDec. 2013.
 19. Attended a National Seminar on National Integration and participated in Slogan writing competition, group discussion and Essay writing competition, organized by National Foundation For Communal Harmony, Ministry of Home affairs, Government of India, New Delhi and Aligarh Muslim University, Aligarh (15th Dec. 2013)
 20. Participated in slogan writing competition on National Environment Awareness Campaign on the theme of Biodiversity Conservation sponsored by Ministry of Environment and Forests, Government of India at Aligarh Muslim University, Aligarh (15th Dec. 2013).
 21. Participated in National Conference on Advances in Mathematics sponsored by National Board on Higher Mathematics held at Hansraj College, University of Delhi during March 7-8, 2014.
 22. Participated in International Conference on recent Trends in Interdisciplinary Sciences: Opportunities and Challenges (RTISOC-2014) held at Faculty of Science, MultanimalModi College, Modinagar-201204 during Feb.28, 2014-March 01, 2014.
 23. Attended XVIth International Conference of *International Academy of Physical Science* and presented a paper entitled, “**Vague Reliability Analysis of a Fault Diagnosis in Power Transformer**”, Organized by PDPM Indian Institute of Information Technology, Design and Manufacturing Jabalpur (M.P.) (March 20-22, 2014)
 24. Attended a national conference on Applications of Mathematics in Engineering and sciences (AMES-2014) and presented a research paper entitled, “**Reliability Analysis of a Bridge Network using Possibility and Intuitionstic Fuzzy sets**”, organized byDepartment of Mathematics, Motilal Nehru National Institute of Technology Allahabad, Allahabad-211004 (India), during (29-30) November, 2014.
 25. Attended IInd International Conference onHigher Education: Issues & Challengesand presented a paper entitled, “**Role of Computer in Education**”, Organized by College of Education, Bilaspur, Greater Noida, G.B. Nagar (U.P.) (December 08-09, 2014)
 26. Attended XVIIth International Conference of *International Academy of Physical Science* and presented a paper entitled, “**Vague Set Theoretic Approach to Reliability Analysis**

- of a Complex System**”, Organized by University of Rajasthan, Jaipur (January 16-18, 2015)
27. Attended One day Interactive Seminar on role of CST UP in promotion of science & Technology and Facilitation of IPR Protection organized by Council of science and technology, U.P. Lucknow in Collaboration with: Intellectual Property Cell, C.C.S. University, Meerut(March 18, 2015)
 28. Attended Conference on advance Technique & devices in Mathematics & Physical Sciences (An International Meet)and presented a paper entitled, **“Fuzzy Reliability Analysis of Cheese Making Plant”**, Organized by Department of Mathematics & Physics at SRM University, Delhi-NCR, Campus, Ghaziabad, U.P. (January 23rd-25th, 2015)
 29. Attended 2nd International Conference on Advance Developments in Engineering and Technology and presented a paper entitled, **“Fuzzy Analysis of Shortest Job First Approach”**, Organized by Lord Krishna College of Engineering, Ghaziabad (U.P.) (February 21-22, 2015)
 30. Attended National Seminar on Interdisciplinary Approach of science in advance of technology : Art of human welfare, Organized by Department of Applied Sciences and humanities, Galgotias College of Engineering and technology Greater Noida (U.P.) (October 15-16, 2015)
 31. Attended XVIIIth International Conference of *International Academy of Physical Science* and presented a paper entitled, **“Vague Reliability Analysis of a Bridge Network”**, Organized by Faculty of Science, University of Allahabad, Allahabad-211002, India (December, 22-24, 2015)
 32. Attended an International Conference on Modern Mathematical Methods and High Performance Computing in Science & Technology (M3HPCST-2015) and presented a paper entitled, **“Interval Valued Vague Set Theoretic Approach to Multiple criteria in Decision Making”**, Organized by Department of Mathematics, RKGIT, Ghaziabad, India (December 27-29, 2015)
 33. Attended an International Conference on Recent development in computational and information technology and presented a paper entitled, **“Reliability Analysis of a Network System”**, Organized by Department of Information technology, SRM, University, Delhi NCR Campus, Ghaziabad, U.P. (February 26-27, 2016)

34. Attended a National Seminar on Political Thinking in Indian Literature at Department of Political Science, C.C.S. University, Meerut (February 13-14, 2016)
35. Attended a National Seminar on Quality Assurance in Higher Education: Involvement of Information and Communication Technology and presented a paper entitled, **“Role of ICT in Teaching of Mathematics and its Impact”**, Organized by D.J. College, Baraut (Baghpat) U.P. sponsored by directorate of Higher Education, U.P. (March 01-02, 2016)
36. Attended XIXth International Conference of *International Academy of Physical Science* and presented a paper entitled, **“Vague Reliability Analysis of a Stochastic system using different types of membership functions”**, Organized by Department of Mathematics and computer science, DSB Campus, Kumaun University, Nainital, India (October, 17-19, 2016)
37. Attended a National Seminar on Recent advances in mathematics and its computational aspects and presented a paper entitled, **“Similarity Measure of water system using Interval Valued Vague sets in Multi criteria decision Making”**, Organized by Department of mathematics S.M.P. Govt. Girls P.G. College, Meerut U.P. sponsored by directorate U.G.C., New Delhi, (November 11-12, 2016)
38. Attended a National Conference on Current Trends in Applied Sciences and presented a paper entitled, **“Reliability analysis of A Three Unit Parallel System With Vague Failure and Repair Rates”**, Organized by IQAC & Faculty of Science J.V. Jain College, Saharanpur-247001 U.P. sponsored by directorate of Higher Education, Govt. of Uttar Pradesh, (March 18th -19th , 2017)
39. Attended 2nd International Conference on *Innovative Approaches in Applied Sciences and Technologies* and presented a paper entitled, **“Fuzzy Reliability Analysis of a Comparable Redundant Gas Separator System”**, Organized by LKC Medicine, Nanyang Technological University, Singapore, In Collaboration with NUS, National University of Singapore, Department of Anatomy, Youg Loo Lin School of Medicine, Singapore, 639673 (June, 19-23, 2017)
40. Attended XXth International Conference of *International Academy of Physical Science on Recent Advances in Physical Sciences and Future Challenges* and presented a paper entitled, **“Vague Set Theoretic Approach to Reliability Analysis of a Summer Air conditioning System”**, Organized by Faculty of Sciences, Osmania University, Hyderabad, India– 500007 (July, 14-16, 2017)

41. Attended a National Seminar on Current Trends in Applied Sciences and presented a paper entitled, **“Reliability analysis of A Three Unit Parallel System With Vague Failure and Repair Rates”**, Organized by IQAC & Faculty of Science J.V. Jain College, Saharanpur-247001 U.P. sponsored by directorate of Higher Education, Govt. of Uttar Pradesh, (March 18th -19th , 2017)
42. Attended a National Seminar on Challenges and Solutions of Higher Education in Current Time and presented a paper entitled, **“Role of ICT in the Challenges of Higher Education”**, Organized by MUTA and D.A.V. College, Bulandshahr (December 26th , 2017)
43. Attended a National Seminar on गणित एवं इसके अनुप्रयोग में तकनीकी शब्दावली का महत्व और शोध पत्र फजी विश्वसनीयता के साथ जटिल प्रणाली का विश्वसनीयता मूल्यांकन स्थान नहरू ग्राम भारती, विश्वविद्यालय, इलाहाबाद अवधि 16–18 फरवरी 2018
44. Attended a National Conference on Advances in Operations Research and Mathematical Sciences (AORMS-2018) and presented a paper entitled, **“Reliability analysis of uncertain stochastic fuzzy systems using different types of membership functions”**, Organized by Department of research & post graduate studies in mathematics & department of statistics, Vardhman College, Bijnore (U.P.) in association with Operational Research Society of India (ORSI), Meerut Chapter, (Feb. 24th -25th , 2018)
45. Attended XXIInd International Conference of *International Academy of Physical Science on Recent Advances in Physical Sciences and Future Challenges* and presented a paper entitled, **“Reliability Analysis and optimization using vague logic based on statistical data”**, Organized by Faculty of Sciences, Dr. Ram Manohar Lohia Avadh University, Faizabad (Ayodhya) – 224001, U.P. to be held during 13-15 April, 2018
46. Attended XXIIIrd International Conference of *International Academy of Physical Science on Recent Advances in Physical Sciences and Future Challenges* and presented a paper entitled, **“Vague Reliability of a System using Sugeno’s fuzzy-TSK model ”**, NEPAL ACADEMY OF SCIENCE AND TECHNOLOGY (NAST) KATHMANDU, NEPAL during November 16-18, 2018
47. Attended and presented a research paper in a National Seminar on applications of technical terminology in modeling, optimization and computing in Science & Technology on Fuzzy Logic and its applications at SRM University Delhi NCR-Campus, Ghaziabad during 26th -28th April, 2019 organized by Commission for scientific and technical terminology, Government of India.

48. Presented a research paper through video conferencing in 4th International Conference on Innovative Approaches in Applied Sciences and Technologies on “Reliability Analysis of a gracefully degradable system by using Sugeno’s (TSK) Mediative Fuzzy logic” during June 25-29, 2019 organized by Mahsa University Kuala Lumpur, Malaysia.
49. Attended National Conference of *International Academy of Physical Science on Promoting the Advancement of Applied Sciences* and presented a paper entitled, “**Learning opportunities from Mathematical Fallacies and paradoxes**” organized by department of mathematics, HNB Garhwal University, SRT Campus Badshahi Thaul, Tehri Garhwal during October 22-23, 2019.
50. Participated in the One day webinar on “Enhancing Research Effectiveness using Scopus, Sciencedirect and Mendeley” organized by Faculty Development Centre, Kurukshetra University, Kurukshetra in Collaboration with Elsevier (Under the Aegis of PMMMNTT, MHRD, Govt. of India) on 01-05-2020.
51. Participated in the Two days webinar on “Computing Paradigms” jointly organized by Yelagiri Hills ACM Chapter and School of Computing Science, Don Bosco College (Co-Ed), Yelagiri Hills, during 21st to 22nd May, 2020.
52. Participated in “Role of Technical Terminologies of Indian Languages in the research studies of Social and scientific” organized by Commission for Scientific and Technical Terminology, Ministry of human Resource Development, Department of Higher education organized by Bundel Kand University, Jhanshi during 21st -24th may, 2020.
53. Participated in the Webinar on, “Art of Writing Research Paper” held on May29, 2020 organized by Department of Computer Science and Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, Uttar Pradesh, India.
54. Participated in the online AICTE Recognized Faculty Development Programme on **Programming Using MATLAB** from 08/06/2020 to 12/06/2020 (One week) organized by NIITR, Chandigarh.
55. Participated in the online AICTE Recognized Faculty Development **Artificial Neural Network and Fuzzy logic** from 22/06/2020 to 26/06/2020 (One week) organized by NIITR, Chandigarh.
56. Participated in the online Faculty Development **on Applications on GeoGebra** from 01/06/2020 to 05/06/2020 (One week) organized by Yashanrao Chavan College of Engineering Nagpur-441110.

57. Participated in a National Webinar on Application of **Mathematical Modeling and Statistical Learning on Covid-19** and its related Problem organized by department of Mathematics, Bareilly College Bareilly-243005 on June 07, 2020.

19. Symposiums, Workshops & Training Program:

1. **Short Term Course in** Fundamentals & Dos Windows, Office, Introduction to Visual Fix Pro & Multimedia, Internet with 78% from RAC Computers, Lucknow, 2002.
2. Attended a National Symposium on **“Scientific Computing with Application To Partial Differential Equations”** at I.I.T., Kanpur (Nov.19-21, 2006).
3. Attended an Orientation Program Organised by UGC-AcademicStaffCollege, Hermitage Compound, KumaunUniversity, Nainital.During February 18, 2008 to March, 19, 2008.
4. Attended a National symposium on **Mathematics inComputer Applications**and presented A research paper **“Reliability Analysis of CCNS Using vague sets”**organised by Department of Mathematics C.C.S.University, Meerut (March 28-29, 2009).
5. Attended a National Workshop on **Ancient Indian mathematics With Special Reference to Vedic Mathematics and Astronomy** and delivered an invited talk on **“Fuzzy Logic in Ancient Mathematics”** organized by Rashtriya Sanskrit Vidyapeetha, Tirupati, during 20-24 september, 2010.
6. Attended a National Workshop on **Optimization – Theory and Practice** organized by SSJ Campus Almora of Kumaun University, Nainital (U.K.) during 15-19 November, 2010.
7. Attended aRefresher Course in **Mathematics/ Operations Research/ Computer Science**Organised by UGC-Academic Staff College, CPDHE, University of Delhi-DelhiDuring January 2, 2013 to January 22, 2013.
8. Attended a NHRC Sponsored one day training programme on **Human Rights** organized by GOVT. P.G. College, Lansdowne(Jaiharikhakl), PauriGarhwal, Utrakhand on 20 March, 2013.
9. Attended a National workshop on **Optimization Techniques & Their Applications (NWOTA-2013)** organized by Department of Mathematics, Motilal Nehru National Institute of Technology, Allahabad & sponsored by NBHM, DRDO, CSIR, INSA and MNNIT Allahabad during June 05-11, 2013.
10. Attended aRefresher Course in **Computer Applications**Organised by UGC-Academic Staff College, Aligarh Muslim University, AligarhDuring Dec. 3, 2013 to Dec. 23, 2013.

11. Attended a Faculty Development **Programme on Modelling, Simulation and MATLAB tools**, organized by ABES Engineering College, Ghaziabad during January 15-17, 2014.
12. Attended a BlueMix Enablement Session through IBM software, India at MIET, Meerut on 18th april, 2014.
13. Attended and Participated in the **One Week Faculty Development Programme on Innovative Approaches in Mathematical & Statistical Sciences** Organized by SRM University Delhi- NCR Campus, Ghaziabad, U.P. During July 06, 2015 to July 11, 2015.
14. Attended and Participated in the **Workshop on ICT Usages in Teaching** Organised by UGC-HRDC Centre for Professional Development in Higher Education, University of Delhi- Delhi, During September 01, 2015 to September 08, 2015.
15. Attended and participated in the National Workshop on Advances Techniques in Mathematics, Physics & Computer science held at SRM, University, Delhi NCR Campus, Ghaziabad, U.P. (February 18-20, 2016)
16. Attended and participated in the Faculty Development Programme on contemporary Trends in Research Methodologies for professional development one Week Organized at SRM, University, Delhi NCR Campus, Ghaziabad, U.P. (July 04-10, 2016)
17. Attended a Refresher Course in **Mathematical Sciences** Organised by UGC-HRDC CPDHE, University of Delhi- Delhi During August 30, 2016 to September 20, 2016.
18. Attended a national workshop on Higher Education in India: Challenges and opportunity Organized by IQAC , Ch Charan Singh University, Meerut during March 19th 2017.
19. Attended a national workshop on Research Ethics, Plagiarism and Reference management jointly Organized by Department of Library & Information Science and IQAC , Ch. Charan Singh University, Meerut during April 3rd 2017.
20. Attended a webinar on Challenges of higher education in era of Covid-19 Pandemic organized by Department of Mathematics, Shia P.G. College, Lucknow on 03 June, 2020.
21. Participated in a webinar on Covid-19 and its Biology: Cure, Precautions and Future organized by Vivek college of Education, Bijnor on 30, June, 2020.

20. Invited Lectures delivered/ chaired the Session

1. **“New Employment Trends in IT”**. In a national seminar organized by Department of computer science, ShyamlalSharaswati (PG) College, Shikarpur, BulandShahr (U.P.) (Dec. 04, 2007)
2. **“SPSS Package in Research Methods in Social Sciences”** In a Workshop on Research Methods in Social Sciences Organized by Department of Political Science C.C.S.University (March 16-21, 2009)
3. **“SPSS Package in Research Methods in Social Sciences”** In a Workshop on Research Methods in Social Sciences Organized by Department of Political Science C.C.S.University (March 23-28, 2009)
4. **“Generalization of Fuzzy Sets and Their Application in Medical Diagnosis”** in a national conference on Role of Mathematics and its application in development of science and Technology as resource person organized byGOVT. P.G. College, Lansdowne (Jaiharikhakl), PauriGarhwal, Utrakhand during (21-22) March, 2013.
5. Attended a national conference on Role of Mathematics and its application in development of science and Technology and chaired a session organized byGOVT. P.G. College, Lansdowne (Jaiharikhakl), PauriGarhwal, Utrakhand during (21-22) March, 2013.
6. Attended a national conference on Applications of Mathematics in Engineering and sciences (AMES-2014) and chaired a session organized byDepartment of Mathematics, MotilalNehru National Institute of Technology Allahabad, Allahabad-211004 (India), during (29-30) November, 2014.
7. **“Soft Computing and Fuzzy Logic”** in a National Workshop on Advance Techniques in Mathematics, Physics & Computer Science as resource person organized by SRM University Delhi-NCR Campus, Ghaziabad, U.P. during (18-20) February 2016.
8. **“Fuzzy logic and its Impact on Reliability”** in a national SeminarRecent advances in mathematics and its computational aspects Organized by Department of mathematics S.M.P. Govt. Girls P.G. College, Meerut U.P. sponsored by directorate U.G.C., New Delhi, (November 11-12, 2016)
9. **Matlab: A Tool in Research and its Application** inthe Faculty Development Programme on contemporary Trends in Research Methodologies for professional development one Week Organized at SRM, University, Delhi NCR Campus, Ghaziabad, U.P. (July 04-10, 2016)
10. Attendeda national SeminarRecent advances in mathematics and its computational aspects and chaired a technical session Organized by Department of mathematics S.M.P. Govt. Girls

P.G. College, Meerut U.P. sponsored by directorate U.G.C., New Delhi, (November 11-12, 2016)

11. **“Vague Logic and their Application in Human Health”** in a National Conference on Current Trends in Applied Sciences Organized by IQAC & Faculty of Science J.V. Jain College, Saharanpur-247001 U.P. sponsored by directorate of Higher Education, Govt. of Uttar Pradesh, (March 18th -19th, 2017)
12. **“Fuzzy Logic and Reliability”** in a National Conference on Advances in Mathematics and Its Applications (NCAMA 2018) organized by Department of Mathematics, M.B. Govt. P.G. College, Haldwani (Nainital), Uttarakhand during 17-18, March, 2018.
13. Attended a national conference on Advances in Mathematics and Its Applications (NCAMA 2018) organized by Department of Mathematics, M.B. Govt. P.G. College, Haldwani (Nainital), Uttarakhand and chaired a session during 17-18, March, 2018.
14. **“Mediative Fuzzy Logic to Reliability Analysis of Network System”** in a 21st Annual Conference of Vijana Parishad of India on Modeling, Optimization and Computing for Technological and Sustainable Development (MOCTSD-2019) organized by Department of Mathematics, SRM University Delhi NCR-Campus, Ghaziabad during 26th -28th April, 2019.
15. Attended a 21st Annual Conference of Vijana Parishad of India on Modeling, Optimization and Computing for Technological and Sustainable Development (MOCTSD-2019) and chaired a technical session organized by Department of Mathematics, SRM University Delhi NCR-Campus, Ghaziabad during 26th -28th April, 2019.
16. Attended the Second International Conference on Frontiers in Industrial and Applied Mathematics (FIAM-2019) and Gave an Invited Talk during December 21-22, 2019 organized by Department of Applied Sciences (Mathematics) Galgotias College of Engineering & Technology, Greater Noida, U.P., India
17. Attended the Second International Conference on Frontiers in Industrial and Applied Mathematics (FIAM-2019) and chaired a technical session during December 21-22, 2019 organized by Department of Applied Sciences (Mathematics) Galgotias College of Engineering & Technology, Greater Noida, U.P., India
18. Attended the 25th Conference of International Academy of Physical Sciences (CONIAPSXXV) on “Physical and Biological Sciences at Cross-roads: Interdisciplinary Explorations and Exciting Challenges” and delivered an Invited Talk on “Multi-Criteria decision making systems using alternatives based on meditative fuzzy logic” during

December 29-31, 2019 organized by Guru Jambheshwar University of Sciences & Technology, Hisar-125001, U.P., India.

19. Attended the 25th Conference of International Academy of Physical Sciences (CONIAPSXXV) on “Physical and Biological Sciences at Cross-roads: Interdisciplinary Explorations and Exciting Challenges” and chaired a technical session during December 29-31, 2019 organized by Guru Jambheshwar University of Sciences & Technology, Hisar-125001, U.P., India
20. Invited Lecture on Mathematical Aspects of Fuzzy Logic and their extension to Real life System, on the theme Smart Innovations in Science, Communications and Computing Technology SISCT-2020 during 14th -15th Feb, 2020 in Subharti University, Meerut.
21. Invited Lecture on AI & Neural Network on the theme “Emerging Trends & Their Future Prospects in Multidisciplinary Sphere” on 11th November, 2020 in I.P. College BSR.
22. Invited lecture in Faculty Development Programme on “ASPECTS OF MATHEMATICS” titled “Soft Computing” dated 24th March 2021 UGC Sponsored Faculty Development Programme on “Aspects of Mathematics” 22.03.2021 to 28.03.2021
23. Resource Person in the online Refresher Course in Mathematics /Operational Research / Statistics and Computer Science held from 4th October 2021 - 18th October 2021 for University and College teachers organized by Centre for Professional Development in Higher Education (CPDHE) UGC-Human Resource Development Centre University of Delhi Delhi - 110 007 , Website: <http://cpdhe.du.ac.in/> Telephone: 91-11-27667099 Ext. 201/104; 91-11-27662065
24. Invited Lecture on **Mediative Fuzzy Extension Technique and its Consistent Measurement in the Decision Making of Medical Application** in 27th International conference on Fuzzy and Computational Mathematics (CONIAPS_2021) organized by Department of Mathematics, National Institute of Technology Agartala, Tripura, India, Pin: 799046, during 26-28 october, 2021
25. Chaired a technical session on 26-10-2021 at NIT Agartala in 27th International conference on Fuzzy and Computational Mathematics (CONIAPS_2021).

21. Books Published

1. A Text Book on Coordinate Geometry and Vectors, ShikshaSahityaPrakashan,Meerut(2006)
2. A Text Book on , **Linear Algebra & Matrices for Graduate Classes, ISBN: 978-93-80803-24-1,** KedarNath Ram Nath publication, Meerut (2012)
3. A Text Book on , **Differential equations and integral Transforms, ISBN: 978-93-80803-25-8,**

- KedarNath Ram Nath publication, Meerut (2012)
4. A Text Book on , **Mechanics, ISBN: 978-93-80803-22-7**,Kedar Nath RamNath Publication, Meerut (2012)
 5. A Text Book on , **Real Analysis, ISBN: 978-93-80803-50-0**,KedarNath Ram Nath Publication, Meerut (2013)
 6. A Text Book on , **Complex Analysis, ISBN: 978-93-80803-46-3**,Kedar Nath Ram Nath Publication, Meerut (2013)
 7. A Text Book on , **Numerical Analysis and Programming in C, ISBN: 978-93-80803-45-6**, Kedar Nath Ram Nath publication, Meerut (2013)
 8. A Chapter on Vague Management Model in Medical Diagnosis in Edited book on **Applied Mathematics ISBN: 978-93-82532-64-4**published by Yking Books Jaipur-302006 (2014)
 9. A Chapter on Fuzzy Reliability of a complex power supply system using fuzzy failure rates In Edited book on **Applied Mathematics ISBN: 978-93-82532-64-4**published byYking Books Jaipur-302006 (2014)
 10. A Chapter on Impact of Demonetization on Industry and Business in Edited book On **DEMONETIZATION A Socio Economic Transformation ISBN: 978-93-85000-69-0** Published by Bharti Publications, New Delhi (2017).
 11. A Chapter on A mathematical model for air polluting factors its impact on Human Health: An intuitionstic Fuzzy Approach in Edited book on Global Challenges to Environment by Adhyayan Publishers & Distributors, New Delhi (2021) ISBN: 978-81-952007-4-0.

22. Achievements:

1. Qualified **NET** [U.G.C.-CSIR] in June 2001.
2. Qualified **NET** [U.G.C.-CSIR] in July 2002.
3. Qualified **NET-JRF** [U.G.C.-CSIR] in Dec. 2002
4. Qualified **G.A.T.E.** [I.I.T., Kanpur] in Dec. 2002.

23. Awards/Fellowship:

1. Junior Research Fellowship from **U.G.C.-C.S.I.R.** New Delhi from Dec., 2002.
2. National Fellowship Scheme by Ministry of Education and Cultural, Govt. of India.- 1997.
3. SARC Certificate of Excellence for Outstanding Educationist Award-2016 on the occasion of International Conference on Global Initiatives in Applied Sciences and green Technologies (GiAsT-2016) during (September, 09-11, 2016), at SRM University, Delhi –NCR Campus, Modinagar, Ghaziabad (UP.), India

4. SERS Excellence in Teaching Award-2017 on the occasion of 2nd International Conference on Innovative Approaches in Applied Sciences and Technologies (iCiAsT-2017) during (June, 19-23, 2017), at Nanyang Technological University (NTU), Singapore, 639673
5. Associate Fellowship Award- 2019 for valuable contribution to mathematics on December, 29, 2019 during CONIAPSXXV at Guru Jambheshwar University of Sciences & Technology, Hisar by International Academy of Physical Sciences.
6. Silver Medal by International Academy of Physical Sciences on December 29, 2019 during CONIAPSXXV at Guru Jambheshwar University of Sciences & Technology, Hisar

24. Worked as reviewer in Various National and International Journals

- 1. International Journal of Applied and Computational Mathematics (Springer)**
- 2. Quaternary International, (Elsevier)**
- 3. Asian Journal of Probability and Statistics**
- 4. JNMS - Journal of Nepal Mathematical Society**
- 5. International Journal of the Analytic Hierarchy Process.**
- 6. International Journal of Electrical and Computer Engineering (IJECE)**
- 7. GANITA [Journal of Bharat Ganit Parisad]**
- 8. International Journal of Fuzzy Systems (Springer)**
- 9. Current Journal of Applied Science and Technology**
- 10. Journal of Intelligent & Fuzzy Systems**
- 11. IEEE Access**
- 12. Health Informatics Journal**
- 13. Results in Control and Optimization (Elsevier)**

- 25. 1. Project:** Project entitled “Mathematical Aspect of Mediative Fuzzy Logic to Health Management System” and granted the amount of Rs. 3, 00,000 /= (Rupees Three Lakhs only) for research and development scheme during the financial year 2020-21. (F. No. 47/2021/606/Sattar-4-2021-4(56)/2020 Dated: 30-03-2021)
- 3. Center of Excellence:** Fuzzy/ Intuitionistic Transportation and Transshipment in context of Computational Artificial Intelligence on this topic awarded by Uttar Pradesh Government

for the establishment of Center of Excellence for the year 2021-2022 under file number (F. No. -91/2021/2095/Sattar-4-2021-4(17)/2021 Dated: 11-10-2021)

4. DST-SERB: Fuzzy Logic, Optimization and soft computing in the context of Artificial Intelligence awarded by File Number SSY/2021/000202 dated 16-12-2021.

26. Conference / Seminars/ Workshop/ FDP Organized

1. 24th Conference of International Academy of Physical Sciences (CONIAPSXXV) on “Innovation in Physical Sciences during August 09-11, 2019 organized by Faculty of Science Chaudhary Charan Singh University, Meerut -250004. U.P., India as Organizing Secretary.

2. Two week interdisciplinary, **ONLINE**, Faculty, Development Programme, On, Usage of ICT in Education: Challenges and Opportunities during, Covid-19, **July 2-15, 2021 by Department of Mathematics**, Chaudhary Charan Singh University, Meerut, as Coordinator.

27. Ph. D. Thesis:

Thesis Title: “**A Study of Fuzzy Aspect of System Reliability**”

Supervisor: **Prof. D. Pandey**

M. Phil. Dissertation:

Dissertation Title: “**Some Results on Fuzzy, Software and Hardware Reliabilities**”

Supervisor: **Prof. D. Pandey**

Relevant Software Skills:

Statistical: MATLAB, SPSS & Computer Applications in Mathematics.

Others: Internet Explorer, Adobe Reader and Adobe Photoshop.

28. Declaration:

I hereby declare that the above written particulars are true to the best of my knowledge and belief.

Date: 03-01-2022

PLACE: Meerut

(M. K. SHARMA)