

## Faculty Profile

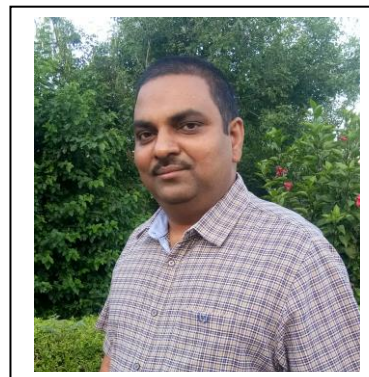
**Dr. Surender Singh**

**Assistant Professor**

School of Mathematics

Shri Mata Vaishno Devi University

Kakryal, Katra, Jammu & Kashmir-182320



### Brief Bio-data:

Dr. Surender Singh is an Assistant Professor in the School of Mathematics, Shri Mata Vaishno Devi University, Katra . He has received his Masters degree from Kurukshetra University, Kurukshetra in 1999. He has also qualified CSIR (NET) in 2002 and later received his PhD (Mathematics) at Deen Bandhu Chhotu Ram University of Science & Technology, Murthal (Sonipat) in 2015. He has more than fifteen years of teaching experience. His main research interest is Mathematical Information Theory, Fuzzy Theory and applications. He has publications in reputed international journals and conferences. He has participated in many international and national conferences. He has also organized conferences at School of Mathematics, SMVDU. He is also a life member of professional bodies like Indian Mathematical Society, Jammu Mathematical Society, Indian Society of Industrial and Applied Mathematics, Indian Society of Technical Education, India, Indian Society of Information Theory and Applications, IAENG, RGMIA. He is also a reviewer of several international Journals of repute.

### Educational Qualification:

S. No.	Qualifications acquired	University / Institution / College	Year of Passing
1.	B.Sc.(Phy., Chem., Maths.)	Maharshi Dayanand University, Rohtak	1996
2.	M.Sc. ( Mathematics)	Kurukshetra University, Kurukshetra	1999
3.	Ph.D.( Mathematics)	Deenbandhu Chhotu Ram University of Science & Technology, Murthal (Sonapat ), Haryana <b>Title of Thesis:</b> Some Generalized Information and Divergence Measures and their Applications <b>Supervisors:</b> Prof. P. K. Bhatia and Dr. Vinod Kumar	2015

**Professional Qualification:**

Qualified National Educational Test (NET) conducted by CSIR-UGC in the year 2002.

**Experience:**

Teaching: 15 years      Research: 12 years      Administration: 08 years      Total: 15 years

**Professional Affiliation:**

S. No.	Designation	Organization	Duration
1	Lecturer	S.D. (P.G.)College, Panipat	19 <sup>th</sup> July 2000 to 15 <sup>th</sup> March 2002
2.	Lecturer	I.B. (P.G.)College, Panipat	15 <sup>th</sup> July 2002 to 22 March 2003
3.	Lecturer	S.D. (P.G.)College, Panipat	18 July 2006 to March 2007
4.	Assistant Professor	S.D Institute of Tech. and Management, Israna Panipat	25 <sup>th</sup> June 2007 to 29 <sup>th</sup> November 2011
5.	Assistant Professor	Shri Mata Vaishno Devi University, Katra	1 <sup>st</sup> December 2011 to Till date

**Courses Taught:****P.G. LEVEL (M.Sc./M.Tech.):**

- Abstract Algebra
- Discrete Mathematics
- Linear Algebra
- Real Analysis
- Differential Equations
- Calculus of Variations and Mechanics
- Modern Applied Algebra

**U.G. LEVEL (B.Sc./B.Tech.)**

- Real Analysis
- Algebra
- Vector Calculus and Coordinate Geometry
- Stochastic Models in Computer Sciences

- Discrete Structure
- Applied Graph Theory
- Numerical Methods
- Engineering Mathematics-I
- Engineering Mathematics-II
- Engineering Mathematics-III

**Areas of Interest / Specialization:**

1. **Mathematical Information Theory**
2. **Fuzzy Theory and Applications**

**Research Profile**

**Research Publications:**

**Published Journal Papers (Only SCI/SCIE/Scopus Listed Journals)**

S. No	Name of Faculty	Title of the paper	Name of the Journal with Impact Factor & ISSN	Volume, Page No., Year	Link of the paper	Indexing
1.	<b>Surender Singh,</b> Abdul Haseeb Ganie	On some correlation coefficients in Pythagorean fuzzy environment with applications	International Journal of Intelligent Systems  <b>Impact factor: 7.229</b> <b>ISSN: 1098-111X</b>	35(4), 682-717  <b>Year: 2020</b>	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/int.2222">https://onlinelibrary.wiley.com/doi/abs/10.1002/int.2222</a>	SCIE Indexed
2.	Abdul Haseeb Ganie, <b>Surender Singh</b>	Some new correlation coefficients of picture fuzzy sets with applications	Neural Computing and Applications  <b>Impact factor: 4.664</b> <b>ISSN: 0941-0643</b>	To be assigned, 1-17  <b>Year: 2020</b>	<a href="https://link.springer.com/content/pdf/10.1007/s00521-020-04715-y.pdf">https://link.springer.com/content/pdf/10.1007/s00521-020-04715-y.pdf</a>	SCIE Indexed
3.	<b>Surender Singh,</b> Sonam Sharma, Sumita Lalotra	Generalized Correlation Coefficients of Intuitionistic Fuzzy Sets with Application to MAGDM and Clustering Analysis	International Journal of Fuzzy Systems  <b>Impact factor: 3.08</b> <b>ISSN: 1562-2479</b>	To be assigned, 1-14  <b>Year: 2020</b>	<a href="https://link.springer.com/article/10.1007/s40815-020-00866-1">https://link.springer.com/article/10.1007/s40815-020-00866-1</a>	SCIE Indexed
4.	<b>Surender Singh,</b> Sumita Lalotra	Knowledge measure of hesitant fuzzy set and its application in multi-attribute decision-making	Computational and Applied Mathematics  <b>Impact factor: 1.26</b> <b>ISSN: 2238-3603</b>	39(2), Article 86, 1-31  <b>Year: 2020</b>	<a href="https://link.springer.com/article/10.1007/s40314-020-1095-y">https://link.springer.com/article/10.1007/s40314-020-1095-y</a>	SCIE Indexed
5.	<b>Surender Singh,</b> Sumita Lalotra, Sonam Sharma	Dual Concepts in Fuzzy Theory: Entropy and Knowledge Measure	International Journal of Intelligent Systems  <b>Impact factor: 7.229</b> <b>ISSN: 1098-111X</b>	34(5), 1034-1059  <b>Year: 2019</b>	<a href="https://onlinelibrary.wiley.com/doi/abs/10.1002/int.22085">https://onlinelibrary.wiley.com/doi/abs/10.1002/int.22085</a>	SCIE Indexed

6.	<b>Surender Singh,</b> Sumita Lalotra	On Generalized Correlation Coefficients of the Hesitant Fuzzy Sets with Their Application to Clustering Analysis	Computational and Applied Mathematics <b>Impact factor: 1.26</b> <b>ISSN: 2238-3603</b>	38(1), Article 11, 1-26 <b>Year: 2019</b>	<a href="https://link.springer.com/article/10.1007/s40314-019-0765-0">https://link.springer.com/article/10.1007/s40314-019-0765-0</a>	SCIE Indexed
7.	Sonam Sharma, <b>Surender Singh</b>	Generalized correlation coefficients of the fuzzy sets and fuzzy soft sets with application in cleanliness ranking of public health centres	Journal of Intelligent and Fuzzy Systems <b>Impact factor: 1.637</b> <b>ISSN: 1064-1246</b>	36(2), 3671-3683 <b>Year: 2019</b>	<a href="https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs181838?resultNumber=0&amp;totalResults=7&amp;start=0&amp;q=surender+singh&amp;resultsPageSize=10&amp;rows=10">https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs181838?resultNumber=0&amp;totalResults=7&amp;start=0&amp;q=surender+singh&amp;resultsPageSize=10&amp;rows=10</a>	SCIE Indexed
8.	Sumita Lalotra, <b>Surender Singh</b>	On a knowledge measure and an unorthodox accuracy measure of an intuitionistic fuzzy set(s) with their applications	Journal of Computational Intelligent Systems <b>Impact factor: 2.153</b> <b>ISSN: 1875-6891</b>	11, 1338-1356 <b>Year: 2018</b>	<a href="https://www.atlantis-press.com/journal/s/jcis/25902770">https://www.atlantis-press.com/journal/s/jcis/25902770</a>	SCIE Indexed
9.	<b>Surender Singh,</b> Sumita Lalotra	Generalized correlation coefficients of the hesitant fuzzy sets and the hesitant fuzzy soft sets with application in group decision-making	Journal of Intelligent and Fuzzy Systems <b>Impact factor: 1.637</b> <b>ISSN: 1064-1246</b>	35(3), 3821-3833 <b>Year: 2018</b>	<a href="https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs18719?resultNumber=1&amp;totalResults=7&amp;start=0&amp;q=surender+singh&amp;resultsPageSize=10&amp;rows=10">https://content.iospress.com/articles/journal-of-intelligent-and-fuzzy-systems/ifs18719?resultNumber=1&amp;totalResults=7&amp;start=0&amp;q=surender+singh&amp;resultsPageSize=10&amp;rows=10</a>	SCIE Indexed
10.	<b>Surender Singh,</b> Abdul Haseeb Ganie, Sumita Lalotra	On generalized correlation coefficients of Picture fuzzy sets with their applications  (To Appear)	International Journal of Fuzzy System Applications <b>Impact factor: NA</b> <b>ISSN: 2156-177X</b>	10(4), Article 2 <b>Year: 2021</b>		Scopus Indexed
11.	<b>Surender Singh,</b> Sumita Lalotra	On a weighted fuzzy knowledge measure with its application to multi-attribute decision-making  (In Press)	Songklanakarin Journal of Science and Technology <b>Impact factor: NA</b> <b>ISSN: 0125-3395</b>	<b>Year: 2020</b>	<a href="https://rdo.psu.ac.th/sjstweb/Ar-Press/2019Nov/10.pdf">https://rdo.psu.ac.th/sjstweb/Ar-Press/2019Nov/10.pdf</a>	Scopus Indexed
12.	<b>Surender</b>	On Some Knowledge	Cybernetics and	20(1),	<a href="http://www.cit.iit.">http://www.cit.iit.</a>	ESCI,

	<b>Singh, Sumita Lalotra, Abdul Haseeb Ganie</b>	Measures of Intuitionistic Fuzzy Sets of Type Two with Application to MCDM, 3-20	Information Technologies <b>Impact factor: NA</b> <b>ISSN: 1314-4081</b>	3-20 <b>Year: 2020</b>	<a href="http://bas.bg/CIT-2020/v-20-1/10341-Volume20_Issue_1-01_paper.pdf">bas.bg/CIT-2020/v-20-1/10341-Volume20_Issue_1-01_paper.pdf</a>	Scopus Indexed
13.	<b>Surender Singh, Sonam Sharma</b>	On Generalized Fuzzy Entropy and Fuzzy Divergence Measure with Applications, 47-69	International Journal of Fuzzy System Applications <b>Impact factor: NA</b> <b>ISSN: 2156-177X</b>	8(3), Article 2, 1-23 <b>Year: 2019</b>	<a href="https://www.igi-global.com/article/on-generalized-fuzzy-entropy-and-fuzzy-divergence-measure-with-applications/233586">https://www.igi-global.com/article/on-generalized-fuzzy-entropy-and-fuzzy-divergence-measure-with-applications/233586</a>	Scopus Indexed
14.	<b>Surender Singh, Sonam Sharma</b>	On Generalized Intuitionistic Fuzzy Knowledge Measure and its Application in MADM using Combined Weights, 1536-1542	International Journal of Recent Technology and Engineering <b>Impact factor: NA</b> <b>ISSN: 2277-3878</b>	8(2), 1536-1542 <b>Year: 2019</b>	<a href="https://www.ijrte.org/wp-content/uploads/papers/v8i2/B2186078219.pdf">https://www.ijrte.org/wp-content/uploads/papers/v8i2/B2186078219.pdf</a>	Scopus Indexed
15.	<b>Surender Singh, Sonam Sharma</b>	Concept of certainty in residual life of a system,	AIP Conference Proceedings <b>Impact factor: NA</b> <b>ISSN: 1551-7616</b>	170003 (1-5) <b>Year: 2019</b>	<a href="https://aip.scitation.org/doi/10.1063/1.5122600">https://aip.scitation.org/doi/10.1063/1.5122600</a>	Scopus Indexed
16.	P.K Bhatia and <b>Surender Singh, Vinod Kumar</b>	On Some Properties of Tsallis Entropy on Majorization Lattice	Acta Mathematica Academiae Paedagogiae Nyíregyháziensis <b>Impact Factor: NA</b> <b>ISSN:1786-0091</b>	31(2), 3331-340 <b>Year: 2015</b>	<a href="https://www.emis.de/journals/AM/APN/vol31_2/13.html">https://www.emis.de/journals/AM/APN/vol31_2/13.html</a>	Scopus Indexed
17.	P.K Bhatia, <b>Surender Singh</b>	On a New Csiszar's f-Divergence Measure	Cybernetics and Information Technologies <b>Impact factor: NA</b> <b>ISSN: 1314-4081</b>	13(2), 43-57 <b>Year: 2013</b>	<a href="http://www.cit.iit.bas.bg/CIT_2013/v13-2/10341-Volume13_Issue_2-03_paper.pdf">http://www.cit.iit.bas.bg/CIT_2013/v13-2/10341-Volume13_Issue_2-03_paper.pdf</a>	Scopus Indexed

### Published Journal Papers ( Referred Journals)

18.	Abdul Haseeb Ganie, Sumita Lalotra, <b>Surender Singh</b>	An exponential hesitant fuzzy entropy measure	Journal of Basic and Applied Engineering Research <b>Impact factor: NA</b> <b>ISSN: 2350-0077</b>	6(2), 283-288 <b>Year:2019</b>		
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19.	<b>Surender Singh,</b> Abdul Haseeb Ganie	On Some Novel Correlation Coefficients in Picture Fuzzy Environment	Review of Business and Technology Research  <b>Impact factor:</b> NA <b>ISSN:</b> 1941-9414	16(2), 14-18  <b>Year:2019</b>	<a href="http://mtmi.us/rbtr/">http://mtmi.us/rbtr/</a>	
20.	<b>Surender Singh,</b> Sumita Lalotra	On some optimization principles based on hesitant fuzzy entropies	Advanced Modeling and Optimization  <b>Impact factor:</b> NA <b>ISSN:</b> 1841-4311	20(1), 89-100  <b>Year:2018</b>	<a href="https://camo.ici.ro/journal/vol20/v20a7.pdf">https://camo.ici.ro/journal/vol20/v20a7.pdf</a>	Mathematical Reviews, UGC List
21.	P.K Bhatia <b>Surender Singh,</b> Vinod Kumar,	On Applications of a Generalized Hyperbolic Measure of Entropy	International Journal of Intelligent Systems and Applications  <b>Impact factor:</b> NA <b>ISSN:</b> 2074-904X	7(7), 36-43  <b>Year:2015</b>	<a href="http://www.mecspress.org/ijisa/ijisa-v7-n7/IJISA-V7-N7-5.pdf">http://www.mecspress.org/ijisa/ijisa-v7-n7/IJISA-V7-N7-5.pdf</a>	EBSCO, ProQuest, J-Gate
22.	P.K Bhatia, <b>Surender Singh,</b> Vinod Kumar	On A Generalized Hyperbolic Measure Of Fuzzy Entropy	International Journal of Mathematical Archives  <b>Impact factor:</b> NA <b>ISSN:</b> 2229-5046	4(12), 136-142  <b>Year:2014</b>	<a href="http://www.ijma.info/index.php/ijma/article/view/2540">http://www.ijma.info/index.php/ijma/article/view/2540</a>	Index Copernicus
23.	P.K Bhatia and <b>Surender Singh</b>	A New Measure of Fuzzy Directed Divergence and its Application in Image Segmentation	International Journal of Intelligent Systems and Applications  <b>Impact factor:</b> NA <b>ISSN:</b> 2074-904X	5(4), 81-89  <b>Year:2013</b>	<a href="http://www.mecspress.org/ijisa/ijisa-v5-n4/IJISA-V5-N4-8.pdf">http://www.mecspress.org/ijisa/ijisa-v5-n4/IJISA-V5-N4-8.pdf</a>	EBSCO, ProQuest, J-Gate
24.	P.K Bhatia, <b>Surender Singh</b>	On Some Divergence Measures Between Fuzzy Sets And Aggregation Operations	Advanced Modeling and Optimization  <b>Impact factor:</b> NA <b>ISSN:</b> 1841-4311	15(2), 235-248  <b>Year:2013</b>	<a href="https://camo.ici.ro/journal/vol15/v15b8.pdf">https://camo.ici.ro/journal/vol15/v15b8.pdf</a>	Mathematical Reviews, UGC List
25.	P.K Bhatia, <b>Surender Singh</b>	Three Families of Generalized Fuzzy Directed Divergence	Advanced Modeling and Optimization  <b>Impact factor:</b> NA <b>ISSN:</b> 1841-4311	14(3), 599-614  <b>Year:2012</b>	<a href="https://camo.ici.ro/journal/vol14/v14c14.pdf">https://camo.ici.ro/journal/vol14/v14c14.pdf</a>	Mathematical Reviews, UGC List

**Book Chapter:**

S. No.	Author(s)	Publication
1.	Surender Singh	Studies on Intuitionistic Fuzzy Information Measure, Mathematical Modelling and Information Technologies, Lambert Academic Publishing.

**Research Supervised:****A. Ph.D. Supervision:**

S. No.	Student Name	Year	Role	Research Topic	Status
1.	Sumita Lalotra	2017-2020	Supervisor	A Study of Information Measures and Correlation Measures based on Intuitionistic and Hesitant Fuzzy Sets	Submitted on 08 Feb. 2020
2.	Sonam Sharma	2016-2020	Supervisor	Some Information Measures and Correlation Measures Based on Fuzzy and Intuitionistic Fuzzy Sets	Thesis written (To be Submitted)
3.	Abdul Haseeb Ganie	2017-2020	Supervisor	Some Measures of Ambiguous Information with Applications	Near Thesis Submission

**B. Master Project/Thesis Supervision:**

S.NO.	Title of the Master Thesis	Students	Year of award
1.	On Some Noetherian and Artinian Rings	Meena Kumari (2011SMM10), Sushil Kumar(2011SMM18)	2013
2.	A survey of E-resources for research in Mathematical Sciences	Sunil Kumar(2012SMM18)	2014
3.	On Some Information Theoretic Models	Deepika Gupta(2012SMM08), Anjali Dogra (2012SMM17)	2014
4.	A Study of Intuitionistic Fuzzy Sets and Their Applications	Ravinder Singh(2013SMM10), Rohini Jasrotia (2013SMM09), Rajni Bala(2013SMM12)	2015

5.	Multi-criterion Decision Making in Framework of Fuzzy Theory	Neha Sharam(14MMM015), Divya Sharma(14MMM024)	2016
6.	Fuzzy Similarity and Dissimilarity Measures with Their Application in Pattern recognition and Medical Diagnosis	Kimmi Rajput(14MMM007), Vikas Kumar (14MMM018)	2016
7.	A study of Aggregation Operators	Sapna Devi (15MMM017), Shria Sharma(15MMM019)	2017
8.	Basics of Number Theory and Cryptography	Neha Mahajan (15MMM018), Parth Gupta(15MMM013)	2017
9.	On Some Clustering Methods	Silky Sharma (16MMM016), Nitish Badyal(16MMM026), Rupali Gupta(16MMM033)	2018
10.	On Some Methods of Image Segmentation	Karnika Sharma(16MMM012), Surbhi Sudan(16MMM032)	2018
11.	On Some Methods of Decision Making	Surbhi Gupta(17MMM031), Sakshi Verma(17MMM036), Punit Punia(17MMM041)	2019
12.	A Study of Some Functional Equations	Taranjeet Singh(17MMM043), Skinder (17MMM011)	2019
13.	On Some Information Measures of Neutrosophic Sets	Samreeti Sharma (18MMM031), Simran Gupta(18MMM048), Supriya Sharma (18MMM049)	2020
14.	On Some Applications of Fuzzy Logic	Nancy Padha (18MMM018) Ranjana Sharma (18MMM025)	2020

**Attended Workshops/Orientation/Refresher Courses recognized by National**

**/International Professional bodies:**

1. AICTE Sponsored Staff Development Programme on “Theory and practical Applications of FEM” organized by MED, NCCE Israna, Haryana during 14<sup>th</sup> June, 2010 to 25<sup>th</sup> June, 2010.
2. UGC-Sponsored Orientation Course at Academic Staff College, BPS Mahila Vishwavidyalaya , Khanpur Kalan during 21<sup>st</sup> Nov, 2012 to 18<sup>th</sup> Dec, 2012.
3. One week Staff Development Program Introduction to MATLAB® and Matrox® Imaging Library (MIL) with Emphasis on hands on Practice (SDPMMIL,12) at School of ECE , SMVDU during 23<sup>rd</sup> to 27<sup>th</sup> Dec, 2012.
4. TIES Sponsored One week National Workshop on Basic Econometrics at School of Business, Faculty of Management, SMVDU during 3<sup>rd</sup> to 8<sup>th</sup> March,2014



5. UGC Sponsored Refresher Course at UGC-Academic Staff College, University of Allahabad during 24<sup>th</sup> May, 2014 to 13<sup>th</sup> June, 2014.
6. ICT based ONE WEEK Workshop "Optimization using MATLAB", from 24<sup>th</sup> - 28<sup>th</sup> October, 2016 conducted by NITTTR, Chandigarh organized at SMVDU, Katra.
7. ICT based ONE WEEK Workshop "Cloud Computing", from 5<sup>th</sup> -9<sup>th</sup> December 2016 conducted by NITTTR, Chandigarh organized at SMVDU, Katra.
8. Two week Refresher course in Research Methodology at HRDC, Shri Mata Vaishno Devi University, Katra w.e.f. 14<sup>th</sup> March, 2017 to 27<sup>th</sup> March, 2017
9. One week STTP on “Stochastic Modelling and Optimal Control of Engineering System” during May 22 – 26, 2017 organized by Deptt. of Mathematics, IIT Roorkee under QIP..
10. Participated and completed “one week Faculty Development Programme on Applications on Soft Computing and Machine Learning” from April 3-7, 2018 organized by School of Computer Science and Engineering, SMVDU, Katra.
11. Participated and successfully completed AICTE approved Faculty Development Programme (FDP101X) on “Foundation program in ICT for Education” conducted by IIT Bombay from March 8-April 12, 2018 under the aegis of PMMMNMTT, MHRD, GOI. (Two week equivalent FDP)
12. Participated and successfully completed AICTE approved Faculty Development Programme (FDP201X) on “Pedagogy for Online and Blended Teaching-Learning Process” conducted by IIT Bombay from April -June 18, 2018 under the aegis of PMMMNMTT, MHRD, GOI. (Two week equivalent FDP)
13. Successfully completed “Training of Trainers Workshop on UGC-Faculty Induction Programme (FIP) from 27-29 March 2019 held at IISER, Pune.

### **MOOC Courses**

1. Successfully completed NPTEL MOOC certificate course on “Introduction to Soft Computing” conducted by IIT, Kharagpur from February-March (08 weeks), 2018.
2. Successfully completed NPTEL MOOC certificate course on “Integral and Vector Calculus” conducted by IIT, Kharagpur from January-April (12 weeks), 2019.

**Presented papers in Workshops/Seminars/Conferences conducted or recognized by Professional agencies:**

**A. International Conference abroad**

1. Participated and presented a paper entitled, "On some novel correlation coefficients in picture fuzzy environment" in 2019 MTMI International Conference on Emerging Issues in Business, Technology and Applied Sciences during 20-22 December 2019 organized by Amity Institute of Higher Education, Ebene, **Mauritius**.

**B. International Conferences within the country**

1. Participated and presented a paper entitled, "On a certainty measure of residual life of a System" in International Conference on Applied and Basic Sciences on 8<sup>th</sup> February 2019 organized by GDC Memorial College Bahal, Bhiwani, Haryana.
2. Participated and presented a paper entitled, "On useful fuzzy knowledge measure and accuracy measure" 84<sup>th</sup> Annual conference of Indian Mathematical Society-An International Meet during 27-30 November 2018 organized by School of Mathematics, Shri Mata Vaishno Devi University, Katra, Jammu and Kashmir.
3. Participated and Presented a paper entitled, "On a dual of residual uncertainty measure" in International conferences & 14<sup>th</sup> Biennial Conference of Indian Society of Industrial and Applied Mathematics (ISIAM) from February 2-4, 2018, organized by Department of Mathematics, Guru Nanak Dev University, Amritsar, Punjab.
4. Presented research paper titled "Studies on Intuitionistic Fuzzy Information Measure" in 1<sup>st</sup> International Conference of Indian Society of Information Theory and Applications (ISITA) on "Mathematical Modeling, Optimization and Information Technology" organized by Sri Sai College of Engineering and Technology, Badhani, Pathankot, Punjab during 16<sup>th</sup> to 19<sup>th</sup> Jan, 2015.
5. Presented research paper titled "Two Parameter Entropy of Uncertain Variables" in International Conference on Mathematics & Engineering Sciences organized by Chitkara University Himachal Pradesh during 20<sup>th</sup> to 22<sup>nd</sup> March, 2014.

### **C. National Conferences**

1. Presented Research Paper titled "On Fuzzy Concepts in Engineering & Technology" in AICTE Sponsored National Seminar on Applications of Mathematics in Engineering Sciences organized by Deptt. Of ASH, NCCE Israna, Haryana on 17<sup>th</sup> March, 2012.
2. Presented paper entitled "On Some Economic Applications of Shannon's Measure" in two days National workshop on Mathematics and its Applications organized by Deptt. of Mathematics, DCR University of Science and Technology, Murthal, Sonapat (Haryana) during 18<sup>th</sup> to 19<sup>th</sup> October, 2012.
3. Presented Paper titled "New Measure of Fuzzy Directed divergence & is application in image segmentation" in "First National Conference on Machine intelligence Research and Advancement" organized by SECE, SMVDU during 21<sup>st</sup> to 23<sup>rd</sup> Dec, 2012.
4. Presented research paper "On Some Aspects of Modelling" in National Conference on Algebra, Analysis and Applications organized by School of Mathematics, SMVDU, Katra during 15<sup>th</sup> to 16<sup>th</sup> March, 2013.
5. Presented research paper "On a New Csiszar's f-divergence Measure" in National Seminar on Recent Trends in Mathematical Sciences organized by School of Mathematics, SMVDU, Katra on 22<sup>nd</sup> March, 2013.
6. Presented research paper titled "On a New Intuitionistic Fuzzy Information Measure using REF" in 2nd National Symposium of Interdisciplinary Sciences organized by Govt. Gandhi Memorial Science College, Jammu during 27<sup>th</sup> to 28<sup>th</sup> February, 2015.
7. Presented paper entitled "On a New Intuitionistic Fuzzy Divergence " in the National Conference on Recent Trends in Mathematical Sciences organized by DoM, SMVDU, Katra during 8<sup>th</sup> to 9<sup>th</sup> october, 2015.
8. Presented paper entitled "On entropy and cross entropy of uncertain variables" in the National Conference on Recent Trends in Mathematical Sciences organized by DoM, SMVDU, Katra during 9<sup>th</sup> to 10<sup>th</sup> February, 2017.
9. Presented paper entitled " Generalized entropy of finite partition of fuzzy set " in the National Conference on Topology, Analysis, Algebra and their Applications organized by DoM, SMVDU, Katra during 7<sup>th</sup> to 8<sup>th</sup> March, 2017.

10. Participated and delivered a talk entitled, “On measures of knowledge and accuracy in intuitionistic fuzzy environment and their applications ” in National Seminar on “Recent Advances in Complex Analysis and Operator Theory” and 27<sup>th</sup> Annual Conference of the Jammu Mathematical Society from February 15-17, 2018, organized by Department of Mathematics, University of Jammu, Jammu, J & K.

**Session Chair in International Conferences**

1. Chaired a Technical Session ‘Soft Computing and Applications’ in 2019 MTMI International Conference on Emerging Issues in Business, Technology and Applied Sciences during 20-22 December 2019 organized by Amity Institute of Higher Education, Ebene, **Mauritius**.
2. Chaired a Session in International Conference on Mechanical Engineering and Allied Sciences (ICMEAS-2018) during 14-15 September 2018 organized by School of Mechanical Engineering, Shri Mata Vaishno Devi University, Katra, Jammu and Kashmir.

**Extension Work (Seminars/Workshops/Conferences/events organized):**

<b>Extension Work</b>		Member/Coordinator/Organizing Secretary ( various conferences as given below)
Seminar / Workshop / Conference/event Organized		
<b>Date</b>	<b>Duration</b>	
28 <sup>th</sup> February, 2013	01 day	<b>Coordinator</b> , Written competition and science quiz event at School of Mathematics to celebrate National Science Day.
15-16 <sup>th</sup> March, 2013	02 days	Member of organizing Committee in National Conference on Algebra, Analysis and Applications organized by School of Mathematics
22 <sup>nd</sup> March, 2013	01 day	Member of organizing Committee in National Seminar on Recent Trends in Mathematical Sciences organized by School of Mathematics
8-9 <sup>th</sup> October,	02 days	Member of organizing Committee in National Conference on

2015		Recent Trends in Mathematical Sciences organized by School of Mathematics
9-10 <sup>th</sup> February, 2017	02 days	<b>Co-organizing Secretary</b> , National Seminar on Recent Trends in Mathematical Sciences organized by School of Mathematics
28 <sup>th</sup> February, 2017	01 day	Member, Organizing Committee, National Science Day, 2017
7-8 <sup>th</sup> March, 2017	02 days	Member of organizing Committee in National Conference on Topology, Analysis, Algebra and their Applications organized by School of Mathematics
27-30 November 2018	04 days	Member (Accommodation In charge), 84th Annual conference of <b>Indian Mathematical Society</b> -An International Meet organized by School of Mathematics, Shri Mata Vaishno Devi University
16-17 November 2019	02 day	<b>Accommodation In charge</b> , AIU, North Zone Vice Chancellors Meet (2019-2020) organized by Shri Mata Vaishno Devi University
13-14 December 2019	02 days	<b>Coordinator</b> , National Conference on Recent Trends in Mathematical Sciences organized by School of Mathematics

### **Reviewer**

- Reviewer, Mathematical Reviews, American Mathematical Society
- Reviewer, Kybernetika
- Reviewer, Computational and Applied Mathematics, Springer Nature
- Reviewer, Communications in Mathematics and Statistics, Springer Nature
- Reviewer, International Journal of Intelligent Systems, Wiley Periodicals Inc.
- Reviewer, Journal of Advances in Mathematics and Computer Science
- Reviewer, Fuzzy Systems and Decision Making, Conference Papers

### **Membership of Professional Bodies**

- Life member of Indian Mathematical Society, India
- Life member of Jammu Mathematical Society, Jammu, India.
- Life member of Indian Society of Industrial and Applied Mathematics, India
- Life member of Indian Society of Technical Education, India.
- Life member of Indian Society of Information Theory and Applications
- Life member of IAENG
- Member, RGMIA

### **Administrative Experience**

**A. Administrative post:** Warden, Nilgiri Boys Hostel ( 27<sup>th</sup> July, 2016 to till date)

**B. Convener/Co-ordinator/Member of Committees, etc :**

**25<sup>th</sup> June, 2007 to 29<sup>th</sup> Nov., 2011 at SDITM, Israna, Panipat, Haryana**

- Professor In charge, Central Library (29/07/2007 to 29/11/2011)
- Member, Prospectus/Information Brochure/Pamphlets Printing and designing Committee for Admission (2008-2009)
- Member, Screening Committee for recruitment of various Technical and administrative positions (2009)
- Member, Team for Internal Audit for ISO Certification (2010)
- Event Coordinator(**Quiz**) at National level Inter College Techno-Test “Versatelia-10” **20<sup>th</sup> March, 2010.** (SD Institute of Technology and Management)
- Event Coordinator(**Puzzle**) at National level Inter College Techno-Test “Synergy-10” 16-17<sup>th</sup> April,2010. (Joint Venture of NC-SD Group of Institutions)
- **Organizing Secretary**, National workshop on “**Microwave and Wireless communications**” at SDITM, Israna, Panipat. **30/04/2011.** (ISTE TEACHER’S CHAPTER)
- HoD, Applied Sciences & Humanities (27/09/2011 to 29/11/2011)
- Examination Coordinator, Internal Examination Cell (2011-2012)
- Member, Anti Ragging Committee (2010-2011, 2011-2012)

**1<sup>st</sup> Dec., 2011 to till date at SMVDU, Katra, J & K**

- Member-Secretary,Academic Affair Committee, School of Mathematics (2017 to till date)
- Member, Student Faculty Committee (2012-till date)

- Coordinator, Time Table, School of Mathematics **(2017 to till date)**
- Coordinator at School of Mathematics (Remedial Class Scheme for SC/ST/OBC/BPL) under Equal Opportunity Cell **(2013-2014)**
- Member Ex-officio, Board of Studies
- Member, Commercial Establishment Committee **(2013 to till date)**
- Member, Anti Ragging Squad **(2014, 2015).**
- Coordinator, Computer Lab, SoM **(2014 to till date)**
- Member, DSRC **(2015 to till date)**
- Member, DRC **(2016-2017, 2019 to till date)**
- Co-ordinator, Workshop-cum-BoS, **29th May, 2016**
- Member, Admission Committee, DoM **(2016)**
- Faculty, Coordinator, MOOC (Spoken Tutorial **2016**)
- Faculty Coordinator, Music Club **(2016 to till date)**
- Convener, Screening Committee, SMVDU-TBIC (recruitments of various posts in **2016**)
- Member, Hygiene Committee of Hostel
- Member, Review committee, Ms/ CISB, Security Services **(2017-2019)**
- Member, Review committee, M/s CIS Bureaus Facility Services Pvt. Ltd., Jammu **(2017-2019)** (providing services of Drivers, Peons/Helpers & General Workers at SMVDU)
- Member, Review committee, M/s Lakshmi Enterprises, Bhatinda (providing housekeeping services at SMVDU) **(2017-2019)**
- Member Secretary, School level NAAC committee **(2018)**
- Member, Shortlisting/Screening Committee for the recruitment of Hostel Caretaker (Male/Female) **(August 2018)**
- Member, Shortlisting/Screening Committee for the recruitment of Junior Assistants **(August 2018)**
- Member, Academic Affair Committee, Directorate of Quality Assurance, SMVDU **(2019 to till date)**
- Member, Committee for Medical Insurance of the Students **(2020-2021)**

**Web Profiles:**

**Research Gate:** [https://www.researchgate.net/profile/Surender\\_Singh5](https://www.researchgate.net/profile/Surender_Singh5)

**Scopus Author ID:** <https://www.scopus.com/authid/detail.uri?authorId=57201871350>

**MathSciNet:** <https://mathscinet.ams.org/mathscinet/search/author.html?mrauthid=956574>

**Orcid ID:**  <http://orcid.org/0000-0003-3430-9674>

**Google Scholar:** <https://scholar.google.com/citations?user=ehD533EAAAAJ>

**Personal Details:**

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**Declaration:** The information given above is correct to the best of my knowledge.

**Date:** 15/06/2020

**Place:** SMVDU, Katra

**Sd/-**  
Surender Singh