



## SHRI MATA VAISHNO DEVI UNIVERSITY

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Department of Mathematics

### Curriculum Vitae

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(11) a) **Ph.D. Thesis Title:** Substitution Operators

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c) **Year of Award:** 1999

### *List of Publications:*

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1. Devia Narrania and **Kuldip Raj**, Approximation via statistical measurable convergence with respect to power series for double sequences, **Forum Mathematicum**, 36 (1) (2024), 53-64. <https://doi.org/10.1515/forum-2022-0368>.
2. **Kuldip Raj**, Devia Narrania, and Ayhan Esi. "Modulated Lacunary  $\mathcal{P}$ -Statistical Convergence of order  $\gamma$  of Sequences of Fuzzy Functions." *New Mathematics and Natural Computation* (2024). <https://doi.org/10.1142/S1793005724500479>.
3. **Kuldip Raj**, M. Devi, A. Esi and M. Aiyub, Generalized weighted composition operators acting between Dirichlet-type spaces and Bloch-type spaces. *Int. J. Nonlinear Anal. Appl. In Press*, 1-11. <http://dx.doi.org/10.22075/ijnaa.2023.25200.2950>.
4. Rahul Kumar, Uday Pratap Singh, Arun Bali & **Kuldip Raj**, Hybrid neural network controller for uncertain nonlinear discrete-time systems with non-symmetric dead zone and unknown disturbances, *International Journal of Control*, 96 (8) (2023), 2003-2011, DOI: [10.1080/00207179.2022.2080117](https://doi.org/10.1080/00207179.2022.2080117).
5. **Kuldip Raj** and S. Sharma. On some characterizations of  $\Delta$ -deferred weighted statistical boundedness. *Acta Mathematica Universitatis Comenianae*, 92(4) (2023), 301-312.
6. D. Narrania, and **Kuldip Raj**. "Applications of deferred Lebesgue product measurable convergence to approximation theorems." *Asian-European Journal of Mathematics* 16 (11) (2023): 2350210.
7. S. Verma, **Kuldip Raj**, and S. K. Sharma. "A Common Fixed Point Theorem via Two and Three Mapping in Banach Algebra." *Journal of Mathematical Extension* 17(2) (2023), paper no. 8,1-23.
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11. Sonali Sharma and **Kuldip Raj**, A new approach to Egorov's theorem by means of  $\alpha\beta$ -statistical ideal convergence, **Issues of Analysis**, 12(30) (2023), 72-86.
12. **Kuldip Raj**, S. A. Mohiuddine and Swati Jasrotia, Characterization of summing operators in multiplier spaces of deferred Norlund summability, **Positivity**, 27(9) (2022), 1-13.
13. U. P. Singh, Swati Jasrotia and **Kuldip Raj**, Linear isomorphic spaces of Cesaro Norlund operator their duals and matrix transformations, **Journal of Applied Analysis**, 29(2023), 229-238, <https://doi.org/10.1515/jaa-2022-2008>.
14. **Kuldip Raj**, Kavita Saini and M. Mursaleen, Applications of the fractional difference operator for studying euler statistical convergence of sequence of fuzzy real numbers and associated Korovkin type theorems, **Issues of Analysis**, 11 (2022), 91-108.
15. **Kuldip Raj**, Sonali Sharma and M. Mursaleen, Almost  $\lambda$ -statistical convergence of complex uncertain sequences, **International Journal of uncertainty Fuzziness and Knowledge-Based systems**, 30(5)(2022), 795-811. <https://doi.org/10.1142/S0218488522500234>.
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1. **List of Papers Presented in Conference:**

1. Participated and presented a paper entitled "Some I-Convergent Lambda A-Summable Sequence Spaces of Fuzzy Numbers of Order  $\alpha$ " at the International e-Conference on Fuzzy Sets & Fuzzy Logic-Generalizations and Applications held on September 06-08, 2023.
2. Participated and presented a paper entitled "STATISTICAL MEASURABLE CONVERGENCE WITH RESPECT TO POWER SERIES FOR DOUBLE SEQUENCES AND ITS APPLICATION" held on Aug 22-24, 2023/ Adana, Turkiye.
3. Participated in fifteen days Virtual International FDP on Frontiers of Mathematics organized by Department of Mathematics, SRMIST, Ramapuram, Chennai, India in collaboration with "1 December 1918 University" of Alba Iulia, Romania from 05-07-2023 to 19-7-2023.
4. Participated and delivered an invited talk on "Applications of Statistically Probability Convergence to Approximation Theorem" held on may 10 to 13 2023 Istanbul, Turkey.
5. Participated and presented a paper entitled "A new approach to Egorav's Theorem by Means of Statistical Idel Convergence" in NCAMS -2022 held during 22-23 Dec 2022 at Department of Mathematics, Gauhati University as part of Platinum Jubilee Celebration from 26<sup>th</sup> jan 2022 to 26<sup>th</sup> jan 2023.

6. *Participated in Internal conference on Recent Advance in Mathematics Fluid Dynamics held on 2<sup>nd</sup> to 4<sup>th</sup> Dec., 2022 and present a paper “Linear isomorphic spaces of Cesaro Norlund Operators” organized by Department of Mathematics Malaviya National Institute of Technology Jaipur, Rajasthan (INDIA)*
7. *Participated in one day National workshop on Research Methodology held on 23-01-2023. Organized by the science club, Govt Degree college (boys) Kathua in collaboration with the Internal Quality Assurance cell (IQAC), Govt. Degree College Boys Kathua on 23<sup>rd</sup> of January 2023.*
8. *Participated and delivered an invited talk on a new version of Korovkin type theorem by means of lacunary statistical measurable convergence in National Conference on Recent Advance in Mathematics NCRAM-22, organized by central university Jammu held on 20<sup>th</sup> – 21<sup>th</sup> October 2022.*
9. *Participated and presented a paper entitled Statistical Convergence in Sequence Spaces of Fuzzy Numbers in International Virtual Conference on Recent Trends in Applied Mathematics (ICRTAM - 2022) organised by Department of Science and Humanities (Mathematics), Sri Ramakrishna Institute of Technology, Pachapalayam, Coimbatore held on 7<sup>th</sup> October, 2022.*
10. *Participated and delivered an invited talk in International Webinar on Recent Trends of Mathematical Science (IWRMS 2022) Organized by Calcutta Mathematical Society during 25-26 February, 2022 Title of the talk On ideal convergent sequence spaces of fuzzy numbers*
11. *Participated in One-Day Online Workshop on ‘Dynamics and Advances in General Financial Rules (GFRs) & Purchase Processes’ held on August 7, 2021 organized by Faculty Development Centre, SMVDU under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMNMTT) Scheme in collaboration with Directorate of Quality Assurance, Shri Mata Vaishno Devi University, Katra (J&K).*
12. *Participated in One-Week Online Faculty Development Program On “Mathematics and Its Application in Science & Engineering” held on (27<sup>th</sup> September-01<sup>st</sup> October, 2021 organized by Faculty Development Centre, Shri Mata Vaishno Devi University under Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMNMTT) Scheme in collaboration with the School of Mathematics, Shri Mata Vaishno Devi University, Katra.*
13. *Participated and delivered an invited talk on the topic “Applications of Fractional Difference Operator to Develop Euler Difference sequence spaces and Their Toeplitz*

*Duals” in Online two days International Conference on “Advancement in Mathematical Sciences and its Applications” held on 16-17 January, 2021 organized by Department of Mathematics, Ram Krishna College Madhubani-847211, Bihar in association with Advance Research Educational Society.*

- 14. Participated and delivered a talk on the topic “Weighted Composition Operators” in 6<sup>th</sup> International Conference on Recent Trends & Advancements in Engineering and Technology held on Jan 17-18, 2020 organized by School of Electronics and Communication Engineering, Shri Mata Vaishno Devi University, Katra, J&K.*
- 15. Participated and delivered an invited talk on the topic “Catalan Sequence Spaces and their Properties”, in Online two days International Conference on “Mathematical Sciences and Computational Intelligence” held on 21-22 December, 2020 organized by School of Mathematics, Shri Mata Vaishno Devi University, Katra, J&K in association with Advance Research Educational Society.*
- 16. Participated and chaired a Session in the “International Conference on Mathematical Sciences and Computational Intelligence” held on 21-22 December, 2020 organized by School of Mathematics, Shri Mata Vaishno Devi University, Katra, J&K in association with Advance Research Educational Society.*
- 17. Participated and delivered an invited talk on the topic “Cesaro-Orlicz Sequence Spaces and Their Related Properties” in International Conference on Analysis and Its Applications(ICAA-2019) held on Dec 16-18, 2019 organized by Department of Mathematics, University of Jammu, Jammu, J&K.*
- 18. Participated and delivered an invited talk on the topic “Multiplication Operators on Cesaro Sequence Spaces” in 4<sup>th</sup> National Conference on Recent Trends in Mathematical Sciences-2019(NCRTMS-2019) In Association with International Academy of Physical Sciences(IAPS) held on Dec 13-14, 2019 organized by School of Mathematics, Shri Mata Vaishno Devi University, Katra, J&K.*
- 19. Participated and chaired a Session in 4<sup>th</sup> National Conference on Recent Trends in Mathematical Sciences-2019 (NCRTMS-2019) In Association with International Academy of Physical Sciences (IAPS) held on Dec 13-14, 2019 organized by School of Mathematics, Shri Mata Vaishno Devi University, Katra, J&K.*
- 20. Participated and delivered an invited talk on the topic “On Fractional Difference Operators” in the “Mathematics Research Scholar Meet” held on Aug 20-22, 2019 organized by Department of Mathematics, University of Jammu, Jammu, J&K.*

21. *Participated in a one day Workshop on “Applied Mathematics” held on May 30, 2019 organized by Department of Mathematics, University of Jammu, Jammu, J&K.*
22. *Participated and presented a paper entitled “Applications of matrix transformation to compute toeplitz duals of lacunary sequence spaces” in the 5<sup>th</sup> Annual National Conference in Mathematics on Recent Developments in Algebra and Analysis held on Dec 13-14, 2018 organized by Department of Mathematics, G. G. M science College, a constitute college of Cluster University of Jammu.*
23. *Participated and presented a paper entitled “Weakly Kothe Orlicz Sequence spaces” in the “84<sup>th</sup> Annual Conference of Indian Mathematical Society: An International Meet” held on Nov 27-30, 2018 organized by School of Mathematics, Shri Mata Vaishno Devi University, Katra, J&K.*
24. *Participated and delivered a talk on “Applications of non-newtonian calculus for classical spaces and Orlicz functions” in the National Conference on “Recent Advances in Mathematics” held on 4<sup>th</sup> – 5<sup>th</sup> October, 2018 organized by Department of Mathematics, Central University of Jammu, Jammu.*
25. *Participated and chair a session at the TEQIP-III sponsored International Conference on Mechanical Engineering and Allied Sciences, 2018 (ICMEAS-2018) organized by school of Mechanical Engineering, Shri Mata Vaishno Devi University Katra, India from 14-15 September, 2018.*
26. *Participated and presented a paper entitled “Generalized Orlicz Hilbert Sequence Spaces” in International Conference & 14<sup>th</sup> Biennial Conference of Indian Society of Industrial and Applied Mathematics (ISIAM) held on February 2-4, 2018 jointly organized by ISIAM and Department of Mathematics, Guru Nanak Dev University, Amritsar.*
27. *Participated and presented a paper entitled “Relative modular uniform approximation by means of power series method with applications” in a National Seminar on “Recent Advances in Complex Analysis and Operator Theory and 27<sup>th</sup> Annual Conference of the Jammu Mathematical Society” held on February 15-17, 2018 organized by Department of Mathematics, University of Jammu, J&K.*
28. *Participated and presented a paper entitled “Generalized Difference Sequence Spaces” in two days National Conference on “Mathematical Sciences and its Applications” held*



*on January 19-20, 2018 organized by G.G.M. Science College, Jammu in collaboration with DST, J&K.*

- 29. Delivered a plenary talk entitled "On Orlicz-Garling Sequence Spaces" and also Chaired a Session in the International Conference on "Analysis and its Applications" held at the Department of Mathematics, Aligarh Muslim University, Aligarh During November 20-22, 2017.*
- 30. Acted as a Technical Chair at the 4<sup>th</sup> International Conference on Recent Trends and Advancements in Engineering and Technology (ICRTAET) organized by Shri Mata Vaishno Devi University, Katra (J&K) during 03-04 November 2017.*
- 31. Participated in National Seminar on "Mechanical Engineering-Research Opportunities and Challenges" held on April 8<sup>th</sup>, 2017 organized by Department of Mechanical Engineering, SMVDU, Katra.*
- 32. Participated and presented a paper entitled "Essential norm of weighted composition operators" in National Conference on "Topology, Analysis and their Applications" held on March 7-8, 2017 organized by Department of Mathematics, SMVDU, Katra in association with Jammu Mathematical Society, Jammu.*
- 33. Participated and presented a paper entitled "On Strongly convergent sequence spaces of Modulus functions and infinite matrix over  $n$ -normed spaces" at 6<sup>th</sup> International Conference on Mathematics and Information Sciences Feb. 09-11, 2017, Egypt.*
- 34. Chaired a session in the National Seminar on "Demonetization of Currency and India Economy" held on December 28<sup>th</sup>, 2016 organized by Department of Economics, SMVD University, Katra, Jammu.*
- 35. Participated and presented a paper entitled "On the Classical Paranormed sequence spaces" in National Seminar on "Demonetization of Currency and India Economy" held on December 28<sup>th</sup>, 2016 organized by Department of Economics, SMVD University, Katra, Jammu.*
- 36. Participated and presented a paper entitled "Almost Lacunary-Orlicz convergent sequence spaces" in National Seminar on Recent Developments in Complex Analysis, Operator Theory and related areas held on October 20-22, 2016 organized by Department of Mathematics University of Jammu, Jammu.*

37. *Participated in one day Workshop on “Patent Drafting and Filling” in association with Technology Information organized by Department of Biotechnology (DoBT), SMVD University, Katra, Jammu on 20<sup>th</sup> October, 2016.*
38. *Participated and presented a paper entitled “Certain Classes of Multiplier Sequences of Cesaro Type” in National Conferences on Topological Algebra and Analysis, held on Feb. 18-19<sup>th</sup>, 2016 organized by Department of Mathematics G.G.M. Science College, Jammu.*
39. *Participated and presented a paper entitled “Some double sequence spaces of Fuzzy numbers defined by a sequence of Orlicz function” in Ist International Conference on Research and Innovations in Science, Engineering & Technology organized by Yogananda College of Engineering & Technology on 20-21 November, 2015.*
40. *Participated and presented a paper entitled “On some new classes of generalized sequence spaces” in the National Conference on Recent trends in Mathematical Sciences organized by School of Mathematics, Shri Mata Vaishno Devi University on 8-9 October, 2015.*
41. *Participated in two days National Workshop on E-content Development and Management conducted by Govt. College for Women Gandhi Nagar, on 23<sup>rd</sup> to 24<sup>th</sup> July, 2015 at Jammu.*
42. *Participated and presented a paper entitled “Some sequence spaces of Fuzzy numbers for Orlicz function and Partial Metric” in the 24<sup>th</sup> Annual conference of the Jammu Mathematical Society and a National Seminar on Topological Algebraic Analysis organized by Department of Mathematics, University of Jammu held on 14-16 May, 2015.*
43. *Participated and presented a paper entitled “Some Generalized I-convergent sequence spaces of Fuzzy numbers” in 2<sup>nd</sup> National Conferences in Mathematics on Recent trends in Algebra and Analysis, held on March 25-26<sup>th</sup>, 2015 organized by Department of Mathematics G.G.M. Science College, Jammu.*
44. *Participated in 10<sup>th</sup> JK Science Congress from 14<sup>th</sup> to 16<sup>th</sup> March, 2015 at University of Jammu and presented a paper title “On double sequence spaces”.*
45. *Participated and presented a paper entitled “Some Paranormed double difference sequence spaces for Orlicz functions and Bounded-Regular Matrices” in two days National Symposium on Interdisciplinary Sciences, held on Feb. 27-28, 2015 organized by G.G.M. Science College, Jammu.*

46. *Participated and presented a paper entitled "Applications of Lacunary Sequences to  $n$ -norm" at National Conference in Mathematics on Analysis and its Applications, 27<sup>th</sup> March, 2014, Organized by Department of Mathematics, G.G.M. Science College, Jammu.*
47. *Participated and presented a paper entitled "Multiplication Operators on Cesaro function spaces" at International Conference on Recent trends in Algebra and Analysis with Applications, Department of Mathematics, Aligarh Muslim University, Aligarh, India, Feb, 12-14, 2014.*
48. *Participated and presented a paper on "Perspective on the status of Mathematics in J&K" in Mathematical Festival held on 13<sup>th</sup> Dec., 2013 organized by Jammu & Kashmir Institute of Mathematical Sciences, Higher Education Department, J&K Government at Jammu.*
49. *Participated, contribute as Session Chair on Soft Computing, Fuzzy Logic and ANN and also presented a paper entitled "On Some Sequence Spaces" in International Conference on Machine Intelligence and research Advancement (ICMIRA-2013) 21-23, December, 2013, SMVDU Katra, Jammu, India.*
50. *Participated, contribute as Session Chair on Mathematical Modelling & Simulation, Software Engineering & Testing in International Conference on Machine Intelligence and research Advancement (ICMIRA-2013) 21-23, December, 2013, SMVDU Katra, Jammu, India.*
51. *Participated and presented a paper entitled "Fuzzy Sequence Spaces" in 23<sup>rd</sup> Annual conference of the Jammu Mathematical Society and a national seminar on recent trends in analysis and topology Feb, 26-28<sup>th</sup>, 2013 Department of Mathematics at University of Jammu.*
52. *Participated in "One day acquaintance programme on Accelerator based Research" held at School of Physics, Shri Mata Vaishno Devi University on June 14, 2012.*
53. *Participated in National Conference on Algebra, Analysis and their Applications Organized by P. G. Department of Mathematics, Govt. M.A.M. College, Jammu from 18<sup>th</sup>*

to 19<sup>th</sup> August, 2012 and presented a research paper on “Composition Operators on Musielak–Orlicz Spaces.”

54. Participated in First National Conference on Machine Intelligence Research and Advancement (NCMIRA, 12) on 21-23 Dec, 2012 and presented a paper title “Some Multiplier generalized difference sequence spaces” organised by School of Electronics & Communication Engineering, SMVD University.
55. Participate on a two days ISTE WORKSHOP on AKASH FOR EDUCATION conducted by Indian Institute of Technology Bombay on 10<sup>th</sup> to 11<sup>th</sup> November, 2012 at SMVDU.
56. Participated in 22<sup>nd</sup> Annual conference of the Jammu Mathematical Society and a national seminar on recent developments in complex analysis and related areas, Feb, 24-25, 2012, Department of Mathematics at University of Jammu.
57. Participated in 7<sup>th</sup> JK Science Congress from 13<sup>th</sup> to 15<sup>th</sup> October 2011 at University of Jammu and presented a paper title “Double difference sequence spaces defined by Musielak-Orlicz function”.
58. Participated in 1<sup>st</sup> International Conference on Mathematical Sciences and Applications which was held on 18<sup>th</sup> December 2011 at India International Centre, New Delhi and presented a paper title “Strongly summable sequence spaces defined by a sequence of Orlicz function”.
59. Participated and Presented a paper title “Difference Sequence spaces defined by Musielak- Orlicz function over n-normed spaces” in 21<sup>st</sup> Annual conference of the Jammu Mathematical Society and a national seminar on recent developments in complex analysis and related areas, Feb, 25-27, 2011, Department of Mathematics at University of Jammu.
60. Participated and Presented a paper title “Weighted Composition Operator between Orlicz function spaces” in 5<sup>th</sup> JK Science Congress from 8<sup>th</sup> to 10<sup>th</sup> February 2010 at University of Jammu.
61. Integral operators between  $L_p$ –Spaces in 20<sup>th</sup> Annual Conference of Jammu Mathematical Society Department of Mathematics, University of Jammu from 28<sup>th</sup> of Feb to 2<sup>nd</sup> March, 2010.

62. *On operators of Weighted Composition Induced by Operator Valued Mappings Acting Between  $L^p$  – Spaces in ICM -2010 Satellite Conference on Functional Analysis and Operator theory at Indian Statistical Institute Bangalore from 8<sup>th</sup> of August to 11<sup>th</sup> of August, 2010.*
63. *Difference sequence spaces in  $n$ -normed spaces defined by Musielak-Orlicz function in International Conference on development and applications of statistics in emerging areas of science and technology along with XXX annual convention of Indian society for probability and statistics, December 8-10, 2010, Department of Statistics, University of Jammu.*
64. *Presented a paper in The 19<sup>th</sup> Annual Conference of Jammu Mathematical Society Department of Mathematics, University of Jammu from 27-28 Feb, 2009.*
65. *On operators of weighted substitution on the generalized spaces of entire functions in 18<sup>th</sup> annual Conference of Jammu Mathematical society University of Jammu from 1<sup>st</sup> to 3<sup>rd</sup> March 2008 .*
66. *“Multiplication Operators induced by Operator valued maps” in the International Congress and 8<sup>th</sup> Conference of Indian Society of Industrial & Applied Mathematics ( ISIAM) on certain Emerging areas in Applicable Mathematics and 17<sup>th</sup> Annual Conference of Jammu Mathematical Society Department of Mathematics , University of Jammu from 31<sup>st</sup> March to 3<sup>rd</sup> April, 2007.*

**General Orientation Course:** *Participated in the UGC-sponsored general orientation course from 07-12-2009 to 04-01-2010, organized by UGC Academic Staff College at University of Jammu.*

**Refresher Course:**

1. *Participated in AICTE-ISTE sponsored Induction/Refresher program on “Sustainable Product Design and Manufacturing” held during March 18-24, 2021 organized by School of Mechanical Engineering at Shri Mata Vaishno Devi University, Katra (J&K).*
2. *Completed Multivariable Calculus (NPTEL MOOC Course) Jan-Mar 2021 (8 week course) from IIT Roorkee.*
3. *Completed Matlab Programming for numerical Computation (NPTEL MOOC Course) Jan-Mar 2020 (8 week course) from IIT Madras.*

4. *Participated in Workshop on “Applications of Analysis” held on February 24-28, 2020 organized by Department of Mathematics, University of Jammu and delivered an invited talk on Tauberian Theorems for de la Vallee Poussin Mean.*
5. *Participated and completed successfully a two week Faculty Development Programme on “MANAGING ONLINE CLASSES AND CO-CREATING MOOCS 3.0” from July 25 – August 10, 2020 from Ramanujan College New Delhi.*
6. *Completed UT.5.05X: Linear Algebra-Foundations to Frontiers (MOOC) 8/1/2019 to 30/4/2019 from The University of Texas System at Austin .*
7. *Completed HKU11x: Engineering Calculus and Differential Equations (MOOC) 2/5/2019 to 17/6/2019 from University of Hong Kong.*
8. *Participated in “Professional Development Training” under TEQIP-III held during March 26-30, 2019 at Indian Institute of Management, Raipur, Chatisgarh.*
9. *Participated in one weeks workshop on “Professional Ethics & Human Values-A Gandhian Perspective” from 11<sup>th</sup>-15<sup>th</sup> March, 2019 presented by Faculty Development Centre, SMVD University.*
10. *Participated and Successfully completed an AICTE approved Faculty Development Programme (FDP201x) on “Pedagogy for Online and Blended Teaching-Learning Process” conducted by Indian Institute of Technology Bombay from May3, 2018-May 30, 2018.*
11. *Participated in two weeks AICTE approved online Faculty Development Program (FDP101x) on Foundation Program in ICT for Education conducted by Indian Institute of Technology Bombay from March 8, 2018 to April 12, 2018.*
12. *Participated in one week Faculty Development Program on “Sustainable Design and Manufacturing (SDM-2018)” organized by School of Mechanical Engineering at Shri Mata Vaishno Devi University, Katra (J&K) during 12<sup>th</sup>-16<sup>th</sup> February 2018.*
13. *Participated in one week Faculty Development Program on “Research Methodology” organized by Human Resource Development Center at Shri Mata Vaishno Devi University, Katra (J&K) during 4<sup>th</sup>-8<sup>th</sup> December, 2017.*
14. *Participated in one week AICTE recognized Short term course on “Optimization using Matlab through ICT” from 24-10-2016 to 28-10-2016 organized by Mechanical Engineering Department at Shri Mata Vaishno Devi University, Katra (J&K).*
15. *Participated in the three weeks UGC-sponsored **Refresher Course in Mathematical Sciences** from 8-12-2015 to 29-12-2015 organized by UGC Human Resource Development Centre at University of Jammu, Jammu.*

16. Participation in AICTE sponsored **Faculty Development Program** on “Applications of Econometrics and time Series Techniques in Business” from 20<sup>th</sup> May to 2<sup>nd</sup> June, 2013 at College of Management, Shri Mata Vaishno Devi University, Katra, J&K.

17. Participated in the two weeks AICTE approved **Staff Development Program** On “Introduction to MATLAB and Matrox Imaging Library (MIL) with Ephasis on hands on Practice (WMMIL’ 11), (DEC 16-29, 2011)” organized by School of Electronics & Communication Engineering, SMVDU, Katra, Jammu from 16<sup>th</sup> to 29<sup>th</sup> Dec 2011.

**Conferences Attended:**

1. National Conferences: 20
2. International Conferences: 8

**3. PhD Guidance/Supervision:**

S.No.	Name of the Scholar	Date of Admission	University	Date of Award of Degree/ Submission of thesis
1.	Sunil Kumar Sharma	01-01- 2010	SMVDU	14-04-2013(Awarded)
2.	Seema Jamwal	30-09-2011	SMVDU	16-02-2016(Awarded)
3.	Suruchi Pandoh	11-02-2013	SMVDU	12-06-2017 (Awarded)
4.	Renu Anand	02-09-2014	SMVDU	25-02-2020(Awarded)
5.	Charu Sharma	13-08-2015	SMVDU	10-10-2019 (Awarded)
6.	Manisha Devi	17-08- 2015	SMVDU	30-06-2022 (Awarded)
7.	Anu Choudhary	11-08-2016	SMVDU	13-04-2021(Awarded)
8.	Kavita Saini	24-09-2018	SMVDU	10-09-2022(Awarded)
9.	Swati Jasrotia	26-08-2019	SMVDU	29-04-2023 (Awarded)

10.	Sonali Sharma	28-01-2020	SMVDU	20-01-2024(Awarded)
11.	Devia Narrania	30-09-2021	SMVDU	Conitnued
12.	Sanjeev Verma	20-06-2022	SMVDU	Conitnued
13.	Samrati Gorka	17-11-2022	SMVDU	Conitnued
14.	Navneet Kour	03-04-2023	SMVDU	Conitnued

4. **Book Published: 01**

**Title:** Substitution operators on some function spaces.

**Publisher:** Lambert Academic Publishing, Germany, 2010.

**ISBN-13:** 978-3838398433, No. of pages: 96.

5. **Conferences organized: 04**

(i) A national conference on Algebra, Analysis and Applications which was held on 15<sup>th</sup> - 16<sup>th</sup> March, 2013 at SMVDU and got funding from CSIR and SMVDU.

(ii) A National Conference on Topology, Analysis, Algebra and their Applications which was held on 7<sup>th</sup>-8<sup>th</sup> March, 2017 at SMVDU and got funding from UGC and SMVDU.

(iii) Coordinator Online Two Days International Conference on Mathematical Sciences and Computational Intelligence which was held on 21-22 December, 2020 organized by SMVDU, Katra in association with Advance Research Educational Society.

(iv) Organized and attended the National Science Day-2017 under the theme "Science and Technology for Specially Abled Persons" held at Shri Mata Vaishno Devi University, Katra (J&K) on 28<sup>th</sup> Feb, 2017

6. **Minor projects Guided (M.Sc. students):**

S. No.	Name of the Student	Entry no.	Session	Title	Status
1	Anita & Rajni Dogra	2007SMM27 2007SMM29	2007-2009	Linear Transformations	Completed
2	Preeti Sharma	2007SMM03	2007-2009	Continuous Functions on Metric Spaces	Completed



3	Nayan Basgotra & Kamia Sharma	2008SMM02 2008SMM07	2008-2010	A Brief Survey on $L^p$ -Spaces	Completed
4	Pankaj Gupta & Ganesh Paul	2009SMM06 2009SMM09	2009-2011	A Brief Survey on Orlicz Function Spaces	Completed
5	Ganshyam Dogra & Sheetal Sharma	2010SMM03 2010SMM05	2010-2012	General Measure and Integration	Completed
6	Nitish Sharma & Vaishali Sharma	2011SMM07 2011SMM17	2011-2013	Summability of Sequences	Completed
7	Kamakshi Sharma & DivyaJyoti	2012SMM20 2012SMM03	2012-2014	Modular Spaces	Completed
8	Shubham & Monika Bajal	2013SMM04 2013SMM17	2013-2015	An Introduction to Orlicz Spaces	Completed
9	Pankaj Sharma & Preeti Kesar	14MMM012 14MMM021	2014-2016	A Brief Study on Orlicz Spaces and their Composition Operators	Completed
10	Nitin Mangotra & Neha Devi	14MMM004 14MMM027	2014-2016	A Study on $n$ -Functions	Completed
11	Ruchi Bhatyal & Jyoti Rani	15MMM023 15MMM030	2015-2017	On Uniform Convergence	Completed
12	Swati Jasrotia & Diksha Mehra	15MMM011 15MMM026	2015-2017	A Connection between Orlicz functions and Young functions	Completed
13	Sunayana Asha kumara Gurjeet kour	16MMM001 16MMM020 16MMM025	2016-2018	On some aspects of Baire One Functions	Completed

14	Shinakshi Jasrotia Indu Bala	16MMM029 16MMM031	2016-2018	An Introduction to Bicomplex Numbers	Completed
15.	Geetanjali Sharna Shazia	17MMM035 17MMM042	2017-2019	On Some Aspects of Bicomplex Numbers	Completed
16.	Suchita Sharma & Rashi Chalotra	17MMM027 17MMM030	2017-2019	Versatility of Open Mapping Theorem and Its Application	Completed
17.			2018-2020		Completed
18.			2018-2020		Completed
19			2019-2021		Completed
20			2019-2021		Completed
21	Amanjeet Kour & Shilpa Bharti	20MMM004 & 20MMM030	2020-2022	Number Theory And Its applications	Completed
22	Nitin Sharma & Aman Ullah Khan	20MMM012 & 20MMM022	2020-2022	Metric and Uniform Spaces	Completed
23	Shipali Sharma & Divya Gupta	21MMM015 & 21MMM024	2021-2023	Sequence of Functions	Completed
24	Avinab Badyal	21MMM005	2021-2023	Double Sequences	Completed
25	Humma Javed Sheikh	22MMM006	2022-2024	Statistical Convergence of Sequences	

## 7. Administrative Contribution to the University:

### (a) Holding an Administrative post

1. Head of School of Mathematics w.e.f. 29<sup>th</sup> Aug., 2022.
2. Warden Nilgiri hostel Aug, 2014-Aug, 2016.

3. Member DPS School management committee (University side) w.e.f. Aug, 2010 to till date.

**(b) Membership of Committees, etc.**

Chairman Board of Studies

Chairman School Research Committee

Chairman Academic Affairs Committee

Member Admission Committee (M.Sc. Mathematics)

Incharge Examination for M.Sc. and B. Tech. (Mathematics) from 2012 to 2020.

**(c) Organisers of events**

Incharge Seminar of Ph.D. scholars of Department of Mathematics.

**(d) Members of Shortlisting/ Selection Committee**

Member of Shortlisting Committee (for short listing the applicants of Asstt. Prof. in Mathematics).

**FOREIGN VISIT:** *I visited the African country Egypt, Cairo to attend the International Conference organized by Zewail City of Science and Technology, Feb. 9-11, 2017.*

**INSTITUTE VISITED IN INDIA:**

1. *Tata Institute of Fundamental Research, Mumbai.*
2. *Aligarh Muslim University, Aligarh.*
3. *University of Delhi, Delhi.*
4. *Indian Institute of Technology, Delhi.*
5. *Vanaras Hindu University, Vanaras.*
6. *Indian Statistical Institute, Bangalore.*
7. *Indian Institute of Sciences, Bangalore.*
8. *Punjab University, Chandigarh.*