Faculty Profile

Name : Dr. Abhishek Singh

Present position: Associate Professor

School of Mathematics

Shri Mata Vaishno Devi University

Kakryal, Katra, J&K-182320

Email: abhishek.singh@smvdu.ac.in

mathdras@gmail.com

Mobile No.: +91 9953921229

Academic Qualifications: M. Sc., Ph.D. (Mathematics)

Doctoral details: Title: On Boehmians and Boehmians Spaces and the Boehmianian transform

analysis

Year: 2009

Supervisor: Professor (Dr.) P.K. Banerji (Past President, IMS)

Department of Mathematics & Statistics, J.N.V. University, Jodhpur

Post-Doctoral details:

Post-Doctoral Fellow (2010-2012), National Board for Higher Mathematics,
 Department of Atomic Energy, Government of India,

(No. 2/40(8)/2010/R&D-II/7053)

Title:- Investigations of Integral Transforms on Generalized functions and generalized quotient spaces.

• Post-Doctoral (DSKPDF-UGC) (2012-2015)

(F.4-2/2006(BSR)/B-663/2012(BSR) dated 26.03.2012)

Title:- Distributional Wavelet Transform

Mentor: Prof. (Dr.) R.S. Pathak (F.I.M.A.(U.K.), F. N. A. Sc.)

DST-CIMS, Banaras Hindu University, Varanasi

Area if Interest: Wavelet analysis & its applications, Distribution theory (generalized functions), generalized quotients spaces, Integral and wavelet transforms, Integral equations, Fractional Calculus.



Research / Teaching / Employment Experience: 14 Years, 06 Months

- 1. Associate Professor, School of Mathematics, Shri Mata Vaishno Devi University, Kakryal, Katra, J&K since December 23, 2024 to continue
- 2. Assistant Professor, Department of Mathematics and Statistics, Banasthali Vidyapith, Banasthali (Rajasthan) since June 28, 2018 to December 21, 2024.
- 3. Assistant Professor (Grade III), Department of Mathematics, AIAS, Amity University Uttar Pradesh, Noida since September 1, 2017 to June 26, 2018.
- 4. Assistant Professor (Grade II), Department of Mathematics, AIAS, Amity University Uttar Pradesh, Noida from September 1, 2015 to September 1, 2017.
- 5. Dr. D.S. Kothari Post-Doctoral Fellow (UGC, Govt. of India), DST-CIMS, Banaras Hindu University, Varanasi from May 2012 to May 2015.
- 6. Post-Doctoral Fellow, National Board for Higher Mathematics, Department of Atomic Energy, Govt. of India, from May 2010 to May 2012.

Courses Taught:

Post Graduate level:

M. Phil level:

Functional Analysis

Advanced Analysis

Theory of wavelets

Mathematics for Chemist

Topology

PDE

Under Graduate level:

Ph.D. Course work

Complex Analysis

Applied Mathematics (I & II)

Engineering Mathematics

Differential Equations

Real Analysis

Calculus

Numerical Analysis/Methods

Theory of wavelets and its applications

Departmental Responsibilities:

1. Member, Department Research Committee, Banasthali Vidyapith, Banasthali, Rajasthan.

- 2. Member in various committees i.e. accreditation, BoS, NEP, etc. at Banasthali Vidyapith, Banasthali, Rajasthan.
- 3. Research coordinator, Department of Mathematics, Amity University Uttar Pradesh (AUUP), Noida, July, 2016 to December 2017.
- 4. Member, Admission Board, AIAS, Amity University Uttar Pradesh (AUUP), Noida, June 2016, Dec. 2016, June 2017, Dec. 2017.
- Coordinator: AM-III Course and Wavelet Analysis and its applications (MATH910), AIAS, Amity University Uttar Pradesh (AUUP), Noida, Dec.-June, 2017 and Jan., 2017, respectively.
- 6. Member, Course review committee, AIAS, Amity University Uttar Pradesh (AUUP), Noida, Jan., 2018 to May, 2018.
- Coordinator: Weekly discussion session, DST-CIMS, Banaras Hindu University, June 2014 to July 2015.

Awards/Grants

- 1. Early Career Research (ECR) Award, Science and Engineering Research Board-SERB (DST), Govt. of India, 2017 (ECR/2017/000394).
- 2. Best paper presentation Award: 30th Annual National Conference of the Mathematical Society-BHU during January 30-31, 2015 on Mathematical Analysis and Applications at Banaras Hindu University, Varanasi, India.
- 3. Award the prize for being most active interacting participant during the deliberation of workshop "Writing Research Paper" Organized by National Academy of Sciences, 11.06.2011, India.
- 4. Travel Grant from DST-Science and Engineering Research Board (SERB) (SB/ITS-Y/02922/2014-15 dated 04.08.2014)
- 5. Travel Grant from National Board for Higher Mathematics, Department of Atomic Energy, Govt. of India (No. 2/44(50)/2014/R&D-II/13022 dated 17.10.2014)
- 6. Travel Grant from DST-Science and Engineering Research Board (SERB) (ITS/2359/2015-16 dated 02.07.2015)
- 7. Dr. D.S. Kothari PDF (University Grants Commission), Govt. of India (2012) (F.4-2/2006(BSR)/B-663/2012(BSR))
- 8. National Board for Higher Mathematics, Department of Atomic Energy, Govt. of India, PDF (2010) (No. 2/40(8)/2010/R&D-II/7053).
- 9. J.N.V. University Research Fellowship (No. JNVU/Dev/F.8-2(159)).

Projects as PI (Completed):

Sponsored projects: Two

S.No.	Name of the	Title of	Duration	PI/Co-	Sanction order No.
	agency	Project		PI	
1	DST-	On the	2018-2021		ECR/2017/000394 dated
	Science and	investigation	(Completed)	PI	20.03.2018
	Engineering	of relation			
	Research	between			
	Board	classical			
	(SERB),	integral			
	Govt. of	transforms			
	India	and wavelet			
		transforms on			
		the			
		distribution			
		spaces			
2	National	Investigation			02011/7/2022NBHM(R.P.)/R&D-
	Board for	of Wavelet			II/10010 dated 29.07.2022
	Higher	Convolutors	2022-2024	PI	
	Mathematics	on	(Completed)		
	(NBHM),	Distribution			
	Department	Spaces			
	of Atomic				
	Energy,				
	Govt. of				
	India				

Ph. D Supervision:

Supervised: Three **Supervising:** One

S.N.	Regn. No.	Name	Topic
1	A4431717002	Ms. Anshu	Investigations on the Wavelet transform and
	(16.01.2017 to	Mala	its applications
	13.08.2021)		
	Completed		
2	En. No.	Ms. Aparna	Investigation of Wavelet Transform on the
	2018/87	Rawat	Distribution and Boehmian Spaces
	(11.10.2018 to		
	25.04.2022)		
	Completed		
3	(01.01.2021 to	Ms. Nikhila	Investigation of Wavelet Transform and
	10.11.2024)	Raghuthaman	Wavelet Convolutors on Certain distribution
	Submitted		Spaces
4	PGPHB23319	Ms. Aanchal	Investigation of Mexican hat wavelet
	(01.01.2021)		transform and Mexican hat wavelet
	Ongoing		convolutors on schwartz distribution spaces

M. Phil Guided/Supervising:

Supervised: One

S.N.	Regn. No.	Name	Topic
1	2020/3380	Ms. Sangeeta	On the exchange property for the wavelet
		Dhawan	transform

M. Sc./M.Tech (Project/Dissertations) Guided/Enrolled:

Two Years M. Sc (M&C): 14

(a) Guided: Fourteen

(b) Enrolled: -

S.	Regn. No.	Name	Topic
1	A4451014028	Stuti Tamta	Exchange property of distributional wavelet transform
	(2016)		
2	A4451015012	Parveen Rani	Study on continuous wavelet transform and its
	(2017)		applications

3	A4451016000	Aprna Rawat	Study of Mexican hat wavelet transforms and an
	(2018)		isometry in the heat equation
4	A4451016062	Geetanjali	Study of generalized functions and its applications
	(2018)		
5	A4451016055	Amita	Uniqueness theorem on wavelet transform of
	(2018)		generalized quotients spaces
6	A4451017023	Kanishka Bharara	Study of Function spaces and its applications
	(2018)		
7	1845630	Puja	Distributional Wavelet transform
	(2020)		
8	1845620	Nikita	Wavelet transform of $L_{c,d}$ -space
	(2020)		
9	1946092	Sonal	The study of Mexican hat wavelet transform of
	(2021)		distributions
10	1946078	Himadri	The study of continuous wavelet transform on
	(2021)	Agarwal	ultraditribution space
11	2046333	Neha	Study of Representation theorems for the Mexican hat
	(2022)	Chaudhary	wavelet transform and its Applications
12	2046349	Shivani Yadav	Paley-Wiener-Schwartz theorem for wavelet transform
	(2022)		and S-transform
13	2046345	Ritu Rani	Exchange Property for the Hartley transform
	(2022)		
14	2242725	Mahima Mehta	Wavelet transform of multiplicator and convolutor for
	(2024)		ultradistibution

B. Sc./B.Tech (Project/Dissertations) Guided/Enrolled:

Three Years B. Sc (M&C): 6

(a) Guided: Six(b) Enrolled: Nil

Membership of learned societies

- 1. Life Member of International Association for Generalized Functions (IAGF).
- 2. Life Member of Indian Mathematical Society (IMS).
- 3. Life Member of Society of Mathematical Analysis and Applications-BHU.
- 4. Life Member of International Association of Engineers (IAENG).
- 5. Life Member of Indian Science Academy.
- 6. Life Member of International Society on Multiple Criteria Decision Making.
- 7. Annual Member of Society of Special Functions and their Applications (SSFA).
- 8. Annual Member of Indian Academy of Mathematical.

Reviewer of Journals:

- 1. Zentralblatt Für Mathematik/Mathematics Abstract, Germany.
- 2. Mathematical Reviews, USA.
- 3. Integral Transforms and Special Functions (Taylor and Francis).
- 4. Proc. of the National Academy of Sciences, Section A: Physical Sciences (Springer).
- 5. Indian J Pure and applied Math. (Springer).
- 6. Investigations in Mathematical Sciences (Springer)
- 7. Journal of Pseudo-Differential Operators and Applications (Springer)
- 8. European Journal of Mathematics (Springer)
- 9. The Journal of Analysis (Springer)
- Rendiconti del Circolo Matematico di Palermo Series 2 (Springer)
 Etc.

Editorial Board Member in International Journals

1. Member, Editorial Board, Applications and Applied Mathematics: An International Journal (AAM).

Academic Visits abroad: Southampton University, Southampton, London (United Kingdom), Hongkong, University of Macau (Chaina SAR).

International Research Collaboration:

- 1. Prof. R. D. Carmichael, Wake Forest University, USA.
- 2. Dr. F. Y. Ayant: France.
- 3. Prof. Hari M. Srivastava, University of Victoria, Victoria, British Columbia, Canada.

Research Publications: Total Published: 47, Accepted: 03, Communicated: 03

List of Publications (Last Ten years: 2014-24)

- 1. Abhishek Singh and N. Raghuthaman, Wavelet convolutors on the space of distributions, Integral Transforms Spec. Funct., (Accepted) (2024) (Taylor and Francis) (SCI/SCIE).
- 2. Abhishek Singh and N. Raghuthaman, *Distributional convolutors for wavelet transform*, Rocky Mountain Journal of Mathematics, (Accepted) (2024) (SCI/SCIE).
- 3. Abhishek Singh and Aparna Rawat, A Family of Mexican Hat Wavelet Stieltjes Transform for Unbounded Non-decreasing Functions, Natl. Acad. Sci. Lett., (Accepted) (2024) (Springer) (SCI/SCIE).
- 4. Abhishek Singh and Aparna Rawat, *The Mexican hat wavelet Stieltjes transform*, Filomat 37:9 (2023), 2717–2730 (SCI/SCIE)
- Abhishek Singh, N. Raghuthaman, and R. D. Carmichael, Wavelet transform of Multiplicators and Convolutors for ultradistributions, Mathematical Methods in the Applied Sciences, 46, 4225–4236 (2023). (Wiley) (SCI/SCIE)
- 6. Abhishek Singh and N. Raghuthaman, *Generalization of Paley-Wiener-Schwartz type theorem*, Natl. Acad. Sci. Lett. **45**, 335–338 (2022) (Springer) (SCI/SCIE)
- 7. Abhishek Singh, S. Singh, A Rawat and P.K. Banerji, *On the wavelet transform of Boehmians*, Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci. 92(3):331–336 (2022) (Springer) (SCI/SCIE)
- 8. Abhishek Singh, Aparna Rawat and Sangeeta, On the *Exchange property for the wavelet transform*, The Journal of Analysis, 30 (4), 1743-1751 (2022) (Springer) (SCOPUS)
- 9. Abhishek Singh and Aparna Rawat, *Mexican hat wavelet transforms on generalized functions function*, Proc. Math. Sci. (2021) 131:31. https://doi.org/10.1007/s12044-021-00627-6 (Springer) (SCI/SCIE)
- 10. Abhishek Singh, N. Raghuthaman and Aparna Rawat, *Paley-Wiener-Schwartz type theorem* for ultradistributional wavelet transform, Complex Analysis and Operator Theory **15**, 75 (2021). https://doi.org/10.1007/s11785-021-01124-4 (Springer) (SCI/SCIE)
- H. M. Srivastava, Abhishek Singh, Aparna Rawat, and S. Singh, A family of Mexican hat wavelet transforms on greens function, Mathematical Methods in the Applied Sciences, 44 (14), 11340-11349 (2021). (Wiley) (SCI/SCIE)
- 12. Abhishek Singh, Some characterizations of wavelet transform, Natl. Acad. Sci.

- Lett. 44, 143–145 (2021). (Springer) (SCI/SCIE).
- 13. Abhishek Singh, Nikhila, Apana Rawat and Jagdev Singh, Representation theorems for the Mexican hat wavelet transform, Mathematical Methods in the Applied Sciences, 43(7) (2020), 3914-3924. (Wiley) (SCI/SCIE)
- 14. Abhishek Singh, *Distributional Mexican hat wavelet transforms*, The Journal of Analysis, **28 (2)** (2020), 533-544. (Springer) (SCOPUS)
- 15. Dinesh Kumar, F.Y. Ayant, Abhishek Singh and P.K. Banerji, Finite Integral Formula Involving Aleph-Function and generalized Mittag-Leffler Function, Problemy Analiza-Issues of Analysis, 9 (27) (2020), 1-10. (SCOPUS)
- 16. R.S. Pathak and Abhishek Singh, *Paley-Wiener-Schwartz theorem for the wavelet transform*, Applicable Analysis, **98** (7) (2019), 1324–1332 (Taylor & Francis) (SCI/SCIE)
- Abhishek Singh and A. Mala, The Continuous wavelet transform on ultradistribution spaces, Colloquium Mathematicum, 157 (2019), 189-201. (Impan) (SCI/ SCIE)
- Anshu Mala, Abhishek Singh and Deepali Saxena, Asymptotic behaviour of distributional Mexican hat wavelet transform, J. Indian Mathematical Society 86 (1-2) (2019), 58-66. (SCOPUS)
- 19. A. Mala, Abhishek Singh and P.K. Banerji, Wavelet transform on L_{(c,d}-space, Integral Transforms Spec. Funct. 29 (6) (2018), 431-441. (Taylor and Francis) (SCI/SCIE)
- Abhishek Singh and P.K. Banerji, Cauchy representation for Fractional Fourier transform for Boehmians, Boletim da Sociedade Paranaense de Matemática, 38(1) (2020), 55-65.
 (SCOPUS)
- Abhishek Singh and P.K. Banerji, Fractional integrals of fractional Fourier transform for integrable Boehmians, Proc. Nat. Acad. Sci., Sec. A, 88 (1) (2018), 49-53. (Springer) (SCI/SCIE)
- 22. R.S. Pathak and Abhishek Singh, Wavelet Transform of Beurling-Bj"orck type Ultradistributions, Rend. Sem. Mat. Univ. Padova, 137 (1) (2017), 211-222. (European Mathematical Society) (SCI/SCIE)
- 23. R.S. Pathak and Abhishek Singh, *Mexican hat Wavelet Transform of Distributions*, Integral Transforms Spec. Funct. **27** (6) (2016), 468-483 (Taylor & Francis) (SCI/SCIE)
- 24. R.S. Pathak and Abhishek Singh, Wavelet transform of generalized functions in $K'\setminus\{M_{p}\}\$ spaces, Proc. Math. Sci. 126 (2) (2016), 213-226 (Springer) (SCI/SCIE)
- 25. R.S. Pathak and Abhishek Singh, *Distributional Wavelet Transform*, Proc. Nat. Acad. Sci., Sec. A, **86 (2)** (2016), 273-277 (**Springer**) (**SCI/SCIE**)

- 26. Abhishek Singh, On the Exchange Property for the Mehler-Fock Transform, Applications and Applied Mathematics: An International Journal, 11(2) (2016) 828-839. (ESCI)
- 27. Abhishek Singh, On exchange property for the Hartley transform, Italian J. Pure Appl. Math. 35 (2015), 373-380. (SCOPUS)
- 28. Abhishek Singh, *Uniqueness theorem for the Hilbert transform for Boehmians, Scientia*, Series A: Mathematical Sciences, **26** (2015), 133-140. **(ESCI)**
- 29. Abhishek Singh, Fractional S-transform for Boehmians, J. Anal. Number Theory, 3 (2) (2015), 1-6. (SCOPUS)
- 30. Abhishek Singh, Fractional Fourier transform on a class of Boehmains, International Journal of Pure and Applied Mathematics, 101 (3) (2015), 413-420. (SCOPUS)
- 31. Abhishek Singh, On exchange property for the Kontorovich-Lebedevtransform, International Journal of Mathematics, Game Theory and Algebra, 23 (4) (2014), 37-46. (NSP, USA) (ESCI)
- 32. R.K. Saxena, J. Daiya and Abhishek Singh, *Integral Transform of K-Generalized Mattag-*Leffler Function $E_{k,\alpha,\beta}^{\gamma,\tau}(z)$, Le Matematiche, **69 F.2** (2014), 7-16. (SCOPUS)

Conference Proceedings:

- 1. Abhishek Singh, Aparna Rawat1 and Shubha Singh, Characteristics of Mexican hat wavelet transform in a class of generalized quotient space, Journal of Computational Analysis and Applications, Vol. 31 Issue 1 (2023), p10-20. 10p (ICMMAAC-22) (SCOPUS).
- Abhishek Singh, N. Raghuthaman and Aparna Rawat, Gap Formula for the Mexican hat wavelet transform, Journal of Computational Analysis and Applications, 107 (ICMMAAC-21) Jan 2022, Vol. 30 Issue 1, p107-113. 7p (SCOPUS).
- 3. Aparna Rawat, Abhishek Singh, J. Daiya and Jagdev, *The wavelet transform for Boehmians of analytic type*, Mathematics in Engineering Science and Aerospace, 12 (3) (2021) (ICMMAAC-20), p743-750. 8p (SCOPUS).
- 4. Abhishek Singh, Color image encryption using TSRSC associated with DWT, IEEE 5th International Conference-Confluence The Next Generation Information Technology Summit (Confluence) (2014), 596-599. (IEEE) (SCOPUS)

DOI: 10.1109/CONFLUENCE.2014.6949237

Book Chapters:

- 1. Abhishek Singh, N Raghuthaman and S K Singh, *Ultradistributional Wavelet Transform* for the Convolutors of Sw, Advances in Mathematical Modelling, Applied Analysis and Computation. Lecture Notes in Networks and Systems, vol 953, pp. 243-248 (2024) https://doi.org/10.1007/978-3-031-56304-1 15 (Springer) (SCOPUS).
- 2. A Rawat and Abhishek Singh, *Integral Transforms and Generalized Quotient Space on the Torus*, Advances in Mathematical Modelling, Applied Analysis and Computation. Lecture Notes in Networks and Systems, vol 952, pp. 285-301 (2024) https://doi.org/10.1007/978-3-031-56307-2 19 (Springer) (SCOPUS).
- 3. Abhishek Singh, S. Singh, and D. Kumar, *The Mexican Hat Wavelet Transform on Generalized Quotients and Its Applications*, Methods of Mathematical Modelling and Computation J. Singh et al. (Eds.), LNNS 666, pp. 1–18 (2023) https://doi.org/10.1007/978-3-031-29959-9 5 (Springer) (SCOPUS).
- 4. Abhishek Singh, Aparna Rawat and J Singh, *Wavelet Transform on generalized quotients spaces and Its Application*, Advances in Mathematical Modelling, Applied Analysis and Computation, LNNS 415, pp. 119–139, (2022) DOI: 10.1007/978-981-19-0179-9_6 (Springer) (SCOPUS).
- Abhishek Singh, Aparna Rawat and N. Raghuthaman, Mexican Hat Wavelet Transform and Its Application, Methods of Mathematical Modelling and Computation for Complex Systems SSDC, volume 373, pp. pp 299–317 (2021) DOI: 10.1007/978-3-030-77169-0_12 (Springer) (SCOPUS).

Chair Session

- 1. Chaired a session in the International Conference on Mathematical Modeling, Applied Analysis and Computation-2022 (ICMMAAC-22) during August, 04-06, 2022 at JECRC University, Jaipur (Raj.) India.
- Chaired a session in the conference on October 12 in the virtual National Conference on New Trends in Applied Mathematics (NCNTAM) 2021 organized by Department of Mathematics, University Institute of Engineering & Technology (U.I.E.T.), Chhatrapati Shahu Ji Maharaj University Kanpur, during October 11 - 12, 2021.
- 3. Chaired a session in the International Conference on Mathematical Modeling, Applied Analysis and Computation-2019 (ICMMAAC-19) during August, 8-10, 2019 at JECRC

- University, Jaipur (Raj.) India.
- 4. Chaired a session in the International Conference on Mathematical Modeling, Applied Analysis and Computation-2021 online (ICMMAAC-21) during August, 5-7, 2021 at JECRC University, Jaipur (Raj.) India.

Conference/workshop organised/member

 Committee member (scientific), for the International Conference on Mathematical Sciences and Statistics 2022 (ICMSS2022) held on 15th – 16th March 2022 at the Department of Mathematics, Faculty of Science, Universiti Putra Malaysia.

Talk/Discussion

- 1. Delivered a talk on "Wavelet transform and its applications" at International Conference on Mathematical Modeling, Applied Analysis and Computation-2020 (ICMMAAC-20) during August, 7-9, 2020 at JECRC University, Jaipur (Raj.) India.
- Delivered a talk on "Paley Wiener Schwartz type theorem for the wavelet transform" at International Congress on Generalized functions 2020 during 31.08.2020 to 04.09.2020 at Department of Mathematics: Analysis, Logic and Discrete Mathematics, Gent University, Gent, Belgium.
- 3. Delivered a talk on "Generalized functions and Wavelet transform" at the National Conference on "Number Theory, Special Functions and their Applications in Computer Science", November 08-10, 2019 in the Department of Mathematics TDPG College, Jaunpur-222002 (UP) India.
- 4. Delivered a talk on "Mexican hat wavelet transform of generalized functions and Boehmians" at International Conference on Mathematical Modeling, Applied Analysis and Computation-2019 (ICMMAAC-19) during August, 8-10, 2019 at JECRC University, Jaipur (Raj.) India.
- 5. Delivered a talk on "Wavelet Transform of Beurling-Bj"orck type Ultradistributions" at The 10th international Society for Analysis, its applications and Computation (ISAAC 2015) during August 03-08, 2015 at University of Macau, Macau, China SAR.
- 6. Delivered a talk on "Wavelet transform of generalized functions in K{Mp}- spaces" at International Congress on Generalized functions during September 08-14, 2014 at Southampton University, England, United Kingdom.

- 7. Delivered a special talk on "*Analysis*" at DST-CIMS, Banaras Hindu University, India, for students and teachers of Ramakrishna Mission Vidhyamandir, Kolkata on 29.07.2013.
- 8. Weekly Discussion session at DST-CIMS, Banaras Hindu University, India during July 2013- Sep.2013 and Feb. 2014-May 2014.

International Seminars/Conferences

- Three days International Conference on Vedic Science: Global Applications during Jan. 27-29, 2024 at Vedic Vigyan Kendra, Banaras Hindu University, Varanasi. Attended and presented a talk "Vedic Mathematics".
- 2. 2ndInternational Conference on "Orthogonal Polynomials, Special functions, and Computer Algebra: Applications in Engineering" (OPSFCA-2022) during October 15th 16th, 2022 at Anand-ICE, Jaipur. Attended and presented a talk "*Generalized quotient space on the torus associated with some integral transforms*".
- 3. The 10th international Society for Analysis, its applications and Computation (ISAAC 2021) online during August 02-06, 2021 at Ghent University, Ghent. Attended.
- 4. The International Conference on Mathematical Modeling, Applied Analysis and Computation-2021 online (ICMMAAC-21) during August, 5-7, 2021 at JECRC University, Jaipur (Raj.) India. Attended and given a talk.
- 5. The International Conference on Mathematical Modeling, Applied Analysis and Computation-2019 (ICMMAAC-19) during August, 8-10, 2019 at JECRC University, Jaipur (Raj.) India. Attended and given a talk.
- 6. The International Conference on Mathematical Modeling, Applied Analysis and Computation-2018 (ICMMAAC-18) during July 6-8, 2018 at JECRC University, Jaipur (Raj.) India. Attended and presented a talk on "Some characterizations of wavelet transform".
- 7. The 10th international Society for Analysis, its applications and Computation (ISAAC 2015) during August 03-08, 2015 at University of Macau, Macau, China SAR. Attended and presented a talk on "Wavelet Transform of Beurling-Bj"orck type Ultradistributions".
- 8. International Congress on Generalized functions during September 08-14, 2014 at Southampton University, England, United Kingdom. Attended and presented a talk on "Wavelet transform of generalized functions in K{Mp}- spaces".
- 9. International Conference on Recent Trends in Engineering and Material Sciences (ICEMS-2016) during March 17-19, 2016 Jaipur

- National University, Jaipur, India. Attended and presented a paper entitled "Wavelet transform on generalized spaces".
- 10. 5th International Conference Confluence (IEEE), during September 25-26, 2014, organized by Amity University, U.P., India. Attended and presented a paper entitled "*Color image encryption using TSRSC associated with DWT*".
- 11. Attended the 'International Conference on Special Functions and their application (ICSFA 2015)', during September 10-12, 2015, organized by Amity University, U.P., India.
- 12. Attended the "International Conference on New Trends in Field Theories", during November 23-26, 2012, organize by DST-CIMS and Department of Physics, Faculty of Science, Banaras Hindu University, Varanasi- 221 005, India.
- 13. International Conference on Special Functions and their Applications (ICSFA-2011) and Symposium on Works of Ramanujan, during July 28-30, 2011, organized by Department of Mathematics and Statistics, JNV university, Jodhpur, India. Attended and presented a paper entitled "Dunkl transform of tempered Boehmians".
- 14. International Congress of Mathematicians 2010 (ICM 2010) during August 19-27, 2010 in Hyderabad, India. Attended and presented a paper entitled "On Weierstrass transform of tempered Boehmians".
- 15. International Congress of Mathematicians 2010 (ICM 2010) Satellite Workshop on Geometric Group Theory during August 9-14, 2010 in Department of Mathematics, Goa University, Goa, India. Attended and presented a paper entitled "Mellin transform for Boehmian on torus".

National Seminars/Conferences:

- National conference of Academy for Progress of Mathematics on "Recent advances in Mathematical Analysis and Applications" (NCAPM-RAMAA-2022) during May 7-8, 2022 at DST- Centre for Interdisciplinary Mathematical Sciences, Institute of Science, Banaras Hindu University, Varanasi, India. Attended and presented a paper entitled "Exchange property of wavelet transform".
- 30th Annual National Conference of the Mathematical Society-BHU during December 30-31, 2015 on Mathematical Analysis and Applications at Banaras Hindu University, Varanasi, India. Attended and presented a paper entitled "Distributional Wavelet transform" and got Best paper presentation award.
- 3. 78th Annual Conference of the Indian Mathematical Society during January 22-25, 2013,

- Banaras Hindu University, Varanasi, India. Attended.
- 4. 77th Annual Conference of the Indian Mathematical Society during December 27-31, 2011, SRTM University, Nanded, India. Attended and presented a paper entitled "Dunkl transform for integrable Boehmians".
- 76th Annual Conference of the Indian Mathematical Society during December 27-30, 2010,
 S.V. National Institute of Technology, Surat, India. Attended and presented a paper entitled "Fourier-Bessel transform for tempered Boehmians".
- 6. 54th Annual Conference of Banaras Hindu University Mathematical Society during December 30-31, 2008, Banaras Hindu University, Varanasi, India. Attended and presented a paper entitled "Hilbert transform on tempered Boehmians".
- 7. Promoting the Application of Mathematics in Engineering and Technology and the Symposium on "Restructuring of Mathematics Syllabi in Engineering", during April 16-17, 2010, Marudhar Engineering College, Bikaner, India. Attended and presented a paper entitled "On the Mellin transform and exchange property".
- 8. Attended the 12th Annual conference of VIJ~NANA PARISHAD OF INDIA and National Symposium on Applications of Special Functions during October 25-27, 2007 at the Department of Mathematics, Jai Narain Vyas University, Jodhpur.

Summer/Winter/Training Programme:

- Attended One Week Workshop on Scientific Writing on LaTeX and other Open Source Software in offline mode during Feb 20-25, 2023, Organized by DST-Centre for Interdisciplinary Mathematical Sciences, Banaras Hindu University, India.
- 2. Attended the "3rd Induction Training Programme" during November 18, 2018 to December 17, 2018 (one month), Organized by Faculty Development Centre, Banasthali Vidyapith, under the scheme of PMMMNMTT, MHRD, Govt. of India, and got highest grade A⁺.
- 3. Attended the "Training Programme on Integral Transform, Wavelets, Distribution Theory and Applications," during July 12-21, 2012, Organized by DST-Centre for Interdisciplinary Mathematical Sciences, Banaras Hindu University, India.
- 4. Attended the "International Workshop on Wavelets, Frames and Applications" during December 15-21, 2011, Organized by Kirori Mal College, Department of Mathematics, University of Delhi, India.
- 5. Attended the "Advanced Instructional School in Functional Analysis", during July 04-22, 2011, organized by Stat-Math Division, ISI Kolkata, India.

6. Attended the "Workshop on "Writing research papers" (NASI- Varanasi Chapter)" during

June 9-11, 2011, organized by Banaras Hindu University, Varanasi, India, and awarded the

prize for "Most Active interacting participant".

7. Attended the "Workshop on Ramanujan's Mathematics" during December 22-24, 2010,

Organized by The National academy of Sciences, Allahabad, India.

8. Attended the "Short Term Programme On Research Methodology" during February 18-23,

2010, Organized by UGC-Academic Staff College, Jai Narain Vyas University, Jodhpur.

Web Profiles:

Research Gate: https://www.researchgate.net/profile/Abhishek-Singh-548

Scopus Author ID: https://www.scopus.com/authid/detail.uri?authorId=58834535600

MathSciNet: https://mathscinet.ams.org/mathscinet/author?authorId=892118

Orcid ID: https://orcid.org/0000-0001-7570-6276

Google Scholar: https://scholar.google.co.in/citations?user=7KTO7GEAAAAJ&hl=en

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

Date: 31.12.2024 Sd/-

Place: SMVDU, Katra Dr. Abhishek Singh