



CURRICULAM VITAE OF DR SHYAMAL DEBNATH

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Education

2002–2008 **Ph.D in Mathematics, Tripura University, Agartala, India**
1996–1999 **Master in Mathematics, Tripura University, Agartala, India**
1993–1996 **Bachelor of Science, M. B. B. College, Agartala, India**
1991–1993 **H.S(+2), Science, Ramesh H. S. School, Udaipur, Tripura, India**
1986–1991 **Class VI- Madhyamik, Barpathari Class XII School, Belonia, Tripura, India**
1981–1986 **Class I-Class V, Barkashari J.B School, Belonia, Tripura, India**

Ph.D Thesis

Title *Study of some preservation of fuzzy aspects with the help of newly defined fuzzy functions and their applications (Degree awarded-30.03.2008)*

Ph.D Supervisors Prof. A. Mukherjee (Retired), Department of Mathematics, Tripura University

Experience

3rd January 2021–onwards **Professor, Tripura University, Agartala, Tripura, India**
03.01.2018–02.01.2021 **Associate Professor, Tripura University, Agartala, Tripura, India**
02.05.2012–02.01.2018 **Assistant Professor, Tripura University, Agartala, Tripura, India**
18.08.2010–01.05.2012 **Assistant Professor, National Institute of Technology, Agartala, Tripura, India**
12.02.2009–17.08.2010 **Assistant Professor, Govt. Degree College, Udaipur, Tripura, India**
03.01.2004–11.02.2009 **Assistant Professor, Govt. Degree College, Belonia, Tripura, India**

Languages

Bengali Read, Write, Speak

Hindi Speak, Read
English Read, Write, Speak

Recent Field of interests

Ideal Convergence, Rough Convergence, Operator norms, Sequence Space, Fuzzy Set.

Scholarship/Award/Recognitions

1. Secured 1st class 1st position in M.Sc Mathematics (1999), Tripura University. (High School-1st Division; H.S(+2)-1st Division; B.Sc-1st Class)
2. CSIR-UGC (JRF) NET-JUNE-2001.
3. ICM (RIO Brazil) Travel Grant-2018 from DST, 2018
4. Chebyshev Grant (RUSSIA), ICM-2022.
5. Bharat Vikas Award-2022 (Institute of Self Reliance, Orissa).

Publication (Referred or Peer reviewed or indexed journals)

1. C. Choudhury, **S. Debnath**, H. Debbarma: On Statistical Convergence of Sequences in Gradual Normed Spaces, Palestine J. Math. (Accepted, 2026) (**Scopus**).
2. **S. Debnath**, S. Debnath and C. Choudhury: On ρ -statistical convergence in gradual normed linear spaces, Latin American Journal of Mathematics (**Accepted, 2026**) (**Scopus**).
3. J. Hossain, **S. Debnath**, S. K. Paul: ON IDEAL CONVERGENCE IN A BI-COMPLEX VALUED METRIC SPACE, Mathematical Sciences and Applications E-Notes(**14 (1) 57-66 (2026)**) (**Scopus**).
4. **M. Rahman**, S. Debnath: ON ROUGH CONVERGENCE OF SEQUENCES OF BICOMPLEX NUMBERS, Dynamics of Continuous, Discrete and Impulsive Systems Series A: Mathematical Analysis **33** (2026) 121-134 (**Scopus**).
5. J. Hossain, **S. Debnath**: ON QUASI STATISTICAL CONVERGENCE OF SEQUENCES OF BI-COMPLEX NUMBERS, J. Indian. Math. Soc. (**93(2) (2026), 249-257**) (**Scopus**).
6. H. Debbarma, **S. Debnath**: Studies On Some Quantum Difference Sequence Spaces In GNLS, AMSA(Japan) Vol. 35, No. 1 (2026), pp. 87-97 (**Scopus**).
7. J. Hossain, **S. Debnath**, S. K. Paul: ON $\mathcal{I}_q^c$ -CONVERGENCE OF SEQUENCES OF BI-COMPLEX NUMBERS, Probl. Anal. Issues Anal. (**15(33)(1), 66-77 (2026)**) (**Scopus**).
8. Santonu Debnath, **S. Debnath**, S. Datta: A New Perspective on Deferred Statistical Convergence of Order α in Fuzzy Normed Linear Spaces, FILOMAT(**39:22 (2025), 7833-7847**) (**SCI-E**).
9. **S. Debnath**, S. Debnath: On Rough Statistical Convergence in Fuzzy Normed Linear Spaces, Palestine J. Math. (**14(3)(2025) , 1092-1101**) (**Scopus**).
10. J. Hossain, **S. Debnath**: ON $\mathcal{I}$ -LACUNARY STATISTICAL CONVERGENCE OF SEQUENCES OF BI- COMPLEX NUMBERS, Iranian J. Math. Sci. Inform. (**Online 2025**) (**Scopus**).
11. C. Choudhury, **S. Debnath**, A Esi: On Rough ϕ -Convergence, Iranian J. Math. Sci. Inform (**Online, 2025**) (**Scopus**).
12. H. Debbarma, **S. Debnath**: On Certain Sequence Spaces Over Gradual Normed Linear Spaces, Mathematica Montisnigri (**Vol LXIV (2025)Page 41-48**) (**Scopus**).
13. **S. Debnath**, A. Halder: ON ROUGH $\mathcal{I}$ -STATISTICAL CONVERGENCE OF COMPLEX UNCERTAIN SEQUENCES, International Journal of Maps in Mathematics, Volume 8, Issue 2, 2025, Pages:346-359 (**Scopus**).
14. **S. Debnath**, A. Halder: On Rough $\mathcal{I}$ -Convergence of Complex Uncertain Sequences, BSPM. V-43 (**2025**) (**Scopus**).
15. J. Hossain, **S. Debnath**: On $\mathcal{I}_\lambda$ - statistical convergence of sequences of bi-complex numbers, TWMS J. App. and Eng. Math. 15(7),(2025) 1674-1685 (**Scopus**).
16. C. Choudhury, **S. Debnath**: Certain aspects of rough deferred statistical cluster points in normed linear spaces, Filomat 39(11) (2025). (**SCIE-Scopus**))
17. H. Debbarma, **S. Debnath**: SOME STATISTICALLY CONVERGENT SEQUENCE SPACES OVER

GRADUAL NORMED LINEAR SPACE, Dynamics of Continuous, Discrete and Impulsive Systems (DCDIS), Series A: Mathematical Analysis 32 (2025) 55-65 (**Scopus**).

18. **S. Debnath**, B. Das: On p -Statistical Convergence of Complex Uncertain Sequences, Mathematics in Science, Engineering, and Aerospace (MESA), 16(1), 237-244 (2025) (**Scopus**).
19. S. Debnath, **S. Debnath**: On some generalization of statistical boundedness in neutrosophic normed spaces, Advances in Mathematical Sciences and Applications 34(1) (2025): 1-12. (**Scopus**)
20. A. Halder, N. P. Pahari, **S. Debnath**, : Some More Results on $\mathcal{I}$ -Convergence of Complex Uncertain Sequences, Annals: Series on Mathematics and Its Applications, Vol. 17, No. 2, (1-8), 2025 (**Scopus**).
21. **S. Debnath**, S. Debnath: On deferred statistical convergence in fuzzy normed linear spaces, Journal of Fuzzy Extension and Applications (JFEA) 6(1):2025,1-13. (**Scopus**)
22. M. Et, C. Choudhury, **S. Debnath**: ρ - statistical boundedness, TWMS J. of Apl. and Eng. Math V.15, N.1, 2025, pp. 89-97 (**Scopus**).
23. A. Halder, **S. Debnath**, A. Esi: On $\mathcal{I}$ -Statistical Convergence of Complex Uncertain Sequences, Filomat 38(28) (2024), 9795-9811. (**Scie-Scopus**)
24. H. Debbarma, **S. Debnath**: On $\mathcal{I}$ - Statistical Convergent Difference Sequence Spaces in GNLS, Advances in Mathematical Sciences and Applications 33(2): (2024) 741-754 (**Scopus**)
25. **S. Debnath**, A. Halder: On $\mathcal{I}$ -Statistical Convergence of Complex Uncertain Sequences in Measure , Ural Mathematical J. Vol. 10, No. 2, 2024, pp. 69-80 (**Scopus**).
26. **S. Debnath**, S. Debnath: On Statistical Limit Superior and Limit Inferior in Neutrosophic Normed Spaces, Advances in Mathematical Sciences and Applications 33(1) (2024), 97-108 (**Scopus**).
27. **S. Debnath**, J. Hossain: ON $\mathcal{I}$ -CONVERGENCE, $\mathcal{I}$ -LIMIT POINT AND $\mathcal{I}$ -CLUSTER POINT OF SEQUENCES OF BI-COMPLEX NUMBERS, Advances in Mathematical Sciences and Applications 33(2) (2024), 303-314 (**Scopus**).
28. **S. Debnath**, S. Debnath: A GENERALIZED STATISTICAL CONVERGENCE IN NEUTROSOPHIC NORMED SPACE, Acta Math. Univ. Comenianae XCIII 2 (2024), 79-93 (**Scopus**).
29. C. Choudhury, B. Das , **S. Debnath**: On statistical convergence of order α of sequences in gradual normed linear spaces, J. Appl. Anal. 2024, <https://doi.org/10.1515/jaa-2023-0105> (**Scopus**).
30. H. Debbarma, C. Choudhury, **S. Debnath**: Studies On Some Sequence Spaces In Gradual Normed Linear Space, Applied Mathematics E-Notes, 24(2024), 80-88 (**Scopus**).
31. **S. Debnath**, A. Halder: ON $\mathcal{I}$ -CONVERGENCE ALMOST SURELY OF COMPLEX UNCERTAIN SEQUENCES, TWMS J. of Apl. and Eng. Math V.14, N.3, 2024, pp. 1166-1178 (**Scopus**).
32. A. Halder, **S. Debnath**: On Lacunary $\mathcal{I}$ -Convergence Almost Surely of Complex Uncertain Sequences, Annals of the University of Craiova, Mathematics and Computer Science Series, V 51(1), 2024, Pages 16-179, (**Scopus**).
33. **S. Debnath**, S. Debnath: Rough Statistical Convergence in Neutrosophic Normed spaces, Southeast Asian Bulletin of Mathematics (2024) 48: 339-353 (**ESCI**).
34. B. Das, A. Halder, **S. Debnath**: On $\mathcal{I}$ -Convergence of Complex Uncertain Sequences, Fasciculi Mathematici (2024)67: 35-48 (**UGC Care**).
35. J. Hossain, **S. Debnath**: ON $\mathcal{I}^{\mathcal{K}}$ - CONVERGENCE OF SEQUENCES OF BI- COMPLEXNUMBERS, Probl. Anal. Issues Anal. 13(31) (3), 2024(**Scopus**).
36. C. Choudhury, **S. Debnath**, A. Esi: Further results on I-deferred statistical convergence, FILOMAT.38(3), 2024 (769-777) (**Scopus, SCIE**).
37. **S. Debnath**, C. Choudhury, S. Debnath: On quasi statistical convergence in neutrosophic normed spaces, Dynamics of Continuous, Discrete and Impulsive Systems Series A: Mathematical Analysis 31 (2024) 21-33 (**Scopus**).
38. C. Choudhury, **S. Debnath**, E. Savas: On λ - statistically φ -convergence, J. Applied Analysis, vol. 30, no. 1, 2024, pp. 75-83 (**Scopus, Web of Science**)
39. A. Halder, **S. Debnath**: ON $\mathcal{I}$ -STATISTICAL CONVERGENCE ALMOST SURELY OF COMPLEX UNCERTAIN SEQUENCES, Advances in Mathematical Sciences and Applications, 32(2) (2023) 431-445 (**Scopus**).
40. **S. Debnath**, B. Das, S. Debnath, C. Choudhury: On Statistical Convergence of order α in neutrosophic normed spaces, Neutrosophic Sets and Systems 58(2023) 299-310 (**Scopus**).

41. C. Choudhury, **S. Debnath**: On quasi statistical convergence in gradual normed linear spaces, TWMS J. App. and Eng. Math.V.13, N.4, 2023, pp. 1327-1336 (**Scopus**).
42. C. Choudhury, **S. Debnath**, **A. Esi**: A new notion of convergence in gradual normed linear spaces, Novi Sad J. Math. DOI: 10.30755/NSJOM.15030 (2023) (**Scopus**).
43. **S. Debnath**, C. Choudhury, S. Debnath: On quasi statistical convergence of order α in neutrosophic normed spaces, Advances in Mathematical Sciences and Applications Vol. 32, No. 2 (2023), pp. 237-251 (**Scopus**).
44. C. Choudhury, **S. Debnath**: On λ - Statistical Convergence of Sequences in Gradual Normed Linear Spaces, Applied Math. E Notes. 23, 209-219 (2023) (**Scopus**).
45. E. Savas, **S. Debnath**, C. Choudhury: On $\mathcal{I}$ - Statistical φ —Limit Superior and $\mathcal{I}$ - Statistical φ —Limit Inferior, Southeast Asian Bulletin of Mathematics (2023) 47(2): 279-287 (**Web of Science**)
46. C. Choudhury, **S. Debnath**: On I -statistical convergence of sequences in gradual normed linear spaces, Mathematicki Vesnik.74(3), 218-228, 2022, (**Scopus**).
47. C. Choudhury, **S. Debnath**: Further results on I and I^* -convergence of sequences in gradual normed linear spaces, Jordan Journal of Mathematics and Statistics (JJMS), 15(4A), 2022, pp 967 - 982 (**Scopus**).
48. C. Choudhury, **S. Debnath**: On N_θ and lacunary statistical derivative, Applied Sciences (APPS).Vol 24(2022) , 62-70. (**Scopus**).
49. **S. Debnath**, C. Choudhury, S. Debnath: On Deferred Statistical Convergence of Sequences in Neutrosophic Normed Spaces, Sahand Commun. Math. Anal. 19(4) 81-96 (2022) (**Scopus**).
50. **S. Debnath**, B. Das: On λ -Statistical Convergence of Order α for Complex Uncertain Sequences, International J of General Syst. DOI:10.1080/03081079.2022.2132490 (2022) (**Scopus**).
51. **S. Debnath**, B. Das: On Rough Statistical Convergence of Complex Uncertain Sequences, New Mathematics and Natural Computation (<https://doi.org/10.1142/S1793005722500454>) (2022) (**Scopus**).
52. C. Choudhury, **S. Debnath**: On some properties of $\mathcal{I}^K$ -convergence, Palestine J. Math.Vol. 11(2)(2022) , 129-135 (**Scopus**).
53. C. Choudhury, **S. Debnath**: On $\mathcal{I}^{K-st}$ convergence of sequence of real numbers, Palestine J. Math.Vol. Vol. 11(2)(2022) , 505-510 (**Scopus**).
54. **S. Debnath**, C. Choudhury: On $\mathcal{I}_\phi^K$ convergence, Journal of Mathematical Extension Vol. 16, No. 10, (2022) (4)1-12 (**ESCI**).
55. C. Choudhury, **S. Debnath**: On A^{I^K} Summability, Ural Math. Jour., 8(1), 13-22 (2022) (**Scopus**).
56. C. Choudhury, **S. Debnath**: On I^K limit Supremum, I^K limit infimum and Related Results, Probl. Anal. Issues Anal. 11(29), No 3, 15-29 (2022) (**Scopus**).
57. C. Choudhury, **S. Debnath**, A. Esi: On I^K -convergence of sequences in gradual normed linear spaces, J Anal 30, 1455-1465 (2022) (**Scopus**).
58. C. Choudhury, **S. Debnath**: On lacunary statistical convergence of sequences in gradual normed linear spaces, Annals of the University of Craiova, Mathematics and Computer Science Series. 49(1), 110-119, 2022 (**Scopus**).
59. **S. Debnath**, Bijoy Das: On Deferred Statistical Convergence of Complex Uncertain Sequences, Journal of Applied Analysis, 2022. <https://doi.org/10.1515/jaa-2022-2006> (**Scopus**, **Web of Science**)
60. **S. Debnath**, B. Das: On Rough Convergence of Complex Uncertain Sequences, Journal of Uncertain Systems, Vol. 14, No. 04, 2150021 (2021) (**Scopus**).
61. B.C.Tripathy, **S. Debnath** and D. Rakshit: On $\mathcal{I}$ -statistically limit point and $\mathcal{I}$ - statistically cluster points of sequences of fuzzy number, *MATHEMATICA* 63 (86), No 1, 2021, pp. 140-147(**Scopus**).
62. **S. Debnath**, C. Choudhury: On $\mathcal{I}$ - statistically φ -convergence, *Proyecciones*. 40(3), 593-604 (2021) (**Scopus**).
63. **S. Debnath**, Bijoy Das: Statistical Convergence of Order α for Complex Uncertain Sequences, *J. Uncertainty System*, 14(2), 2150012 (2021)(**Scopus**)
64. **S. Debnath**, A. Debnath: Statistical convergence of multisequences on $\mathbf{R}$, Applied Sciences, 23, 2021, 42-51 (**Scopus**).
65. C. Choudhury, **S. Debnath**: On $\mathcal{I}$ - Convergence of Sequences in Gradual Normed Linear Spaces, *Facta Universitatis, Series of Mathematics and Informatics*, Vol. 36, No 3 (2021), 595 - 604 (**Web of Science**)
66. A.Esi, **S. Debnath** and S. Saha: Asymptotically double λ_2 -statistically equivalent sequences of interval

- numbers, *MATHEMATICA* 62(1), 2020, pp. 39-46(**Scopus**).
67. **S. Debnath** and D. Rakshit: Rough statistical convergence of sequences of fuzzy numbers, *MATHEMATICA* 61 (84), No 1, 2019, pp. 33-39(**Scopus**).
 68. **S. Debnath**, J. Debnath: On Rough Ideal Convergence in Intuitionistic Fuzzy Normed Spaces, *J. Fuzzy Math*, 27(3), 643-650 (2019) (**UGC list-49340**).
 69. **S. Debnath** and N. Subramanian: Generalized rough lacunary statistical triple difference sequence spaces in probability of fractional order defined by Musielak-Orlicz function, *Boletim da Sociedade Paranaense de Matemática*, 37(1) 55-62,(2019) (**Scopus**).
 70. E. Savas, **S. Debnath** and D. Rakshit: On $\mathcal{I}$ -Statistically Rough Convergence, *Publications de l'Institut Mathématique*, 105(119), 145-150 (2019) (**Sci-E, Scopus**).
 71. E. Savas, **S. Debnath**: On lacunary statistically ϕ -convergence, *Note Di Matematica* 39(2), 2019, 111-120.(**Scopus**)
 72. **S. Debnath** and A. Debnath: Study of ring structure from multiset context, *Applied Sciences*, Vol. 21, 2019, pp. 84-90. (**Scopus**)
 73. B.C.Tripathy, **S. Debnath**, Fuzzy m-structures, m-open multifunctions and bitopological spaces, *Boletim da Sociedade Paranaense de Matemática*, 37(4) 119-128,(2019) (**Scopus**).
 74. **S. Debnath**, V.N.Mishra and J. Debnath: On Statistical Convergent Sequence Spaces of Intuitionistic Fuzzy Numbers, *Boletim da Sociedade Paranaense de Matemática*, 36(1) 235-242,(2018) (**Scopus**).
 75. **S. Debnath** and D. Rakshit: On rough convergence of fuzzy numbers based on α -level sets, *J. Indian Math. Society*, 85(1-2),42-52 (2018) (**Scopus**).
 76. **S. Debnath** and D. Rakshit: On $\mathcal{I}$ - statistical convergence, *Iranian J. Math. Sciences and Inform.*, 13(2), 101-109 (2018) (**Web of Science, Scopus**).
 77. B. C. Tripathy, **S. Debnath**, D. Rakshit: On Multiset Group, *Proyecciones J. Mathematics*, 37(3), 479-489 (2018) (**Scopus**).
 78. B.C.Tripathy, **S. Debnath** and S. Saha : On some new difference sequence spaces of interval numbers, *Proyecciones J. Mathematics*, 37(4), 603-612 (2018) (**Scopus**).
 79. A.Esi, **S. Debnath** and S. Saha: Some New Sequence Spaces of Interval Number Based on Zweier Sequences and Fibonacci Numbers, *Divulgaciones Matematicas*, 19(2)(2018) pp 36-42.(**SCOPUS**)
 80. **S. Debnath**, J. Debnath and B. C. Das: Basic arithmetic operation on triangular intuitionistic fuzzy number based on α -level sets, *J. Fuzzy Mathematics*. 25(1), 21-30 (2017)(**UGC list-49340**).
 81. **S. Debnath**, M. Mursaleen and D. Rakshit: I - statistical limit superior and I - statistical limit inferior, *Filomat* .31(7), 2103-2108 (2017) (**IF-0.63, Sci-expanded, Scopus**)
 82. **S. Debnath**, U. Misra and B.C.Das: On Some Newly Generalized Difference Triple Sequence Spaces, *Southeast Asian Bulletin of Mathematics* 41(4) 491-499 (2017) (**UGC list-49072**)
 83. **S. Debnath**, B.C.Das, D. Bhattacharya and J. Debnath: Regular Matrix Transformation on Triple Sequence Spaces, *Boletim da Sociedade Paranaense de Matemática*, 35(1), 85-96 (2017). (**Scopus**)
 84. **S. Debnath**, J. Debnath: On some generalized difference sequence spaces of fuzzy numbers defined by a sequence of moduli; *Facta Universitatis, Series of Mathematics and Informatics*,32(3), 405-412(2017). (**UGC list-48675, Web of Science**)
 85. **S. Debnath** and N. Subramanian: The Generalized Non-Absolute Type of Triple Γ^3 Sequence Spaces defined Musielak-Orlicz function; *Facta Universitatis, Series of Mathematics and Informatics*, 32(3), 413-420(2017).(**UGC list-48675, Web of Science**)
 86. **S. Debnath** and N. Subramanian: Rough statistical convergence on triple sequences, *Proyecciones J. Mathematics*, 36(4), 685-699, (2017).(**Scopus**)
 87. **S. Debnath** and N. Subramanian: On Riesz almost Lacunary Cesaro $[C, 1, 1, 1]$ statistical convergence in probabilistic space of $\chi^3\Delta f$, *Acta Mathematica Academie Paedagogice Nyíregyháziensis*, 33(2), 221-231 (2017). (**Scopus**)
 88. **S. Debnath** and B.C.Das: Statistically Convergent Triple Sequence Spaces Defined by Modulus Function, *J. Indian Academy of Mathematics*, 39(1),59-66 (2017). (**UGC list-21013**)
 89. **S. Debnath** and B.C.Das: Regular Matrix Transformation on Triple Sequence Spaces-I, *MATHEMATICA* 59 (82), No 1-2, 2017, pp. 124-133(**Scopus**).
 90. **S. Debnath**, J. Debnath and D. Bhattacharya: On rough I- convergent sequence spaces of fuzzy numbers

- defined by sequences of Orlicz functions and matrix transformation, *New Trends in Mathematical Sciences*, 4(1), 184-192 (2016).(**MR**)
91. **S.Debnath** and S. Saha: Matrix Transformation on Statistically Convergent Sequence Spaces of Interval Number Sequences, *Proecciones J Mathematics*, 35(1), 187-195 (2016) (**Scopus**).
 92. **S.Debnath** and S. Saha: On Statistically Convergent Sequence Spaces of Two Dimensional Interval Vectors, *J. Indian Academy of Mathematics*, 38(1), 29-37, (2016). (**UGC list-21013**)
 93. **S.Debnath** and B.C.Das: Some Generalized Triple Sequence Spaces Defined by Modulus Function, *Facta Universitatis, Series of Mathematics and Informatics*. 31(2), 373-382, (2016) (**UGC list-48675, Web of Science**)
 94. **S.Debnath** and S. Saha: Some Statistically Convergent Difference Sequence Spaces of Interval Numbers, *ROMAI J*, 12(1), 53-59 (2016)(**MR**)
 95. **A.Esi, S. Debnath** and S. Saha: Asymptotically Double Lacunary Statistically Equivalent Sequences of Interval Numbers, *Proyecciones J. Mathematics*, 35(4), 469-479 (2016) (**Scopus**).
 96. **S. Debnath** and N. Subramanian: The generalized non-absolute type of triple Γ^3 sequence spaces defined by Musielak-Orlicz function, *MATHEMATICA*, 58 (81), 1-2,51-59 (2016). (**Scopus**)
 97. **S.Debnath**, B. Sarma and S.Saha: On Some Sequence Spaces of Interval Vectors, *Afrika Matematika*, 26(5), 673-678(2015). (**Scopus**)
 98. **S.Debnath**, A. J.Datta and S.Saha: Regular Matrix of Interval Numbers based on Fibonacci Numbers, *Afrika Matematika* , 26(7), 1379-1385(2015). (**Scopus**)
 99. **S.Debnath** and B.C.Das: New Type of Difference Triple Sequence Spaces, *Palestine J. Math*, 4(2), 284-290 (2015).(**UGC list-48859**)
 100. B.C.Tripathy and **S. Debnath**: On fuzzy b-locally open sets in bitopological spaces, *Songklanakarin J. Sci. & Techol.*, 37(1), 93-96, 2015.(**Scopus**)
 101. **S.Debnath**, B.Sarma and B.C.Das: Some Generalized Triple Sequence Spaces of Real Numbers, *J. Nonlinear Anal & Optimiz.*, 6(1),71-79 (2015).(**MR**)
 102. **S.Debnath** and S. Saha: On some I-convergent generalized difference sequence spaces associated with multiplier sequence defined by a sequence of modulli, *Proecciones J Mathematics*, 34(2), 137-145, 2015.(**Scopus**)
 103. **S. Debnath**, J. Debnath and D. Bhattacharya: On Some Classes of Sequences of Intuitionistic Fuzzy Numbers with respect to Ideals, *J. Indian Academy of Mathematics*, 37(2), 295-304 (2015).(**UGC list-21013**)
 104. **S. Debnath**, J. Debnath and D. Bhattacharya: On Some Sequence Spaces of IFNs, *Bull. Kerala Math. Association*, 12(2), 125-133 (2015).(**UGC list-64043**)
 105. **S.Debnath** and J.Debnath: Some ideal convergent sequence spaces of fuzzy real numbers, *Palestine J. Mathematics*, Vol. 3(1), 27-32 (2014).(**UGC list-48859**)
 106. **S.Debnath** and S.Saha: Some Newly Defined Sequence Spaces Using Regular Matrix of Fibonacci Numbers, *AKU-J. Sci. and Eng.*, 14 011301 (1-3) (2014). (**UGC list-62452**)
 107. **S.Debnath** and J.Debnath: On I-statistically convergent sequence spaces defined by sequences of Orlicz functions using matrix transformation, *Proyecciones J Math*, 33(3) 277-285, (2014).(**Scopus**)
 108. B.C. Tripathy and **S.Debnath**: On generalized difference sequence spaces of fuzzy numbers, *Acta Sinet. Tech.*, Vol. 35(1) , 117-121, (2013). (**Scopus**)
 109. B.C. Tripathy and **S.Debnath**: γ -Open sets and γ -Continuous Mappings in Fuzzy Bitopological Spaces , *J. Int. & fuzzy Syst.*, 24(3) , 631-635 (2013).(**Scopus**)
 110. **S.Debnath** and J.Debnath: Some generalized statistical convergent sequence spaces of fuzzy numbers via ideals, *Math. Sci. Lett.*,V-2(2), 151-154(2013).(**Google Scholar.**)
 111. **S.Debnath**: On fuzzy biminimal structure spaces, *Int. Journal of Math. Analysis*, Vol.6, no. 17, 841 – 845, (2012). (**UGC list-16177**)
 112. **S.Debnath**: On Fuzzy δ -Semi Connectedness, *Frontier in Science*, Vol.2 (6),133-136, (2012). (**MR**)
 113. **S.Debnath**: On semiopen sets and semi-continuous functions in intuitionistic fuzzy topological spaces, *IOSR-JM*, Vol 3(3),35-38, (2012). (**MR**)
 114. **S.Debnath**: On fuzzy δ -semi continuous functions, *Acta Ciencia Indica*, Vol.- XXXIV M, No-2, 697-703 (2008)(**UGC list-63803**).

115. A.Mukherjee and **S.Debnath**: Fuzzy strongly semi β -irresolute functions, *Acta Ciencia Indica*, Vol.-XXXII M, No-3, 933-936 (2006)(**UGC list-63803**).
116. A.Mukherjee and **S.Debnath**: On FRSG-continuous and FRSG-irresolute mappings, *Acta Ciencia Indica*, Vol.-XXXI M, No-4, 1221-1224 (2005).(**UGC list- 63803.**)
117. A.Mukherjee and **S.Debnath**: On fuzzy faintly α - continuous functions, *Indian J. Pure and Appl. Math*, 34(11); 1625-1630 (2003). (**Scopus**)

Non-indexing journals with ISBN No

1. **S. Debnath: Prospects of Mathematical Sciences in India, Bulletin of the Tripura Mathematical Society, XXXVII (2016-17) 35-39**
2. **S. Debnath** and N. Subramanian: On rough I-convergence of triple sequences, *J. Tripura Mathematical Society*, 17, 76-85 (2015)(**UGC list-63974**)
3. A.Mukherjee and **S.Debnath**: δ -semi open sets in fuzzy setting, *J.Tri.Math. Soc.* Vol.- 8, 51-54 (2006). (ISBN-0972-1320) (**UGC list-63974**)
4. A.Mukherjee and **S.Debnath**: δ -almost lower semi-continuous functions, *J.Tri. Math. Soc.* 6, 57-60(2004). (ISBN-0972-1320) (**UGC list-63974**)

Conference Proceeding

1. **S. Debnath** and D. Rakshit, Rough Convergence in Metric Spaces, **New Trends in Analysis and Interdisciplinary Applications**, Selected Contributions of the 10th ISAAC Congress, Macau 2015, pp 449-454, Publisher: Springer
2. **S. Debnath** and S. Saha, On Some Sequence Spaces of Regular Matrix of Interval Numbers based on Fibonacci Numbers, **Proceedings of ICFM2015**, p 192-93 (ISSN-978-81-928118-9-5)
3. **S. Debnath** and B.C.Das, Some Triple Sequence Spaces based on Difference Operator Δ^2 , **Proceedings of ICFM2015**, p 189-91 (ISSN-978-81-928118-9-5).
4. **S.Debnath** and S. Saha, On Statistically Convergent Sequence Spaces of Interval Numbers, **Proceedings of IMBIC V-(3)**, P 178-182 (2014) .(ISSN-978-81-925832-28)
5. A.Mukherjee and **S.Debnath**: Fuzzy Strongly Semi α -irresolute Functions, **Proc. Nat. Sem. On Recent Trends in Maths & its Appl**, 171-176, 2003.

Seminar/Conference/Workshop/Refresher/Orientations etc. Participated:

1. Delivered the Keynote Speech at 2nd International Conference On Global Assembly for Mathematical Modeling and Analysis (GAMMA)-2026 at Dept of Mathematics, ICFAI University, Tripura, INDIA during 6-10 July, 2026.
2. Delivered an invited talk Innovative Concepts of Mathematical Science and Social Sciences in Shaping Sustainable Policies and Addressing Social Challenges (ICMSSC2026) at Dept of Mathematics, GDC, Kamalpur, Tripura, INDIA during 11-13 March, 2026.
3. INTERNATIONAL CONFERENCE ON ADVANCES IN MATHEMATICAL SCIENCES AND THEIR TECHNOLOGICAL APPLICATION (ICAMSTA-2025) at Dept of Mathematics, Osmania University, Hyderabad, Telengana, INDIA during 12-14 December, 2025.
4. Perform as a **Chief Guest** in **Mathematics Day** Celebration, by the Department of Mathematics, ICFAI University on 10.01.2024.
5. Perform as a **Resource Person** in a Two Week Online International Faculty Development Programme on "Current Trends in Applications of Mathematics" , organized by the Department of Mathematics, School of Sciences and Humanities, Vel Tech Rangarajan Dr.Sagunthala Institute of Science and Technology, Avadi, Chennai-62, Tamil Nadu, India from 21-09- 2022 to 04-10-2022.
6. Perform as a **Chairman** in the INTERNATIONAL WEBINAR ON MATHEMATICAL ANALYSIS AND ITS APPLICATIONS (IWMAA-2021) April 8-9, 2021 at Department of Mathematics Tripura University.
7. Perform as a **Mentor** for the Online Foundation Course in Mathematics (OFCM-2020) held online

- during 04 - 24 October, 2020 organized by MTTS Trust.
8. "85th Annual Conference of Indian Mathematical Society" at Dept. of Mathematics, Indian Institute of Technology, Kharagpur during November 22-25, 2019, INDIA.
 9. International Congress of mathematician 2018 (ICM 2018), at Rio, Brazil, during 1-9 August, 2018. (T.A sponsored by DST-SERB)
 10. **Deliver a invited talk** on 'Latex and Beamer' organized by Faculty Development Center, Tripura University during 28-04-2017 to 04-05-2017.
 11. **Deliver a invited talk** to 'Training Programme of School Teachers under Rastriya Avishkar Abhiyan' organized by Tripura University during 10th-14th July, 2017.
 12. Attended as a Teachers Participants in MTTS Camp, 2017 at Dept. of Mathematics, IIT Guwahati.
 13. 20th international mathematics conference 2017 at Dept of Mathematics, University of Dhaka, Bangladesh during 8-10 December, 2017.
 14. Recent Trends in Mathematical Sciences and Applications" (ICRTMSA-2016) at Dept. of Mathematics, Burdwan University during February 9-11, 2016, INDIA.
 15. 82nd Annual Conference of Indian Mathematical Society" at Dept. of Mathematics, University of Kalyani during December 27-30, 2016, INDIA.
 16. 2nd International Conference on Recent Trend in Mathematics and Its Applications (ICRTMA), 18-19 March, 2015, Dept. of Mathematics, Vidyasagar University, West Bengal.
 17. International Conference on Frontiers in Mathematics (ICFM2015), 26-28 March, 2015, Dept. of Mathematics, Gauhati University, Assam.
 18. 10th ISAAC 2015 Conference, 3-8 August, 2015, Dept. of Mathematics, University of Macau, China SAR.
 19. National Conference on Ancient Indian Mathematics, February 8-9, 2014, Organized by Tripura Mathematical Society.
 20. Winter school on Pattern Recognition and Image Processing, 25-29 March, 2014.
 21. International Conference on Recent Advances in Pure and Applied Mathematics (ICRAPAM14), 6-9 November, 2014, ANTALYA, TURKEY.
 22. National Conference on "Role of Mathematics in Advancement of Science & Technology" 18th -21st, October, 2013 at B.S.N.V PG College, Lucknow.
 23. International Conference on Current Development in Mathematics and Mathematical Sciences (ICCD-MMS2014), December 19-21, 2014, Organized by CMS, Saltlake City, Kolkata
 24. Workshop on Rough Set and its Applications, November 16-17, 2012, Dept. of Mathematics, TU
 25. National Conference on "Recent Trends in Mathematical & Computational Sciences"-28-30, November, 2012 at IASST, Guwahati
 26. Advanced Instructional School on Numerical Linear Algebra, December 2-22, 2010, Dept. of Mathematics, IIT, Guwahati
 27. UGC Sponsored Refresher Course, 16th Feb. to 7th March, 2009, ASC, Jadavpur University
 28. International Conference on Rough Sets, Fuzzy Sets and Soft Computing, 5th to 7th November, 2009, Dept. of Mathematics, Tripura University
 29. Seminar on Contemporary Areas in Physical and Life Sciences, November 26-27, 2009, IQAC, Karimganj College, Assam
 30. Workshop on Syllabus Preparation for UG Course (TDC and TDCH), Tripura University, 21 March, 2009.
 31. Seminar on Rough Sets, Fuzzy Sets and their Applications, April 7, 2010, Dept. of Mathematics, Tripura University
 32. UGC Sponsored Orientation Programme, 11th June to 8th July, 2007, ASC, Guwahati University
 33. National Seminar on Fuzzy Sets & its Applications, November 25-26, 2006, TMS and School of IT & Computer Science, Tripura University
 34. Computer Training Programme on Mathematical Programming in C- Language, 9th to 15th October, 2006, MMD College, Sabroom, South Tripura
 35. ISI-NERIST Winter School on Soft Computing, Data Mining & Bioinformatics, Feb. 14-18, 2005, Dept. of Computer Science, NERIST

36. National seminar on recent trends in Mathematics & its Applications, April 28-29, 2003, Dept. of Mathematics, Tripura University

Seminar/ Conference/ Training Programme Organized

1. Organized an international conference titled “**International Conference on Recent Advances in Mathematics and its Applications (ICRAMA-2019)**” July 16-18, 2019 at Dept. of Mathematics, Tripura University as joint organizing Secretary.
2. Organized one week “**Pedagogical Training for Mathematics Teachers - 2018 (PTMT)**” March 26-31, **2018** sponsored by NBHM, DAE, GOI as a Coordinator.
3. Organized “**Mini-Mathematics Training and Talent Search Programme (Mini MTTS Agartala) 2017**” Tripura University, Agartala January 19-24, **2017** sponsored by NBHM, DAE, GOI as a Coordinator.
4. Organized “**North-East Summer Workshop in Analysis and Probability 2015**” Tripura University, Agartala June 27-30, **2015** in Collaboration with ISI-Bangalore as a Coordinator.
5. Organized a two weeks “**Pedagogical Training for Mathematics Teachers - 2014 (PTMT)**” December 1-14, **2014** sponsored by NBHM, DAE, GOI as a Coordinator.
6. Organized a fifteen days “**Training Programme for Under Graduate Students in Mathematics**” 5th to 19th July, **2013** sponsored by DST, GOI as a Coordinator.

Membership/Positions in Learned Academic Bodies/Organizations

1. American Mathematical Society, (No- DBSHXA)
2. Indian Mathematical Society, (No- D-12-118)
3. Calcutta Mathematical Society, (LD/86)
4. Indian Academy of Mathematics, (LM-280)
5. Tripura Mathematical Society, (Ex-Treasurer)
6. External Member, BUGS-Dept. of Mathematics, Assam University, Silchar

Research Projects

1. Title: I-statistically convergent sequences of fuzzy numbers, EMR-II, CSIR (MAJOR), Amount: 8.23 Lakhs, (2014-2017) Completed
2. Title: Some New Sequence Spaces of Interval Numbers, UGC-BSR Startup Grant, Amount: 6.00 Lakhs, (2013-15), Completed
3. Title: Study of some preservation of fuzzy functions and their applications, MRP (UGC-NERO), 2005-2007, Completed

Research Supervisions (Scholar's Name, Topic and Status)

1. Jayanta Debnath, Title “**STUDY ON SOME GENERALIZED CONVERGENT SEQUENCE SPACES OF FUZZY AND INTUITIONISTIC FUZZY NUMBERS**” (Awarded, 28th May 2016 under NIT, Agartala)
2. Subrata Saha, Title “**STUDIES ON SOME GENERALIZED SEQUENCE SPACES**” (Awarded, 9th January 2017 under Tripura University, Agartala)
3. Bimal Chandra Das, Title “**STUDIES ON SOME GENERALIZED TRIPLE SEQUENCE SPACES**” (Awarded, 13th February 2018 under Tripura University, Agartala)
4. Debjani Rakshit, Title “**ON I-STATISTICALLY CONVERGENT SEQUENCES**” (Awarded, 16th November 2018 under Tripura University, Agartala)
5. Bijoy Das, Title “**STUDIES ON SOME GENERALIZED CONVERGENCE CONCEPTS OF COMPLEX UNCERTAIN VARIABLES**”, Awarded on 28.06.2023 under Tripura University.
6. Chiranjib Choudhury, Title “**STUDIES ON I^K CONVERGENCE AND ITS APPLICATIONS**”, Awarded on 19.07.2023 under Tripura University.
7. Amit Halder, Title “**STUDIES ON I-CONVERGENCE OF COMPLEX UNCERTAIN SEQUENCES AND ITS GENERALIZATION**”, Awarded on 09.04.2025 under Tripura University.

8. Santonu Debnath, Title “**STUDIES ON STATISTICAL CONVERGENCE CONCEPTS UNDER NEUTROSOPHIC ENVIRONMENT**”, Awarded on 06.05.2025 under Tripura University.
9. Hamari Debbarma, Title “**STUDIES ON SOME SEQUENCE SPACES OVER GRADUAL NORMED LINEAR SPACE**”, Awarded on 21.01.2026 under Tripura University.
10. Juwel Hossain, Title “**Studies on some generalized convergence of sequences of bi-complex numbers**”, Registered on 24.01.2024 under Tripura University.
11. Chayan Sarma, Title “**Studies on Some Generalisations of Minimum Norm Attaining Operators**”, Registered on 27.10.2025 under Tripura University.
12. Mijanur Rahman, Title “**Studies on rough convergence of sequences of bi-complex numbers**”, Registered on 27.10.2025 under Tripura University.
13. Ripan Debnath, Course work completed, 2025, under Tripura University.
14. Bikramjit Bhattacharjee, Course work going on, 2026 under Tripura University.

Ph.D Thesis Evaluated

1. Title “STUDIES ON SOME CLASSES OF SINGLE AND DOUBLE SEQUENCES OF FUZZY REAL NUMBERS” (under Gauhati University)
2. Title “THE ENTIRE RATE AND DOUBLE ENTIRE SEQUENCE SPACE OF FUZZY NUMBERS DEFINED BY MODULUS” (under Bharathidasan University)
3. and many more (under Kazi Nazrul University; Manipur University; Manonmaniam Sundaranar University etc)

Reviewer

1. Mathematical Reviews (AMS), Reviewer No. 101875, Location: 6-TRIP-M
2. ZentralblattMATH, Reviewer No. 17012
3. Different reputed journals of international level (indexing by SCOPUS, WOS)

Book

1. Fuzzy Topology, Some Fuzzy Functions and their Applications, Research India Publisher, Delhi, October 2015, ISBN: 978-93-84443-60-3
2. Degree Mathematics, V-1; Progressive Publisher, Kolkata, January,2015; ISBN 978-81-8064-211-1. (Two Co-authors)
3. Degree Mathematics, V-3; Progressive Publisher, Kolkata, January,2016; ISBN 978-81-8064-230-2. (Two Co-authors)
4. Book Name: Advances in Functional Analysis and Fixed Point Theory
Chapter Name: **Gradual Normed Linear Spaces** (pp 121-141)
Authors: **Shyamal Debnath**, Chiranjib Choudhury
Publisher: **Springer (24 April, 2024)**
Online ISBN **978-981-99-9207-2**.

Collaboration

1. Prof. Ekrem Savas, Dept. of Mathematics, Istanbul Commerce University, Turkey.(**Received an invitation letter to perform as a ‘Visiting Scientist’ at Usak University, TURKEY**)
2. Prof. Ayhan Esi, Dept. of Mathematics, Adiyaman University, Turkey.
3. Prof. M. Et, Dept. of Mathematics, Firat University, Turkey.
4. Prof. N. P. Pahari, Dept. of Mathematics, Tribhuvan University, Nepal.
5. Prof M. Mursaleen, Dept. of Mathematics, Aligarh Muslim University, UP, India.
6. Prof. Umakanta Mishra, Dept. of Mathematics, Berhampur University, Orissa, India.
7. Prof. N. Subramanian, Dept. of Mathematics, SASTRA University, Tamilnadu, India.(**Visited to my lab for two months as a INSA visiting scientist fellow**)
8. Prof. V. N. Mishra, Dept. of Applied Mathematics and Humanities, S.V. National Institute of Technology, Surat 395007, Gujarat, India.

9. Prof. B. C. Tripathy, Dept. of Mathematics, Tripura University, Agartala, India.
10. Dr. Bipul Sarma, Dept. of Mathematics, Madhab Chandra College, Barpeta, Guwahati, Assam, India.
11. Dr. Amar Jyoti Dutta, Dept. of Mathematics, Pragjyotish College, Santipur, Guwahati, Assam, India.

Country Visited

1. 6-9 November, 2014, ANTALYA, TURKEY.
2. 3-8 August, 2015, University of Macau, China.
3. 8-10 December, 2017, University of Dhaka, Bangladesh.
4. 1-9 August, 2018, ICM2018, Rio, Brazil.