Information Regarding Research & Publications

Number of publications:

Sl. No	Name of the faculty	International Journal Publication	National Journal Publication	Conference Publication	Books	Books Chapter
1	Prof.(Dr)Debasish Bhattacharya	40	8	International: 8 National:7	00	01

Publication Details: Prof. (Dr) Debasish Bhattacharya.

2023

 Nath J, Chhatri S, Bhattacharya D (2023) A multi-objective portfolio selection problem with parameters as interval type fuzzy set. Int. J. OperationResearch. DOI: 10.1504/IJOR.2022.10051487

2022

- 2. Banik S, Bhattacharya D (2022) "General Method for Solving Multi-Objective De-Novo Programming problem Optimization", Journal of Mathematical Programming and Operations Research.
- **3.** Chakraborty S, Bhattacharya D (2022) "Fuzzy Approach to Solve General De-Novo Programming Problem. Advances in Mathematical Modeling", Applied Analysis and Computation. Proceeding of ICMMAAC 2021. DOI:10.1007/978-981-19-0179-9_10.

2020

- Banik S, Bhattacharya D, (2020) A Note on min-max Goal programming Approach for Solving MultiObjective De Novo Programming Problem, Int. J. Operation Research, Vol. 37 (1), pp. 32-47. (Scopus)
- **5.** J Nath, D Bhattacharya (2020) ,Solution of a portfolio selection problem using linear model, Int. J of Maths and Stat Invention (IJMSI), Vol 8, issue 7 July 2020,pp 36-50.
- 6. J Nath S Banik, D Bhattacharya, Portfolio optimization in share market using multiobjective linear programming, Int J of Math and Comp Research (IJMCR), Vol 08, Issue 08 Auust 2020, pp 2112 – 2123, ISSN: 2320-7167 (Index Copernicus).

<u>2019</u>

7. Banik S, Bhattacharya D, (2019), One-step approach for solving general multiobjective De Novo programming problem involving fuzzy parameters, Hacettepe Journal of Mathematics & Statistics, Vol. 48 (6), pp. 1824-1837. (SCI)

2016

 J. Debnath, D. Bhattacharya, S. Debnath, (2016). On Rough I-Convergent Sequence Spaces of Fuzzy Numbers defined by Sequences of Orlicz Function and Matrix Transformation, New Trends in Mathematical Sciences, vol. 4(1), pp. 184-192, (Index Copernicus)

2015

- **9.** Saha A. K., Bhattacharya D, (2015) A Note on Strongly Lower Semi-Continuous Functions and the Induced Fuzzy Topological Space Generated by Them, Journal of mathematical and fundamental sciences, Vol. 45, No. 1, 2013, 61-82. (Scopus & ESCI).
- **10.** Bhattacharya D, Saha A. K, (2015) Normal Induced Fuzzy Topological Space, Italian Journal of pure & Applied Math.– Vol. 34,pp(45–56). (Scopus).
- Saha A. K., Bhattacharya D, (2015) Countable Fuzzy Topological Space and Countable Fuzzy Topological Vector Space, Journal of Math. Fund. Sciences, Vol. 47, No. 2, 154-166. (Scopus & ESCI)
- **12.** S. Debnath, B.C Das, D. Bhattacharya, J. Debnath, (2015). Regular Matrix Transformation on Triple Sequence Spaces, Boletim da SociedadeParanaense de Matematica, vol. 34(2), (Scopus).
- **13.** S. Debnath, J. Debnath, D. Bhattacharya, (2015) On Some Sequence Spaces of IFNs, Bulletin of Kerala Mathematics Association, v. 12(2), pp. 125-133.
- 14. S. Debnath, J. Debnath, D. Bhattacharya, (2015). On Some Classes of Sequences of Intuitionistic Fuzzy Numbers with respect to Ideals, The Journal of the Indian Academy of Mathematics, vol. 37(2),pp. 295-304.

<u>2014</u>

15. D. Bhattacharya, LipikaDey, (2014) r-weak cb spaces, Italian J. of Pure and Applied Math, Vol 32. Pp (87-102). (Scopus).

<u>2013</u>

- 16. Bhattacharya D, Chakraborty S, (2013) Optimal System Design under Multi objective Decision-Making Using De-Novo concept: A New Approach. Int. J. Computer Application. Vol.63 No 12,pp 0975-8887.DOI: 10.5120/10519-5496
- 17. D. Bhattacharya, LipikaDey, (2013) Cardinal Generalization of Generalized Topological Spaces, Journal of Advance Studies in Topology, vol. 4. no 1. pp (1-10) (Index Copernicus).

18. D. Bhattacharya, LipikaDey, (2013), A Note On r-Strongly Normal Semi-continuous Functions; Journal of Tripura Mathematical Society vol.15, pp 34-37.

<u>2012</u>

- 19. Bhattacharya D, Pal D. (2012) A Study of Road Traffic Noise Annoyance on Daily Life in Agartala City Using Fuzzy Expert System and Multiple Regression Analysis, Int. J. of Scientific and Research Publications, Vol 2,Issue 5, ISSN 2250-3153. (Index Copernicus)
- 20. Bhattacharya D, Pal D (2012), Effect of Road Traffic Noise Pollution on Human Work Efficiency in Government Offices, Private Organizations, and Commercial Business Centres in Agartala City Using Fuzzy Expert System: A case Study, Advances in Fuzzy Systems, Article ID 828593, 9 pages, Hindawi Pub Cor. DOI : 10.1155/2012/828593. (Scopus)
- Bhattacharya D, Saha A. K., (2012) Compactness in Countable Fuzzy Topological Spaces, Current Trends in Tech. and Science, vol-1, issue-2, ,pp 74-78. ISSN-2279-0535.
- 22. Gupta M, Bhattacharya D, (2012), 'Solving Multi-Objective Problems by Using Weighted Fuzzy Goal Programming Methods', Archives Des Sciences, Volume 65, No. 5, May 2012, PP-51-62. (Scopus)
- 23. Gupta M, Bhattacharya D, (2012), 'A New Concept of Membership Function for the solution of Fuzzy Multi Objective Linear Goal Programming Problem', Archives Des Sciences, Volume 65, No. 5, PP-374-388. (Scopus)
- 24. Gupta M, Bhattacharya D, (2012), 'Two Weighted Fuzzy Goal Programming Methods to Solve MultiObjective Goal Programming Problem', Journal of Applied Mathematics, Volume 2012, Article ID 796028, pp-1-21. (Scopus)
- 25. Bhattacharya D, Chakraborty S, (2012), A New Approach of Solution of Multi Stage and Multi objective Decision-Making Problem Using De-Novo Programming, European journal of Scientific Research, Vol.79 No 3 pp 393-417 ISSN 1450-216X. (Scopus)
- **26.** D. Bhattacharya, LipikaDey, (2012) r-real compact spaces, CommentationesMathematicaeUniversitatisCarolinae, vol 53,no 2, pp. 253-267. (Scopus)

2011

- 27. Gupta M, Bhattacharya D, (2011), 'A New Approach to Solve Bi Level Multi Objective Fuzzy Goal Programming Problem', CiiT International Journal of Data Mining Knowledge Engineering, volume 3, Issue: August, pp. 668-672.
- 28. Gupta M, Bhattacharya D, (2011), 'An Approach to solve the Fuzzy Multi Objective Linear Fractional Goal Programming Problem', Journal of Statistics and Mathematics, Volume 2, Issue 1, PP-23-35. ISSN 0976- 8807(ICV = 6.89) (Index Copernicus.)
- **29.** Bhattacharya D, Pal D. (2011), Road Traffic Noise Annoyance in Hospitals, Nursing Homes in Agartala City- A Case Study, CiiT Int. J. of Artificial Intelligent Systems and Machine Learning, Vol.3, No 11, pp (692- 697).

30. Bhattacharya D, Pal D,(2011), The Effect of Road Traffic Noise on Teaching Learning Process of Road Side Schools of Agartala City Using Fuzzy Expert System- A Case Study, Int. J. of Computer Sci, Systems Engineering and Information Technology, 4(2), pp.135-143.

2010

- **31.** Gupta M, Bhattacharya D, (2010), 'Goal Programming and Fuzzy Goal Programming Techniques in the Bank Investment Plans under the Scenario of Maximizing Profit and Minimizing Risk Factor: A Case Study', Advances in Fuzzy Mathematics, Vol. 5, No. 2, pp. 111-119. (Index Copernicus.)
- 32. Gupta M, Bhattacharya D, (2010), 'The Optimal Investment Plan of Banks Using the Goal Programming and Fuzzy Goal Programming Techniques: A Case Study', International Journal of Fuzzy Systems and Rough Systems (IJFSRS), January-June, issue, Vol. 3, Issue 1, pp.25-29
- **33.** Gupta M, Bhattacharya D, (2010), 'Multi Objective Problem in Fuzzy Environment where Resources are Triangular Fuzzy Number', European Journal of Scientific Research, Vol. 46, No.1, pp.099-106. (Scopus)
- **34.** Gupta M, Bhattacharya D, (2010), 'Min Sum Weighted Fuzzy Goal Programming Model in Investment Management Planning: A Case Study', International Research Journal of Finance and Economics, Issue 56, pp. 76-81. (Scopus)
- **35.** Gupta M, Bhattacharya D, (2010), 'Multi Objective Problem in Fuzzy Environment', Journal of Tripura Mathematical Society, Volume 2, December, pp. 21-26.

1999

- **36.** Bhaumik R. N, Bhattacharya D, (1999) Weakly Delta-Real compact Spaces, Journal Tripura mathematical Society, No. 1, pp. 29-36.
- **37.** Bhaumik R. N, Bhattacharya D, (1999) Regular cb-Spaces, Bull. Cal. Soc.No, pp, 91, (3)185-192

<u>1997</u>

38. Bhaumik R. N, Bhattacharya D, (1997), Regular G-Delta Embedding's, Far East J. Math. Sci. SplVol (Part II), pp.167-179, ISSN 0971-4332. (Scopus)

<u>1995</u>

39. Regular □_□ -Subsets and Real compact Spaces, Bull. Cal. MathSoc ,Bhaumik R. N, Bhattacharya D. (1995). 87, pp 39-44.

<u>1992</u>

40. On regular semi continuous functions, Math. Edn.26 (1992), 11-17 Bhaumik, R.N and Bhattacharya, D.

International Conferences

- Bhattacharya D, (10th November 2022)Recent Studies on Rough Set Theory and their Applications Proceedings of 96th Birthday of Prof. Z. I. Palak and 41st year of Rough Set. Virtual mode.
- Banik S, Bhattacharya D, June 2018), "A New Approach for Solving Multi-objective De Novo Programming Problem", International Conference on Materials, Applied Physics and Engineering (ICMAE2018), International Journal of Engineering & Technology (UAE)"
- Banik S, Bhattacharya D, (Feb 2018), "Weighted Goal Programming Approach for Solving Multiobjective De Novo Programming problem", International conference on Advances in computing Application (ICACA-18), NIT Uttarakhand, published by IJERCSE Journal, Vol. 5,(No. 2), 2018.
- Bhattacharya D, Chakraborty S, (Jan 2018), "Solution of the general multi-objective De Novo programming problem using compensatory operator under fuzzy environment" ICAPM 2018, published by Journal of Physics: Conference Series, doi: 10.1088/1742-6596/1039/1/012012, Thailand.
- Bhattacharya D, Chakraborty S.(2015) A New Approach to Solve General Multiobjective De Novo Programming Problem Under Fuzzy Environment, 4th Annual International Conference on Computational Geometry & Statistics, Published by GSTF, pp (12-18), ISSN 2251-1911, Singapore.
- Bhattacharya D, Chakraborty S. (2014) A Note on the Solution of Multi-objective De Novo Programming Problem, 2nd International Conference on Emerging Research in Computing, Information, Communication and Applications. Published by Elsevier Publication, vol.1 pp (731-736), Bengalore.
- Bhattacharya D, Saha A. K. (Nov 5-7, 2009) A Study on Induced Fuzzy Topological Spaces Generated by m- RLSC Functions, International Conference on Rough Sets, Fuzzy Sets and Soft Computing, Tripura University

 Bhaumik R.N, Bhattacharya D, (19-21 March 2009), Delta Real compact Spaces, Proceedings International Seminar on Recent Trends in Topology & its Application, St. Joseph's College, Irinjalakuda, Kerala, pp200-209.

National Conferences

- Banik S, Bhattacharya D. (June 11-12, 2016), "A One-step Fuzzy Approach for Solving General MultiObjective De Novo Programming Involving Fuzzy Parameters", National Conference on Engineering Problems and Application of Mathematics, NIT Agartala.
- Gupta M, Bhattacharjee D, (Feb 2014), "Partial Fractions with Vedic Method", Proceedings, National Conference on Ancient Indian Mathematics, Womens' College Agartala, Tripura (W), Organized by TMS.
- Bhattacharya D, Chakraborty S. (2011), Multi-objective Decision Making Using De Novo Programming, National Seminar on Rough Set, Fuzzy Set and Soft Computing,vol. 79(3), pp (393-417).
- Gupta M, Bhattacharya D (November 11-12, 2011) "A Modified Weighted Fuzzy Goal Programming Approach for the Solution of Multi Objective Decision Making Problems", National Seminar (NSRFSC11), Tripura University, India.
- Bhattacharya D, Saha A. K. (Nov 14-15, 2008), A Note on r-countably Induced Fuzzy Topological Spaces, National Seminar on Recent Developments in Mathematics and its Applications, Tripura University.
- Bhattacharya D, Saha A. K, ((Nov 25-26, 2006), Fuzzy Topological Spaces Induced by Regular Lower Semi-continuous Functions, National Seminar on Fuzzy Mathematics and its Applications, Tripura University.
- 15. Bhaumik R. N, Bhattacharya D, (April 2003), Fuzzy Regular □ Subsets, Proc. of the National Seminar onrecent Trends in Mathematics and its applications, Tripura University.

List of Ph.D Awarded:

Sl. No.	Name	Title of the Thesis	Year	Supervisor
1	Dr. Apu Kumar Saha (2009-2012)	A Generalized Fuzzy Topological Space and Some Induced Fuzzy Space	2012	Prof.(Dr) Debasish Bhattacharya
2	Dr. MousumiSengupta (2018-2013)	Study on Some Multi- objective Decision Making Method and Their Application to Real Life Problems	2012	Prof.(Dr) Debasish Bhattacharya
3	Dr. LipikaDey (2009-2014)	A study on Generalization of Real compact spaces and Generalized Topology spaces	2013	Prof.(Dr) Debasish Bhattacharya & Dr. Baby Bhattacharya
4	Dr. Debasish Pal (2009-2015)	Applications of Real traffic noise annoyance of Agartala city Dwellers and for medical diagnosis of gallstone susceptibility	2014	Prof.(Dr) Debasish Bhattacharya & Dr. Baby Bhattacharya
5	Dr. SayantaChakraborty (2009-2016)	A study on the solution of Multi-objective De-Novo Programming Problem under crisp and fuzzy environment and its Applications to real Life Problems Using Some New Approaches	2015	Prof.(Dr) Debasish Bhattacharya
6	Dr. JayantaDebnath (2012-2016)	Study of Generalized Convergent Sequence Space of Fuzzy numbers and Intuitionistic Fuzzy Numbers	2016	Prof.(Dr) Debasish Bhattacharya & Dr. Shyamal Debnath
7	Dr. Susanta Banik (2016-2022)	A Study on Multi- objective Optimization Using De Novo Programming under Crisp, Fuzzy and Type- 2 Fuzzy Environment	2022	Prof.(Dr.) Debasish Bhattacharya