

## CURRICULUM VITAE

**PROF.MANTU SAHA**

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### Personal Profile

**Name:** MANTU SAHA

**Designation:** PROFESSOR OF MATHEMATICS

**Mailing Address :( office):** Department of Mathematics, The University of Burdwan, Golapbag, Post Office: Rajbati, District: Purba Bardhaman, Pin: 713104, West Bengal, India. Contact No.: (+91)9434578881(Mob.) & (+91)9064921212 (Mob.)

**(Residence)** ‘Matri Niketan’, East Nutan Pally, Post Office: Burdwan, District: Purba Bardhaman, Pin-713 101, West Bengal, India.

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### Academic Details

- **Qualifications:** M.Sc. (First Class First (Pure Stream), Gold Medalist), PGDCA, Ph.D.
- **Publications:**(Details are given in *Annexure-I*)
  - Research Papers [Published & Accepted]:**102** nos.[International Journals:73 nos.& National Journals: 29 nos.].
  - Research Monograph: **01** no.
  - Study Materials of P.G.Course in DDE (The University of Burdwan):**05** nos.
  - Online Study Materials of P.G. Course [Functional Analysis]:[e-PGPathshala (MHRD, Govt. of India)]: **01** no. [ **35** texts modules]
- **Research Project:**(Details are given in *Annexure-II*)
  - (i) Completed: **01**no. (Minor Research Project)
  - (ii) Completed Departmental Project **UGC (DSA-SAP (I))**:**01** no., as **Deputy Coordinator (2012-2017)**].
- **Research Guidance:**(Details are given in *Annexure-III*)
  - **M.Phil.** Awarded: **01** no.
  - **Ph.D.:** Awarded: **08** nos.

- Field of Specialization: **Functional Analysis and Operator Theory.**
- Topic of Doctoral Thesis: **A Study on Fixed Points of Mappings over a Quasi Metric Space and Over a Banach Space with a Probability Measure.**
- Mentor of Ph.D Thesis: Professor A.P. Baisnab (Retired), Department of Mathematics, The University of Burdwan
- Area of Research: **Fixed Point Theory and its Applications, Operator Theory, Topology and Functional Analysis.**
- Research Experiences: More than **32Years.**
  - J.R.F.(19.11.1990-19.11.1992)
  - S.R.F.(20.11.1992-11.07.1994) *and continuing till date.*
- **Reviewer of Research paper(s):** Several research papers submitted to International Journals (Referred/ Peer Reviewed/ Springer)and Reviewer Mathematical Reviews of American Mathematical Society.

#### Administrative Experience:

- **Management Trainee** in WBSEB (12.07.1994-11.07.1995).
- **Assistant Engineer (U)** in WBSEB (12.07.1995-15.11.1997 (*Saturday*)).

#### Teaching Experience:

Institution/Organization	Designation	Duration
<i>Raniganj Girls' College, Department of Mathematics affiliated to the University of Burdwan.</i>	<b>Lecturer</b>	17 <sup>th</sup> November, 1997–25 <sup>th</sup> August, 2003
<i>Raniganj Girls' College, Department of Mathematics affiliated to the University of Burdwan</i>	<b>Lecturer (Sr.Lecturer Scale)</b>	26 <sup>th</sup> August, 2003–5 <sup>th</sup> June, 2006
<i>Department of Mathematics, The University of Burdwan</i>	<b>Reader and Head</b>	06 <sup>th</sup> June, 2006 – 05 <sup>th</sup> June, 2009 including the position as a <b>Head</b> (19.06.2008 (A.N)–18.06.2010(F. N)
<i>Department of Mathematics, The University of Burdwan</i>	<b>Associate Professor</b>	06 <sup>th</sup> June, 2009–05 <sup>th</sup> June, 2012
<i>Department of Mathematics, The University of Burdwan</i>	<b>Professor</b>	6 <sup>th</sup> June, 2012– <i>and continuing till date.</i>

#### Academic Involvement:

[Details are given in *Annexure-IV*]

- **Invited lectures delivered in seminars/conferences/symposiums/workshops:**
  - (i) International: **05** nos.
  - (ii) National /State/ Regional: **28** nos.

- **Course Taught:**
  - (i) **(Post-Graduation):** Functional Analysis, Advanced Functional Analysis, Mathematical Logic, Graph Theory, Algebra, Topology, Complex Analysis, Operator Theory and its Applications, Transformed calculus.
  - (ii) **(Graduation):** Algebra, Calculus, Analysis, Geometry, Numerical Analysis, Probability and Statistics.
- **Participation and Presentation of Research papers in seminars/conferences:**
  - (i) International: **04** nos.
  - (ii) National: **07** nos.
- **Participation in Training Programmes and Workshops :**
  - (i) Training Courses: **03** nos.
  - (ii) Workshops: **03** nos.
- **Participation in Seminars/Symposiums/Conferences**
  - (i) Participation: **10** nos.
  - (ii) Organized Seminars/ Conferences as Convener/Joint Convener: **03** nos.
  - (iii) Organized Refresher Courses as Coordinator: **03** nos.

#### Awards/ Honours

- (i) **Awarded with Professor Sudhodhan Ghosh Memorial Lecture Award by Calcutta Institute of Theoretical Physics(2013)**
- (ii) Got the position in **World Scientist University Ranking (2021,2022 ,2023)** [AD Scientific Index]

#### Position Held and Professional Activities

- **Position Held :**
  - (i) **Former Head, Department of Mathematics, The University of Burdwan [2008-2010].**
  - (ii) **Former Deputy Coordinator [UGC-DSA(SAP-I)] in the Department of Mathematics, The University of Burdwan [2012-2017].**
  - (iii) **Former Director, UGC-HRDC, The University of Burdwan [ October 2020- May 2021].**
  - (iv) **Involved as a Member in NAAC Peer Team visit and also acted as a Chairperson in some NAAC Peer Team visit.**
- **Professional Activities:**
  - (v) **Member of Post Graduate Board of Studies in Mathematics at the University of Burdwan**
  - (vi) **Member of Board of Research Studies in Mathematics at the University of Burdwan**
  - (vii) **Member of IQAC, The University of Burdwan**
  - (viii) **Member of NAAC Committee, The University of Burdwan**
  - (ix) **Member of Gender Audit Committee, The University of Burdwan**
  - (x) **Former member of Post Graduate Board of Studies in Mathematics at Kazi Nazrul University, Asansol**
  - (xi) **Member of Under Graduate Board of Studies in Mathematics at Kazi Nazrul University, Asansol**
  - (xii) **Member of Post Graduate Board of Studies in Mathematics at Vidyasagar University, Midnapore.**

- (xiii) Performed **confidential works** in the Department of Mathematics, Visva-Bharati, Santiniketan, Department of Applied Mathematics, Calcutta University, Vidyasagar University, Midnapore Kazi Nazrul University , Asansol, Sadhu Ram Chand Murmu University , Jhargram , St.Xavier's College , Kolkata.
- (xiv) Acted as a **Ph.D examiner** in Mathematics in different **Universities of India**.
- (xv) **Member** of different selection committee of Universities
- (xvi) **Member** in the CAS promotion of college teachers.
- (xvii) **Reviewer** of research papers/articles in different international and national journals
- (xviii) **Reviewer** in Mathematical Reviews, American Mathematical Society.
- (xix) **Content Writer** of Post Graduate Course on Functional Analysis (**e-PG Pathshala** Project, **MHRD, and Govt.of India**)
- (xx) **Course Coordinator** and **Content Writer of Post Graduate Course** on Functional Analysis with on line Video Lectures under **MOOC (Swayam)** Programme (**MHRD, Govt. of India**).
- (xxi) Holding a **Life Membership** of Calcutta Mathematical Society.
- (xxii) Holding a **Life Membership** of Indian Science Congress Association
- (xxiii) Holding a **Life Membership** of Indian Mathematical Society

#### Research Profile Information

:: **VIDWANInfo** : <https://vidwan.inflibnet.ac.in/profile/195913>

:: **Google ScholarInfo** : <https://scholar.google.com/citations?user=2y31ZA4AAAAJ&hl=en>

:: **ORCID Info** : <https://orcid.org/0000-0003-0128-2268>

:: **Research gate info** : <https://www.researchgate.net/profile/Mantu-Saha>

:: **Web of Science Info** : <https://www.webofscience.com/wos/author/record/V-8424-2019>

For more additional information [see **Annexure-V**]

#### Declaration:

I do hereby declare that the information given above is true to the best of my knowledge and belief.

  
(Mantu Saha)

*List of publications of Dr.Mantu Saha, Professor of Mathematics*

No. of Published/ Accepted Research Papers: **102**

International Journals: **73**

National Journals: **29**

Research Monograph: **01**

**Published:**

**Year 2024:**

[1] Sayantan Panja, Kushal Roy and **Mantu Saha** , Wardowski type enriched contractive mappings with their fixed points, The Journal of Analysis, 32 (2024) ,269-281, DOI: <https://doi.org/10.1007/s41478-023-00026-y> (ESCI & Scopus)

[2] Ismat Beg, Kushal Roy and **Mantu Saha**,  $S^{\text{JS}}$  Metric Space: A Survey, J. Nonlinear Sci.Appl., 17 (2024)30-69.

**Year-2023:**

[3] Kushal Roy, Debashis Dey and **Mantu Saha**, “Certain fixed point results on  $U$ -metric space using Banach orbital contraction and asymptotic regularity”, Mathematica Slovaca, 73(2) (2023), 485-500, DOI: 10.1515/ms-2023-0036. (SCIE&Scopus)

[4] Kushal Roy, Sayantan Panja, **Mantu Saha**, Ravindra K Bisht, On fixed points of generalized Kannan and Reich type contractive mappings, Filomat, 37(26)(2023), 9079-9087, <https://doi.org/10.2298/FIL2326079R> (SCIE & Scopus)

**Year-2022:**

[5] Kushal Roy, Sayantan Panja, **Mantu Saha** and R. K. Bisht, “On common and sequential fixed points via asymptotic regularity”, Commun. Korean Math. Soc., 37(1) (2022), 163-176. (ESCI & Scopus)

[6] Kushal Roy, **Mantu Saha**, Vahid Parvaneh and Maryam Khorshidi, “A new variant of symmetric distance spaces and an extension of the Banach fixed point theorem”, Journal of Mathematics, Volume 2022, Article ID 9282762, 8 pages <https://doi.org/10.1155/2022/9282762>. (SCIE & Scopus)

[7] Kushal Roy and **Mantu Saha**, “Branciari  $S_b$ -Metric Space and Related Fixed Point Theorems with an Application”, Applied Mathematics E-Notes, 22 (2022), 8-17. (ESCI & Scopus)

[8] Kushal Roy, **Mantu Saha**, Reny George, Liliana Guran and Z. D. Mitrović, “Some covariant and contravariant fixed point theorems over bipolar  $p$ -metric spaces and applications”, Filomat, 36:5 (2022), 1755–1767, <https://doi.org/10.2298/FIL2205755R>. (SCIE & Scopus)

[9] Sayantan Panja, Kushal Roy, Marija V. Paunović, **Mantu Saha** and Vahid Parvaneh, Fixed points of weakly  $K$ -non expansive mappings and a stability result for fixed point iterative process with an application, Journal of Inequalities and Applications (2022), 2022:90, <https://doi.org/10.1186/s13660-022-02826-9>. (SCIE&Scopus)

[10] Kushal Roy and **Mantu Saha**, “Generalized cone  $b$ -random metric space with some random fixed point theorems”, TWMS J. Appl. Eng. Math., 12(3) (2022), 1004-1019. (ESCI & Scopus)

[11] Sayantan Panja , **Mantu Saha** And Ravindra K. Bisht, Existence of common fixed points of non-linear semi groups of Enriched Kannan contractive mappings, CARPATHIAN J. MATH, Volume 38 (2022), No. 1, Pages 169 - 178

[12] **Kushal Roy**, Ismat Beg and Mantu Saha, “Best  $S^S$ -proximity point on an ordered sequential  $S^S$ -metric space with an application to variation inequality problem”, *Discussiones Mathematicae Differential Inclusions Control and Optimization*, 42(2) (2022), 171-187.

[13] **Kushal Roy**, Mantu Saha, “Fixed point theorems for a class of extended  $JS$  contraction mappings over a generalized metric space with an application to fixed circle problem”, *Proyecciones Journal of Mathematics*, 41(6) (2022), 1551-1572. (Scopus)

#### **Year-2021:**

[14] Ismat Beg, Kushal Roy and **Mantu Saha**, “Ekeland’s variational principle in an  $S^S$ -metric space and a fixed point theorem”, *Facta Universitatis: Series Mathematics and Informatics*, 36(5) (2021), 1117-1127. (ESCI)

[15] KushalRoy, **Mantu Saha** and Ismat Beg, “Fixed point of contractive mappings of integral type over an  $S^S$ -metric space”, *Tamkang J. Math.*, DOI:10.5556/j.tkjm.52.2021.3298, 52(2) (2021), 267-280. (ESCI & Scopus)

[16] Vladimir Rakočević, Kushal Roy and **Mantu Saha**, “Wardowski And Ćirić Type Fixed Point Theorems Over Non-Triangular Metric Spaces”, *Quaestiones Mathematicae*, 1-11, (onlinepublished), <https://doi.org/10.2989/16073606.2021.1970044>. (SCIE & Scopus)

[17] Kushal Roy and **Mantu Saha**, “Sequential bipolar metric space and well-posedness of fixed point problems”, *IJNAA*, 12(2) (2021), 387-398. (ESCI & Scopus)

[18] Sayantan Panja, Kushal Roy, **Mantu Saha**, “Fixed points for a class of extended interpolative  $\psi F$ -contraction maps over a  $b$ -metric space and its application to dynamical programming”, *UPB Scientific Bulletin, Appl. Math. And Phys.*, 83(1) (2021), 59-70. (SCIE & Scopus)

[19] Ismat Beg, Kushal Roy and **Mantu Saha**, “ $S^S$ -metric and topological spaces”, *Journal of Mathematical Extension*, 15(4) (2021), 1-16. (ESCI)

[20] Kushal Roy and **Mantu Saha**, “Interpolative Caristi type contractive mapping in an extended  $b$ -metric space”, *The Journal of Analysis*, (2021), (online published), <https://doi.org/10.1007/s41478-021-00342-5>. (ESCI & Scopus)

[21] Kushal Roy and **Mantu Saha**, “An abstract metric space and some fixed point theorems with an application to Markov process”, *The Journal of Analysis*, (2021), (online published), <https://doi.org/10.1007/s41478-021-00325-6>. (ESCI & Scopus)

[22] Erdal Karapınar, Kushal Roy and **Mantu Saha**, “A New Generalization Of  $M$ -Metric Space With Some Fixed Point Theorems”, *Facta Universitatis (NIS) Ser. Math. Inform.*, 36(1)(2021), 79-88. (ESCI)

[23] Kushal Roy, Sayantan Panja and **Mantu Saha**, “A Generalized Fixed Point Theorem In An Extended Cone  $b$ -Metric Space Over Banach Algebra With Its Application To Dynamical Programming”, *Applied Mathematics E-Notes*, 21 (2021), 209-219. (ESCI & Scopus)

[24] Kushal Roy, Sayantan Panja, **Mantu Saha** and Zoran D. Mitrović, “Some Fixed Point Theorems Via Combination Of Weak Contraction and Caristi Contractive Mapping”, *Annales Mathematicae Silesianae* (2021), DOI: 10.2478/amsil-2021-0003, 35(2) (2021), 289–301. (ESCI & Scopus)

[25] Kushal Roy, Hossein Alaaidizaji, **Mantu Saha**, Babak Mohammadi, and Vahid Parvaneh, “Some Fixed-Point Theorems over a Generalized  $F$ -Metric Space”, *Advances in Mathematical Physics*, Volume 2021, Article ID 5570653, 7 pages <https://doi.org/10.1155/2021/5570653>. (SCIE & Scopus)

[26] Kushal Roy, **Mantu Saha** and Debashis Dey, “An Introduction To  $U$ -Metric Space And Non-Linear Contraction With Application To The Stability Of Fixed Point Equation”, *Mat. Vesnik*, 73, 4 (2021), 268–281. (ESCI & Scopus)

**Year-2020:**

[27] Kushal Roy and **Mantu Saha**, “Fixed points of mappings over a locally convex topological vector space and Ulam-Hyers stability of fixed point problems”, *Novi Sad J. Math.*, 50(1) (2020), 99-112. (Scopus)

[28] Sayantan Panja, Kushal Roy, Mantu Saha, Ravindra K. Bisht, “Some Fixed Point Theorems via Asymptotic Regularity”, *Filomat*, 34:5 (2020), 1621–1627. (Scopus)

[29] Kushal Roy, Ismat Beg and **Mantu Saha**, “Sequentially compact  $S^S$ -metric spaces”, *Commun. Optim. Theory*, 2020(2020), Article ID 4, doi:10.23952/cot.2020.4, 1-7.

[30] Debashis Dey, Kushal Roy and **Mantu Saha**, “On generalized contraction principles over  $S$ -metric spaces with application to homotopy”, *J. New Theory*, 31 (2020), 95-103.

[31] A. P. Baisnab, Kushal Roy and **Mantu Saha**, “Cantor's intersection theorem and some generalized fixed point theorems over a locally convex topological vector space”, *Methods of Functional Analysis and Topology*, 26(3) (2020), 262-271. (Scopus)

[32] Kushal Roy and **Mantu Saha**, “Generalized contractions and fixed point theorems over bipolar  $Cone_{tvs}b$ -metric spaces with an application to homotopy theory”, *Mat. Vesnik*, 72(4) (2020), 281-296. (Scopus)

[33] Kushal Roy, Sayantan Panja, **Mantu Saha** and Vahid Parvaneh, “An extended  $b$ -metric type space and related fixed point theorems with an application to nonlinear integral equations”, *Advances in Mathematical Physics*, Volume 2020, Article ID 8868043, 7 pages, <https://doi.org/10.1155/2020/8868043>. (Scopus)

[34] Sayantan Panja, Kushal Roy and **Mantu Saha**, “Weak interpolative type contractive mappings on  $b$ -metric spaces and their applications”, *Indian J. Math.*, 62(2) (2020), 231-247. (Scopus)

[35] Kushal Roy, **Mantu Saha** and Ismat Beg, Fixed point of generalized contractive mappings on  $S^S$ -metric spaces with two metrics, *Theory Approx. Appl.*, 14(1)(2020), 14 pages.

[36] Kushal Roy and **Mantu Saha**, “Some random fixed point theorems for Prešić type contractive mappings with several applications”, *Indian J. Math.*, 62(3) (2020), 371-405. (Scopus)

**Year-2019:**

[37] Kushal Roy and **Mantu Saha**, “Common fixed point theorems for generalized contractive mappings in an  $F$ -cone metric space over a Banach algebra”, *Malaya Journal of Matematik*, 7(4) (2019), 751-758.

[38] Kushal Roy and **Mantu Saha**, “Fixed point theorems for a pair of generalized contractive mappings over a metric space with an application to homotopy”, *Acta Universitatis Apulensis*, 60 (2019), doi: 10.17114/j.aul.2019.60.01, 1-17.

[39] Kushal Roy and **Mantu Saha**, “On fixed points of Ćirić-type contractive mappings over a C\*-algebra valued metric space and Hyers-Ulam stability of fixed point problems”, J. Adv. Math. Stud., 12(3) (2019), 350-363.

[40] Kushal Roy and **Mantu Saha**, “On Some Common Approximate Fixed Point Theorems”, General Mathematics, 27(2) (2019), 23–34, DOI: 10.2478/gm-2019-0012.

**Year-2018:**

[41] Kushal Roy and **Mantu Saha**, “Fixed point theorems for generalized contractive and expansive type mappings over a C\*-algebra valued metric space”, Sci. Stud. Res. Ser. Math. Inform., 28 (2018), No. 1, 115-130.

[42] Pabitra Debnath and **Mantu Saha**, “Categorization of  $n$ -inner Product Space”, Asian Research Journal of Mathematics, Vol. 11(4), 1-10, 2018; Article no. ARJOM.43135.

[43] Pabitra Debnath and **Mantu Saha**, “Some Result On Fixed Point of Expansive Mapping Over Modular Metric Space”, IJMA, 9(10), Oct., 2018, 8-12.

[44] Pabitra Debnath and **Mantu Saha**, “On  $I$  and  $I^k$ -convergence in  $n$ -normed linear Spaces”, IOSR Journal of Mathematics (IOSR-JM), Vol. 14, Issue 4, Ver. IV (Jul - Aug 2018), 38-44.

[45] Pabitra Debnath and **Mantu Saha**, ‘Fixed point of mappings with contractive iterates in a modular metric space’, Research Guru, Vol. 12, Issue 3, December-2018, 633-636.

[46] Debashis Dey, Raul Fiero and **Mantu Saha**, “Well-posedness of fixed point problems, Journal of Fixed Point Theory and Applications, (<https://doi.org/10.1007/s11784-018-0538-j>), Springer, 2018. (Scopus)

**Year-2017:**

Nil

**Year-2016:**

[47] Amit Kumar Laha and **Mantu Saha**, “Random fixed point of Ćirić type contractive operator, South East Asian Bulletin of Mathematics”, South East Asian Bulletin of Mathematics, 40:2016, 529–544.

[48] Amit Kumar Laha and **Mantu Saha**, “Fixed point on  $\alpha$ - $\psi$ multivalued contractive mappings in cone metric space, Acta Et Commentationes Universitatis Tartuensis de Mathematica, 20(1), 2016. (Scopus)

[49] Debashis Dey, Pritha Dan and **Mantu Saha**, “Best Proximity Points for  $\phi$ -Contractions and Weak  $\phi$ -Contractions”, South East Asian Bulletin of Mathematics, 40: 2016, 467-477.

[50] Ismat Beg, Amit Kumar Laha and **Mantu Saha**, “Coincidence point of isotone mappings in partially ordered metric space”, Rendiconti del Circolo Matematico di Palermo, 2016, doi10.1007/S12215-016-0232-3. (Scopus)



### Year-2015:

[51] Amit Kumar Laha and **Mantu Saha** , “Fixed point for a class of set valued mappings on a metric space endowed with a graph”, ROMAI J., 11(1), 2015, 115-129.

[52] Pritha Dan and **Mantu Saha** , “Existence of fixed points for a class of contractive maps in 2-metric spaces”, Journal of Scientific Research and Reports, 7(2), 2015, 86-96.

### Year-2014:

[53] Ismat Beg, **M. Saha** , A. Ganguly and D. Dey, “Random fixed point of Greguš mapping and its application to nonlinear stochastic integral equations”, Kuwait journal of science & engineering, 41(2), 2014,1-14. (Scopus)

[54] Ismat Beg, Debashis Dey and **Mantu Saha**, “Convergence and stability of two random iteration algorithms”, J. Nonlinear Funct. Anal., 2014, 2014:17. (Scopus)

[55] Amit Kumar Laha and **M. Saha** , “Fixed point of Geraghty’s contractive mapping in 2-metric space”, International journal of Mathematical Archive, 5(6),2014,210-214.

[56] Pritha Dan and **Mantu Saha** , “Proximity points for a class of generalized proximal contractive mapping”, International journal of Mathematical Archive ,5(6),2014,166-176.

[57] Debashis Dey and **Mantu Saha** , “An extension of Banach fixed point theorem in Fuzzy metric space”, Boletim da Sociedade Paranaense de Matematica (3s.) v. 32 1 (2014), 299-304. (Scopus)

[58] Mukti Gangopadhyay, Pritha Dan and **M. Saha**, “An application of random fixed point theorem in integral equation”, IOSR Journal of Mathematics, Vol. 9 (4) (Jan. 2014), 57-61.

### Year-2013:

[59] Mukti Gangopadhyay , **Mantu Saha** and A. P.Baisnab , “Some fixed point theorems in Partial metric spaces”, Turkic World Math. Soc. J. App. Eng. Math., V.3, N.2, 2013, pp. 206-213. (Scopus)

[60] Debashis Dey and **Mantu Saha**, Common fixed point theorems in a complete 2-metric space, Acta Universitatis Palackianae Olomucensis, Facultas Rerum Naturalium, Mathematica, 52, 1 (2013) 79–87.

[61] Debashis Dey and **Mantu Saha** , “Application of random fixed point theorems in solving nonlinear stochastic integral equation of the Hammerstein type”, Malaya Journal of Matematik, Vol. 2(1), 2013, 54-59.

[62] Debashis Dey and **Mantu Saha**, “Partial cone metric space and some fixed point theorems”, Turkic World Math. Soc. J. App. Eng. Math., Vol. 3(1), 2013, 1-9. (Scopus)

[63] Debashis Dey, Amit Kumar Laha and **Mantu Saha**, “Approximate coincidence point of two non-linear mappings”, Journal of Mathematics, Hindwai publishing corporation, Vol. 2013, ArticleID 0.4 pages, dx.doi.org/10.1155/2013/962058. (Scopus)

[64] Mukti Gangopadhyay, A. P. Baisnab and **Mantu Saha**, “Expansive mappings and their fixed points in a vector metric space”, International Journal of Mathematical Archive-4(8), 2013, 147-153.

[65] **M. Saha**, Anamika Ganguly, “Fixed point theorems for a class of weakly contractive mappings in a setting of 2-Banachspace”, Journal of Mathematics, Hindawi Publishing Corporation, Vol.2013, Article ID 434205, 7 pages, doi.org/10.1155/2013/434205. (Scopus)

[66] Debashis Dey and **Mantu Saha**, “Approximate fixed point of Reich operator”, Acta Math. Univ. Comenianae, Vol. LXXXII, 1 (2013), 119-123. (Scopus)

#### **Year-2012:**

[67] **Mantu Saha** and Debashis Dey, “Some random fixed point theorems for  $(\theta, L)$ -weak contractions”, Hacettepe Journal of Mathematics and Statistics (SCI), Vol. 41(6) (2012), 795-812. (Scopus)

[68] **M. Saha**, Anamika Ganguly, “Random fixed point theorem on Ćirić type contractive mapping and its consequence”, Fixed Point Theory and Applications, Springer, 2012:209 doi: 10.1186/1687-1812-2012-209, 18 pages. (Scopus)

[69] **M. Saha**, R. Chikkala and A. P. Baisnab, “Strong non-periodicity and fixed points of set-valued mappings, Fuzzy sets, rough sets and multivalued operations and applications, (ISSN 0974-9942), vol. 4(1) 2012, 45-50.

[70] **Mantu Saha**, Debashis Dey, Anamika Ganguly and Lokenath Debnath, “Asymptotic Regularity and Fixed Point Theorems on a 2-Banach Space”, Surveys in Mathematics and its applications, Vol.7 (2012), 31-38. (Scopus)

[71] Mukti Gangopadhyay, **Mantu Saha** and A. P. Baisnab, “Vector Cone metric Spaces and Some Fixed Point theorems”, J. Mech. Cont. & Math. Sci., Vol. 7(1), July (2012), 974-987.

[72] Mukti Gangopadhyay, **Mantu Saha** and A. P. Baisnab, "Caristi-type Fixed Point Theorems on a 2-Banach Space", Gen. Math. Notes, Vol.8 (1), January-2012, 1-5.

#### **Year-2011:**

[73] Mukti Gangopadhyay, **Mantu Saha** and A.P.Baisnab, Vector metric spaces and some fixed point theorems, Int. Journal of Math. Archive, Vol. 2(4), (Apr-2011), 419-423.

[74] **M.Saha**, Anamika Ganguly, “Some results on fixed points of control function in a setting of 2-metric space”, Publications of Problems & Application in Engineering Research, Vol.2 (4) (July-Dec, 2011), 137-143.

[75] **Mantu Saha**, Debashis Dey and Anamika Ganguly, “A generalization of fixed point theorems in a 2-metric space”, ‘General Mathematics’, Romania, Vol. 19, No.1 (2011), 87-98.

[76] Debashis Dey, Anamika Ganguly and **Mantu Saha**, “Fixed point theorems for mappings under general contractive condition of integral type”, Bull. Math. Anal. Appl., Vol. 3, Issue 1 (2011), 27-34.

[77] **Mantu Saha** and Anamika Ganguly, “Fixed point theorems for contraction mappings satisfying asymptotically regularity in integral setting”, Int. Journal of Math. Archive, Vol. 2(2), (Feb-2011), 280-284.

**Year-2010:**

[78] **Mantu Saha** and Debashis Dey, “Fixed point theorems for a class of  $A$ -contraction on a 2-metricspace”, Novi sad Journal of Mathematics, Vol. 40, No. 1, 2010, 3-8. (Scopus)

[79] **Mantu Saha** and Debashis Dey, “Fixed point of expansive mappings in a 2-Banach space”, International Journal of Mathematical Sciences and Engineering Applications (IJMSEA), Vol. 4 No. IV (October, 2010), 355-362.

[80] **Mantu Saha** and R. Chikkala, “Fixed Point Theorem over a Quasi metric space”, South East Asian Journal of Mathematics and Mathematical Sciences, India, Vol.8 No.2 (2010), 61-67.

[81] **Mantu Saha**, Debashis Dey and Anamika Ganguly, “Fixed point theorems on two different 2-metric spaces”, International Journal of Mathematical Sciences and Engineering Applications (IJMSEA), Vol. 4 No. III (August, 2010), 427-439.

[82] **M. Saha**, Mukti Gangopadhyay and A.P.Baisnab, “Cantor’s Theorem in 2-metricspace and its applications”, International Journal of Mathematical Sciences and Engineering Applications (IJMSEA), Vol. 4 No. III (August, 2010), 107-116.

[83] **Mantu Saha**, Mukti Gangopadhyay and Lokenath Debnath, "On random fixed point theorems inseparable Banach spaces with a probability measure", International Journal of Contemporary Mathematical Sciences, Vol. 5, 2010, no. 23, 1115 – 1129.

[84] Mukti Gangopadhyay, **Mantu Saha**, “Completeness of a nearly Bi-quasi metric space”, ‘International Journal of Contemporary Mathematical Sciences’, Vol. 5, 2010, no. 10, 459 –466.

**Year-2009:**

[85] **Mantu Saha** and Debashis Dey, “Fixed point theorems of contractive type mappings in a 2-metricspace” International Mathematical Forum, Vol. 4, no. 36, 1783 – 1791, 2009.

[86] Mukti Gangopadhyay, **Mantu Saha** and A. P. Baisnab, "Fixed point theorems for a class of mappings in a 2-Banach space", International Journal of Mathematical Analysis, Vol. 3, 2009, no. 27, 1339 – 1347.

[87] **Mantu Saha** and Debashis Dey, “Some results on common fixed point theorems in a 2-metricspace”, NBU Journal of Mathematics’, Vol. II (1), 2009, 29-36.

[88] **M.Saha** and L. Debnath, “Random fixed point of mappings over a Hilbert space with a probability measure” Adv. Studies Contemp. Math, Vol. 18(1), 2009, 97-104.

[89] **Mantu Saha** and Debashis Dey, "Some results on fixed points of mappings in a 2-metric space", ‘International Journal of Contemporary Mathematical Sciences’, Vol. 4, 2009, no. 21, 1021-1028.

[90] **Mantu Saha** and Debashis Dey, “On the Theory of Fixed Points of Contractive Type Mappings in a 2-Metric Space”, ‘Int. Journal of Math. Analysis, Vol. 3, 2009, no. 6, 283-293.

**Year-2008:**

[91] **Mantu Saha**, R. Chikkala and A.P. Baisnab, "Semigroup of quasi-proximal mappings and their fixed points", 'Revista de la Academia Canaria de Ciencias', vol. XX, no.1-2(2008), 25-31. (Scopus)

[92] **Mantu Saha** and Debashis Dey, "On a verification of discontinuity at fixed points", 'International Journal of Mathematics and Computer Science', 3(2008), no. 4, 231-236.

[93] Mukti Gangopadhyay, **Mantu Saha** and A. P. Baisnab, "Some Fixed Point Theorems for Contractive Type Mappings in 2-Banach Space", 'International Journal of Mathematics and Computer Science', 3(2008), no. 4, 237-246.

[94] **Mantu Saha**, "On fixed point of expansive mappings", 'South East Asian Journal of Mathematics & Mathematical Sciences', Vol-6 No. 3 (2008), 41-46.

**Year-2007:**

[95] **M.Saha** and R.N. Mukherjee, "Fixed point of mappings with contractive iterate in a 2-metric space", 'Bull. Pure. Appl. Math.', Vol.1 (1), (2007), 79-84.

[96] **Mantu Saha** and R.N. Mukherjee, "Fixed Point Theorems over a Banach Space with a central structure", 'International Journal of Mathematics and Computer Science', 2(4), (2007), 297-304.

**Year-2006:**

[97] **Mantu Saha**, "Fixed point of some set valued mappings over a Bi-quasi-metric space", 'Journal of Tri. Math. Society, India', 8 (2006), 15-24.

[98] **Mantu Saha**, "On some random fixed point of mappings over a Banach Space with a probability measure", 'Proceedings of National Academy of Sciences', India, 76(A), III, (2006), 219-224. (Scopus)

[99] **Mantu Saha** and R.N. Mukherjee, "On some results of fixed point theorems on a class of quasi metric space", 'GUMA', Vol.9, 2006, 14-17.

**Year-(2005-1993):**

[100] **Mantu Saha** and A.P. Baisnab, "On Ćirić contraction Operator and fixed points, Indian Journal of Pure and Applied Mathematics, Springer, (ISSN 0019- 5588), 27(2), (1996), 177- 182. (Scopus)

[101] **Mantu Saha** and A.P. Baisnab, "Fixed Point of mappings with contractive Iterate", 'Proc. Nat. Acad. Sci., India', 63(A), IV, (1993), 645-650. (Scopus) .

**Accepted and to appear:**

[102]Kushal Roy, **Mantu Saha**, “Bipolar Hausdorff like metric and Nadler type multivalued fixed point theorems with an application”, *Surveys in Mathematics and Its Applications*, (accepted and to appear). (Scopus)

**Book:**

1. Research Monograph: Fixed Point theorems acting on 2-metric space: A brief study”, written jointly by Debashis Dey and **Mantu Saha**, Scholar’s Press, Germany, 2013(ISBNNo.: 978-3-639-51495-7).

**Research Project:**

**Minor Research Project:**

**Title: Application of Fixed Point of Mappings over Spaces with Different Topological Structures"**

**Funding Agency:** UGC, Eastern Regional Office (File No.F.No.8-1/2005 (SR) dated 24-11-2006) amounting to Rs. 1, 00,000/- [2006-2009]

**Status: Completed** as a Principal Investigator

**Departmental Project:**

**UGC (DSA-SAP (I))(2012-2017)**[UGC sanction letter no. F.510/1/DSA/2012 (SAP-I) dated 07.09.12]

**Thrust Area: Continuum Mechanics and Functional Analysis with their Applications**

**Funding Agency:** UGC amounting to Rs. 75, 00,000/-

**Post: Deputy Co-ordinator [2012-2017]**

**Status: Completed**

**Research Guidance:**

**1. Ph.D.Awarded Students:08**

- (i) Name of the student: **Ms.Mukti Gangopadhyay**  
Year of award: **2010** [with joint supervision: Professor A.P.Baisnab [Retd. Professor of Mathematics, The University of Burdwan]].

**Title of Thesis:** A study on separation of axioms and covering axioms in bi-topological spaces and investigation of fixed point of mappings over generalized metric space with their random analogue.

- (ii) Name of the student:**Sri Debashis Dey**

Year of award: **2012**

**Title of Thesis:** Investigation on fixed points of mappings in certain spaces

- (iii) Name of the student: **Smt. Anamika Ganguly**

Year of award: **2012**

**Title of Thesis:** A study on fixed point of operators in different spaces

- (iv) Name of the student: **Smt.Pritha Dan**

Year of award: **2016**

**Title of Thesis:** A study on fixed points of mappings over metric spaces and over a Banach space with Probability measure.

- (v) Name of the student: **Sri Amit Kumar Laha**

Year of award: **2016**

**Title of Thesis:** Fixed points for a class of operators over different topological structured spaces.

- (vi) Name of the student: **Sri Pabitra Debnath**

Year of award: **2020**

**Title of Thesis:** A study on operators and its invariant points over different metric spaces.

- (vii) Name of the student: **Sri Kushal Roy**

Year of award: **2023**

**Title of Thesis: Investigations on Fixed Points of Mappings**

- (viii) Name of the student: **Sri Sayantan Panja**

Year of award: **2024**

**Title of Thesis: A Study on fixed point theory and its Applications**

**2. M.Phil Guidance: 01**

Name of the student:**Sri Pabitra Debnath**

Year of award: 2009

**Title of Dissertation:** On fixed points of mappings over a 2-metric space and some of their applications.

**Academic Involvements:**

**Invited lectures delivered in seminars /conferences /symposiums /workshops:**

**International:**

- (i) Delivered an invited talk at Islamic University, Bangladesh on 08.06.2013 and visited Khulna University, Bangladesh during the period 08.06.2013-14.06.2013.
- (ii) Delivered an invited talk as a Guest speaker at Rajshahi University, Bangladesh on 13.06.2013 and visited Khulna University of Engineering and Technology during the period 08.06.2013- 14.06.2013.
- (iii) Invited as a visiting fellow at Kazan National Research Technological University, during the period 13.03.2013-19.03.2013 and delivered an invited talk at Kazan State University, Russia on 13.03.2013 and at Nizhnekamsk Petrochemical College, Nizhnekamsk, Russia on 18.03.2013 (Period: 13.03.2013-19.03.2013)
- (iv) Invited as a Guest Professor in Department of Mathematics, Jagannath University, Dhaka, Bangladesh during the period: 21.11.2012-30.11.2012 and delivered an invited talk in the seminar on Mathematics and its Applications in Real life on 26.11.2012.
- (v) Visited the Department of Mathematics, Rajshahi University, Bangladesh and participated in a academic discussions on current research trends in Non linear functional analysis on 24.11.2012 (Period: 21.11.2012-30.11.2012).

**National/State/Regional:**

- (i) **Delivered a guest lecture** on ‘An over view of metric fixed point theory’ at Department of Mathematics, Indian Institute of Technology, Gauhati on July 08, 2023.
- (ii) **Delivered an invited talk** on ‘Elements of fixed point theory’ in a workshop held at Department of Mathematics, Visva-Bharati, Santiniketan during September 20- 21, 2022
- (iii) **Delivered an invited talk** on ‘A Study on fixed points for a class of mappings over a locally convex space’ in International Conference on Nonlinear Applied Analysis and optimization 2021 (ICNAAO) at Department of Mathematics, Indian Institute of Technology, B.H.U during December 21-23, 2021 (through online)
- (iv) **Delivered an invited talk** on ‘Research Methodology’ at Swami Vivekananda University, Kolkata on July 04, 2021 (through online).
- (v) **Delivered an invited talk** on ‘Fixed Point Theorems and Its Applications’ in a one week web workshop for UG students on Metric Spaces during March 22-28, 2021 at Department of Mathematics, Krishna Chandra College, Hetampur, Birbhum, West Bengal on March 27, 2021 (through online).
- (vi) **Delivered an invited talk** on ‘Elements of Mathematical Logic’ in a one day National level Webinar organized by Department of Mathematics, M.U. College on September 23, 2020.



- (vii) **Delivered an invited talk** on ‘Analytic functions and its Applications’ at Hooghly Mohsin College on July 10, 2020 (through online).
- (viii) **Delivered an invited talk** on ‘An introduction to fixed points of contractive mappings over a locally convex topological vector space’ in a two day National Seminar on Recent Trends in Mathematical Sciences and its Applications (NSRTMSA-19) at Raiganj University during March 14-15, 2019.
- (ix) **Delivered an Invited series of lectures** in STC/Workshop on fixed point theory and dynamical systems (FPTDS-2017) during 20-30, 2017 at Department of Mathematics, Indian Institute of Technology, B.H.U.
- (x) **Delivered an invited talk** on ‘Characterization of completeness property of a metric space’ at the Department of Mathematics, Burdwan Raj College on 17<sup>th</sup> September, 2016.
- (xi) **Delivered a series of lectures** on ‘Hilbert space and operator theory’ at Summer School on Quantum Mechanics correlation, Foundation, Information Processing and Various Applications’ at Physics and Applied Mathematics Unit in **I.S.I., Kolkata** on 22nd June, 2015.
- (xii) **Delivered an invited lecture** on ‘Elements of metric spaces’, State level seminar on Fundamental Aspects in mathematics & applications at Department of mathematics, Nistarini College, Purulia on December 2, 2014.
- (xiii) **Delivered an invited talk** on ‘Consequences of Random fixed point theorem on Ciric Operator, National seminar on Recent perspectives on non linear mathematics and its applications, Department of Mathematics, Visva-Bharati, Santiniketan, India, March 25-26, 2014 .
- (xiv) Acted as a **Resource person** for **INSPIRE** Programme (DST) in the Department of Mathematics, The University of Burdwan, West Bengal, India during 18.08.2014-22.06.2014.
- (xv) **Delivered an invited talk** on Singularity at Dumdum Motijheel College, Kolkata, West Bengal on 11<sup>th</sup> June, 2014.
- (xvi) Acted as a **Resource person** for **INSPIRE** Programme (DST) in the Department of Mathematics, The University of Burdwan, West Bengal, India during 10.06.2013-11.06.2013.
- (xvii) **Delivered an invited lecture** on Elementary Calculus at Panihati Mahavidyalaya, Kolkata, West Bengal, India on 12th December, 2013.
- (xviii) **Delivered an invited talk** on Fixed Point Theory and its Applications at Ramananda College, Bishnupur, Bankura, West Bengal, India on 19.03.2012.
- (xix) **Delivered an invited lecture** in 12<sup>th</sup> Refresher Courses in Mathematical Sciences (UGC Sponsored) at Burdwan University, West Bengal, India on 23rd December, 2010
- (xx) **Delivered an invited talk** entitled “Linear operators” at B.N. Mahavidyalaya, Itachuna, and West Bengal, India on 27th March, 2010.

- (xxi) **Delivered an invited talk** entitled “2-metric space and some fixed point theorems in UGC sponsored National Seminar on Roles of Mathematical analysis and models in science and society” at Kalyani University, West Bengal, India held on March 17-18, 2010.
- (xxii) **Delivered an invited talk** entitled “Beauty of Analysis” at Netaji Mahavidyalaya, Arambagh, West Bengal, India on 12th September, 2009.
- (xxiii) **Delivered an invited talk** entitled “Complex Analysis” at Netaji Mahavidyalaya, Arambagh, West Bengal, India on 5th December, 2008.
- (xxiv) **Delivered an invited talk** on “Elements of Graph Theory and Its Application in UGC sponsored State Level Seminar on “Discrete Mathematics with its Applications ” at B.B. College Asansol, West Bengal, India held on March, 17-18, 2007.
- (xxv) Delivered an invited talk in 9th Refresher Courses in Mathematical Sciences (UGC Sponsored) at The University of Burdwan, West Bengal, India on 24.02.2007 (period: 17.02.2007-09.03.2007).
- (xxvi) **Delivered an invited talk** at on ‘Functional Analysis’ at the Advanced Training Programme for the Undergraduate students of the North East India sponsored by the Department of Science and Technology, at Department of Mathematics Gauhati University, Assam, India on 19-21, December, 2006.
- (xxvii) **Delivered an invited talk** at UGC sponsored one day State Level Seminar on Modern Trends in Mathematics and Its Vital Applications ’held at Shyampur Siddheswari Mahavidyalaya, Ajodhya, Howrah, West Bengal, India, on 12th December, 2006.
- (xxviii) **Delivered an invited talk** on ‘Elements of Group Theory at Asansol Girls’ College, affiliated to Burdwan University, West Bengal in a National Seminar, organized by Department of Mathematics held on July, 2005.

**Participation in Training Courses:**

- (i) Attended and completed 28th Orientation Programme: (October 26 to November 22, 2006) at Academic Staff College, The University of Burdwan, West Bengal, India.
- (ii) Attended and completed 03rd Refresher Course in Mathematical Sciences: (January 21 to February 07, 2006) at Academic Staff College, The University of Burdwan, and West Bengal, India.
- (iii) Attended and completed 07<sup>th</sup> Refresher Course in Mathematical Sciences: (March 18 to April 07, 2000) at Academic Staff College, The University of Burdwan, and West Bengal, India.

### **Participation in Workshops:**

- (i) Workshop on Innovations in Open & Distance Learning organized by DDE, University of Burdwan (9<sup>th</sup> and 10<sup>th</sup> April, 2011).
- (ii) Workshop on Research Methodology (for science stream) at the UGC Academic Staff College, The University of Burdwan, West Bengal, India during February 14-17, 2011.
- (iii) Workshop on Development of Self-Learning Materials (SLM) organized by DDE, University of Burdwan (6<sup>th</sup> and 7<sup>th</sup> March, 2010).

### **Organized Seminars / Conferences:**

1. Acted as a joint Convener in International Conference on Frontier of Mathematics and Applications (ICFMA-2008) at The University of Burdwan, West Bengal, India, during 16-18, 2008.
2. Acted as a Convener at UGC sponsored seminar on “Need Based Mathematics Training as on Today” held on March, 09-10, 2002 at Raniganj Girls’ College, (affiliated to The University of Burdwan), West Bengal, India.
3. Acted as a Convener at UGC sponsored seminar on “Undergraduate Teaching in Mathematical Analysis and its Application” at Raniganj Girls’ College, (affiliated to The University of Burdwan), West Bengal, India held on December, 13-14, 2000.

### **Organized Refresher Courses:**

1. Acted as a joint Coordinator in 13<sup>th</sup> Refresher Course in, Mathematical Sciences at Academic Staff College, The University of Burdwan, West Bengal, India during 30.11.2011-20.12.2011.
2. Acted as a joint Coordinator in 11<sup>th</sup> Refresher Course in Mathematical Sciences at UGC Academic Staff College, The University of Burdwan, West Bengal, India in 16.02.2010-08.03.2010.
3. Acted as a joint Coordinator in 10<sup>th</sup> Refresher Course in Mathematical Sciences at UGC Academic Staff College, The University of Burdwan, West Bengal, India during 29.11.2008-19.12.2008.

### **Participation and Presentation of Research papers in seminars/conferences:**

1. Attended and presented a research paper on ‘Random fixed point theorem of contractive mappings and its consequences’ in an International Conference on Recent Advances in Mathematical Sciences and Applications (ICRAMSA-2013) at Rajib Gandhi Pradyogiki Vishwavidyalaya, Madhyapradesh, December 24-26, 2013.

2. Attended and presented a research paper on 'Fixed point of mappings with contractive iterate in a 2- metric space' in an International Seminar on Foundation of Mathematics, Analysis and Geometry at Department of Pure Mathematics, Calcutta University, West Bengal, India, December 12-14,2007.
3. Attended and presented a research paper on 'Random Fixed point of mappings over a Hilbert Space with a probability measure' in a National Seminar on Mathematical Analysis and its Applications (DRS), Department of Mathematics, Utkal University, Orissa, March 23-25, 2007.
4. Attended and presented a research paper on 'Fixed Point of some set valued mappings over a bi- quasi metric space in a UGC sponsored seminar on present development in Mathematics' (SPDM-2005), February, 09-10-2005 at J.K. College, Purulia, West Bengal, India.
5. Attended and presented a research paper on 'Random fixed point of mappings over a Banach Space with a Probability measure' in a National Seminar on advances in Mathematics and its application, The University of Burdwan, West Bengal, India, January, 18-20, 2005.
6. Attended and presented a research paper on 'On Bi-Quasi Metric spaces and Some Fixed Point Theorems' in a National Seminar-2004, Kalyani university, India,February, 13-14,2004.
7. Attended and presented a research paper on 'Some Random Fixed Theorems in A Banach Space' in an International Symposium on Recent Advances in Mathematics and its Application, Calcutta Mathematical Society, Salt Lake, Kolkata-64, India, December, 20-22, 2003.
8. Attended and presented a research paper on 'Random Fixed Points of Mappings over a Banach Space with a Probability Measure' in a National Seminar on Recent Trends in Mathematics under DRS (SAP) of UGC,New Delhi, Department of Mathematics, The University of Burdwan, West Bengal, India, December, 26-28, 2002.
9. Attended and presented a research paper on 'Asymptotic Regular Operators Over A Normed Linear Space And Their Fixed Points' in a National Seminar on Recent Trends in Mathematics and Its Applications, Department of Mathematics, Visva- Bharati, Santiniketan, India, February, 25-26,2002.
10. Attended and presented a research paper on Fixed Points of Some Set Valued Mappings Over A Bi- Quasi Pseudo Metric Space' in a International Symposium on Mathematics and its Application, Calcutta Mathematical Society, India, February 17- 19, 2001.
11. Attended and presented a research paper on 'Nearest Point Sets and A Fixed Point Theorem' in a National Seminar on Recent Advances in Mathematics under DRS(SAP) of UGC, New Delhi, Department of Mathematics, The University of Burdwan, West Bengal, India, February, 01-03, 2000.

### **Participation in Seminars /Symposiums /Conferences:**

1. Attended in an International Conference on “Recent Trends in Mathematical Sciences & Applications (ICRTMSA-2016)” at the Department of Mathematics, The University of Burdwan, West Bengal, India during February 09-11, 2016 and chaired in some technical sessions.
2. Attended in an International Conference on “Revisiting Ancient Mathematics and Mathematical Sciences & Applications (ICRAMMS-2015)” at the Department of Mathematics, The University of Burdwan, West Bengal, India during February 18-20, 2015 and chaired in some technical sessions.
3. Attended in a 3rd International Conference on Frontier of Mathematics & Applications (ICFMA-2014) at the Department of Mathematics, The University of Burdwan, West Bengal, India during January 29-31, 2014 and chaired in a some technical sessions
4. Attended in a National Seminar on Advances in mathematics & Applications (NSAMA-2013) at the Department of Mathematics, The University of Burdwan, West Bengal, India during March 06-07, 2013.
5. Attended in International Conference on Differential Geometry and its applications and informatics besides, Department of Pure Mathematics, University of Calcutta, and December 17-21, 2012.
6. Attended in a National Seminar on Mathematics & Applications (NSMA-2012) at the Department of Mathematics, The University of Burdwan, West Bengal, and India during March 28-29, 2012.
7. Attended in a National Seminar on Mathematics & Applications (NSMA-2011) at the Department of Mathematics, The University of Burdwan, West Bengal, India during February 24-25, 2011.
8. Only attended in a UGC sponsored State Level seminar on Uncertainty: aMathematical Approach” at M.U.C Women’s College Burdwan, West Bengal, India on September, 2009.
9. Attended in National Seminar on Recent Trends in Mathematics and Applications at Department of Mathematics, Burdwan University West Bengal, India on February 18-20, 2009 (Acted as a Chairman of Organizing Committee) and chaired in one of the technical sessions.
10. Attended in a UGC sponsored State Level seminar on” Uncertainty: a Mathematical Approach” at M.U.C women’s college Burdwan, West Bengal, India on September, 2008 and chaired in an inaugural session and chaired in one of the Technical session.

**Additional Information:**

- (i) Acted as a **Chairman** in Technical sessions of different National Seminars and International Seminars/conferences in the Department of Mathematics, The University of Burdwan and Kazi Nazrul University, Asansol since 2014.
- (ii) **Delivered** several invited talks in Refresher Courses in Mathematics/Mathematical Sciences in Academic Staff Colleges (Presently named as HRDC Centres) of different Universities *viz.* The University of Burdwan, North Bengal University, Calcutta University, Ranchi University, Gauhati University since 2006 and till to date 2024.
- (iii) **Delivered** several invited talks in orientation course/Faculty Development Programmes in Academic Staff Colleges (Previously named as HRDC Centre, Presently known as Malaviya Mission Teacher Training Centre) of different Universities *viz.* The University of Burdwan, since 2006 and till to date 2024.
- (iv) Acted as an **Adjudicator** in different Refresher Courses /Orientation Courses /Faculty Development Programmes at Academic Staff College, (Presently named as HRDC Centre ) The University of Burdwan, and West Bengal, India since 2006 and till to date 2024.
- (v) **Delivered lectures** as a Guest teacher in the Department of Mathematics, University of Gourbanga , Malda during 2016-2018
- (vi) Joined as a **Guest Faculty of MCA Department**, The University of Budwan (2000 -2006 & also in 2014).
- (vii) Acted as a **Joint Coordinator** for the centre of NET/SET studies, Burdwan University, West Bengal, India during March 14, 2011-March 31, 2012.
- (viii) Involved as a **member** of the **Governing Body**, T.D.B College, Raniganj (affiliated to The University of Burdwan), West Bengal, India, during 2008-2011.
- (ix) Acted as a **Chairman** in Post Graduate Board of Studies in Mathematics in the University of Burdwan during June 2008- June 2010.
- (x) Acted as a **Chairman** in Under Graduate Board of Studies in Mathematics in The University of Burdwan during June 2008- June 2010.
- (xi) Acted as a **Joint convener** in Sports Committee of Burdwan University Golden Jubilee Celebration 2009-2010
- (xii) Acted as a **Chairman** in purchase Committee of PG Halls and Hostels of the University of Burdwan from 2011 to 2013 also being attached as a member of purchase Committee of PG Halls and Hostels of the University of Burdwan since 2014.
- (xiii) **Member** as Post Graduate Board of Mathematics in The University of Burdwan since 2006.
- (xiv) Acted as a **Counsellor** of Post Graduate Teaching in Mathematics at Netaji Subhas Open University, West Bengal, India during 2006-2010.
- (xv) Acted as a **Counsellor** of under Graduate Teaching in Mathematics at Indira Gandhi National Open University (IGNOU) at Asansol B.B. College Study centre, West Bengal, India during 2000-2004.

- (xvi) Participated as a **member** of the University **visiting team/inspection team** for the inspection of different college under the University of Burdwan during 2007-2011.
- (xvii) Acted as a **member** in different academic expert committee/selection committee/academic committee in Mathematics since 1998.
- (xviii) **Programme Officer**, National Service Scheme (NSS) , Raniganj Girls"College,June,2002 affiliated to The University of Burdwan, West Bengal, India.
- (xix) Joined as a **Management Trainee (Engineering)** in West Bengal state Electricity Board on 12<sup>th</sup> July,1994 and continued up to 11<sup>th</sup> July,1995
- (xx) Joined as an **Assistant Engineer (U)** in West Bengal State Electricity Board on 12<sup>th</sup> July, 1995 and worked up to 15<sup>th</sup> November, 1997.

  
(Mantu Saha)