

BIO DATA



1. Name of the applicant: Dr. PINAKI MAJUMDAR
2. DOB: 24/06/1979
3. Sex: Male
4. Nationality: Indian
5. Address for correspondence: Department of Mathematics,
Bolpur College, Bolpur, West-Bengal, Pin-731204, INDIA
E-mail: pmajumdar2@rediffmail.com
6. Present Designation: Associate Professor, Department of
Mathematics, Bolpur College,
7. Academic Qualification: Ph.D. in Mathematics
8. Ph.D.:

(a) Title of the thesis	A study of several types of sets expressing uncertainty and some mathematical structures on them
(b) University/Institute	Dept. of Mathematics, Institute of Science, Visva-Bharati, Santiniketan
(c) Year of Obtaining PhD degree	2013
(d) Area of research Work	Fuzzy Mathematics
(e) PhD Course Work	Done

9. (a) Work experience:

Post Held	Name of the employer	Nature of Assignment	Period	Exp. In Years	Remark
1. Associate Prof. of Mathematics	Bolpur College	Permanent	From 22/01/2021 till date		Present Service
2. Associate Prof. of Mathematics	M.U.C Women's College, Burdwan (W.B)	Permanent	From 23/02/2019 to 21/01/2021	1 year 11 months	Past service
3. Assistant Prof. of Mathematics	M.U.C Women's College, Burdwan (W.B)	Permanent	From 23/2/2005 To 22/2/2019	14 Yrs.	Past service
4. Lecturer of Mathematics	Bengal College of Engineering & Technology, Durgapur (W.B.)	Permanent	From 07/07/2003 to 22/02/2005	1 year 8 months (approx.)	Past service

9. (b) Post-Graduate Teaching Experience:

(1) Working as a visiting faculty in Mathematics PG department of Biswa Bangla Biswabidyalaya since March, 2023. Currently acting as the Departmental Co-coordinator of Mathematics PG Department of BBB.

(2) Worked as a guest faculty of Mathematics at Integrated Science education and research centre (ISERC), Visva-Bharati during 2010-2017.

(3) Taken classes of M.Sc. Mathematics students at DDE- University of Burdwan during 2011-2017.

(4) Taken classes of M.Sc. Mathematics students at Netaji Open University (Burdwan study centre) several times.

(5) Working as a guest faculty of Mathematics at Vidya -Bhavana, Visva-Bharati during 2008-2010

10. Research Projects Completed:

(i) Completed an University Grants Commission (India) funded MRP (S) of Rs. 1,01,500/- on "Fuzzy Inner Product and Intuitionistic Fuzzy Inner Product Spaces" during 2010-2012.

(ii) Completed an research project from University Grants Commission (India) -MRP (S) scheme on "Neutrosophic Sets and its Applications" of Rs. 1,93,000/-during 2013-2015.

11. Publications:

(a) Published Research papers:

- (1) MADM technique under QSVN environment using different prioritized operator, *Neutrosophic Sets and Systems*, 48(1), pp 443-456, 2022
- (2) Vaccine distribution technique under QSVN environment using different aggregation operator, *Neutrosophic Sets and Systems*, 48(1), pp 443-457, 2022
- (3) Quadripartitioned single valued neutrosophic rough sets and their applications in decision making, *TWMS J. App. and Eng. Math.* V.12, N.2, 2022, pp. 619-630, 2022
- (4) Green bus model through QSVN Z-numbers., *Nonlinear Studies*,29(1) pp 45-59, 2022
- (5) A New Approach Towards Intuitionistic Fuzzy Multisets, *International Journal of Fuzzy System Applications (IJFSA)* 11(1) pp 1-10, 2022
- (6) A multi-criteria group decision making algorithm with quadripartitioned neutrosophic weighted aggregation operators using quadripartitioned neutrosophic numbers in IPQSVNSS environment, *Neutrosophic Sets and Systems*, 48(1), pp 443-456, 2022
- (7) An Approach to Similarity Measure between Neutrosophic Soft Sets, *Neutrosophic Sets and Systems*, 30, pp182-190. 2022
- (8) Bipolar quadripartitioned single valued neutrosophic rough sets, *Neutrosophic sets & Systems*, 38(1),244-257, 2020
- (9) Bipolar quadripartitioned single valued neutrosophic sets, *Proyecciones (Antofagasta)*, 39(6), 1597-1614, 2020
- (10) A Noble Encryption method using triangular numbers, *Int. Jr. of Emergng tech. & Adv. engineering*, 10(7), 32-36, 2020
- (11) On New Centroid Based Techniques for Solving Fuzzy Linear Programming Problems, *International Journal of Fuzzy Logic and Intelligent Systems*, 2019
- (12) A multi-criteria group decision making algorithm with quadripartitioned neutrosophic weighted aggregation operators using quadripartitioned neutrosophic numbers in IPQSVNSS environment, *Soft Computing*, 2019
- (13) An approach to similarity measure between neutrosophic soft sets, *Neutrosophic Sets and Systems*, 2019
- (14) Neutrosophic Soft Digraph, *Neutrosophic Graph Theory and Algorithms*, 2020
- (15) Similarity Measures in Neutrosophic Sets-I & II, *Fuzzy Multi-criteria Decision-Making Using ...*, Springer, 2019
- (16) SOFT MULTI-DIGRAPHS, *Advance and Innovative Research*, 2018

- (17) Properties and applications of soft digraphs, *Malaya Journal of Matematik (MJM)*, 2019
- (18) On Single Valued Neutrosophic Signed Digraph and its Applications, *Neutrosophic Sets and Systems*, 2018
- (19) Entropy based Single Valued Neutrosophic Digraph and its applications, *Neutrosophic Sets and Systems*, 2018
- (20) P. Majumdar, On New Measures of Uncertainty for Neutrosophic Sets , *Neutrosophic Sets & Systems*, 17, 50-58 (2017)
- (21) P. Majumdar (with K. Sinha), Soft Digraphs: Operations & Applications, *Annals of Fuzzy Mathematics and Informatics (Korea)*, 11(1), 113-123(2017)
- (22) P. Majumdar (with R. Chatterjee, S. K. Samanta) Interval-valued Possibility Quadripartitioned single valued neutrosophic soft sets and some uncertainty based measures on them, *Neutrosophic sets & Systems*, 14, 35-43 (2016)
- (23) P. Majumdar (with R. Chatterjee, S. K. Samanta), On some similarity measures and entropy on quadripartitioned single valued neutrosophic sets, *Journal of Intelligent and Fuzzy Systems(IOS press)*, 30(4), 2475-2485 (2016) (DOI: 10.3233/IFS-152017).
- (24) P. Majumdar (with R. Chatterjee, S. K. Samanta), Type 2 soft sets, *Journal of Intelligent and Fuzzy Systems (IOS press)*, 29, 885-898 (2015) (DOI: 10.3233/IFS-151619).
- (25) P. Majumdar (with R. Chatterjee, S. K. Samanta), Single valued neutrosophic multisets, *Annals of Fuzzy Mathematics and Informatics (Korea)*, 10(3),499-514 (2015).
- (26) P. Majumdar, On Type II Fuzzy parameterized soft sets, *Journal of Arts, Science & Teaching*, 1(1),63-78(2015)
- (27) P. Majumdar (with Sujaoy Das, S.K. Samanta), On soft linear spaces and soft normed linear spaces, *Annals of Fuzzy Mathematics and Informatics (Korea)*, 9(1), 91-109 (2015)
- (28) P. Majumdar (with H. Hazra, S.K. Samanta), Soft Proximity, *Annals of Fuzzy Mathematics and Informatics (Korea)*, 7(6), 867-877 (2014)
- (29) P. Majumdar (with H. Hazra, S.K. Samanta), Proximity of Soft sets, *Annals of Fuzzy Mathematics and Informatics (Korea)*, 8(1), 113-123(2014)
- (30) P. Majumdar (with S. Broumi, M. Dhar & F. Smarandache), New operations on Intuitionistic Fuzzy Soft sets, *I.J. Information Engineering and Electronic Business*, 6(2), 47-52(2014)
- (31) P. Majumdar (with S. Broumi, F. Smarandache), New operations on Intuitionistic Fuzzy Soft sets based on First Zadeh's logical operators, *Journal of new results in science*, 4, 71-81(2014)

- (32) P. Majumdar (with S. Broumi, F. Smarandache), New operations on Intuitionistic Fuzzy Soft sets based on Second Zadeh's logical operators, I.J. Information Engineering and Electronic Business, 1, 25-31(2014)
- (33) P. Majumdar (with S.K. Samanta), On similarity and entropy of Neutrosophic sets, Journal of Intelligent and Fuzzy Systems (IOS press), 26 (2013) 1245-1252
- (34) P. Majumdar (with S.K. Samanta), Decision Making based on similarity measure of vague soft sets, Journal of Intelligent and Fuzzy Systems (IOS press), 24, pp 637-646 (2013)
- (35) P. Majumdar (with S.K. Samanta), Softness of a soft set: Soft set entropy, Annals of Fuzzy Mathematics and Informatics (Korea) 6(1) pp 59-68 (2013)
- (36) P. Majumdar (with S.K. Samanta), On Intuitionistic Fuzzy Continuity and Boundedness, The Journal of Fuzzy Mathematics (USA), 21(3) (2013) 531-542.
- (37) P. Majumdar (with Sk. Nazmul, S.K. Samanta), On Multiset and multigroups, Annals of Fuzzy Mathematics and Informatics (Korea), 6(3) (2013) 643-656.
- (38) P. Majumdar, Soft Multisets, The Journal of Mathematical and Computational Science (SCI press UK), Vol. 2, No. 6, pp 1700-1711(2012)
- (39) P. Majumdar (with H. Hazra, S.K. Samanta), Soft Topology, Fuzzy Information & Engineering (Springer), Vol. 3, No. 1, pp 105-115(2012).
- (40) P. Majumdar (with S.K. Samanta), A Generalised Fuzzy Soft Set Based Student Ranking System, International Journal of Advances in Soft Computing and its Applications, Vol. 3, No. 3, pp 1-10(2011).
- (41) P. Majumdar (with S.K. Samanta), On Similarity measure of Fuzzy Soft Sets, International Journal of Advances in Soft Computing and its Applications (Malaysia), Vol. 3, No. 2, pp 1-8(2011).
- (42) P. Majumdar (with S.K. Samanta), Intuitionistic Fuzzy Inner Product Spaces, The Journal of Fuzzy Mathematics (USA), Vol.18, No. 1, pp 115-124(2011).
- (43) P. Majumdar (with S.K. Samanta), On Soft Mappings, Computer and Mathematics with Application (Elsevier), Vol. 60, No 9, pp 2666- 2672 (2010).
- (44) P. Majumdar (with S.K. Samanta), Generalized fuzzy soft set, Computer and Mathematics with Application (Elsevier), Vol. 59, No. 4, pp 1425-1432 (2010).
- (45) P. Majumdar, On Distance based Similarity Measure between Intuitionistic Fuzzy Soft Sets, Anusandhan, Vol. 12, No. 22, pp 41-50 (2010).

(46) P. Majumdar (with S.K. Samanta), On Fuzzy Inner Product Spaces, The Journal of Fuzzy Mathematics, Vol. 16, No. 2, pp 377-392 (2008).

(47) P. Majumdar (with S.K. Samanta), Similarity measure of soft sets, New Mathematics and Natural Computation (World Scientific), Vol. 4, No.1, pp 1-12 (2008).

(b) Books Chapters:

(1) Written a chapter titled: ***Soft Sets: Theory and Applications*** in Global Trends in Intelligent Computing Research and Development, B.K. Tripathy and D.P. Acharjya, editors., IGI Global, USA (December, 2013), ISBN 978-1-4666-4936-1 (hardcover) -- ISBN 978-1-4666-4937-8 (ebook) -- ISBN 978-1-4666-4938-5 (print & perpetual access)

(2) Jointly written two chapters in the book titled: Neutrosophic Theory and its Applications, Collected Papers, Vol. I, Edited by Florentin Smarandache, Europa Nova Brussels, 2014 (ISBN -978-1-59973-320-3)

(3) Written a chapter titled ***“Neutrosophic Sets and its applications to decision making”*** in the book Computational Intelligence for Big Data Analysis: Frontier Advances & Applications, Springer- Verlag/Heidelberg (Studies in Adaptation, learning, and Optimization Series) (2015), Editors- D.P. Acharjee, Satchidananda Dehuri, Dr. Sugata Sanyal, (ISBN 978-3-319-16597-4).

(4) Written a chapter titled: ***Some hybrid soft sets and their applications in decision making*** in Generalized and Hybrid set structures and applications for soft computing, Sunil Jacob John, editos., IGI Global, USA (2016) (ISSN: 2327-0411).

(5) Similarity Measures in Neutrosophic Sets I & II, Fuzzy Multi-criteria Decision –Making using Neutrosophic Sets, 249-294, 295-325, Springer, 2019

(6) Neutrosophic Soft Digraph, Neutrosophic Graph Theory & Algorithms, IGI Global, 2020
ISBN13: 9781799813132

(7) QSVN Soft Sets and Their Applications in Student Classification, in Handbook of Research on the Applications of Neutrosophic Sets Theory and Their Extensions in Education, IGI Global USA, ISBN 9781668478363, **2023** pages 279-293

(c) No. of Seminar/Conference attended (Invited talk / Paper presentation only):

(1) Participated and presented an invited talk in the national seminar on Fuzzy set theory and applications (FSTA 2017) held at the department of Mathematics, NIT Durgapur, India during November 30 –December 1, 2017.

(2) Participated and presented a paper in the second regional science and technology congress (Western Region), held at the Univ. of Burdwan, India during November 16-17, 2017.

(3) Participated and presented a paper in the international Science Seminar held at Burdwan Raj College, Univ. of Burdwan, India on October 10, 2017.

- (4) Participated and presented a paper in the international conference on Recent Trends in Mathematical Sciences & Applications (ICRTMSA-2016) held at the department of Mathematics, Univ. of Burdwan, India during February 09-11, 2016.
- (5) Participated and presented a paper in the national seminar on Recent Developments in Mathematics and its applications (NSRDMA-2016) held at the department of Mathematics, Univ. of Kalyani, India during January 21-22, 2016.
- (6) Participated and presented a paper in the international conference on Recent development in Mathematical sciences & their applications (CNDAPBS-2014) held at the Darjeeling Govt. college, Darjeeling, India during November 1-3, 2014.
- (7) Participated and presented a paper in the 3rd international conference on Frontiers of Mathematics & Applications (ICFMA-2014) held at the department of Mathematics, Univ. of Burdwan, India during January 29-31, 2014.
- (8) Participated and presented a paper in the national seminar on Mathematics for Nonlinear Systems held at the department of Mathematics, Visva-Bharati, India during March 17-18, 2013.
- (9) Participated and presented a paper in the national seminar on Advances in Mathematics & Applications (AMA-2013) held at the department of Mathematics, Univ. of Burdwan, India during March 6-7, 2013.
- (10) Participated and presented a paper in the national seminar on Non-linear aspects of analysis & Algebra (NAAA-2012) held at the department of Mathematics, Visva-Bharati, India during March 24-25, 2012.
- (11) Participated and presented a paper in the national seminar on Mathematics & Applications (NSMA-2012) held at the department of Mathematics, Univ. of Burdwan, India during March 28-29, 2012.
- (12) Participated and presented a paper in the national seminar on Analysis of Nonlinear systems (ANS-2011) held at the department of Mathematics, Visva-Bharati, India during March 26-27, 2011.
- (13) Participated and presented a paper in the national seminar on Mathematics & Applications (NSMA-2011) held at the department of Mathematics, Univ. of Burdwan, India during February 24-25, 2011.
- (14) Participated and presented a paper in the international conference on Recent development in Mathematical sciences & their applications (ICRDMSA-2010) held at the Calcutta Mathematical Society, Kolkata, India during December 9-10, 2010.
- (15) Participated and presented a paper in the national seminar on Mathematics Phobia: Its genesis & Remedies (MPGR-2010) held at the department of Mathematics, Visva-Bharati, India during February 13-15, 2010.
- (16) Participated and presented a paper in the international conference on Recent advances in Mathematics & Applications (ICRAMA-2010) held at the department of Mathematics, Univ. of Burdwan, India during January 13-15, 2010.
- (17) Participated and presented a paper in the national conference on Emerging areas in Mathematics & Applications (NSEAMA-2009) held at the department of Mathematics, Univ. of Burdwan, India during February 18-20, 2009.

(18) Participated and presented a paper in the 16th West Bengal State Science & Technology Congress held at the Univ. of Burdwan, India during February 28- March 1, 2009.

(19) Participated and presented a paper in the international conference on Frontier of mathematics & Applications held at the department of Mathematics, Univ. of Burdwan, India during January 16-18, 2008.

(20) Participated and presented a paper in the international conference on Soft Computing & Intelligent Systems held at Jabalpur Engineering College, Jabalpur (M.P.) , India during December 27-29, 2007.

(21) Participated and presented a paper in the international conference on Fuzzy Mathematics & its Applications held at New Arts & Science College, Ahmednagar (M.S.) , India during January 27-29, 2007.

(22) Participated and presented a paper in the national conference on Uncertainty: A Mathematical Approach (UAMA-2006) held at M.U.C Women's College, Burdwan, India during September 7-8, 2006.

(23) Participated and presented a paper in the UGC Sponsored state level seminar on Need based Mathematics as on today (SNBMTOT-2006) held at Raniganj Girl's College, India during March 9-10, 2006.

12(a) Design of new curricula/ professional update:

(i) Participated in the Workshop on Review of Engineering Degree Curriculum of Mathematics held at NITTTR, Kolkata, India from 26-30 July, 2004, jointly organized by NITTTR & WBUT.

(ii) Completed a UGC sponsored Refresher Course in Mathematics at Academic Staff College at Univ. of Burdwan, India during 17/2/2007 to 9/3/2007

(iii) Completed a UGC sponsored Orientation Course at Academic Staff College at Univ. of Burdwan, India during 4/3/2008 to 31/3/2008.

(iv) Completed a UGC sponsored Refresher Course in History of Science and Technology at Academic Staff College at Univ. of Burdwan, India during 30/1/2015 to 19/2/2015

(v) Completed a AICTE sponsored Short term Course on Pattern Recognition & its Applications at PDPM IIIT, Jabalpur(MP), India during 12/10/2017 to 16/10/2017

(b) Professional Achievements:

(i) Included in the list of worlds AD World Scientific Index 2023 of world's top scientists.

(i) Biography included in MARQUIS WHOS-WHO in SCIENCE, 2012 Edition.

(ii) Life member of INDIAN MATHEMATICAL SOCIETY.

(iii) **Reviewer** of several international reputed journals like IEEE Transactions on Fuzzy Systems, CAMWA (Elsevier), NM&NC (World Scientific), Mathematical Sciences (Hindwai), AFMI(Korea), Jr. of intelligent & Fuzzy systems(IOS) etc.

(iv) Acted as the convener of UGC sponsored second national conference on Uncertainty: A Mathematical Approach (UAMA-2008) held at M.U.C Women's College, Burdwan, India, during 23-24 September, 2008.

(v) Acted as the convener of DST sponsored third national conference on Uncertainty: A Mathematical Approach(UAMA-2009) held at M.U.C Women's College, Burdwan, India, on 27 February, 2009.

(vi) Acted as the convener of a national conference on Current trends in Indian Mathematics (CTIM-2012) held at M.U.C Women's College, Burdwan, India, on 22 December, 2012.

(vii) Former Editor-in-Chief of Journal of Arts Science & Teaching (ISSN 2395-4353).

(viii) **Over 2500 citations in Google Scholar (H-Index 16, I-10 Index 21).**

(ix) Acted as the convener of a national conference on Current trends in Fuzzy Mathematics & its applications (CTFMA-2016) held at M.U.C Women's College, Burdwan, India, on 7th December, 2016.

(x) **Member of Editorial & Review board** of International Journal of Information Engineering and Electronic Business (IJIEEB), Modern Education and Computer Science Press (MECS).

(xi) Conferred an **honorary membership** of Neutrosophic Science International Association, USA in 2016.

(xii) Member of UG Board of Studies for Maths. In Univ. of Burdwan since 2023.

(xiii) Acted as Head Examiner, Paper Setter, Examiner, Moderator of Burdwan Univ, Visva-Bharati, Kazi Nazrul Univ, NSOU, BBB etc for several times.

(c) Academic Achievements:

(i) Stood first class first in B.Sc. Mathematics (Honours) course in the University.

(ii) Stood first class first in M.Sc. Mathematics course in the University.

(iii) Received National Scholarship for the result in B.Sc.

(iv) Received University Merit Scholarships.

(v) Qualified in UGC-CSIR NET examination twice (In December 2002 & June 2004)

(d) Research Achievements:

(i) Received Best Research Paper award in Mathematical Sciences in XII West Bengal regional Science & technology Congress in 2010 & 2017.

(ii) Received Second prize in oral presentation in Mathematical Sciences in Second Regional Science and Technology Congress (western region) in 2017 held at Univ. of Burdwan, India.

(e) Research Guidance and Thesis Evaluation:

- i) Acting as Co-guide for Ph.D at Visva-Bharati. One student (Miss Rajashee Chatterjee) has been awarded with Ph.D.
- ii) Evaluated Ph.D. thesis of one candidate under University of Chennai.
- iii) One student is doing post-doctoral research under my supervision.

(f) Foreign Collaboration:

I have collaborated with Prof. F. Smarandache, Univ. of new Maxico, USA and Dr. S. Broumi, Univ. Al Hassan Ahamedia, and that have produced 4 research papers.