

## BIO - DATA

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**Date of birth** : January 16, 1958

### Educational qualifications:

Examination Passed	Institution/ University	Year of Passing	Subjects Taken	Class/ Division	Remarks
Ph.D.	IIT, Kharagpur	1987	Operations Research	-	-
PG Diploma	IIT, Kharagpur	1982	Mathematics & Ops. Res.	No class/Div. is given by Inst.	-
M.Sc.	Berhampur University	1980	Mathematics	1 <sup>st</sup>	6th rank in University
B.Sc.(Hon)	Behrampur University	1978	Maths (Hons), Phys & Chem.	1st	3rd rank in University

### Work Experience:

Organization	Designation	No. of years served	Total Experience
Indian Institute of Management, Lucknow	Professor	August 2001 – till Date	
Indian Institute of Management , Lucknow	Associate Professor*	Feb'95-Aug, 2001.	6 ½ years
Tata Research Development & Design Center, (R&D of TCS) Pune	Member of Technical Staff	July '92 - Feb '95	2 years, 8 months
Xavier Institute of Management, Bhubaneswar	Associate Professor (Comp. & Systems)	May '88 - July '92	4 years, 2 months
CFTRI (A CSIR Organization) Mysore	Scientist	April '87 - May '88	1 year, 1 month

\* Joined as visiting faculty in Feb 95 which was regularized in Nov 1995

### Academic Administration

1. Member Task Force, Dept. of Public Enterprise, Govt. of India
2. Member, BOG, Haryana School of Business, GJU Hissar.
3. Steering Committee Member, UP Power Corporation
4. Chairman, Computer Advisory Committee, Nov 2005 – Nov 2007
5. Chairman, Admissions Committee and Co-ordinator of extension of CAT facility to 26 Non-IIM Institutions (1998-2001).
6. Chairman, Decision Science Group , ( May2001- July 2003)
7. Chairman, Library Stock Verification Committee, (1995).
8. Member, PGP Executive Committee (1995-97).
9. Member, Library Advisory Committee (1995-97).
10. Member, Admissions Committee (1995- June 2003).

## Publications:

1. S.Shukla, B.K.Mohanty and A.Kumar, Strategizing sustainability in e-commerce channels for additive manufacturing using value-focused thinking and fuzzy cognitive maps, *Industrial Management and Data Systems*, 118(2018), pp 390-411.
2. A fuzzy approach to prioritize DEA ranked association rules, *Int. J. of Business intelligence and data mining*, 2018( Accepted).
3. Mahima Gupta and B.K.Mohanty, Finding numerical compensation in multiple criteria Decision Making problems under fuzzy environment, *International Journal of Systems Science*, 48 (2017), 1301-1310.
4. Mahima Gupta and B.K. Mohanty, Attribute Partitioning in Multiple Attribute Decision Making Problems for a Decision with a Purpose- A Fuzzy Approach *J Multi-Criteria Decision Analysis*, 123 (2016), pp 160-170
5. Mahima Gupta and B.K. Mohanty, An algorithmic approach to group decision making problems under fuzzy and dynamic environment, *Expert Systems with Applications* 55(2016) pp 118- 132.
6. Mahima Gupta and B.K. Mohanty, Multi-stage Multi-Objective production planning using linguistic and numeric data - A fuzzy integer programming model, *Computers and Industrial Engineering*, 87 ( 2015) pp 454- 464.
7. B.K.Mohanty and Mahima Gupta, Product Selection in E-commerce under Fuzzy environment: A MADM Game Theoretic Model, ***International Journal of Game Theory Review*, 17 (2015) pp 1540008-1-1540008-14.**
8. A.Mishra, BK Mohanty and SB Das, Effect of consumer design perception on brand equity, *J of Management Research* 15(2015) pp 43-59.
9. A. Chaudhry, B.K. Mohanty and K.N. Singh, Supply Chain risk assessment during new product development : a group decision making approach using numeric and linguistic data , ***Int. J. Production Research***, 51(2013) pp 2790- 2804
10. B.K.Mohanty and K. Passi, An agent based e-commerce system that reacts to buyers' feedbacks- A Fuzzy approach, ***International Journal of Approximate Reasoning***, 51(2010) pp 948-963
11. B.K.Mohanty, A preference structure on efficient points in a multiple criteria decision making problem – A Fuzzy approach, ***The Journal of Fuzzy Mathematics***, 18(2010) pp 703-712
12. B.K.Mohanty and B. Aouni, Product Selection in Internet Business- A Fuzzy Approach, ***International Transactions in Operations Research***, 17(2010) 317-331.
13. B.K. Mohanty, Fuzzy logic in e- commerce, II(2008) pp 1-5
14. N. Karacapilidis and B.K.Mohanty, On the development e-business strategies: an integrated approach of Fuzzy logic and Game theoretic approach, ***Int. J. of Electronic Business***, 4(2006), pp 483-499.
15. B.K.Mohanty, A Multi-objective decision making model for e-business- A Fuzzy approach, ***International J. Lateral Computing***, 1(2005),pp 37 – 49.
16. B.K.Mohanty and B. Bhasker, Product classification in the Internet Business – A Fuzzy Approach, ***Decision Support Systems***, 38(2005), 611-61
17. B.K.Mohanty, Assigning weights to Multiple Criteria- A Fuzzy Approach, ***J. of Fuzzy Mathematics***, 6 (1998), pp 209-222.
18. B.K.Mohanty, A Game Theoretic Procedure for Ranking Efficient Points of a Fuzzy Multi-objective Programming Problem, ***The Journal of Fuzzy Mathematics***, 3 (1995) pp 529 - 541
19. K.K. Agarwal, Pwan Kumar and B.K. Mohanty, Estimating Operational Profile in Software Reliability-A Fuzzy approach, ***Journal of Intelligent and Fuzzy Systems***, 1, (1994), pp 307-311.

20. B.K.Mohanty and TAS Vijayaraghavan, A multi-objective programming problem and its equivalent goal programming problem and its equivalent goal programming problem with appropriate priorities and aspiration levels - A fuzzy approach, **Computer & Operations Research**, 22 (1995) pp 771 – 778
21. B.K. Mohanty, A procedure for measuring uncertainties due to lack of information in a Fuzzy game theory problem, **International Journal of Systems Science**, 25 (1994) pp 2309 – 2317
22. B.K.Mohanty and N. Singh, Fuzzy Relation Equations in Analytical Hierarchy Process, **Fuzzy Sets and Systems**, 63, (1994), pp 11-19.
23. B.K.Mohanty, Fuzzy optimization systems - Critical issues, **Indian Journal of Transport Management**, 18, (1994), pp 215-221.
24. N. Singh and B.K. Mohanty, A Fuzzy approach to multi-objective routing problem with applications to process planning in manufacturing systems, **International Journal of Production Research**, 29, (1991), pp 1161-1170.
25. JR Rao, RN Tiwari and B.K. Mohanty, A method for finding Numerical Compensation in a Fuzzy Multicriteria Decision Problem, **Fuzzy Sets and Systems**, 25, (1988), pp 33-41.
26. JR Rao, RN Tiwari and B.K. Mohanty, A Preference Structure on Alternatives and Judges in a group Decision Problem -A Fuzzy Approach, **Int. Journal of System Science**, 19, (1988), pp 1795-1811.
27. JR Rao, RN Tiwari and B.K. Mohanty, A Preference Structure on aspiration levels in Goal Programming Problem - A Fuzzy approach, **Fuzzy Sets and Systems**, 25, (1988), pp 175-182.

#### **Book Chapters and International Conference Proceedings**

1. PROMETHEE: A Decision Support Tool for E-Business, in edited volume Fuzzy Logic and its applications in Technology and Management, **Narosa Publications, 2006**
2. Making E-Business customer focused : A Fuzzy approach, ,in the book Managing World Wide Operations & Communications with Information Technology, **Idea Group Inc, 2007**
3. Fuzzy logic in e-commerce: some problems and suggested solutions, in the book Enterprise Information Systems Technology, **Macmillan India Publications, 2008.**
4. E-Business: a multiple attribute decision making problem under fuzzy environment, in the book Innovations in Information Systems and Technology **Macmillan India Publications, 2009**
5. “‘WEB BASED INFORMATION FOR PRODUCT RANKING IN E- BUSINESS-A FUZZY APPROACH’, in the Proceedings of 8<sup>th</sup> International conference on Electronic Commerce, Association of Computing Machinery Publications, New York , 2006.
6. Tranquillity and Anxiety in e-business: A fuzzy approach” in the Proceedings of International Conference on “Advanced Computer Theory and Engineering “, **IEEE Computer Society Press, 2008.**
7. A Multi Attribute Value Theory approach to rank association rules for leveraging better business decision making, S Shukla, BK Mohanty and A Kumar, *Procedia Computer Science* 122, 1031-1038

#### **Conferences:**

1. Numerical Compensation in Fuzzy MCDM Problems - Presented at the National Convention of Operation Research Society of India, held at **TISCO Jamshedpur** during December 1985

2. Multi judges in Fuzzy MCDM problem - Presented at the National Symposium of applications of Mathematics to Science, Technology and Society held at **Calcutta University** during February 1986.
3. Assigning weights to Multiple Criteria under Fuzzy environment - Presented at the National Convention of Applications of Mathematics to Science, Technology and Society held at **Calcutta University** during February 1987.
4. Delivered guest lecture on "Various applications of fuzzy sets with special reference to the theory of Possibility and Necessity", at the National Conference on Young Scientists Brainstorm, held at **S.V.University Tirupati**, October 1987.
5. A fuzzy Measure for selecting an efficient solution in Multicriteria Decision Problem - Presented at the International Conference on Mathematical Modelling in Science and Technology held at **IIT Madras** during August 1988.
6. Fuzzy concepts in Statistics, Computers and Operations Research - Presented at the National Convention of Indian Mathematical Society held at the **University of Pune** during December 1988.
7. Fuzzy Game Theory - Presented at the International Conference at Game Theory and Economics Applications held at **Indian Statistical Institute, New Delhi** during December 1990.
8. Fuzzy Statistics - Presented at the National Convention of Orissa Mathematical Society held at **Utkal University, Bhubaneswar** during February 1992.
9. Measurement for lacking information in Fuzzy Game Theory Problems - Presented at the National Convention of Operational Research Society of India held at **Indian Institute of Management, Ahmedabad** during December 1992.
10. Fuzzy Logic in Ranking Machines and Machinery Components According to their Priority for Maintenance - Presented at the National Convention of American Society for Mechanical Engineers, held at **Corporate R & D, BHEL, Hyderabad**, during May 1995.
11. Presented a paper entitled "Multicriteria Decision Making under Fuzzy Environment at the Annual Convention of Operational Research Society of India, **IIT Bombay**, December 22 - 24, 1996.
12. Presented a paper entitled "Knowledge Combination under Fuzzy Environment", International Conference on Operations and Quantitative Management, held at **Jaipur** during January 3-8, 1997.
13. Presented a paper entitled "Fuzzy Concepts in Managerial Decision Making" at the National Conference on Mathematical Analysis and Related Topics, **Berhampur University, Orissa**, during July 16- 18, 1997.
14. Presented a paper entitled "Multicriteria Decision Making- A Fuzzy Linguistic Quantifier Approach "at International Conference on Recent Developments in Mathematical Analysis with Applications to Industrial Problems, **Banaras Hindu University**, during March 2-5, 1998.
15. Presented a paper "Product Classification in Internet Business – A Fuzzy approach" held at the International Conference on Information Technology, **Institute of Management and Information Technology, Cuttack**, Nov 2001.
16. Presented a paper entitled " Product selection in the Internet Business – A fuzzy Approach "at the Canadian Operational Research Society -02 conference held at **University of Toronto** during June 3 – 5, 2002

17. As an invited speaker presented a paper entitled “Fuzzy Applications in Internet Business”, International conference on “Analysis and Discrete Structure “, **IIT Kharagpur**, December 22-24, 2002
18. As an invited speaker presented a paper entitled “Fuzzy Optimization- A methodology for Internet Business” International conference on” Operational Research and Development held at **Anna University, Chennai**, during December 27 –30, 2002
19. As an invited speaker presented a paper entitled “Supply Chain Management under Fuzzy Environment” at the “National Conference on Recent Trends in Mechanical Engineering” held at **Thapar Institute of Eng. and Tech, PATIALA**, during Oct 31- Nov1, 2003
20. Presented a paper entitled “A Preference Structure on Efficient Points in Multi-Criteria Decision Making Problem – A Fuzzy Approach” at National Conference on Recent Trends in Computational Mathematics, held at **Gandhigram Rural Institute, Gandhigram**, during March 18-19, 2004.
21. Presented a paper entitled “Internet Business under Fuzzy Environment “, at the National Conference on Information Technology, Operations Research and Computing, held at **Dr.B.R. Ambedkar University, Agra**, April 10 – 12, 2004
22. Presented a paper entitled “PROMETHEE: A Decision Support Tool for E-Business”, at the National Conference on Fuzzy Logic and its Applications in Technology and Management, held at **IIT Kharagpur** during May 21 – 22, 2004.
23. Presented a paper entitled “E-Business under fuzzy environment: A multi-attribute decision making model’ at the 17<sup>th</sup> International Conference on Multiple Criteria Decision Making, conducted by **Simon Fraser University** held at **Whistler, B.C. Canada** during August 6-11 2004.
24. Presented a paper entitled “A Multi-objective Decision Making Model for E-Business –A Fuzzy Approach” at the Ist World Congress on Lateral Computing, held at **Indian Institute of Science, Bangalore**, December 17–19, 2004.
25. Fuzzy Logic and multiple criteria decision making an integrated approach for e-business Solutions, presented as a guest speaker at the National Seminar on “Emerging Issues in Management and Information Technology in Changing Corporate World”, held at Rourkela Institute of Management Studies, **Biju Pattanayak Technical University, Rourkela**, January 28-29, 2005.
26. Presented a paper entitled “Tranquility and Anxiety concepts in e-business – A Fuzzy approach, at the International Conference on Innovation and Technology Management, held at **CGCRI, Kolkata**, during Feb 3-5, 2006.
27. Presented a paper entitled ““WEB BASED INFORMATION FOR PRODUCT RANKING IN E-BUSINESS-A FUZZY APPROACH”” at the International Conference on Electronic Commerce, held at Delta Fredericton, **University of New Brunswick, Canada** during August 14- 16, 2006.
28. Presented a paper entitled “Fuzzy Logic and e-commerce” at the National conference on Soft Computing, held at **Institute of Management Technology, Nagpur**, during Nov 17-18, 2006
29. Presented a paper entitled “Product preference in e- market: A Fuzzy approach, Presented at The National Conference on Business Optimization Research Wave, Held at **NITIE, Mumbai** during Feb 15-17, 2007.

30. Presented a paper entitled “Making e-Business customer focussed – A Fuzzy approach” at International Conference of **Information Resource Management Association held at Vancouver, Canada, during May 19- 23, 2007.**
31. Presented a paper entitled “Fuzzy applications in e- Business a Multiattribute Decision Making model at the National Research Seminar ob Operations Management, **Symbiosis Institute of Management, Pune, August 12, 2007.**
32. Presented a paper entitled “Fuzzy Logic in E-Business”, at the National Conference on Information Technology, **Asia Pacific Institute of management, New Delhi, Aug 31- September 1, 2007.**
33. Presented a paper entitled “Fuzzy Logic in E-Commerce”, at the National Conference on Mathematical Analysis and Application, **Berhmpur University, Nov 3-4, 2007.**
34. As an Invited speaker presented a paper entitled “Soft Computing for Information Technology “The National Conference on Emerging Trends on Information Technology, held at **SGS Institute of Technology and Science , Indore** during Dec 18 – 20, 2007.
35. Presented a paper entitled “E-Business under fuzzy environment: some decision support tools”, at the National Conference on Technology to common man – emerging trends and practices in management of technology, held at **IBA, Noida** during August 1- 2, 2008
36. As a Key note speaker presented a paper entitled “Tranquillity and Anxiety in e-business: A fuzzy approach” at the International Conference on Advanced Computer Theory and Engineering , **IEEE Computer Society, held at Phuket, Thailand,** Dec 20 – 22, 2008.
37. As a guest speaker gave a talk on “Fuzzy logic in E-commerce” held at ACCTA 2010, **CVR College of Engineering, Bhubaneswar,** during August 03-05, 2010.
38. As an invited speaker gave a talk at National Conference o Business Ethics and Human Values, held at **Panjab University, Chandigarh,** during Dec 22-23, 2010.
39. As a guest speaker gave a talk on “Fuzzy Logic in Business Intelligence” at International Conference on IT and Business Intelligence, organized by **IMT Nagpur,** held at Hyderabad, during November 25-27, 2011.
40. As a guest speaker presented a paper entitled “ Soft Computing and its application in e-commerce” at the International Conference on Soft Computing for problem solving held at **IIT Roorkee,** during Dec 20-22, 2011.
41. As a guest speaker presented a paper entitled “Internet business in fuzzy environment – a Multiobjective model using PROMETHEE” at Harbour Bishop College , **Bharati dashan University, Tiruchirapali,** during January 05-07, 2012.
42. As a guest speaker gave a talk on “Role of foreign and private universities in higher education” at the National Seminar on education – imperatives for change- making Jharkhand a knowledge hub, held at ASSOCHAM and **Jharkhand Rai University, Ranchi,** during Oct 27-28, 2012.
43. As an invited speaker gave a talk on “ Fuzzy Logic in E-commerce” at International Conference on Optimization Modelling and Applications held at **University of Delhi,** during November 29-December1, 2012.
44. As an invited speaker gave a talk on “Fuzzy Logic and computational finance “ held at International Conference on Computational and Financial Econometrics, **IIT Kharagpur,** during Dec 27-28, 2012.

45. As an invited speaker gave a talk on “Fuzzy Game Theory” at International Symposium on applied Optimization and Game Theoretic Models. Held at **ISI Delhi**, during January 09-11, 2013.
46. As an invited speaker gave a talk on 'Start-ups in India' at the National Conference on Start-ups and Innovations , held at Dy Patil College of Management, Pune , During Dec 3-5, 2017.
47. As a guest speaker gave a talk on “Skills developments in management” at National Conference on Business and management” held at **GJU Hisar**, during February 7-8, 2013.
48. As a keynote speaker gave a talk at the National Conference on “Paradigm for sustainable business: People, Planet and Profit during March 8-9, 2013, at **IIT Roorkee**.
49. As a key note speaker delivered a talk on Fuzzy Applications in Business, at the "National Conference on medium, small, and micro enterprises" held at **Punjabi University Patiala** during March 27-28, 2014.
50. As a key note speaker delivered a talk on "multiple product attributes in Internet Business- A Fuzzy approach" held at Int. Conference on Optimization theory and applications, **Delhi University**, during Jan 30- 31, 2016.
51. As a keynote speaker delivered a talk on the use of Fuzzy Logic in Skill Development at "National Conference on Skill Development" **Ravenshoe University, Cuttack** during April 8-9, 2016.
52. As an invited speaker presented a paper entitled "Product Ranking in online business: A Fuzzy Set Theoretic Approach", Management Science and Practice-2016, held at **IIT Madras**, during September 9-10, 2016.
53. As an invited speaker, presented a paper entitled " Use of fuzzy sets in product ranking" , held at "2017 Symposium on Mathematical Programming and Game Theory", ISI, Delhi, during January 9-11, 2017.
54. As an invited speaker delivered a speech on "Start-up India" at the National Conference on "Start-up India - Business Entrepreneurship", held at Dy Patil Institute of Management, Pune, during Feb 3-4, 2017.
55. As an invited speaker, delivered a lecture on “Product Preference with Multiple Attributes-A Fuzzy Set Theoretic Approach” at the third International Conference on Fuzzy Systems and Data Mining, held at National Dong Hwa University, Hualien, TAIWAN, during November 24-27, 2017.
56. In recognition of my Management Research and Education, I have been awarded life time achievement award at the 9<sup>th</sup> International Conference on “Measure, Manage, and Facilitate Change to Harness Organization Potential”, held at Prestige Institute of Management, Gwalior, During January 6-8, 2018

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#### **Subjects Taught**

1. Management Science in Practice- A spread sheet-modelling approach with case studies.
2. Operations Research
3. Relational Database management systems
4. Decision Support System
5. Computer Algorithms
6. Software Risk Management
7. Soft Computing
8. Fuzzy Logic in Information Technology and Management

#### **Sponsored Research:**

1. UGC sponsored a professor of Tampere University, Finland under the cultural exchange program of the Govt. of India to do research on Fuzzy Decision-Making Problems under my guidance during May 1990.
2. Fuzzy routing problems - in collaboration with University of Windsor Canada, sponsored by NSERC Canada.

3. TELCO Jamshedpur has sponsored a research project on Production Planning Problem., 1994.
4. Indian Banker's Association has sponsored a project for surveying banking customers. I was a team member in the said project, 1997.
5. Ministry of HRD, Govt. of India - Electronic Business under Fuzzy environment, 2004.

**Visiting Faculty:**

1. Centre for Mathematical Sciences, Trivandrum - to do some research on Fuzzy applications.
2. Berhampur University (Orissa), to take MPhil classes on Futurology.
3. Management Development Institute, Gurgaon - To teach DBMS course (MBA Students).
4. IIT, Roorkee – To teach a course on DSS (MBA Students) .
5. Laurentian University, Sudbury, ON, Canada – To do some collaborative research work in the area of Fuzzy Logic applications in the Internet Business, during May 2002, 2005, 2006, 2007 and 2008.
6. University of Lethbridge, Alberta, Canada, Fuzzy applications in e-Business. May 2005.
7. Indian Institute of Information Technology and Management, Gwalior, to teach the Management Science courses.
8. Indian Institute of Management, Kozhikode, to teach a Doctoral level course on Fuzzy Data Mining
9. IIM, Kashipur, to teach courses in Operations Research.
10. IIM, Rohtak, to teach courses on Operations Research.
11. Flame School of Business, Pune, to teach Quantitative Methods.
12. IIM Sirmur, To teach courses on Statistics and Operations Research
13. IIM Jammu, to teach the courses on Operations Research.

**Management Development Programme/ Workshop**

1. Conducted an MDP “ Decision Making under Uncertain Environment” during April –1996 at IIM Lucknow
2. Conducted a Programme on Project Management at Indian Institute of Quality Management, Jaipur during January 2002.
3. Conducted a Programme on the use of Goal Programming in Tablet and Capsule Manufacturing at R&D Centre , Sun Pharmaceutical Industries , Baroda during July 2002.
4. Conducted a programme on the Fuzzy Interval Programming in Credit Risk Management in Banks at CRISIL, Mumbai, during July 2003.
5. Conducted an Executive Development Programme entitled “Managerial Decision making under uncertain environment “During December 2003, 2004, 2005, 2006 and 2007, 2008, 2009, 2010 ,2012 and 2013 at IIM Campus, Lucknow.
6. Conducted a Workshop on “E-Business under fuzzy environment” at the “World Congress on Lateral Computing” held at Indian Institute of Science Bangalore on December 18, 2004.

**Areas of Research Interest:**

Multicriteria Decisions Making, Fuzzy Data Mining, Software Risk Management, Fuzzy Sets in e-commerce