

Faculty Profile

Name : Prof. (Dr.) Kajal De, *M.Sc., M.Phil., Ph.D.*

Designation : Professor of Mathematics

School/ Department : School of Science, Netaji Subhas Open University

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Educational Qualification:

B.Sc.(Hons. In Mathematics) 1987 from Presidency College, University of Calcutta, Kolkata, West Bengal with 1st class.

M.Sc. (Applied Mathematics) 1989 from University of Calcutta, Kolkata, West Bengal with 1st class.

M.Phil. (Applied Mathematics) 1991 from University of Calcutta, Kolkata, West Bengal with 1st class.

Ph.D. August 1999, in Applied Mathematics (Science) from University of Calcutta, Kolkata, West Bengal.

Qualified in the **UGC-CSIR NET** examination for JRF & Lecturership in June, 1991.

Teaching Experience:

i) Department of Applied Mathematics, Vidyasagar University, Midnapore, West Bengal (25.05.1992- 20.09.2006)

ii) School of Science, Netaji Subhas Open University, Kolkata (since 21.09.2006)

Administrative Experience:

a) **Head of the Department of Applied Mathematics, Vidyasagar University,** Midnapore, West Bengal

b)

b) Chairperson of i) UG Board of Studies in Mathematics

ii) PG Board of Studies in Mathematics

iii) Subject committee of Mathematics in Distance Education

at **Vidyasagar University**, Midnapore, West Bengal.

c) **Director, School of Science of Netaji Subhas Open University** from August, 2008 to August, 2011.

d) **Registrar (acting) of Netaji Subhas Open University** from June, 2010 to October, 2010.

e) Member of the **Executive Council** of **Netaji Subhas Open University** since August, 2008.

f) Member of **Academic Council** of **Netaji Subhas Open University** since 2007.

g) Performed different academic and examination related works at different institutes like Kalyani University, Burdwan university, Vidyasagar University, Gourbanga University, Calcutta University, St. Xaviers' College etc. And in examinations like SSC, WBCS, WBJEE etc.

Research Experience:

Research Interests: Information Theory, Operations Research, Graph Theory.

Research Project: 1 UGC-sponsored Minor Research Project titled 'Entropy Optimization With Some Applications' successfully completed.

Research Guidance: Supervised one candidate to obtain Ph.D.degree in 2004 from VU. Supervised two candidates to obtain Ph.D. degree in 2011 and in 2012 from NSOU.

Research Publications in the last five years

1. Journals:

- [1] Chaudhuri, A., De, K., Chatterjee, D., Fuzzy Support Vector Machine for Bankruptcy Prediction, *Applied Soft Computing Journal*, Elsevier Publications, Cranfield, United Kingdom, volume 11, issue 2, year 2011, pp. 2472 - 2486.
- [2] Chaudhuri, A., De, K., A Fuzzy Genetic Algorithm Heuristic for University Course Timetable Problem, *International Journal of Advances in Soft Computing and its Applications*, The International Centre for Scientific Research and Studies, Jordan, Volume 2, Number 1, pp 86 – 110, 2010.
- [3] Chaudhuri, A., De, K., A Study of the Job Scheduling Problem Using Rough Fuzzy Multi Layer Perception Neural Networks Technique, *International Journal of Artificial Intelligence: Theory and Applications*, Romania, Volume 1, Number 1, pp 4 – 24, 2010.
- [4] Chaudhuri, A., De, K., Chatterjee, D., Fuzzy Integer Linear Programming for the Examination Timetable Problem, *International Journal of Innovative Computing, Information and Control*, Special Issue, Japan, September, 2010.
- [5] Chaudhuri, A., De, K., A Comparative study of the Transportation Problem under Probabilistic and Fuzzy Uncertainties, GANIT, *Journal of Bangladesh Mathematical Society*, Dhaka, Bangladesh, 2009.
- [6] Chaudhuri, A., De, K., Chatterjee, D., Solution of System of Equations - A Neuro-Fuzzy Approach, *East West Journal of Mathematics – Special Volume*, Bangkok, Thailand, pp 66 – 80, 2008.
- [7] Chaudhuri, A., De, K., Chatterjee, D., Mitra, P., Trapezoidal Fuzzy Numbers for the Transportation Problem, *International Journal of Intelligent Computing and Applications*, International Science Press, Dalian, China, Volume 1, Number 2, pp 96 – 115, 2009.

- [8] Chaudhuri, A., De, K., Chatterjee, D., Solution of the Decision Making Problems Using Fuzzy Soft Relations, *International Journal of Information Technology*, Singapore Computer Society, Singapore, Volume 15, Number 1, pp 78 – 107, 2009.
- [9] Chaudhuri, A., De, K., Chatterjee, D., A Study of the Traveling Salesman Problem Using Fuzzy Self Organizing Map, *IEEE Transactions on Evolutionary Computation*, IEEE Computer Society, Volume 12, Number 6, pp 724 – 734, 2008.
- [10] Chaudhuri, A., De, K., Chatterjee, D., A Comparative Study of Kernels for the Multi-class Support Vector Machine, *IEEE Transactions on Neural Networks*, IEEE Computer Society, Volume 19, Number 12, pp 3275 – 3281, 2008.

2. Book Chapters:

- [1] Chaudhuri, A., De, K., Chatterjee, D., Discovering Stock Price Prediction Rules of Bombay Stock Exchange Using Rough Fuzzy Multi Layer Perception Networks, Book Chapter: *Forecasting Financial Markets in India*, Rudra P. Pradhan, Indian Institute of Technology Kharagpur, (Editor), Allied Publishers, New Delhi, India, pp 69 – 96, 2009.
- [2] Chaudhuri, A., De, K., Time Series Forecasting using Hybrid Neuro-Fuzzy Regression Model, Book Chapter: *Rough Sets, Fuzzy Sets, Data Mining and Granular Computing*, H. Sakai et al., (Editors), Lecture Notes in Artificial Intelligence, Springer Verlag, Berlin, Germany, LNAI 5908, pp 86 – 100, 2009.

3. Conferences:

- [1] Chaudhuri, A., De, K., Achieving greater explanatory power and forecasting accuracy with non-uniform spread fuzzy linear regression, *Proceedings of 13th Conference of Society of Operations Management*, Department of Management Studies, Indian Institute of Technology, Madras, India, pp 80 – 86, 2009.
- [2] Chaudhuri, A., De, K., Classification of Financial Investments using Neuro-Fuzzy and Rough Set Approaches, *Proceedings of 1st International Conference on Data Management*, Institute of Management Technology, Ghaziabad, Uttar Pradesh, India, pp 805 – 826, 2008.

Orientation Programme / Refresher Course attended:

Attended one Orientation programme of University of Calcutta and two Refresher Courses at Vidyasagar University.

Attended one Summer School at Indian Statistical institute, Kolkata.