Dr. Surupa Chakraborty (Roy)

Department: Statistics

Designation: Assistant Professor

Qualification:

- M.Sc. in Statistics, Calcutta University (1996)
- PhD in Statistics, Calcutta University (2005)

Doctoral Research Topic: "Measurement Error Models: Some Related Inference problems".

Teaching Experience: 17 years (UG level)

PhD supervision (working as joint supervisor under the University of Calcutta)

Topic:

- Multivariate ordinal data (degree awarded)
- Under reported count data (on going)

Completed Research Projects:

1. "A Methodological Study on Misclassified Binary Responses when predictors are subject to measurement Error" (sole investigator) under DST (SERC FAST TRACK SCHEME) Ref No. SR/FTP/MS-03/2006. Project duration: 1.5.2007- 30.4.2010. Total funding: Rs 3,48,000/-

2. "Ascertainment adjusted familial data analysis under some irregular phenomena" (principal investigator) under CSIR, Ref No. 25(0207)/12/EMR-II. Project duration: 1.2.2013- 30.1.2016.Total funding: Rs 5,88,383/-

Research area of interest:

1. Count and Ordinal Data
2. Measurement error/ Classification error
3. Group testing
4. Missing data

Publication list:

1. Rana, S, *Roy, S* & Das, K (2018): Analysis of Ordinal Longitudinal Data Under Nonignorable Missingness and Misreporting: An Application to Alzheimer's Disease Study. Journal of Multivariate Analysis. 166, 62-77.

2. Das, K, Rana, S & *Roy, S* (2017): Evaluation of Alzheimer Disease Progression based on Clinical Dementia Rating Scale with Missing Responses and Covariates. Journal of Biopharmaceutical Statistics. ISSN: 1054-3406 (Print) 1520-5711 (Online) Journal homepage: http://www.tandfonline.com/loi/lbps20.

3. Banerjee T & *Roy, S* (2017): Measurement Error in Astronomy, Wiley StatsRef, Statistics Reference online, DOI: 10.1002/9781118445112.stat07930.

4. Sengupta, D. & *Roy, S.* (2016): One way ANOVA model with under reported counts. CSA Bulletin, 68(1&2) 1-15.

5. Das, K., *Roy, S.* & Chattopadhyay, A.K. (2016): Analysis of ordinal longitudinal data using semi-parametric mixed models. Journal of Statistical Research, 48-50(1), 15-33.

6. *Roy, S.*, Rana, S. & Das, K (2016): Clustered data Analysis under Miscategorized Ordinal outcomes and missing covariates. Statistics in Medicine. 35, 3131-3152.

7. *Roy, S* (2016): Analysis of ordered Probit Model with surrogate response data and measurement error in covariates. , Communications in Statistics: Theory and Methods, 45 (9), 2665-2678.

8. Rana, S., *Roy, S* and Das K (2016): On Analyzing Ordinal Data when Responses and Covariates are both missing at random: Statistical Methods in Medical Research, 25(4), 1564-1578.

9. *Roy, S.*, Sarkar, A and Das, K (2014). : Analysis of Bivariate Binary data with possible chances of wrong ascertainment, Journal of Statistical Computation and Simulation, 84 (4), 724-738.

10. *Roy, S.*, Das K and Sarkar A (2013). : Analysis of binary data with the possibility of wrong ascertainment. Statistica Neerlandica , 67(3) , 293-310.

11. *Roy, S.* (2012): Accounting for Response Misclassification and Covariate Measurement Error using a Random Effects Logit Model, Communications in Statistics (Simulation and Computation), 41 (9), 1623-1636.

12. *Chakraborty, S.* and Banerjee, T.(2010) : Analysis of mixed outcomes: misclassified binary responses and measurement error in covariates, Journal of Statistical Computation and Simulation, 80(11), 1197-1209.

13. ***Roy, S.*** and Banerjee, T. (2009): Analysis of Misclassified Correlated Binary data using Multivariate Probit Model when Covariates are subject to Measurement Error, Biometrical Journal, Vol 51(3), 420-432.

14. ***Roy, S.,*** Banerjee, T. (2008): Misclassification and Measurement Error Models in Epidemiological Studies: Edited Volume "Statistical Advances in Biomedical Sciences: State of the Art and Future Directions" Editors- Biswas, A, S.Fine, J and Segal, M. Published by John Wiley, NewYork.

15. ***Roy, S.*** and Banerjee, T.(2006): A flexible model for generalized linear regression with measurement error, The Annals of the Institute of Statistical Mathematics, 58(1), 153-169.

16. ***Roy, S.***, Banerjee, T. and Maiti, T. (2005): Measurement Error Model for Misclassified Binary Responses, Statistics in Medicine. 24: 269-283.

17. Banerjee, T. and ***Roy, S.*** (2004): A simple Test for Polarization of multinomial cell probabilities, Calcutta Statistical Association Bulletin, 55(217-218), 29-38.

18. ***Roy, S.*** and Banerjee, T. (2001): Generalised Linear Measurement- Error Models with Multivariate t- Measurement Error, Calcutta Statistical Association Bulletin, 51 (192-203).