

ACADEMIC PROFILE OF FACULTY MEMBERS

1. **Name: Dr. Neeraj Tiwari**
2. Designation: Professor & Head
3. Qualification: M.A, Ph.D.
4. Area of Specialization/Research field: Sample Survey
5. Award/Recognition:
6. Number of Research projects: Completed 03, and ongoing Nil. The details are given below:

S.No.	Title of the Project	Awarding Authority	Duration	Date of Start
1	Detection of geo-spatial hotspots for enteric diseases using GIS and spatial scan statistic and to study the effect of water pollution on physical and mental health of residents of Almora and Nainital districts of Uttarakhand.	Uttarakhand Council of Science & Technology, Dehradun	2 Years	01-05-2009
2	Geo-statistical Investigation of the hotspots of Vector-borne Diseases in Kumaon Region of Uttarakhand in Relation to Climatic Change and Socio-economic Conditions	University Grants Commission (U.G.C.), New Delhi	3 Years	01-05-2009
3	Investigation of geo-spatial hotspots for the occurrence of tuberculosis in Kumaon region of Uttaranchal using GIS and spatial scan statistic	Indian Council of Medical Research (I.C.M.R.), New Delhi	2 Years	01-06-2009

7. Number of Ph.D. awarded: 10

8. Number of Candidates working for Ph.D.: 06

9. Publications

(i) Books

1. Tiwari N. and Joshi S.K. (2011): *Interface Between Statistics, Mathematics and Allied Sciences*. Excel India Publishers, New Delhi (ISBN: 978-93-81361-11-5).

2. Tiwari, N., Joshi, S.K. and Joshi, J. (2011): *A geo-statistical study of the hotspots of enteric diseases*. Lambert Academic Publishing, Germany (ISBN: 978-3-8465-5717-4).

3. Tiwari, N., Joshi, J. and Upreti, P.K. (2012): Investigation of geo-spatial hotspots for the occurrence of tuberculosis. Lambert Academic Publishing, Germany (ISBN: 978-3-8484-0806-1).

(ii) Research article published:

1. Chaturvedi,A., Tiwari,N. and Pandey,S.K.(1992) : Second-order Approximations to a Class of Sequential Point Estimation Procedures. *METRON*, **Vol. L**, no. 1-2, pp.161- 177.

2. Tiwari,N. and Nigam,A.K.(1993) : A Note on Constructive Procedure for Unbiased Controlled Roundind. *STATISTICS & PROBABILITY LETTERS*, **18**, pp. 415-420.

3. Chaturvedi,A., Tiwari,N. and Pandey,S.K.(1993) : Multi-Stage Estimation of the Common Location Parameter of Several Exponential Distributions. *COMMUNICATIONS in STATISTICS, Th. & Meth*, **Vol. 22**, No. 5, pp. 1413-1424.

4. Chaturvedi,A., Tiwari,N. and Pandey,S.K.(1996) : Multi-Stage Point Estimation of the Common Location Parameter of Several Exponential Distributions. *MICRIELECRTONICS and RELIABILITY*, **Vol. 36**, No. 5, pp. 637-643.

5. Tiwari,N. and Nigam,A.K.(1998) : On Two Dimensional Optimal Controlled Selection. *Journal Of Statistical Planning and Inference*, **69**, pp. 89-100.

6. Chaturvedi,A., Tiwari,N. and Tomar,S.K.(2002) : Robustness of the Sequential Testing Procedures for the Generalized Life Distributions. *Brazilian Jour. of Probability and Statistics*, **16**, pp. 7-24.
7. Chaturvedi,A. and Tiwari,N.(2002) : Some Classes of Three-Stage Estimation Procedures. *Journal of Combinatorics, Information & System Sciences*, **Vol. 27**, Nos. 1-4, pp. 41-55.
8. Bisht, R.K., Dhami, H.S. and Tiwari, N.(2006): An evaluation of different statistical techniques of collocation extraction using a probability measure to word combinations. *Journal of Quantitative Linguistics*, **Vol 13**, Number 2-3, pp. 161-175.
9. Tiwari, N., Adhikari, C.M.S., Tewari, A. and Kandpal, V.(2006): Investigation of geo-spatial hotspots for occurrence of tuberculosis in Almora district using GIS and spatial scan statistic. *International Journal of Health Geographics*, **5**, 33.
10. Tiwari, N. (2007): Lattice sampling without sample size restriction. *Statistical Techniques in Life-Testing, Reliability, Sampling Theory and Quality Control* (Ed. Prof. B.N.Pandey), Narosa Publishing House, New Delhi, pp. 135-143.
11. Chaturvedi, A., Tiwari, N. and Kumar, S.(2007): Some remarks on classical and Bayesian reliability estimation of binomial and Poisson distributions. *Statistical Papers*, 48, 683-693.
12. Tiwari, N., Nigam, A.K. and Pant, I.(2007): On an Optimal Controlled Nearest Proportional to Size Sampling Scheme. *Survey Methodology*, Vol.33, No. 1, pp. 87- 94.
13. Tiwari, N. and Kumar, S.(2008): Sequential point estimation procedures for the generalized life distributions. *Journal of Reliability and Statistical Studies*. Vol.1, Issue 1 (2008), pp. 48-53.
14. Bhatnagar, R.K. and Tiwari, N. (2009): Rank sensitization of countries in human development reports of UNDP in view of Kakwani's approach for achievement indicator. *Journal of Reliability and Statistical Studies*. Vol.2, Issue 1 (2009), pp. 71- 84.
15. Tiwari, N., Joshi, S.K., Joshi, J. and Bhatt, V. (2009): A geo-statistical study of the hotspots of enteric diseases in Almora and Nainital districts of Uttarakhand. *Proceedings of the International Conference on Frontiers of Interface Between Statistics and Sciences* organized by C.R.Rao Advanced Institute of Mathematics, Statistics and Computer Sciences, Hyderabad and University of Hyderabad at **Hyderabad**, from December 30, 2009-January 02, 2010, pp. 627-641.

16. Tiwari, N. and Nigam, A.K. (2010): Two dimensional optimal controlled nearest proportional to size sampling design using quadratic programming. *Statistical Methodology* (USA). Vol. 7, Issue 6, pp. 601-613.
17. Tiwari, N., Kandpal, V., Tewari, A., Ram Mohan Rao, K. and Tolia V.S. (2010): Investigation of tuberculosis clusters in Dehradun city of India. *Asian Pacific Journal of Tropical Medicine*, pp. 412-420.
18. Joshi, A. and Tiwari, N. (2010). Fluctuations in Sex Ratio-A case study of Delhi. *Productivity Promotion*, Vol. 12, No. 49 (September 2009-March 2010), pp. 88-92.
19. Chandra, G., Tiwari, N. and Singh, S.K. (2011). Near Optimal Allocation Model for Skewed Distributions in Ranked Set Sampling. *International Journal of Statistics and Systems*, Vol. 6, No. 1, 57-65.
20. Tiwari, N. and Chandra, G.(2011): A systematic approach for unequal allocation for ranked set sampling with skew distributions. *Journal of Indian Society of Agricultural Statistics*, 65 (3), 331-338.
21. Tiwari, N. and Sud, U.C. (2011): Minimum Variance Optimal Controlled Nearest Proportional to Size Sampling Scheme Using Multiple Objective Functions. *Journal of Indian Society of Agricultural Statistics*, 65 (3), 297-304.
22. Chandra, G., Tiwari, N. and Chandra, H. (2011): Adaptive cluster sampling based on ranked sets. *Metodoloski Zvezki*, Vol. 8, No. 1, 39-55.
23. Banerjee, J and Tiwari, N. (2011): Improved ratio type estimator using Jackknife method of estimation. *Journal of Reliability and Statistical Studies*, Vol. 4, Issue 1, 53-63.
24. Joshi, A. and Tiwari, N. (2011): Sex Ratio in India-embarrassing to be honest. *Current Science*, Vol. 101, No. 8, 1006-1008.
25. Acharya, M.R.N., Sahai, A. and Tiwari, N. (2011): An interactive algorithm for efficient estimation of square of the normal probability mean for small samples. *International Journal of Mathematical Archive*, 2(5), 662-664.
26. Richards, W.A., Sahai, A. and Tiwari, N. (2011): Computerized statistically-oriented reduced-biased-sandwich reduced-MMRMSE algorithmically improved interpolation using Newton's forwarded difference formula. *International Journal of Mathematical Archive*, 2(5), 802-806.
27. Sahai, A. and Tiwari, N. (2011): On efficient confidence intervals via meta-analysis of geo-spatial data for global warming control in decision-maker's setup for project managers. *InterStat*, March 2011, #2 (online on www.interstat.statjournals.net).

28. Chandra, G. and Tiwari, N. (2011): Ranked set sample theory for large set size with probability proportional to rank size matrix. *Interface Between Statistics, Mathematics and Allied Sciences* (Editors Neeraj Tiwari and S.K.Joshi), pp. 38-49. Excel India Publishers, New Delhi (ISBN: 978-93-81361-11-5).
29. Bhatt, Y., Ghosh, N. and Tiwari, N. (2011): Assessing the prospects of producing energy from Indian agriculture. *Interface Between Statistics, Mathematics and Allied Sciences* (Editors Neeraj Tiwari and S.K.Joshi), pp. 72-86. Excel India Publishers, New Delhi (ISBN: 978-93-81361-11-5).
30. Tiwari, N. and Pandey, G.S. (2011): A '(U,S,T)-model' for unequal allocation for ranked set sample with skew distributions. *Interface Between Statistics, Mathematics and Allied Sciences* (Editors Neeraj Tiwari and S.K.Joshi), pp. 103-112. Excel India Publishers, New Delhi (ISBN: 978-93-81361-11-5).
31. Banerjee, J. and Tiwari, N. (2011): Balanced sampling plans excluding adjacent units. *Interface Between Statistics, Mathematics and Allied Sciences* (Editors Neeraj Tiwari and S.K.Joshi), pp. 139-148. Excel India Publishers, New Delhi (ISBN: 978-93-81361-11-5).
32. Tiwari, N. and Sud, U.C. (2012): An Optimal Procedure for Sample Coordination Using Multiple Objective Functions and Nearest Proportional to IPPS Size Sampling Designs. *Communications in Statistics-Theory & Methods*, 41, 2014-2033.
33. Tiwari, N. and Pandey, G.S. (2012): Linear allocation models for systematic distributions in Ranked Set Sampling. *Journal of Reliability and Statistical Studies*. Vol. 5, Issue 1, 43-54.
34. Tiwari, N. (2012): A statistical model predicting the prevalence of tuberculosis in Almora district of Uttarakhand, India in relation to age and sex. *Proceedings of International Conference on 'Recent Developments in Statistics, Applied Econometrics and Forecasting'*, held at University of Allahabad. Accepted for publication.
35. Kumar, J., Mishra, S. and Tiwari, N. (2012): Identification of hotspots and safe zones of crime in Uttar Pradesh, India: Geospatial analysis approach. *International Journal of Remote Sensing Applications*, Vol. 2, No. 1, 10-14.
36. Chandra, G. and Tiwari, N. (2012): Estimation of Location and Scale Parameters of Log Normal Distribution Using Ranked Set Sampling. *Journal of Statistics & Applications*, Vol. 7, No. 3-4, 139-152.
37. Agnihotri, I., Joshi P.K. and Tiwari, N. (2013): Geographical distribution and surveillance of tuberculosis (TB) using spatial statistics. *International Journal of Applied Geospatial Research*, 4(2), 39-53.

38. Tiwari, N and Chilwal, A. (2013): On Minimum Variance Optimal Controlled Sampling: A Simplified Approach, *Journal of Statistical Theory and Practice*, (**Online Published**) URL link: <http://dx.doi.org/10.1080/15598608.2013.828338>
39. Tiwari, N. and Chilwal, A. (2013): A simplified selection scheme for unequal probability sampling without replacement. *Thailand Statistician*, 11(2), 133-141.
40. Tiwari, N., Joshi, J. and Joshi, S.K. (2013): Statistical Modelling for Disaster Management in Uttarakhand. *Management and Technology of Control of Disasters* (Editor S.N. Chauhan), pp. 169-178. BLOOMSBURY PUBLISHING INDIA LTD (ISBN: 978-93-82951-42-1).
41. Chandra, G., Tiwari, N. and Singh, S.K. (2014): A Generalized Approach on Ranked set sampling theory for large set size. *Journal of Indian Society of Agricultural Statistics*, 68(1), 55-65.
42. Bhatnagar, R.K. and Tiwari, N. (2014): Impact of Bhatnagar's first and second alternative formulations on rankings of the countries in UNDP's Human Development Reports during 1995 to 1998. *International Journal of Education, Development, Society and Technology*, Vol. 2, Issue 1, 1-18.
43. Tiwari, N. and Chilwal, A. (2014): A Simplified Approach for Two Dimensional Optimal Controlled Sampling Designs. **Advances in Statistics** (Hindwai Publishing Corporation). 05/2014. I(2014):1-10.
44. Tiwari, N. and Chilwal, A. (2014): Empirical Comparison of Various Approximate Estimators of the Variance of Horvitz-Thompson Estimator under Split Method of Sampling" in **Journal of Reliability and Statistical Studies**.
45. Tiwari, N. and Chilwal, A. (2014): An Optimal Controlled Selection Procedure for Sample Coordination Problem using Linear Programming and Distance Function. *Hacettepe Journal of Mathematics and Statistics*.
46. Bhatt, V. and Tiwari, N. (2014): A Spatial Scan Statistic for Survival Data based on Weibull distribution. *Statistics in Medicine*, Vol. 33, Issue 11, 1867-76.
47. Tiwari, N. and Rakumari, S.D. (2013): Causes of Infant Deaths in Sikkim. *Asian Journal of Research in Social Sciences and Humanities* (ISSN 2249-7315), Vol. 3, Issue 1, 34-46.
48. Tiwari, N. and Rajkumari, S.D. (2014): Rural Urban Sex Differentials in Infant Mortality in Sikkim. *Indian Journal of Metarnal and Child Health*. Accepted.

49. Tiwari, N. and Rajkumari, S.D. (2014): An Investigation into Determinants of Maternal Mortality in a Hilly Area of Northeast India. Annals of Medical and Health Sciences Research. Accepted.

50. Tiwari, N. and Rajkumari, S.D. (2014): Rural Urban Sex Differentials in Infant Mortality in Sikkim. Indian Journal of Pediatrics. Accepted.

10. Conference/Seminar organized: Three seminar organized.

11. Academic/Administrative positions held:

- (i) Worked as Assistant Hostel Warden at S.D.(P.G.) College, Muzaffarnagar, India for two years.
- (ii) Worked as Professor Incharge of Computer Cell at S.D. (P.G.) College, Muzaffarnagar, India, for five years.
- (iii) Worked as Assistant Dean Student Welfare for more than two years at Kumaon University, S.S.J.Campus, Almora, India.
- (iv) Worked as Assistant Proctor for more than two years at Kumaon University, S.S.J.Campus, Almora, India.
- (v) Worked as Co-coordinator of Employment and Career Councelling Centre for two years at Kumaon University, S.S.J.Campus, Almora, India.
- (vi) Working as Campus Head, Department of Statistics, Kumaon University, S.S.J.Campus, Almora, India, since December 2006.
- (vii) Worked as Programme Officer in N.S.S. in S.S.J.Campus, Almora since 17th October 2007 till 5th August 2010.

12. Membership to professional organization/Associations: Life member of Operational Research Society of India, Forum for Interdisciplinary Mathematics and Bayesian Society of India.

13. Any other information: None

Date: 22/09/2015