

**Dr. Amarjit Kundu, Professor,  
Department of Mathematics, Raiganj University**

## **Academic Qualifications:**

M.Sc. and Ph.D.

## **Contact Details**

Department of Mathematics, Raiganj University,  
Raiganj, Uttar Dinajpur, West Bengal, Pin-733134  
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## **Specialization**

1. Probability and Statistics
2. Graph Theory
3. Classical Mechanics
4. Numerical Analysis

## **Research Interest**

Reliability, Applied Probability, Statistical quality Control.

## **Research Area**

Ordering and Aging Properties of Systems, Statistical Quality Control, Reliability.

## **Experience**

**Research Experience:** 25 years

**Teaching Experience:** 25 years

## **Ph.D. Scholars**

- **Ph.D. Completed:**
  - Surja Kanta Mishra
  - Bidhan Modok
  - Biplab Hawlader

- **Registration done:**

- Saifur Rahaman

## Research Projects

- **UGC Project:** Reference No. [F.PSW.-108/09-10(ERO)], Duration: 2009 – 2011.
- **NBHM Project:** Reference No. [2/48(13)/2011/-R&D II/3246], Duration: 2012 – 2015.
- **UGC Project:** Reference No. [PSW-103/13-14(ERO)I.D.WK4-0.31], Duration: 2014– 2016.

## Administrative Experience

1. Acted as a joint convener for the seminar *Recent Trends in Mathematical Sciences and Its Applications*, Dept. of Mathematics, Raiganj University, 14th-15th March, 2019.
2. Member of Board of Studies, Raiganj University.
3. Member of Under Graduate Board of Studies of Kalyani University (26.08.2010-08.08.2018).
4. Acted as Head of the Department of Statistics, Raiganj University.
5. Acted as Head of the Department of Mathematics, Raiganj University.
6. Member of IQAC, Raiganj University.
7. Now Head of the Department of Mathematics, Raiganj University.

## Publications

### Research Papers:

- National: 0
- International: 32

## Publications

1. Modok, B., Chowdhury, S., and Kundu, A. (2026): “Studentized bootstrap control chart for percentiles of truncated beta distributed environmental data,” *Stochastic Environmental Research and Risk Assessments* 40, 58, I.F. 3.6, SCI, **Q1**, DOI: 10.1007/s00477-026-03199-x.

2. Rahaman, S., Kundu, P., and Kundu, A. (2025). "Some results on aging properties of  $r$ -out-of- $n$  systems having dependent components," *Annals of Operations Research*, 1-18, I.F.: 4.6, SCI, **Q1**.
3. Modok, B., Chowdhury, S., and Kundu, A. (2025): "Control charts for monitoring Weibull quantile under generalized hybrid and progressive censoring schemes," *Statistics and Computing*, 35(2), 49, I.F.: 1.6, SCI, **Q1**.
4. Modok, B., Chowdhury, S., and Kundu, A. (2025): "Process monitoring schemes for generalized Weibull quantiles under hybrid censoring," *Quality Technology & Quantitative Management*, 1-24. I.F.: 2.2, SCI, **Q1**.
5. Hawlader, B., Kundu, P., and Kundu, A. (2025). Optimal allocation of active and standby redundancies in series systems. *Operations Research Letters*, 60, 107237. SCI I.F.: 0.8, **Q2**.
6. Rahaman, S., Kundu, P., and Kundu, A. (2025). On comparisons of  $r$ -out-of- $n$  systems having dependent components. *Communications in Statistics-Theory and Methods*, DOI: 10.1080/03610926.2025.2540854, SCI, I.F.: 0.863, **Q2**.
7. Chowdhury, S., Kundu, A., and Modok, B. (2025): "Control Monitoring Schemes for Monitoring Percentiles of Generalized Exponential Distribution with Hybrid Censoring," *REVSTAT-Statistical Journal*, 23(1), 1-17, I.F.: 1.239, SCI.
8. Kundu, A., Chowdhury, S., and Modok, B. (2024): "Stochastic comparisons of random extremes from non-identical random variables," *Annals of Operations Research*, 1-16, SCI I.F.: 4.6, **Q1**.
9. Kundu, P., Kundu, A., and Hawlader, B. (2023): "Stochastic comparisons of largest claim amounts from heterogeneous portfolios," *Statistica Neerlandica*, 77(4), 497-515, I.F.: 1.4, SCI, **Q2**.
10. Hawlader, B., Kundu, P. and Kundu, A. (2023): "Stochastic comparisons of lifetimes of fail-safe systems with dependent and heterogeneous components under random shocks," *Statistics: A Journal of Theoretical and Applied Statistics*, 57(3), 694-709, I.F.: 1.90. SCI, **Q2**.
11. Chowdhury, S., Kundu, A., and Mishra, S. K. (2023): "Ordering Properties of the Smallest Order Statistic from Weibull-G Random Variables," *Communications in Statistics - Theory and Methods*, Vol. 52(18), pp. 6525-6541, I.F.: 0.863, **Q2**.
12. Chowdhury, S., Kundu, A. and Mishra, S.K. (2021): "Comparisons of Order Statistics from Heterogeneous Poisson and Geometric Distributions," *Calcutta Statistical Association Bulletin*, DOI: 10.1177/00080683211055894, ISSN: 0008-0683.
13. Chowdhury, S., Kundu, A. and Modok, B. (2021), "Bootstrap Beta Control Chart for Monitoring Proportion Data," *International Journal of Quality & Reliability Management*, DOI: 10.1108/IJQRM-09-2020-0287, I.F.: 2.976, ISSN: 0265-671X, SCOPUS, **Q1**.
14. Kayal, S. and Kundu, A. (2021): "Ordering Results on Extremes of Inverse Kumaraswamy Random Samples," *Communications in Statistics - Theory and Methods*, DOI: 10.1080/03610926.2021.1966468, I.F.: 0.863, ISSN: 0361-0926, SCI, **Q2**.

15. Kundu, A., Chowdhury, S. and Balakrishnan, N. (2021): "Ordering Properties of the Smallest and Largest Lifetimes in Gompertz–Makeham Model," *Communications in Statistics - Theory and Methods*, DOI: 10.1080/03610926.2021.1919898, I.F.: 0.863, ISSN: 0361-0926, SCI,**Q2**.
16. Chowdhury, S., Kundu, A. and Mishra S.K. (2021): "On Comparison of Two Parallel Systems Having Log–Lindley Distributed Components," *Communications in Statistics - Theory and Methods*, I.F.: 0.863, DOI: 10.1080/03610926.2021.1910838, ISSN: 0361-0926, SCI,**Q2**.
17. Kundu, A. and Chowdhury, S. (2020): "On Stochastic Comparisons of Series System with Heterogeneous Dependent and Independent Location-Scale Family Distributed Components," *Operations Research Letters*, Vol. 48, pp. 40-47. I.F.: 1.151, ISSN: 0167-6377, SCI,**Q2**.
18. Kundu, A. and Chowdhury, S. (2019): "Ordering Properties of the Largest Order Statistics from Kumaraswamy-G Models Under Random Shocks," *Communication in Statistics: Theory and Methods*, Taylor & Francis, Vol. 50(6), pp. 1502-1514. I.F.: 0.863, ISSN: 0361-0926, SCI,**Q2**.
19. Nanda, A.K., Maiti, S.S., Kundu, C. and Kundu, A. (2019): "Parameter Estimates of General Failure Rate Model: A Bayesian Approach," *Journal of Computational and Applied Mathematics*, Elsevier, Vol. 351, pp. 317–330. I.F.: 2.037, ISSN: 0377-0427, SCI,**Q2**.
20. Kundu, A. and Kundu, C. (2018): "Bivariate Extension of Generalized Cumulative Past Entropy," *Communication in Statistics: Theory and Methods*, Taylor & Francis, Vol. 47(8), pp. 1962-1977. I.F.: 0.863, ISSN: 0361-0926, SCI,**Q2**.
21. Kundu, A. and Chowdhury, S. (2018): "Ordering Properties of Sample Minimum from Kumaraswamy-G Random Variables," *Statistics*, Taylor & Francis, Vol. 52(1), pp. 133-146. I.F.: 1.90, ISSN: 0233-1888, SCI,**Q2**.
22. Chowdhury, S. and Kundu, A. (2017): "Stochastic Comparison of Parallel Systems with Log-Lindley Distributed Components," *Operations Research Letters*, Vol. 45, pp. 199-205. I.F.: 1.151, ISSN: 0167-6377, SCI,**Q2**.
23. Kundu, A. and Kundu, C. (2016): "Bivariate Extension of (Dynamic) Cumulative Past Entropy," *Communication in Statistics: Theory and Methods*, Taylor & Francis, Vol. 46(9), pp. 4163-4180. I.F.: 0.863, ISSN: 0361-0926, SCI,**Q2**.
24. Kundu, A., Chowdhury, S., Nanda, A. K. and Hazra, N.K. (2016): "Some Results on Majorization and Their Applications," *Journal of Computational and Applied Mathematics*, Elsevier, Vol. 301, pp. 161–177. I.F.: 2.037, ISSN: 0377-0427, SCI,**Q2**.
25. Kundu, A. and Chowdhury, S. (2016): "Ordering Properties of Order Statistics from Heterogeneous Exponentiated Weibull Models," *Statistics and Probability Letters*, Elsevier, Vol. 114, pp. 119-127. I.F.: 0.980, ISSN: 0167-7152, SCI,**Q2**.
26. Kundu, A. and Nanda, A.K. (2016): "On Study of Dynamic Survival and Cumulative Past Entropies," *Communication in Statistics: Theory and Methods*, Taylor & Francis, Vol. 45(1), pp. 104-122. I.F.: 0.863, ISSN: 0361-0926, SCI,**Q2**.

27. Nanda, A.K. and Kundu, A. (2012): "On Improvement and Deterioration of Repairable System Under Generalized Stochastic Orders," *Special Triennial Volume of Calcutta Statistical Association Bulletin*, Vol. 63, pp. 259-272.
28. Nanda, A.K. and Kundu, A. (2011): "Comparison of Two Repairable Systems," *Statistics and Probability Letters*, Elsevier, Vol. 81, pp. 446-450. I.F.: 0.980, SCI, **Q2**.
29. Nanda, A.K. and Kundu, A. (2009): "On Generalized Stochastic Orders of Dispersion Type," *Special Triennial Volume of Calcutta Statistical Association Bulletin*, Vol. 61, pp. 155-182.
30. Nanda, A.K. and Kundu, A. (2009): "On Generalized Stochastic Orders of Dispersion Type," *Special Triennial Volume of Calcutta Statistical Association Bulletin*, Vol. 61, pp. 155-182.
31. Hu, T., Kundu, A. and Nanda, A.K. (2007): "A Note on Bayesian Imperfect Repair Model," *Journal of Applied Statistical Science*, Nova Science Publisher, Vol. 15(4), pp. 407-411.
32. Hu, T., Kundu, A. and Nanda, A.K. (2001): "On Generalized Orderings and Aging Properties with Their Implications," *System and Bayesian Reliability, Essays in Honour of Prof. R.E. Barlow on his 70th Birthday*, Hayakawa, Y., Irony, T., and Xie, M. (Eds.), World Scientific, New Jersey, Vol. 5, pp. 199-228.

## Papers presented/Invited Lectures in conferences/seminars workshops

Sl. No.	Title of the Paper Presented	Title of Conference/Seminar	Date(s) of the Event	Organized by
1	Acted as Session Chair	International Workshop on Reliability Theory and Survival Analysis	19.12.2025 - 21.12.2025	Indian Institute of Management Kozhikode (IIMK), Kerala
2	Bootstrap Control Chart for Percentiles of Some Finite Range Distributions (Invited Lecture)	Golden Jubilee Conference on Productivity, Quality and Reliability: New Vistas	07.01.2023 - 08.01.2023	Indian Association for Productivity Quality Control and Reliability

3	Bootstrap Control Chart of Percentiles of Some Life Time Distributions with Hybrid Censor Data (Invited Lecture)	International Indian Statistical Association (IISA) 2022 Conference	26.12.2022 - 30.12.2022	Jointly organized by International Indian Statistical Association (IISA) and Indian Institute of Science (IISc.) Bengaluru, India
4	Session Organizer	International Workshop on Reliability Theory and Survival Analysis (IWR TSA) 2022	23.12.2022 - 25.12.2022	Department of Mathematics and Statistics, IISER Kolkata
5	On Comparison of Two Series and Parallel Systems with Gompertz-Makeham Distributed Components (Invited Lecture)	International Conference on Strategic Management, Decision Theory, and Data Science	04.01.2020 - 06.01.2020	Indian Association for Productivity, Quality Control and Reliability and CSIR-CGCRI
6	Comparison of Two Parallel Systems under Random Shock (Invited Lecture, Session Chair, Session Organizer)	International Conference on Innovations in Data and Statistical Sciences	27.12.2019 - 30.12.2019	International Indian Statistical Association and IIT Bombay
7	Stochastic Comparison of Two Series and Parallel Systems with Finite Range Distributed Component (Invited Lecture)	International Conference on New Paradigms in Statistics for Scientific and Industrial Research	04.01.2018 - 06.01.2018	Indian Association for Productivity, Quality Control and Reliability and CSIR-CGCRI
8	On Comparison of Two Series and Parallel Systems with Location-Scale Distributed Components (Invited Lecture)	2017 IISA International Conference on Statistics, Hyderabad	27.12.2017 - 30.12.2017	International Indian Statistical Association
9	On Bivariate Dynamic Cumulative Past Entropy Functions (Invited Lecture)	International Conference on Celebrating Statistical Innovation and Impact in a World of Big & Small Data	20.12.2015 - 24.12.2015	Department of Statistics & Centre for Advanced Studies, Savitribai Phule Pune University

10	Ordering Properties of Largest Statistics from Heterogeneous Generalized Exponential Populations (Invited Lecture, Session Chair)	International Conference on Statistics for Twenty-first Century-2015	17.12.2015 - 19.12.2015	Department of Statistics, University of Kerala, Trivandrum
11	Ordering Properties of Order Statistics from Heterogeneous Exponential Populations (Invited Lecture)	Recent Trends in Mathematics and Its Applications, 2015	18.03.2015 - 19.03.2015	Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University
12	Bivariate Extension of (Dynamic) Cumulative Past Entropy	National Conference on Advances in Theoretical and Applied Statistics	11.02.2015 - 13.02.2015	Panjab University, Chandigarh
13	On Study of Generalized Cumulative Entropy of Order $\alpha$ and Type $\beta$ (Invited Lecture)	International Conference on Recent Advances in Statistics and Their Applications	26.12.2013 - 28.12.2013	ISPS and Aurangabad University
14	Study of Dynamic Survival Entropy and Cumulative Past Entropy of Order $\alpha$ (Invited Lecture)	International Conference on Statistics, Science and Society: New Challenges and Opportunities	02.01.2013 - 05.01.2013	Chennai
15	On Study of Dynamic Survival Entropy and Cumulative Past Entropy	National Conference on Application of Statistics in Industry and Planning	25.02.2012 - 27.02.2012	Visva-Bharati University, Santiniketan
16	On Study of Dynamic Survival Entropy (Invited Lecture)	XXXI Annual Convention of Indian Society for Probability and Statistics (ISPS) and International Conference on Statistics, Probability and Related Areas	19.12.2011 - 22.12.2011	Cochin University of Science and Technology, Cochin
17	Comparison of Two Repairable Systems	International Conference on Development and Applications of Statistics in Emerging Areas of Science & Technology	08.12.2010 - 10.12.2010	Jammu University, Jammu

18	On Improvement and Deterioration of a Repairable System Under Generalized Stochastic Orders (Invited Lecture)	International Conference on Statistics, Probability, Operations Research, Computer Science and Allied Areas	04.01.2010 - 08.01.2010	Andhra University, Visakhapatnam
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## Other Relevant Information

### Reviewer for Scientific Journals

- **Springer Nature:**

- Annals of Operations Research
- Scientific Reports

- **Elsevier:**

- Statistics and Probability Letters
- Operations Research Letters
- Journal of Computational and Applied Mathematics
- IIMB Management Review

- **Taylor and Francis:**

- Statistics
- Communications in Statistics: Theory and Methods
- Communications in Statistics: Simulation and Computation
- Stochastic Models

- **John Wiley and Sons:**

- Naval Research Logistics

- **Other Journals:**

- International Journal of Reliability and Safety (IJRS)
- OPSEARCH
- AIMS Mathematics
- Mathematica Slovaca
- Stochastic Models in Probability and Statistics

### Professional Membership

- Life member of International Indian Statistical Association.
- Life member of Indian Association for Productivity, Quality Control and Reliability.
- Life member of Calcutta Mathematical Society.