


Format for Faculty Details for IGNOU Web site

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|---|------------------|---------|---|
|  | Name: | | Dr. Taruna Kumari |
| | Designation: | | Associate Professor in Statistics |
| | Contact Address: | | School of Sciences, Raman Bhawan, Block- D, Academic complex, Indira Gandhi National Open University Maidan Garhi, New Delhi - 110068 |
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EDUCATIONAL QUALIFICATIONS

| Degree | Year | Institute/University |
|---------------------|------|--|
| Ph.D. | 2018 | Department of Statistics, University of Delhi, Delhi |
| M.Phil. | 2012 | Department of Statistics, University of Delhi, Delhi |
| M.A. Statistics | 2009 | Hindu College, University of Delhi, Delhi |
| B.A.(H) Mathematics | 2007 | Miranda House, University of Delhi, Delhi |

CAREER PROFILE

Teaching Experiences:

- Working as an Associate Professor from August 10, 2021 to till date, in the Discipline of Statistics, School of Sciences, Indira Gandhi National Open University, Maidan Garhi, New Delhi-110068
- Worked as an Assistant Professor (Ad-hoc) from August 19, 2015 to August 09, 2021, in the Department of Statistics, University of Delhi (DU), Delhi-110007, INDIA.
- Worked as an Assistant Professor (Ad-hoc) from July 21, 2010 to August 18, 2015 in the Department of Statistics, Sri Venkateswara College, DU, Benito Juarez Rd, Dhaula Kuan Enclave I, Delhi-110021, INDIA.

AREA OF INTEREST/SPECIALIZATION

- Reliability and Life Testing
- Order Statistics
- Statistical Inference in Life Testing

ROLE AND RESPONSIBILITIES AT IGNOU

- Design and Development of academic Programmes/Courses of Statistics.
- Coordination of the new Programmes/Courses of Statistics from the stage of proposal to launch.
- Maintenance of already offered Programmes/Courses of Statistics.
- Teaching and Counselling of the students of Statistics.

- Research in Core and Interdisciplinary areas.
- Participation in various activities/committees at IGNOU.
- External Examiner for conduct of practical examination.
- Conduct of Interactive radio Counselling sessions time to time.
- Other responsibilities assigned by IGNOU.

RESEARCH GUIDANCE – NIL

| Supervision of | Year of completion | Name | Ph. D. Topic |
|----------------|--------------------|------|--------------|
| - | - | - | - |

Books/Monographs (Authored/Edited)/ **Book Chapter/ Lecture Notes:**

Book Chapter:

1. **Kumari, T., & Pathak, A.** (2022). Estimation and Testing Procedures for the Reliability Functions of Exponentiated Generalized Family of Distributions and a Characterization Based on Records. In **Optimization Models in Software Reliability** (pp. 283-321). Springer, Cham.

Papers in Refereed/Peer reviewed Journals: 21 (Total)

1. Simran Takkar, Bhawna Tyagi, Naveen Kumar, **Taruna Kumari**, Khushboo Iqbal, Ajit Varma, Indu Shekhar Thakur, Arti Mishra (2022). Biodegradation of methyl red dye by a novel actinobacterium *Zhihengliuella* sp. ISTPL4: Kinetic studies, isotherm and biodegradation pathway. *Environmental Technology & Innovation*, 26, 102348. ELSEVIER; IF- 7.758. SCOPUS indexed. ISSN 2352-1864.
2. Arti Mishra, Juhi Gupta, **Taruna Kumari**, Ruchita Pal and I.S. Thakur (2021). Unravelling the attributes of novel cyanobacteria *Jacksonvillea* sp. ISTCYN1 by draft genome sequencing. *Bioresource Technology*, 337 (2021) 125473. ELSEVIER; IF-11.889, SCOPUS indexed, ISSN 0960-8524.
3. Ajit Chaturvedi, **Taruna Kumari** and Vijay Kumar Pandey (2020). On the Estimation of Parameters and Reliability functions of a New Two-Parameter Lifetime Distribution based on type II censoring. *STATISTICA*, Vol. 3, 201-232. SCOPUS indexed, ISSN 1973-2201.
4. Ajit Chaturvedi and **Taruna Kumari** (2019). Estimation and Testing Procedures of the Reliability Functions of Generalized Inverted Scale Family of Distributions. *Statistics-A Journal of Theoretical and Applied Statistics*, vol-53, issue-1, 148-176. Taylor & Francis; IF- 2.346, SCOPUS indexed, ISSN:0233-1888(P) 1029-4910 (O).
5. **Taruna Kumari**, Ajit Chaturvedi and Anupam Pathak (2019). Estimation and Testing Procedures for the Reliability Functions of Kumaraswamy-G Distributions and a Characterization based on Records. *Journal of Statistical Theory and Practice*, 13:22. <https://doi.org/10.1007/s42519-018-0014-7>, Springer, SCOPUS indexed, ISSN: 1559-8608 (P) 1559-8616 (O).

6. **Taruna Kumari** and Anupam Pathak (2019). On the Comparison of Classical and Bayesian Methods of Estimation of Reliability in Multicomponent Stress-Strength Model for a Proportional Hazard Rate Model. *American Journal of Applied Mathematics and Statistics*, Vol. 7, No. 4, 152-160.
ISSN (P): 2328-7306.
7. Ajit Chaturvedi and **Taruna Kumari** (2019). Robust Bayesian analysis of generalized inverted family of distributions. *Communications in Statistics-Simulation and Computation*, 48(8), 2244-2268.
Taylor & Francis; IF-1.162, SCOPUS indexed, ISSN: 0361-0918 (P) 1532-4141 (O).
8. Ajit Chaturvedi and **Taruna Kumari** (2019). Estimation and comparison of the stress-strength models with more than two states under Weibull distribution and type II censoring scheme. *Communications in Statistics - Theory and Methods*, 48, NO. 3, 537-548.
Taylor & Francis; IF- 0.863, SCOPUS indexed, ISSN: 0361-926 (P) 1532-415X (O).
9. Ajit Chaturvedi, **Taruna Kumari** and Narendra Kumar (2021). Numerical study of robust Bayesian analysis of generalized inverted family of distributions based on progressive type II right censoring. *Communications in Statistics-Simulation and Computation*, 50(11), 3207-3240.
Taylor & Francis; IF- 1.162. SCOPUS indexed. ISSN 0361-0918 (P) 1532-4141 (O).
10. Ajit Chaturvedi, **Taruna Kumari** and Narendra Kumar (2019). Bayesian Estimation Procedures for Generalized Inverted Scale Family of Distributions based on Progressive Censoring. *Far East Journal of Theoretical Statistics*. Vol. 56, No. 2, 2019, 93-124, ISSN: 0972-0863.
11. Arti Mishra, Rashmi Rathour, Rashmi Singh, **Taruna Kumari** and Indu Shekhar Thakur (2019). Degradation and detoxification of phenanthrene by actinobacterium *Zhihengliuella* sp. ISTPL4. *Environmental Science and Pollution Research*, 27, 27256-27267.
Springer; IF-5.190, SCOPUS indexed, ISSN: 0944-1344 (P) 1614-7499 (O).
12. **Taruna Kumari** and Bhupender kumar (2018). High-mobility group box 1 protein (HMGB1) gene polymorphisms and cancer susceptibility: A comprehensive meta-analysis. *Clinica Chimica Acta*, Vol. 483, 170-182.
ELSEVIER; IF-6.314, SCOPUS indexed, ISSN: 0009-8981.
13. **Taruna Kumari**, Meenakshi Vachher, Savita Bansal, Rameshwar N.K. Bamezai and Bhupender Kumar (2018). Meta-analysis of mitochondrial T16189C polymorphism for cancer and Type 2 diabetes risk. *Clinica Chimica Acta*, Vol. 482, 136-143.
ELSEVIER; IF-6.314, SCOPUS indexed, ISSN: 0009-8981.

14. Rashmi Rathor, Juhi Gupta, Bhawna Tyagi, **Taruna Kumari** and Indu Shekhar Thakur (2018). Biodegradation of pyrene in soil microcosm by *Shewanella* sp. ISTPL2, a psychrophilic, alkalophilic and halophilic bacterium. *Bioresource Technology Reports*, 4, 129-136.
ELSEVIER SCOPUS indexed, ISSN: 2589-014X.

15. Ajit Chaturvedi and **Taruna Kumari** (2017). Robust Bayesian Analysis of Generalized Half Logistic Distribution. *Statistics, Optimization & Information Computing*, Vol. 5, 158–178.
SCOPUS indexed, ISSN 2310-5070.

16. Ajit Chaturvedi and **Taruna Kumari** (2017). Estimation and Testing Procedures for the Reliability Functions of a General Class of Distributions. *Communications in Statistics - Theory and Methods*, Vol. 46, No. 22, 11370-11382.
Taylor & Francis; IF- 0.863, SCOPUS indexed, ISSN: 0361-926 (P) 1532-415X (O).

17. Ajit Chaturvedi and **Taruna Kumari** (2015). Estimation and testing procedures for the reliability functions of a family of lifetime distributions. *InterStat*.
YEAR/2015/abstracts/1504001.php. Available at
<http://interstat.statjournals.net/INDEX/Apr15.html>
ISSN 1941-689X.

18. **Taruna Kumari** and Anupam Pathak (2014). Relations for moments of generalized order statistics from Chen distribution and its characterization. **Journal of Combinatorics Information and System Sciences**, Vol. 39, No. 1-4, pages 49-56.
ISSN: 0250-9628.

19. **Taruna Kumari** and Anupam Pathak (2014). Conditional expectation of certain distributions of dual generalized order statistics. *International Journal of Mathematical Analysis*, Vol. 08, no. 3, 141-148.
ISSN 1312-8876.

20. **Taruna Kumari** and Anupam Pathak (2014). Recurrence Relations for Single and Product Moments of Generalized Order Statistics from Generalized Power Weibull Distribution and its Characterization. *International Journal of Scientific & Engineering Research*, 5(1), 1914-1917. ISSN 2229-5518.

21. Jagdish Saran and **Taruna Kumari** (2013). Recurrence relations for marginal and joint moment generating functions of upper k-record values from Gompertz distribution. *ProbStat Forum*, Vol. 06, 96-106. ISSN 0974-3235.

HONOURS/AWARDS/DISTINCTIONS

UGC-CSIR NET JRF

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| CONFERENCES/SEMINARS/WORKSHOPS ORGANISED/PARTICIPATED |
| <ul style="list-style-type: none">• Conferences/Seminars/Workshops organised: 01• Conferences/Seminars participated: 03• Attended Workshops/ Short Term Courses:05• Paper Presented in Seminar / Conferences: 03• Faculty Development Programmes: 03• Refresher Course: 01 |
| RESEARCH PROJECT – NIL |