

CURRICULUM VITAE



Name : DAVID D. HANAGAL

Honors & Awards : Elected as the Fellow of Royal Statistical Society, London, UK, in the year 2003.

Designation : Professor & Head
Faculty : Science

Office Address: Professor & Head
Department of Statistics
Vishwakarma University
Laxmi Nagar, Kondhwa Badruk
Pune-411048, India.

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david.hanagal@gmail.com
Web: <http://stats.unipune.ac.in/ddh/ddh1.html>

Sex : Male
Citizen : Indian
Date of Birth : April 16, 1957
Marital Status : Married

Educational Qualifications:

Degree	University/Institute	Subject	Year
B.Sc.	Karnatak University	Physics, Statistics, Mathematics	1978
M.Sc	Karnatak	Statistics	1980
M.Phil.	S.P. Pune University	Statistics	1988

Ph.D.	S.P. Pune University	Statistics	1992
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Title of Ph.D. thesis: Some Contributions to the inference in Bivariate
And Multivariate Exponential Distributions.

Ph.D. Supervisor: B. K. Kale

Teaching/Research Experience:

Duration	Institute	Designation	Nature of work
Dec 1980 - Jan 1982	Karnatak College Dharwad, India.	Lecturer (Assist. Prof.)	Teaching
Jan 1982 - May 1982	K.W. College Sangli, India.	Lecturer (Assist. Prof.)	Teaching
Jun 1982 - May 1988	Y.M. College Pune, India.	Lecturer (Assist. Prof.)	Teaching
Jun 1988 - May 1995	S.P. Pune University Pune, India.	Lecturer (Assist. Prof.)	Teaching & Research
Jun 1995 - May 2006	S.P. Pune University Pune, India.	Reader (Assoc. Prof.)	Teaching & Research
June 2006 - May 2015	S.P. Pune University Pune, India.	Professor	Teaching & Research
June 2015 – April 2017 Retired on 30.04.2017	S.P. Pune University Pune, India.	Professor & Head	Teaching & Research
March 2018 -	Vishwakarma University Pune, India.	Professor & Head	Teaching & Research

Visiting Appointments at Abroad:

Duration	Institute	Designation	Nature of work
Nov 1996 – Oct 1997	Colegio de Postgrad. Texcoco, Mexico.	Visiting Professor	Teaching & Research
Nov 1997 - Mar 1998	Universidad Narro Saltillo, Mexico	Visiting Professor	Teaching & Research
Apr 1998 - Jan 1999	University of Duesseldorf, Germany.	Sr. Statistician	Research
Jan 2002 - Dec 2002	University of Duesseldorf, Germany.	Sr. Statistician	Research
Jun 2002 – Apr 2004	University of Duesseldorf, Germany.	Sr. Statistician	Research
Aug 2006 – May 2007	Michigan State University, U.S.A.	Visiting Professor	Teaching & Research

Research Publications: Enclosed list of publications

International	National	Proceedings	Submitted	Books	Book-Chapters
100	12	6	5	2	3

Google Citation Indices:

Total Citations	h-index	i10-index
724	14	26

Books Published: 2

1. A book on “ **Introduction to Applied Statistics: Non-calculus based approach**”, Narosa Publishing House, published in the year 2009.
2. A book on “ **Modeling Survival Data Using Frailty models** “, CRC Press, Taylor and Frances Group, Chapman and Hall, New York, published in the year 2011.

Book-Chapters Published:

1. **Multivariate Reliability Models and Methods**. Wiley’s Encyclopedia of Quantitative Risk Assessment, New York: Wiley & Sons. Vol 3, 1144-47. ISBN: 978-0-470-03549-8. (2008).
2. **Bayesian Estimation Using EM Algorithm in Bivariate Exponential Distribution Based on Censored Sample**. New Developments in Applied Statistics. New York: Nova Science Publishers, 197-214. ISBN: 9781613246481. (2012).
3. **Frailty Models in Public Health**. Handbook on Statistics, Vol. 37(B), Elsevier Publishers. New York; 209-247. ISBN: 978-0-444-63975-2; ISSN: 0169-7161. (2017).

Clinical Experience:

Worked as Sr. Biostatistician/Scientist in Heinrich Heine University, Institute of Statistics in Medicine, Duesseldorf, Germany.

Work involved: Data analysis using SAS package, New Model building in Clinical research.

Duration: April 1998 to January 1999

January 2002 to December 2002, June 2003 to April 2004.

PROFILE :

1. Distinction of being elected as the ‘Fellow of Royal Statistical Society, London, UK,’ in 2003.
2. Editor of “InterStat” Journal.

3. Editor-in-Chief (Indian Region) of “American Journal of Biostatistics”
4. Editor of “International Journal of Agricultural and Statistical Sciences”.
5. Guest Editor of Journal of the Indian Statistical Association (2014).
6. Associate Editor of the Journal of Indian Society for Statistics and Probability.
7. Editorial Board member of “Statistical Papers” (2002-2011).
8. Editorial Board member of “International Journal of Environmental Sciences”.
9. Editorial Board member of “Journal of Applied & Computational Mathematics”.
10. Editorial Board member of “International Journal of Statistics and Reliability Engineering”.
11. Editorial board member of “Advances in Reliability”.
12. Vice-President of Indian Society for Probability and Statistics.
13. Wrote a book on “ [Introduction to Applied Statistics: A Non-calculus based approach](#)”, Narosa Publishing House, published in the year 2009.
14. Wrote a book on “ [Modeling Survival Data Using Frailty Models](#) “, CRC Press, Taylor and Frances Group, New York, published in the year 2011.
15. Wrote three Book-Chapters (details are at the end of the CV).
16. Worked as visiting Professor at Michigan State university, East Lansing, U.S.A. during August 2006 to May 2007.
17. Worked as visiting Professor at Mexico during Nov 1996 to March 1998.
18. Worked as Sr. Biostatistician/Scientist at Heinrich Heine university, Duesseldorf, Germany during April 1998 to January 1999, January 2002 to December 2008 and June 2003 to April 2004.
19. Governing Council member of Journal of the Indian Statistical Association.
20. Subject Expert for UGC special assistant program (SAP) screening Committee
21. Subject Expert for the selection of UGC Major and Minor research projects
22. Subject Expert for the selection of UGC Post-Doctoral Fellowships
23. Advisory Committee Member of UGC special assistance program (SAP) for Karanatak University Dharwad.
24. Advisory Committee Member of UGC special assistance program (SAP) for Banaras Hindu University, Varanasi.
25. Board of Studies member of Cochin University of Science and Technology, Cochin.
26. Board of Studies member of Pondicherry University, Paducherry.
27. Board of Studies member of Yashawantrao Mohite College, Bharati Vidyapeeth, Pune.
28. Convener of A. R. Kamat Award for Best Ph.D. thesis from Indian Society for Probability and Statistics.
29. Executive Council member of Indian Society for Probability and Statistics (2013-2016).
30. Treasurer of Indian Statistical Association (2003 – 2014).
31. Governing Council member of Indian Statistical Association (2003 till date).
32. A dynamic Statistician with over 36 years of rich Academic and Research oriented experience in national as well as international environment.
33. Presently working as Professor and Head of the Department of Statistics with Savitribai Phule Pune University.
34. In depth knowledge of Statistical inference, Clinical Trials, Reliability, Survival Analysis, Frailty models, Generalized loss of memory property, Stress-Strength models, Test for bivariate exponentiality and multivariate exponentiality against positive aging, Selection problems, Censoring Schemes, Distribution Theory, Multivariate models, Classical inference, Bayesian inference, nonparametric inference, Characterisation and Nonparametric Inference.

35. Expertise in application of various Statistical Packages viz., SAS, SPLUS, R, SPSS, MATLAB, MINITAB and LOTUS for researches and analysis.
36. Hands on experience in Biostatistics and have played a key role in carrying out Statistical Analysis of Dental Implant Data through application of SAS package.
37. Convener of International Conference on “Role of Statistics in the advancement of Science and Technology” during December 16-18, 2013 in the Department of Statistics, University of Pune.
38. Convener of IISA International Conference on “Celebrating Statistical Innovation and Impact in a World of Big and Small Data” during December 20-24, 2015 at YSHADA, Pune.
39. Conducted conferences/seminars and workshops for generating awareness of the Advanced Statistical Computing tools and Statistical Software.
40. Conducted “SIX SIGMA”, “Statistical Process Control”, “Designs of Experiments”, and “Engineering Reliability” programs for Sr. level managers of several industries.
41. Have published 118 research papers in well-known International Journals (Refereed Journals) and presented a talk in more than 50 national & international conferences.

Recent Research: Frailty regression models for univariate and bivariate survival data, Censoring Schemes, Bayesian inference for bivariate survival data, Bootstrapping, Monte Carlo methods, MCMC algorithms.

Area of Research:

Inference in bivariate and multivariate exponential distribution, Selection of better component in two component system, Stress-Strength models, Reliability theory, Multivariate Pareto and Weibull Distributions, Characterization, Nonparametric Inference, Tests for bivariate and multivariate exponentiality against positive aging, Survival Analysis, Frailty models.

Courses currently teaching: Data Mining and Survival Analysis.

Courses Taught:

Reliability Theory, Survival Analysis, Data Mining, Linear Algebra, Probability Distributions, Parametric Inference, Multivariate Analysis, Operations Research, Statistical Process Control, Designs of Experiments, Sampling theory, Regression analysis, Actuarial Statistics, Computer Oriented Statistical methods, Programming in SAS, SPSS, MINITAB and R.

Professional Affiliation:

1. Fellow of the Royal Statistical Society(RSS), London, UK.
2. Editorial Board member of “Statistical papers” Journal (2002-2011).
3. Editorial Board member of “InterStat” Journal.
4. Editorial Board member of Journal of Reliability and Statistical Studies (JRSS).
5. Life member of International Indian Statistical Association (IISA).
6. Life member, Governing Council member and Treasure of Journal of the Indian Statistical Association(JISA).

7. Life member of Indian Science Congress Association(ISCA).
8. Life member of Indian Society for Probability and Statistics(ISPS).

Statistical Software Experience :

- Expertise in SAS package since 1996. I have used SAS/STAT, SAS/GRAPH, SAS/IML, SAS/INSIGHT, SAS/QC modules in SAS.
- Expertise in conducting and also worked as resource person in the Workshop on "Advanced Statistical Computing" during February 28 to March 5, 2005. The motivation of this workshop is to train statisticians in well-known statistical packages like SAS, SPSS and R.
- Expertise in conducting and also worked as resource person in the Workshop on "Advanced Statistical Computing" during August 8-19, 2005. The motivation of this workshop is to train statisticians in well-known statistical packages like SAS, SPSS and R.
- Expertise in conducting and also worked as resource person in the Workshop on "Advanced Statistical Computing" during November 13-15, 2007. The motivation of this workshop is to train statisticians in well-known statistical package Systat.
- Resource person in the Workshop on "Uses of Statistical Software" during September 29 to October 10, 2000. The motivation of this workshop is to train statisticians in well-known statistical packages like SAS, SPSS and R.
- Resource person and also conducted "SIX SIGMA" training program during June 21-22 and October 7-9, 2005 for the production and manufacturing industries in Pune. Also conducting training program in "SPC, DOE, Taguchi Techniques & Reliability " at Sr. managerial level in Industries.
- Resource person in R Statistical Package Workshop during May 2004 and November 8-28, 2005 at University of Pune.
- Co-ordinator in Advanced Statistical Computing Workshop at Department of Statistics, University of Pune during November 8-10, 2007.
- Resource person in Advanced Statistical Computing Workshop at Yashawantrao Chavan Maharashtra Open University, Nashik during December 10-12, 2008.
- Coordinator of the national workshop on "Reliability, Survival Analysis and Industrial Statistics" at University of Pune, during November 9-10, 2012.
- Convener of International Conference on "Role of Statistics in the Advancement of Science and Technology", at University of Pune during December 16-18, 2013.

Invited talk delivered in International/National Conference: 50

Invited talk delivered in Workshop : 10

Invited talk delivered in Summer Courses : 10

Computer knowledge:

1. Languages Known: VISUAL BASIC 6, JAVA, C, C++, GAUSS, WEB Designing.
2. Statistical Packages Used: SAS, SPLUS, SPSS, MATLAB, MINITAB and LOTUS.
3. Platform Used: WINDOWS and UNIX.

Referee Work: Worked as a referee for the following journals

1. Journal of the Indian Statistical Association
2. Communications in Statistics
3. Biometrics
4. Statistical Papers
5. Journal of Multivariate analysis
6. Statistical Methods
7. Gujarat Statistical Review
8. Sankhya
9. IEEE Transactions
10. Statistics & Probability Letters
11. Statistics
12. Aligarh Journal of Statistics
13. Technometrics
14. Journal of Statistical Computational and Simulation
15. Journal of Applied Probability and Statistics
16. Model Assisted Statistics and Applications
17. Journal of Applied Statistics
18. Computational Statistics and Data Analysis
19. International Journal of Statistics and Management System
20. Punjab university Journal of Mathematics
21. Annals of Operations Research
22. TEST Journal
23. Indian Association for Product, Quality and Reliability Transactions

Referee Work/ viva-voce for the following Ph.D. theses:

1. Bangalore University, Bangalore, Karnatak;
2. Cochin University of Science and Technology, Cochin, Kerala;
3. M.D. University, Rohtak, Haryana;
4. Sardar Patel University, Gujarat;
5. Periyar University, Periyar, Tamilnadu;
6. Mahatma Ghandi University, Kottayam, Kerala;
7. Gandhigram Rural University, Gandhigram, Tamilanadu,
8. Shivaji University, Kolhapur, Maharashtra.
9. S.G.B. Amravati University, Amravati, Maharashtra.
10. R.T.M. Nagpur University Nagpur, Maharashtra.
11. Kakatiya University, Warangal, Telangana.

Research Report:

1. UGC Minor Research Project: Title: Inference problems in bivariate exponential models. Amount sanctioned Rs. 17,000/- during the year 1993-95 at University of Pune, India.

2. **UGC Minor Research Project: Title: Selection of a better component in bivariate exponential models. Amount sanctioned Rs. 8,000/- during the year 1995-97 at University of Pune, India.**
3. **National Council of Science and Technology, Mexico: Title: Estimation of system reliability in stress-strength models of stochastic systems. Place and Period: Colegio de Postgraduados, Montecillo, Texcoco, CP56230, Mexico during the year 1996-97.**
4. **National Council of Science and Technology, Mexico: Title: Estimation of reliability of a component based on quantiles under Weibull stress-strength models. Place and Period: Universidad Autonoma Agraria Antonio Narro, Saltillo, CP25315 Mexico during the year 1997-98.**
5. **German Research Grant Project, Germany: Title: Parametric and non-parametric regression analysis of survival times on dental implants. Place and period: Heinrich Heine University, Institute of Statistics in Medicine, University street 1, D-40225 Duesseldorf, Germany during the period 1998-1999 and 2002-2004.**
6. **UGC-CSIR Major Research Project: Title: Frailty Models for the Survival Data. Place and Period: University of Pune, Pune during the period 2009-11. Sanctioned amount: Rs. 6,38,000/-**
7. **BCUD Research Project: Title: Replacement Policies which depend on Age, Repair Time and Nature of Repair. Place and Period: University of Pune, Pune during the period 2009-12. Sanctioned amount: Rs. 3,00,000/-**

Recent Conferences/Workshops Attended:

1. **International Workshop on Reliability, Statistical Inference and Related Fields at IIM Khozikode, India during January 7-9, 2005.**
2. **International Conference on Reliability and Safety Engineering at IIT Kharagpur, Bhubaneshwar Branch, India during December 21-23, 2005.**
3. **International Conference on Reliability and safety Engineering at IIT Kharagpur, Chennai, India during December 18-20, 2006.**
4. **International Conference on Reliability and safety Engineering at IIT Kharagpur, Udaipur, India during December 17-19, 2007.**
5. **National Conference on Statistical Inference at University of Pune, India during January 8-10, 2006. (Worked as a Convener).**
6. **National Conference on Modelling and Analysis of Life Time Data held at Cochin University of Science and Technology during February 20-22, 2006.**
7. **National Conference at Department of Statistics, University of Pune during August 6-8, 2007.**

- 8. National Conference at Department of Statistics, University of Pune during December 16-18, 2008.**
- 9. ISA International Conference at Department of Statistics, University of Pune during December 21-23, 2009.**
- 10. International Indian Statistical Association Conference at Vishakhapatnam during January 4-8, 2010.**
- 11. National Workshop on Basic Statistics and its Applications at Institute of Bioresources and Sustainable Development, Department of Biotechnology, Imphal during August 16-21, 2010**
- 12. Satellite International Conference on Probability and Statistics at Sambalpur University during September 1-3, 2010.**
- 13. National Workshop on Reliability Theory and Survival Analysis at Indian Institute of Technology, Powai during November 25-27, 2010.**
- 14. International Conference on Development and Applications of Statistics in Emerging areas of Science and Technology at Department of Statistics, Jammu University, Jammu during December 8-10, 2010.**
- 15. National Workshop on Computational Methodologies in Statistics at Department of Statistics, Pondicherry University, Pondicherry during January 19-21, 2011.**
- 16. International Conference on Statistics and Information Analytics, Loyola College, Chennai-600034 during August 25-27, 2011.**
- 17. International Conference on Statistics, Probability and Related Areas and ISPS, CUSAT, Cochin, during December 19-22, 2011.**
- 18. National Seminar on “significance of Bioavailability, bioequivalence and Statistics” at MMM College of Pharmacy, Kalewadi, Pune during February 21-22, 2012.**
- 19. Chief guest at National Seminar on “Applications of Statistical methods in Industrial Sector and Medical Sciences” at Pratibha College of Commerce and Computer Studies, Chinchwad, Pune during February 25, 2012.**
- 20. National Workshop on “Applications of Statistics in Designing Pharmaceutical Experiments” at Sinhgad Institute of Pharmaceutical Sciences, Lonawala, during March 2-4, 2012.**
- 21. National Seminar on “Statistics and its Applications” at Devi Ahilya University, Indore during March 16, 2012.**

- 22. Chief guest and gave a talk on “Industrial Statistics” at National Statistics day at Ministry of Statistics & Programme, NSSO, Government of India on 29th June 2012 in the honour of P. C. Mahalanobis birth centenary.**
- 23. Gave an invited talk at National Seminar on “Recent Developments in Statistical Modeling”, October 12-13, 2012 at Shivaji University, Kolhapur.**
- 24. Worked as a co-ordinator and gave a talk at National Workshop on “Reliability Theory, Survival Analysis and Industrial Statistics” November 9-10, 2012 at Department of Statistics, University of Pune.**
- 25. Gave an invited talk at 21st International Conference of FIM on “Interdisciplinary Mathematics, Statistics and Computational Techniques” at Panjab University, Chandigarh, during December 15-17, 2012.**
- 26. Gave an invited talk at International Conference on “ Frontiers of Statistics and its Applications” in Conjunction with XXXII Annual Convention of ISPS at Pondicherry University, Puducherry, during December 21-23, 2012.**
- 27. Gave an invited talk at IISA International Conference on “Statistics, Science and Society: New Challenges and Opportunities” at University of Madras, Chennai, during January 2-5, 2013.**
- 28. Chief guest and also gave a talk on “Labour and Employment Statistics” at National Statistics day at Ministry of Statistics & Programme, NSSO, Government of India on 29th June 2013 in the honour of P. C. Mahalanobis birth centenary.**
- 29. Gave an invited talk at International Conference on “Mathematical Techniques in Engineering Applications” at Graphic Era University, Dehradun during October 24-25, 2013.**
- 30. Gave an invited talk at International Conference on “ Frontiers of Statistics and its Applications” in Conjunction with XXXIII Annual Convention of ISPS at Dr. Babasaheb Ambedkar Marathawada University, Aurangabad, during December 26-28, 2013.**
- 31. Gave an invited talk at International Workshop on “Reliability Theory and Survival Analysis” at Cochin University of Science and Technology, Cochin during December 31, 2013 – January 2, 2014.**
- 32. Gave an invited talk at National Seminar on “Research in Statistical Science: Past, Present and Future” at Sardar Patel University, Vallabh Vidyanagar, Gujarat, during February 21-22, 2014.**
- 33. Gave an invited talk in National Seminar on “Statistical Science for Better Tomorrow” in Conjunction with 8th National Statistics Day at S. V. University, Tirupati during June 27-29, 2014.**

34. Gave an invited talk in National Workshop on “Reliability Theory and Survival Analysis” at Annamalai University, Chidambaram during November 17-19, 2014.
35. Gave an invited talk in International Conference on “Statistics and Information Technology for a Growing Nation” at S. V. University, Tirupati, during November 30 to December 2, 2014.
36. Gave an invited talk and also Chief Guest in Faculty Development Program on “Machine Learning Algorithms Data Mining Tools and Big Data Analysis” organized by BCUD, Savitribai Phule Pune University at Sinhgad Institute of Technology and Science during 28th January to 1st February 2015.
37. Gave an invited talk in International Conference on “Statistics and Information Technology for a Growing Nation” at S. V. University, Tirupati, during November 30 to December 2, 2014.
38. Gave an invited talk and also Chief Guest in Annual Departmental Festival at Fergusson College, Pune during December 29-30, 2015.
39. Gave an Key note talk State Level Workshop on “Reliability and Survival Analysis” at Modern College, Pune during January 9, 2016.
40. Gave an invited talk and also Chief Guest in the National Conference at Pratibha College, Chinchwad, Pune during January 12, 2016.
41. Gave an invited talk in the National Conference on “Advances in Applied, Physical, Chemical and Life Sciences” at D. Y. Patil College, Pimpri, Pune during February 3-4, 2016.
42. Gave an invited talk in the National Conference on “Recent Trends in Mathematics and its Applications” at C. T. Bora College, Shirur, Dist: Pune during February 4-5, 2016.
43. Gave an invited talk on the National Statistics day seminar on “Agriculture and Farmer’s Welfare” on 29th June 2016 at Modern College, Ganeshkhind, Pune.
44. Gave an invited talk at State Level Workshop on “Bioinformatics and Biostatistics using R-software” during September 30 to October 1, 2016 at S. P. College, Pune.
45. Gave an invited talk at International Conference on Statistics and Optimization in conjunction with XXXVI-th ISPS during December 17-19, 2016 at Aligarh Muslim University, Aligarh.
46. Gave a key note address at State Level Workshop on “Training on Data Analysis Through SPSS” during January 11, 2017 at Sinhgad Institute, Pune.

47. Gave a key note address at State Level Seminar on “Designs of Experiments: Bridging the gap between Academic and Industry” on 4th February 2017 at Sinhgad College of Pharmacy, Pune.
48. Gave an invited talk at National Conference on “Statistics and Optimization Techniques” during February 11-13, 2017 at M.D. University, Rohtak, Haryana.
49. Gave a key note address at National Seminar on “Statistical Inference and Stochastic Modelling” during February 22-23, 2017 at Karnatak University, Dharwad, Karnataka.
50. Gave a key note address at National Conference on “ “ during March 17-18, 2017 at Sardar Patel University, Anand, Gujarat.

Conferences Attended at Abroad:

1. IFIC TC7 International Conference on Modelling and Optimization at Detroit, U.S.A. during July 22-25, 1997.
Title of the paper presented : Estimation of system reliability in multi-component series stress-strength models.
2. Simposio de Estadistica at CIMAT, Guanajuato, Mexico during the period 30th June to 4th July 1997.
Title of the paper presented : A multivariate Weibull distribution.
3. V Meeting of the International Biometric Society Network at Veracruzana Universidad, Xalapa, Veracruz, Mexico during August 6-9, 1997.
Title of the paper presented : Estimation of system reliability in s-out-of-k system.
4. 12 Foro de Estadistica at IIMAS, UNAM, Mexico during September 22-26, 1997.
Title of the paper presented : Estimation of reliability of a component subjected to bivariate exponential stress.
5. I gave a seminar on “ Estimation of System Reliability in Multi-component Series Stress-Strength Models” at Department of Mathematics, Institute of Technology and Higher Studies, Moterrey, Mexico, on January 30, 1998.
6. German Biometric Society Conference, Berlin, Germany during September 2002.
Title of the paper presented : Bivariate survival of dental implant data.
7. International Biometric Society Conference at Reading, UK during September 16-18, 2003.
Title of the paper presented : Modelling bivariate dental survival data: a parametric approach.

Seminars and Lectures Presented:

Presented several seminars and lectures in the following Universities and Institutes at abroad and in India.

1. University of Mexico, Mexico. (Feb. 1997)
2. Monterray University, Mexico. (Feb. 1998)
3. University of Chapingo, Mexico. (March 1997)
4. Collegio de Postgraduados, Mexico. (March 1997)
5. Agricultural University of Narro, Mexico. (Feb. 1998)
6. University of Duesseldorf, Germany. (June 1998)
7. I gave a seminar on 5th Sept. 2006 at Department of Statistics & Probability, Michigan State University, East Lansing, USA.
8. I gave a seminar on 5th March 2007 at Department of Mathematical and Statistical Sciences, University of Alberta, Canada.
9. I gave a seminar on 20th April 2007 at Department of Statistics, University of Maryland Baltimore Cork, Baltimore, USA.
10. St. Thomas College, Pala, Kerala, India.
11. Vaikunt Mehta Institute, Pune, India. (as a visiting faculty(1988))
12. Department of Botany, University of Pune. (as a visiting faculty (1989-91))
13. National Institute of Construction Management and Research, Pune. (as a visiting faculty (2005))
14. Poona Divisional Productivity Council, Pune. (as a visiting faculty(2005))
15. IBS ICFAI Business School, Pune. (as a visiting faculty (2007, 2008))
16. I gave seminar and lectures during February, 2008 at Department of Statistics, Shivaji University, Kolhapur.
17. I gave seminar and lectures during October 6-9, 2008 at Department of Statistics, Sardar patel University, Vallabh, Vidyanagar, Gujarat.
18. I gave a seminar at Indian Statistical Institute, Calcutta on January 16, 2009.
19. I gave seminar at Department of Statistics, Karnatak University on March 30, 2009.
20. I gave a seminar at National Conference, Department of Biotechnology and Bioinformatics, Karnatak University on January 30, 2009.
21. I gave a seminar at P.C. Jabin College, Hubli on January 31,2009.
22. I gave a seminar at Indian Statistical Institute, Calcutta on August 20, 2010 on the topic "Optimal replacement policies based on number of down times".
23. I gave a seminar at Department of mathematics, Madurai Kamraj University, Madurai on October 18, 2010 on the topic "Optimal replacement policies based on number of down times of the first component".
24. I gave a seminar at International Institute of Information Technology, Pune on 13th October 2011 on "Advance Statistical Computing".
25. I gave a seminar at SAS Institute on "Word Statistics Day", 20th October 2011 on the topic "Analysis of Dental Implant Data using bivariate Survival Model".

Yearly Conferences Attended in India Since 1988:

1. Indian Science Congress Association Conference during the years (1988-2000).
2. Indian Society for Probability and Statistics Conference during the years (1991-2010).

M.Phil. and Ph.D. students guided:

1. **M.Phil. : Kombiz A. Ahmadi. Registered in 2004, Awarded in 2006.. Some contributions to the inference results in stress-strength models.**
2. **Ph.D. : Kombiz A. Ahmadi. Registered in 2006, Awarded Ph.D. in 2009 : Topic: Some contributions to the Bayesian inference in bivariate Distributions.**
3. **Ph.D. : Rupali A. Kanade. Registered in 2009, Awarded in 2011: Topic: Contributions to the optimal repair and replacement policies.**
4. **Ph.D. : Samajdwar C. Jagadiswar. Registered in 2008, Awarded in 2012: Topic: Development of a process performance index for a continuous production process.**
5. **Ph.D. : Alok D. Dabade. Registered in 2008, Awarded in 2012: Topic: Contributions to the Bayesian inference in shared frailty models.**
6. **Ph.D. : Richa Sharma. Registered in 2009, Awarded in 2012: Topic: Contributions to the inference in shared frailty models.**
7. **Ph.D. : Susmita M. Bhambure. Registered in 2011, Awarded in 2015. Topic: Contributions to the in shared frailty models for bivariate survival data.**
8. **Ph.D. : Arvind Pandey. Registred in 2012, Awarded in 2015. Topic: Modeling frailty for bivariate survival data.**
9. **Ph.D. : Asmita T. Kamble. Awarded in 2016: Topic: Modeling bivariate survival data using frailty models.**
10. **Ph.D.: Nileema N. Bhalerao. Awarded in 2017. Topic: Contributions to the inference in software reliability models.**

Administrative Experiences:

1. **Head of the Department of Statistics, Savitribai Phule Pune University, Pune 411007 from June 1, 2015 to date.**
2. **Treasurer of the Journal of the Indian Statistical Association during the period 2004 to 2014.**
3. **Vice-president of the Pune University Statistical Association (1999-2001, 2004-2006).**
4. **Treasurer of the Pune University Statistical Association (1993-1996).**
5. **Member of the Examination Committee of the Department of Statistics, University of Pune (1992-1996, 2004-2006).**
6. **Chairman of the Examination Committee of the Department of Statistics, University of Pune from 2010 to 2013.**

7. Member of the Library committee of the Department of Statistics, University of Pune (1992-1996).

Languages known:

English, German, Spanish, Hindi, Kannada and Marathi.

Names and Addresses of Reference:

1. Prof. Makarand Ratnaparkhi
Department of Statistics
Wright State University
3640, Col Glen Highway, Dayton
OH 45435-0001, USA.
makarand.ratnaparkhi@wright.edu
2. Prof. Bimal K. Sinha
Department of Mathematics and Statistics
University of Maryland Baltimore Cork
1000 Hilltop Circle, Baltimore,
MD 21250, U.S.A.
Email: sinha@umbc.edu
Tel: +1(410)455 2347
3. Prof. B.K. Kale
Department of Statistics
University of Pune
Pune-411007, India.
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LIST OF RESEACH PUBLICATIONS IN PEER REVIEWED JOURNALS:

Year: 1991

1. Large sample tests of λ_3 in the bivariate exponential distribution. *Statistics and Probability Letters*, 12(4), 311-13. Co-author: B.K. Kale. ISSN : 0167-7152.
2. Large sample tests of independence in an absolutely continuous bivariate exponential distribution. *Communications in Statistics, Theory and methods*, 20(4), 1301-13. Co-author: B.K. Kale. ISSN No. 0361-926.
3. Large sample tests of independence and symmetry in the multivariate exponential distribution. *Journal of the Indian Statistical Association*, 29(2), 89-93. ISSN: 0537-2585.

Year: 1992

4. **Large sample tests for testing symmetry and independence in some bivariate exponential models. Communications in Statistics, Theory and Methods, 21(9), 2625-43. Co-author: B.K. Kale. ISSN No. 0361-926.**
5. **Some inference results in bivariate exponential distributions based on censored samples. Communications in Statistics, Theory and Methods, 21(5), 1273-95. ISSN No. 0361-926.**
6. **Some inference results in modified Freund's bivariate exponential distribution. Biometrical Journal, 34(6), 745-56. ISSN: 0323-3847.**
7. **Inference results in some bivariate exponential models based on censoring. Proceedings of the Symposium on Statistical Inference held at Trivandrum, Kerala, India during June 16-18, 1992, Centre for Mathematical Sciences, India, 83-92.**

Year: 1993

8. **Some inference results in an absolutely continuous multivariate exponential model of Block. Statistics and Probability Letters, 16(3), 177-80. ISSN : 0167-7152.**
9. **Some inference results in several symmetric multivariate exponential models. Communications in Statistics, Theory and methods, 22(9), 2549-66. ISSN No. 0361-926.**

Year: 1995

10. **Testing reliability in a bivariate exponential stress-strength model. Journal of the Indian Statistical Association, 33, 41-45. ISSN: 0537-2585.**
11. **Estimation of reliability in absolutely continuous bivariate exponential stress-strength models. Stochastics and Quality control (or Stochastics and Quality control (or Economic Quality Control)), 10, 217-22. ISBN: 1869-6147.**

Year: 1996

12. **A multivariate Pareto distribution. Communications in Statistics, Theory and methods, 25(7), 1471-88. ISSN No. 0361-926.**
13. **Estimation of system reliability from stress-strength relationship. Communications in Statistics, Theory and methods, 25(8), 1783-97. ISSN No. 0361-926.**
14. **UMPU tests for testing symmetry and stress-passing in some bivariate exponential models. Statistics, 28(3), 227-39. 0233-1888**

15. Estimation of system reliability under bivariate Pareto distribution. *Parisankhyan Samikkha*, **3**, 13-18.
16. Estimation of system reliability in two-component stress-strength models. *Stochastics and Quality control (or Economic Quality Control)*, **11**, 145-54. ISBN: 1869-6147.
17. A multivariate Weibull distribution. *Stochastics and Quality control (or Economic Quality Control)*, **11**, 193-200. ISBN: 1869-6147.
18. Selection of a better component in bivariate exponential models. *Statistical Methods and Applications*, **5(2)**, 229-38. ISSN: 1618-2510.

Year: 1997

19. Correction on "A multivariate Weibull distribution". *Stochastics and Quality control (or Economic Quality Control)*, **12**, 59. ISBN: 1869-6147.
20. Inference procedures in some bivariate exponential models under hybrid random censoring. *Statistical Papers*, **38(2)**, 169-89. ISSN: 0932-5026.
21. Estimation of reliability when stress is censored at strength. *Communications in Statistics, Theory and Methods*, **26(4)**, 911-19. ISSN No. 0361-926.
22. Tests for bivariate exponentiality against BHNBU alternatives. *Communications in Statistics, Theory and methods*, **26(5)**, 1239-52. ISSN No. 0361-926.
23. On the estimation of reliability of a component subjected to two stresses. *International Journal of Management and Systems*, **13(1)**, 49-58. ISSN : 0970-7328.
24. Note on estimation of reliability under bivariate Pareto stress- strength model. *Statistical Papers*, **38(4)**, 453-60. ISSN: 0932-5026.

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25. Testing whether the survival function is multivariate new better than used. *Statistical Papers*, **39(2)**, 203-11. ISSN: 0932-5026.
26. Estimation of system reliability in stress-strength models for distributions useful in life testing. *IAPQR Transactions*, **23(1)**, 61-65. Year: 1998. ISSN: 0970-0102.
27. On the estimation of system reliability in stress-strength models. *Stochastics and Quality control (or Economic Quality Control)*, **13(1)**, 17-22. ISBN: 1869-6147.
28. Tests for bivariate exponentiality against BIFRA alternatives based on censored samples. *Communications in Statistics, Theory and Methods*, **27(8)**, 1947-60. Co-author: T.V. Ramanathan. ISSN No. 0361-926.

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29. Estimation of system reliability. *Statistical Papers*, 40(1), 99-106. ISSN: 0932-5026.
30. Estimation of reliability of a component subjected to bivariate exponential stress. *Statistical papers*, 40(2), 211-20. ISSN: 0932-5026.

Year: 2003

31. Estimation of system reliability in multi-component series stress-strength models. *Journal of the Indian Statistical Association*, 41(1),1-7. ISSN: 0537-2585.

Year: 2004

32. Parametric bivariate regression analysis based on censored samples: A Weibull model. *Stochastics and Quality control (or Economic Quality Control)*, 19, 83-90. ISBN: 1869-6147.

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33. A bivariate Weibull regression model. *Stochastics and Quality control (or Economic Quality Control)*, 20, 143-50. ISBN: 1869-6147.
34. Weibull extension of a bivariate exponential regression model. *Stochastics and Quality control (or Economic Quality Control)*, 20, 247-53. ISBN: 1869-6147.
35. A positive stable frailty regression model in bivariate survival data. *Journal of the Indian Society for Probability and Statistics*. 9, 35-44. ISSN: 2364-9569.
36. Bivariate Weibull regression with gamma frailty for censored data. *Proceedings of 1st International Conference on Reliability and Safety Engineering, December 21-23, 2005, held at Indian Institute of Technology, Bhuvaneshwar, India.* pp. 13-20.

Year: 2006

37. Bivariate Weibull regression model based on censored samples. *Statistical Papers*, 47, 137-148. ISSN: 0932-5026.
38. A gamma frailty regression model in bivariate survival data. *IAPQR Transactions*, 31, 73-83. ISSN: 0970-0102.
39. Weibull extensions of bivariate exponential regression model for a survival data. *Statistical Methods*, 8, 110-122.

40. **Bivariate Weibull regression model with gamma frailty for the survival data. Statistical Methods, (Special issue on National Seminar on Modelling and Analysis of Life Time Data), 37-51.**
41. **Bivariate Weibull regression with positive stable frailty for censored data. Proceedings of 2nd International Conference on Reliability and Safety Engineering, December 18-20, 2006, held at Indian Institute of Technology, Chennai, India. pp. 184-192.**
42. **Weibull extension of bivariate exponential regression model with gamma frailty for survival data. Stochastics and Quality control (or Economic Quality Control), 21, 165-174. ISBN: 1869-6147.**

Year: 2007

43. **Positive stable frailty regression models in mixture distributions. Proceedings of 3rd International Conference on Reliability and Safety Engineering, December 17-19, 2007, held at Indian Institute of Technology, Udaipur, India. pp. 350-356.**
44. **Gamma frailty regression models in mixture distributions. Stochastics and Quality control (or Economic Quality Control), 22(2), 295-302. ISBN: 1869-6147.**
45. **A power variance function frailty regression model in bivariate survival data. IAPQR Transactions, 32(2), 117-129. ISSN: 0979-0102**

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46. **Frailty regression models in mixture distributions. Journal of Statistical Planning and Inference, 138(8), 2462-68. ISSN: 0378-3758**
47. **Modelling heterogeneity for bivariate survival data by the lognormal distribution. Statistics & Probability Letters, 78(9), 1101-09. ISSN : 0167-7152.**
48. **Bayesian hypotheses tests for some bivariate exponential distributions. Model Assisted Statistics and Applications, 3(3), 269-278. Coauthor: K.A. Ahmadi. ISSN: 1574-1699.**
49. **Bayesian estimation of parameters in some bivariate exponential models. Advances and Applications in Statistics, 10(2), 179-93. Coauthor: K.A. Ahmadi. ISSN: 0972-3617.**
50. **Estimation of parameters by EM algorithm in bivariate exponential distribution based on censored samples. Stochastics and Quality control (or Economic Quality Control), 23(2), 257-66. Coauthor: K.A. Ahmadi. ISBN: 1869-6147.**

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51. **Weibull extension of bivariate exponential regression model with different frailty distributions. Statistical Papers, 50, 29-49. ISSN: 0932-5026.**

52. **Generalized loss of memory property and a multivariate extension. Stochastics and Quality control (or Economic Quality Control), 24, 43-54. Coauthor: V. Mandrekar. ISBN: 1869-6147.**
53. **Bayesian estimation of the parameters of bivariate exponential distributions. Communications in Statistics – Simulation and Computation, 38(7), 1391-1413. Coauthor: K.A. Ahmadi. ISSN: 0361-0926.**
54. **Bayesian estimation of parameters in bivariate exponential regression models. Journal of Statistical Theory and Application, 8(4), 428-47. Coauthor: K.A. Ahmadi. ISSN: 1538-7887.**
55. **Inference in the multivariate exponential models. Journal of Reliability and Statistical Studies, 2(2), 1-10. ISBN: 0974-8024.**
56. **Bayesian estimation using EM algorithm in bivariate exponential distributions based on censored samples. Journal of Applied Statistical Science, 17(2), 181-98. Coauthor: K.A. Ahmadi. ISSN: 1067-5817.**
57. **Modeling heterogeneity for bivariate survival data by power variance function distribution. Journal of Reliability and Statistical Studies, 2, 14-27. ISBN: 0974-8024.**
58. **A replacement policy based on down time for a cold standby system with dependent lifetime and repair time. Stochastics and Quality control (or Economic Quality Control), 24(2), 207-12. Coauthor: S.R. Rattihalli. ISBN: 1869-6147.**

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59. **Correlated compound Poisson frailty model for the bivariate survival data. International Journal of Statistics and Management Systems, 5, 127-40. ISSN : 0973-7359.**
60. **Modeling heterogeneity for bivariate survival data by Weibull distribution. Statistical Papers, 51(4), 947-58. ISSN: 0932-5026.**
61. **Modeling heterogeneity for bivariate survival data by compound Poisson distribution. Model Assisted Statistics and Applications, 5(1), 01-09. ISSN: 1574-1699.**
62. **Optimal replacement policy based on number of down times. Stochastics and Quality control (or Economic Quality Control), 25(1), 3-12. (with Rupali A. Kanade). ISBN: 1869-6147.**
63. **Modeling Heterogeneity for bivariate survival data by the compound Poisson distribution with random scale. Statistics & Probability letters, 80, 1781-90. ISSN : 0167-7152.**

64. **Optimal replacement policy based on number of down times with priority in use. Stochastics and Quality control (or Economic Quality Control), 25(2), 243-51. (with Rupali A. Kanade). ISBN: 1869-6147.**

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65. **Bivariate linear failure rate distribution. International Journal of Statistics and Management Systems, 6, 73-84. (with K.A. Ahmadi). ISSN : 0973-7359.
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66. **Quality loss index QLI and its properties. Stochastics and Quality control (or Economic Quality Control), 26(1), 63-72. (with J. C. Samajdwar). ISBN: 1869-6147.**
67. **Quality loss index for non-symmetric distributions. International Journal of Reliability and Quality Performance, 3(2), 159-73. (with J. C. Samajdwar). ISBN: 0975-2102.**
68. **Quality loss index with one sided specification limit. International Journal of Reliability and Quality Performance, 3(2), 175-90. (with J. C. Samajdwar). ISBN: 0975-2102.**
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70. **Optimal geometric process replacement policies based on number of downtimes. International Journal of Reliability, Quality and Safety Engineering, 18(6), 495-513. (with Rupali A. Kanade). ISSN: 0218-5393.**

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71. **Optimal replacement policy based on number of down times of the first component. Journal of the Indian Society for Probability and Statistics, 13, 54-64. (with Rupali A. Kanade). ISBN: 2364-9569.**
72. **A bivariate Gompertz regression model with shared gamma frailty for censored data. Model Assisted Statistics and Applications, 7, 161-168. (with Richa Sharma). ISSN: 1574-1699.**
73. **Bayesian estimation of parameters for bivariate Gompertz regression model with shared gamma frailty under random censoring. Statistics and probability Letters, 82, 1310-17. (with Richa Sharma). ISSN : 0167-7152.**

74. **Modeling Hetrogeneity in bivariate survival data by compound Poisson distribution using Bayesian approach. International Journal of Statistics and Management Systems, 7(1-2), 36-84. (with Alok D. Dabade). ISSN : 0973-7359.**
75. **Analysis of tumorigenesis data using shared gamma frailty models via Bayesian approach. International Journal of Statistics and Management Systems, 7, 105-135. (with Richa Sharma). 0973-7359.**

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76. **Modeling of inverse Gaussian frailty model for bivariate survival data. Communications in Statistics, Theory & Methods, 42(20), 3744-69. (with Alok D. Dabade). ISBN/ISSN No. 0361-926.**
77. **Bayesian estimation of parameters and comparison of shared gamma frailty models. Communications in Statistics, Simulation & Computation, 42(4), 910-931. (with Alok D. Dabade). ISSN: 0361-0926.**
78. **Modeling heterogeneity for bivariate survival data by shared gamma frailty regression model. Model Assisted Statistics and Applications, 8, 85-102. (with Richa Sharma). ISSN: 1574-1699.**
79. **Analysis of diabetic retinopathy data using shared inverse Gaussian frailty model. Model Assisted Statistics and Applications, 8, 103-119. (with Richa Sharma). ISSN: 1574-1699.**
80. **A comparative study of shared frailty models for kidney infection data with generalized exponential baseline distribution. Journal of Data Science, 11, 109-42. (with Alok Dabade). ISSN: 1683-8602.**
81. **Compound negative binomial shared frailty models for bivariate survival data. Statistics and Probability Letters, 83, 2507-15. (with Alok Dabade). ISSN : 0167-7152.**
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83. **Prevalence, seasonality and antibiotic susceptibility of thermophilic campylobacters in ceca and carcasses of poultry birds in the “live-bird market”. African Journal of Microbiology Research, 7(21), 2442-53, 2013. (with S. Parker, D. Sachdev, N. DeSouza, A. Kamble, G. Suresh, H. Munot, Y. Shouche, B. Kapadnis). ISBN/ ISSN No. 1996-0808.**

Year: 2014

84. **Bayesian estimation of bivariate exponential distributions based on linex and quadratic loss functions: a survival approach with censored samples. Communications in Statistics, Simulation and Computation, 43(1), 31-44. (with K. A. Ahmadi and S. M. Latifi). ISBN/ISSN No. 0361-0918.**
85. **Comparisons of Frailty Models for Kidney Infection Data under Weibull Baseline Distribution. International Journal of Mathematical Modelling and Numerical Optimisation, 5(4), 342-373. (With Alok Dabade). ISBN/ ISSN No . 2040-6307.**
86. **Gamma Shared Frailty Model Based on Reversed Hazard Rate for Bivariate Survival Data. Statistics and Probability Letters, 88,190-196. (with Arvind Pandey). ISSN : 0167-7152.**
87. **QLI – a valuable index on assurance of quality for customers of process industries. Proceedings of International Conference on Quality. October 19-22, 2014 at Tokyo, Japan. pp. 940-951. (with Jagadiswar Samajdwar).**
88. **Shared Inverse Gaussian Frailty Model Based on Reversed Hazard Rate for Modeling Australian Twin Data. Journal of the Indian Society for Probability and Statistics, 15, 9-37. Coauthor: Susmita M. Bhambure. ISSN : 2364-9569.**
89. **Inverse Gaussian shared frailty for modeling kidney infection data. Advances in Reliability, 1, 1-14. (eSciTech Publishing). Coauthor: Arvind Pandey. ISSN: 2377-1097.**
90. **Analysis of kidney infection data using shared positive stable frailty models. Advances in Reliability, 1, 21-39. (eSciTech Publishing). Coauthor: Susmita M. Bhambure. ISSN: 2377-1097.**
91. **Bayesian estimation in shared gamma frailty models. International Journal of Statistics and Reliability Engineering, 1(2), 88-112. Coauthor: Asmita T. Kamble. ISSN: 2350-0174.**
92. **Bayesian estimation in shared inverse Gaussian frailty models. International Journal of Statistics, 1, 9-20. (eSciTech Publishing). Coauthor: Asmita T. Kamble.**
93. **Bayesian estimation in shared positive stable frailty models. Journal of Data Science, 13, 615-640. Coauthor: Asmita T. Kamble. ISSN 1683-8602.**

Year: 2015

94. **Comparison of shared gamma frailty models using Bayesian approach. Model Assisted Statistics & Applications, 10, 25-41. Coauthor: Susmita M. Bhambure. ISSN: 1574-1699.**

95. **Analysis of bivariate survival data using shared inverse Gaussian frailty model. Communications in Statistics, Theory & Methods, 44(7), 1351-1380. (with Richa Sharma). ISBN/ISSN No. 0361-926.**
96. **Comparison of frailty models for acute leukaemia data under Gompertz baseline distribution. Communications in Statistics, Theory & Methods, 44(7), 1338-1350. (with Richa Sharma). ISBN/ISSN No. 0361-926.**
97. **Modeling bivariate survival data based on reversed hazard rate. International Journal of Mathematical Modelling and Numerical Optimisation, 6(1), 72-100. Coauthor: Arvind Pandey. ISSN: 2040-6307**
98. **Shared Frailty Models Based on Reversed Hazard Rate for Modeling Australian Twin Data. Indian Association for Product, Quality and Reliability Transactions, 40(1), 61-93. Coauthor: Arvind Pandey. ISSN: 0970-0102.**
99. **Bayesian estimation in shared compound Poisson frailty models. Journal of Reliability and Statistical Studies, 8(1), 159-180. Coauthor: Asmita T. Kamble. ISSN: 2277-9620.**
100. **Effect of soil pH on Meloidogyne species in Piper betel by path analysis study. Indian Journal of Nematology, 45(1), 71-80. Coauthors: M. V. Kulkarni and D. Wagh. ISSN: 0303-6960.**
101. **Bayesian inference in Marshall-Olkin bivariate exponential shared gamma frailty regression model under random censoring. Communications in Statistics, Theory and Methods, 44(1), 24-47. Coauthor: Richa Sharma. ISBN/ISSN No. 0361-926.**
102. **Gamma frailty models for bivariate survival data. Journal of Statistical Computation and Simulation, 85(15), 3172-3189. Coauthor: Arvind Pandey. ISSN: 0094-9655.**
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Year: 2016

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106. **Bayesian Estimation in Shared Compound Negative Binomial Frailty Models. Research & Reviews: Journal of Statistics and Mathematical Sciences, 2(1), 53-67. Coauthor: Asmita T. Kamble. ISSN : 2396-8303.**
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110. **Shared Gamma Frailty Models Based on Additive Hazards. Journal of the Indian Society for Probability and Statistics, 17(2), 161-184. Coauthor: Arvind Pandey. ISSN No. 2364-9569.**
111. **Analysis of NHPP software reliability growth models. International Journal of Statistics and Reliability Engineering, 3(2), 53-67. Coauthor: Nileema N. Bhalerao. ISSN: 2350-0174.**

Year: 2017

112. **Shared frailty model based on reversed hazard rate for left censoring data. Communications in Statistics: Simulation and Computation, 46(1), 230-243. Coauthor: Arvind Pandey and P. G. Sankaran. ISSN: 0361-0918.**
113. **Shared frailty models based on reversed hazard rate for modified inverse Weibull distribution as a baseline distribution. Communications in Statistics, Theory and Methods, 46(1), 234-246. Coauthor: Arvind Pandey. ISBN/ISSN No. 0361-926.**
114. **Modeling Australian twin data using shared positive stable frailty models based on reversed hazard rate. Communications in Statistics, Theory and Methods, 46, 3754-3771. Coauthor: Susmita M. Bhambure. ISBN/ISSN No. 0361-926.**
115. **Shared Gamma Frailty Models Based on Reversed Hazard Rate for Modeling Australian Twin Data. Communications in Statistics, Theory & Methods, 46(12), 5812-5826. Coauthor: Susmita M. Bhambure. ISBN/ISSN No. 0361-926.**
116. **Correlated gamma frailty models for bivariate survival data. Communications in Statistics, Simulation and Computation, 46(5), 3627-3644. Coauthors: Arvind Pandey and Ayon Ganguly. ISSN: 0361-0918.**

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118. **Shared Inverse Gaussian Frailty Models Based on Additive Hazards. Communications in Statistics, Theory & Methods, 46(22), 11143-11162. Coauthor: Arvind Pandey. ISBN/ISSN No. 0361-926.**