BIO DATA

In respect of

DR. ASHA GOPALAKRISHNAN SENIOR PROFESSOR IN STATISTICS, DEPARTMENT OF STATISTICS.



COCHIN UNIVERSITY OF SCIENCE & TECHNOLOGY, COCHIN, KERALA, INDIA.

1. ASHA GOPALAKRISHNAN, MSc., M.Phil, Ph.D



2. Senior Professor

Department of Statistics, Cochin University of Science and Technology Cochin-682022, Kerala India.

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3. Education

- 1. MSc (1989), Cochin University of Science and Technology.
- 2. MPhil (1992), University of Kerala.
- 3. PhD (1996), Cochin University of Science and Technology.

4. Title of the Thesis:

Some Bivariate Lifetime Models in Discrete Time.

5. Research Interests

Distribution Theory, Reliability Theory, Survival Analysis.

6. Positions holding

1. **Senior Professor** (Since **4-10-2020**) Department of Statistics, Cochin University of Science and Technology, Cochin-682 022.

7. Positions held

- 1. **Professor,** Department of Statistics, Cochin University of Science and Technology, Cochin-682 022.(4-10-2010 to 3-10-2020.)
- 2. **Associate Professor**, **(4-10-2007 to 3-10-2010.)** Department of Statistics, Cochin University of Science and Technology, Cochin-682 022.
- 3. **Reader** in Statistics, **(4-10-2004 to 3-10-2007.)** Department of Statistics, Cochin University of Science and Technology, Cochin-682 022.
- 4. **Senior Lecturer** in Statistics, **(4-10-1999 to 3-10-2004.)** Department of Statistics, Cochin University of Science and Technology, Cochin 682 022.
- 5. Lecturer in Statistics on Deputation (13-11-1997 to 6-Apr-2001.) to Department of Statistics, Cochin University of Science and Technology, Cochin 682 022.
- 6. Lecturer in Statistics, (4-10-1995 to 3-10-1999.) St Thomas College, Kozhencherry.

8. Administrative Positions

- 1. **Head,** Department of Statistics- **3 years** (1-Mar-2014 to 15-Mar-2014, 29-Aug-2017 to 15-Nov-2019).
- 2. Asst. Warden, Aishwarya, Ladies Hostel, 2007-2009.
- 3. Member, Advisory Committee Women's Study Centre, Cochin University of Science and Technology, Cochin 682 022 (2010).
- 4. Member, Gender Justice Committee, Cochin University of Science and Technology, Cochin 682 022, (2008-2010.)
- 5. Member, NAAC Steering Committee (2020-2021).

9. Awards and Honors:

- 1. Recipient of National Board of Higher Mathematics Research award-1992, Department of Atomic Energy, Govt of India.
- 2. Elected Member of International Statistical Institute, Netherlands.

10. Academic and Extension Activities:

A. Scholarly and Professional activities:

- 1. **Reviewer**-American Mathematical Reviews, Several National and International Journals like Journal of Statistical Planning and Inference; Communications in Statistics-Theory and Methods; Communications in Statistics-Simulation and Computation; ProbStat Forum; Statistics and Probability Letters; IEEE transactions in Reliability; Computational Statistics and Data Analysis; Journal of Indian Statistical Association; Statistical Papers, Applied Stochastic Models in Business and Industry, Journal of Reliability Engineering and System Safety. Publons impact over time- 4(2020).
- 2. **Guest Editor**, Statistical Methods (2006), Special Issue on Proceedings of the National Seminar on Modelling and Analysis of Life Time Data.
- 3. **Associate Editor,** Journal of Indian Statistical Association.(JISA).
- 4. **Associate Editor**, Far East Journal of Theoretical Statistics.

B. Activities for Professional Bodies.

- 1. Member, International Society for Bussiness and Industry(ISBIS)
- 2. Member, International Indian Statistical Association.(IISA).
- 3. Treasurer, Indian Chapter, IISA.
- 4. Chair, Outreach committee, IISA, Indian Chapter
- 5. Member, Outreach Committee, IISA.
- 6. Member, American Mathematical Society
- 7. Member, International Indian Statistical Association.
- 8. Member, Indian Society for Probability and Statistics.
- 9. Member, Indian Statistical Association
- 10. Member. Kerala Statistical Association

C. Resource person for

Refresher courses and FDP sponsored by UGC, AICTE, NCERT, TEQIP, MHRD.

D. Academic Related activities.

- 1. Chair, PG Board of Studies in Statistics, CUSAT(2022-26)
- 2. Member, Board of Board of Studies in Integrated M.Sc.-Physical Sciences.(2022-26)
- 3. Chair, PG Board of Studies in Statistics, CUSAT (2015-2017)
- 4. Member, PG Board of Studies in Statistics, CUSAT (2010-)
- 5. Chair, PG Board of Studies in Integrated M.Sc.-Physical Sciences.(2017-18)
- 6. Member, Board of Studies, Sacred Heart College, Thevara. (Autonomous).(2014-2017)
- 7. Member, Board of Studies, The Maharaja Sayajirao University of Baroda, Gujarat. (2014-2017)
- 8. Member, Board of Studies, St Teresa's College, Thevara (Autonomous).(2017-2020).
- 9. Member, Board of Studies, CMS College Kottayam(2018-2021).
- 10. Member, Research Ethics committee, CUSAT.

11. Projects Completed Successfully: 4 Nos.

A. Disciplinary:

- 1. **Principal Investigator** of UGC Minor Research Project on Multivariate Geometric Extensions, 2001 2002, worth INR. 25,000/-.
- 2. **Principal Investigator** of a major research project "Modelling and Analysis of Preventive Maintenance by Reliability Characteristics" funded by the Department of Science and Technology, Government of India worth of INR. 9,31,085. Duration of the project is 3 years (2006 to 2009).
- 3. **Co-Investigator** of DST-SERB sponsored major research project "Stochastic Modeling of non-linear Time Series" worth INR. 13.2 lakhs.

B. Inter-Disciplinary:

1. **Co-Investigator** of a major research project "Reliability Studies on Sonar Transducer Encapsulant Materials" funded by NPOL, Government of India worth of INR. 9,84,500/-.

Duration of the project is 1 year (2012-2013).(In Association with Department of Polymer Science.CUSAT.)

12. Major Consultancies: 1 Nos

A Study of Absenteeism at Apollo Tyres, Pt Ltd. Perambra. (2015).

13. Conferences/Workshops organized:

- 1. Organized a National Seminar on "Stochastic Modelling and Analysis" during 24-25, March, 2011.
- 2. Organized a Workshop on "R" in Cochin University of Science and Technology, during 14-17, February 2012.
- 3. Organized a Workshop on "Official Statistics-Indian Context", on 20th October, 2015.
- 4. Organized ISBIS Sponsored Time-to- Event and Time Series using R. 2017.
- Organized Virtual workshop on "BAYESIAN MODELING: COMPUTATIONS AND APPLICATIONS" for researchers and faculty at Cochin University of Science and Technology, CUSAT. Bimonthly- April 2017-August, 2017.
- 6. Organized 'A workshop on Time to Events and Time series Data Analysis using R held at Department of Statistics, during 27-29, Sept 2018.
- 7. Organized Seminar Series under Erudite program- 2018-2019. Erudite Scholar: Prof William Q Meeker, University of Iowa, USA.

14. Academic Visits:

A. International:

- 1. **Chulalongkorn University, Bangkok**: Workshop on Sampling Techniques, June 22, 2012.
- 2. **Polytechnic University of Catalonia, Barcelona,** Conference on Business and Industry in Statistics. 2015.
- 3. **University of Piraeus, Athens,** Greece, Conference on Business and Industry in Statistics.2018.
- 4. City University of Hong Kong, Mathematical Methods in Reliability. 2019.

5. University of Pennsylvania, USA, Leadership Academicians Programme. 2019.

B. National:

- 1. Visited **Indian Statistical Institute-Chennai** during 23-28, February, 2015 and delivered a talk on Cascading Models under research collaborations.
- 2. Visited **Indian Statistical Institute -Delhi** during 2-7, March, 2015 for research collaboration.
- 3. UGC SAP visiting scientist, Dept. of Statistics, **University of Calcutta** under the UGC DSA visiting scheme and delivered a series of lectures on Reliability Modelling during 27-31, March 2016.
- 4. UGC SAP visiting Scientist, Dept. of Statistics, **Panjab University, Chandigarh** under the UGC DSA visiting scheme and delivered a series of lectures on Reliability Modelling during March 2017.

15. Research Guidence.

A. M.Phil Thesis Supervised

| Name of the Student | Title of the Thesis | Year of Completion |
|----------------------|---|-----------------------|
| Shiney George | On HNBUE Class of Distributions | 1999 |
| Lovely Abraham T. | Exponential distribution in higher dimensions | 2001 |

B. Doctoral Thesis Supervised

| Name of the Student | Title of the Thesis | Month and Year of Completion |
|----------------------------|--|---------------------------------|
| K.M. Jagathnath Krishna | A Bivariate Pareto Distribution with Freund Dependent Structure | April 2011. |
| Rejeesh C John | A Study on the Reversed Lack of Memory Property and its Generalizations | October 2011. |

| A. Vincent Raja | On Analysis of bivariate lifetime data- Some Models and Applications | June, 2018. |
|-----------------|---|-------------|
|-----------------|---|-------------|

C. Doctoral Thesis Under Supervision

| Name of the Student | Topic of Research Work |
|---------------------|------------------------|
| Soorya Surendran | Reliability Modelling. |
| Durga Vasudevan | Reliability Modelling. |
| Anoop Babu T | Survival Analysis. |

16. Publications:

A. Technical Reports

- 1. Project Report on "Modelling and Analysis of Preventive Maintenance by Reliability Characteristics" presented to Cochin University of Science & Technology.
- 2. Project Report on "Reliability Studies on Sonar Transducer Encapsulant Materials" presented to Cochin University of Science & Technology.
- 3. Report on the Analysis of Absenteeism data in Apollo Tyres-Trichur.

B. Publications in peer reviewed Journals – 31 Nos (For list see Appendix 1).

C. Book Reviews - Marshall, A.W and Olkin,I, Life Distributions- Structure of Nonparametric, Semiparametric, and Parametric Families - Mathematical Reviews, 2009e.

17. Conferences/Workshops attended. (See Appendix-2)

18. Ongoing Academic Collabrations.

1. Book Authoring: Haim Bar, Nalini Ravishanker, G Asha "Statistical Practice for Data Science" CRC Press.(Accepted) May 2021.

- 2. Ongoing Research Collaborations :Prof Anup Dewanji, ISI, Calcutta.
- **19.** <u>Teaching:</u> Since 5' th Oct 1995. Post Graduate programmes: M.Sc(Statistics), M.Phil (Statistics), PhD (Statistics), M.Tech(Engineering Statistics). Integrated MSc.

20. Examination Related Activities:

- 1. Regular course related examination evaluation.
- 2. Question Paper setter for state Universities.
- 3. Ph.D Adjudication for Universities, National Institutes, International Universities.
- 4. Subject Expert in Advisory board for National level Examination Commissions, State Public Service Commissions.

APPENDIX-1

List of Publications. (Publications in Referred International Journals only).

- 1. N.Unnikrishnan Nair and **G.Asha** (1994), Characteristic properties of a bivariate geometric distributions by reliability concepts, Journal of the Indian Statistical Association, 32, 111-116. ISSN: 0537-2585
- 2. **G.Asha** and N.Unnikrishnan Nair (1996), Characterization of bivariate geometric distribution, Calcutta Statistical Association Bulletin, 46, 23-28. ISSN: 0008-0683
- 3. N. Unnikrishnan Nair and **G.Asha** (1997), Some classes of multivariate life distributions in discrete time, Journal of Multivariate Analysis, 62, 181-189. ISSN: 0047259X, 10957243, Impact factor:0.99
- 4. **G. Asha** and N. Unnikrishnan Nair (1998), Bivariate failure rates in discrete time, Statistical Methods for Quality Improvement, B. Abraham (ed.), 339-350.
- 5. **G. Asha** (2000), Characterizations of the Marshall-Olkin bivariate exponential distribution, Statistical Methods, 2(1), 45-49.
- 6. **G. Asha** and P. G. Sankaran (2002), 'A bivariate Geometric model and its properties', Journal of the Indian Statistical Association, Vol.40, 1-12. ISSN: 0537-2585

- 7. **G. Asha,** P. G. Sankaran and N.Unnikrishnan Nair (2003), 'Probability models with constant total failure rate'. Communications in Statistics, Theory and Methods, Vol.32, No.6, 1089-1099. IISSN: 15324141, 03610918, Impact factor:0.43
- 8. N Unnikrishnan Nair and **G Asha** (2004), "Characterizations using failure rate and reversed failure rate", Journal of Indian Society for Probability and Statistics, Vol,8, 45-56. ISSN 2277-9620
- 9. **G Asha,** N Unnikrishnan Nair and PG Sankaran (2004), "Characterizations using conditional mean Residual life time", Journal of the Calcutta Statistical Association, Vol,55, 219-254. ISSN: 0008-0683
- 10. N. Unnikrishnan Nair, **G. Asha** and P. G. Sankaran (2004), On the covariance residual lives. Statistica. LXIV, n3. Pp 573-585. ISSN: 1973-2201
- 11. N. Unnikrishnan Nair, P. G. Sankaran and **G. Asha** (2005), Characterizations of distributions using Reliability Concepts Journal of the Applied Statistical Sciences, vol14, No 3-4, pp 237-242. ISSN: 1067-5817
- 12. R P Gupta, N Unnikrishnan Nair and **G Asha** (2006), Characterizations of Discrete distributions, Far East Journal of Theoretical Statistics, 20(1), 113-122. ISSN: 0972-0863.,Impact factor:0.879
- 13. **G Asha** and Jagathnath Krishna (2006), A note on the characterizations of generalized Marshall-Olkin type Multivariate Pareto distributions, Journal of Indian Statistical Association, 44,2,117-125. ISSN: 0537-2585
- 14. **G Asha** and Rejeesh C John (2007), On The Boundary Class Of Increasing And Decreasing Reversed Hazard Rate Distribution, Calcutta Statistical Association Bulletin, 59, 233-234,1-15. ISSN: 0008-0683
- 15. N Unnikrishnan Nair and **G Asha** (2008), Some characterizations based on bivariate reversed mean residual life, Probstat Forum, Vol 1, 1-14. ISSN: 0974-3235
- 16. **G. Asha** and K.M. Jagathnath Krishna (2008), Modelling and characterizations of a bivariate Pareto distribution, Journal of Statistical Theory and Application, 7(4), 435-452.ISSN 1538-7887
- 17. **G. Asha** and Rejeesh C. John (2009), Characterizations using generalized reversed lack of memory property, Statistics and Probability Letters, 79(12), 1480-487. ISSN: 0167-7152, Impact Factor: 0.58
- 18. **G. Asha,** K.M. Jagathnath Krishna and K.R. Muraleedharan Nair (2009), Characterization of bivariate distributions using residual measure of uncertainty, Journal of Probability and Statistical Science, 7(2), 139-152.

- 19. **G Asha** and N. Unnikrishnan Nair (2010), Reliability properties of mean time to failure in age replacement models, International Journal of Reliability Quality and Safety Engineering, 17(1) 15-26.ISSN: 0218-5393, 1793-6446
- 20. **G Asha** and Jagathnath Krishna K M (2012), Inequality measures for bivariate distributions with load sharing dependence, Calcutta Statistical Association Bulletin, 64(2) 53-54.ISSN: 0008-0683
- 21. **G Asha,** I. Elbatal and C.J. Rejeesh (2013), Further results on discrete mean past life time, Communications in Statistics-Theory and Methods, 45(4), 1081-1098.ISSN: 15324141, 03610918, Impact factor:0.43
- 22. **G Asha** and Rejeesh C John (2014), Characterizations using past entropy measures, Metron, DOI 10.1007/s40300-014-0053-0. ISSN: 0026-1424, Impact Factor: 0.222
- 23. I. Elbatal, **G Asha** and A Vincent Raja (2014), Transmuted exponentiated Frechet distribution: Properties and Applications, Journal of Statistics Applications & Probability, 3(3) 379-394. ISSN: 2090-8423, 2090-8431
- 24. Sreelekshmi N, **G Asha** and K.R. Muraleedharan Nair (2015), On inferring inequality measures using L-moments, Stochastic and Quality Control . Vol 3(2), 1869-6147.
- 25. **G. Asha**, Jagathnath Krishna K. M. and D. Kundu(2016), An extension of the Freund's bivariate distribution to model load sharing systems, American Journal of Mathematical and Management Sciences.35(3), 1-20,ISSN:0196-6324,2325-8454.
- 26. **G. Asha** and Vincent Raja A.(2016), An extension to the Fruend's bivariate distribution to model cascading failures, Communications in Statistics-Simulation and Computation.doi.org/1080/036/0198.2016
- 27. Sreelakshmi, N, Sudheesh K Kattumannil, **Asha G,** (2018) Quantile based tests for exponentiality against DMRQ and NBUE alternative. Journal of Korean Statistical Society, 47.185-200.
- 28. **G Asha**, A Vincent Raja, Nalini Ravishanker(2017) Reliability Modelling incorporating Loadshare and fraility. Applied Stoshastic Models in Bussiness and Industry. doi:10/1002/ASMB2294.
- 29. Sarabia, JM , Raja, A.V & **Asha, G**(2018): Bivariate distribution s with transmuted conditionals: Models and Applications, Communications In Statistics- Theory & Methods. Doi.org/10.1080/03610926.2018.1536785.
- 30. K. K. Sudheesh, **G. Asha** & K. M. Jagathnath Krishna (2019) "On the mean time to failure of an age-replacement model in discrete time." Communications in Statistics- Theory & Methods. DOI: 10.1080/03610926.2019.1672742.
- 31. **G. Asha** and Soorya C.S (2021), "On a Class of Transmuted Distributions to Model Survival Data with a Cure Fraction." Calcutta Statistical Association Bulletin, doi.org/10.1177%2F00080683211052768.

32. APPENDIX-2

Conferences/Workshops participated.

- 1. The National Seminar on Statistical Methodology and New Applications at Department of Statistics, Bangalore University, Bangalore. January 27-29, 1994.
- 2. The XV Annual Conference of ISPS held at Department of Statistics, Mannmaniam Sundaranar University, Thirunelveli. December, 21-23, 1994.
- 3. The International Conference on Quality Improvement through Statistical Methods'. The Cochin University of Science and Technology, Cochin-22. December, 28-31, 1996.
- 4. One day Seminar and Annual Conference of the Kerala Statistical Association, The Department of Statistics, Maharaja's College, Ernakulam, March-6, 1999.
- 5. The U.G.C sponsored National Conference on Statistics held at St.Thomas College, Pala, March 18-20, 1999.
- 6. The National Conference on Reliability Analysis held at the Department of Statistics, Cochin University of Science and Technology, Cochin-22. December 28-29, 1999.
- 7. The National Seminar on Probability models and Applied Statistics'. Department of Statistics, University of Calicut, Calicut. February 24-25, 2000.
- 8. The International Conference on 'Order Statistics and extreme values. Theory and Applications' Department of Studies in Statistics University of Mysore. Mysore-570006 India, December 18-20, 2000.
- 9. The International conference on Statistics in Industry, held at Department of Statistics. Cochin University of Science and Technology Dec 2002.
- 10. The International Conference on Reliability, Statistics and related fields, held at Indian Institute of Management, Kozhikode during Jan 7-9, 2005.
- 11. 25'th Conference of Indian Society for Probability and Statistics & Annual meeting of Indian Bayesian Society, held at held at the department of Statistics, Bangalore University during Dec 28-30, 2005.
- 12. National Seminar on Modeling and Analysis of lifetime data, held at the department of Statistics, Cochin University of Science and Technology, Cochin during Feb 20-22, 2006.
- 13. Workshop on Women and Health literacy in Kerala held at the department of Statistics, Cochin University of Science and Technology, Cochin during Jul 28-29, 2006.
- 14. IISA Joint statistical Meeting and International Conference on Statistics, Probability and related Areas held in Cochin, Jan 2-5, 2007.
- 15. IISA Workshop on Financial Mathematics, Cochin, January 6, 2007.

- National Seminar on Statistical Methods and Reliability Analysis, , Department of Statistics, Cochin University of Science and Technology, Cochin, India, during January 28-30, 2008
- 17. International Symposium on Probability Theory and Stochastic Processes, Department of Mathematics, Cochin University of Science and Technology, Cochin-22, during February 6–9, 2009,
- 18. XI Annual Conference of the Society of Statistics, Computer and Applications, Department of Statistics, University of Madras, Chennai, India, during February 24-26, 2009.
- 19. Two days workshop on Statistical Genetics, Department of Statistics, Cochin University of Science and Technology, Cochin, India, during December 29-30, 2009.
- 20. Key Note Speaker for one day seminar held at Ernakulam Collectrate, Organized by the Economics and Statistics Department, Government of Kerala as a part of celebrations of Statistics Day on 29'July'2010.
- 21. Three days workshop on Reliability Theory and Survival Analysis, Department of Mathematics, IIT Bombay, Mumbai, India, during November 25-27, 2010.
- 22. Delivered a Key Note Speech for one day seminar held at Ernakulam Collectrate, Organized by the Economics and Statistics Department, Government of Kerala as a part of celebrations of Statistics Day on 29'July'2011.
- 23. Attended the National Seminar on Stochastic Modelling and Analysis held at CUSAT during 24 -25, March 2011.
- 24. An invited talk in the State level seminar on Experimental Design and Self Similarity, Department of Statistics, Newman College, Thodupuzha on 3rd August, 2011
- 25. Attended Workshop on Reliability Theory and Survival Analysis, Nov 23-27, 2011 at ISI, Kolkatta.
- 26. Attended an Annual convention of Indian Society for Probability and Statistics (ISPS) and International Conference on Statistics, Probability and related areas, CUSAT, December 19-22, 2011.
- 27. Attended Workshop on R, CUSAT, February 14-17, 2012.
- 28. Presented the invited paper 'An extension of the Freund's bivariate distribution to model load sharing systems' at the International Symposium on Business and Industrial Statistics(ISBIS2012) held in Bangkok, Thailand, June17-21.
- 29. Attended a Workshop on Simulation Model Development, CUSAT, December 17-19,2012.

- 30. Attended a Workshop on Statistical Analysis of Time Series Data with Applications, CUSAT, January 14-16, 2013.
- 31. Attended UGC sponsored residential workshop on "Capacity Building for Women managers in Higher Education: Sensitivity Awareness-Motivation", 21-25 Jan, 2013: Organized by WSC, CUSAT.
- 32. Invited speaker at the National Seminar on "Modern Statistical Tools in Fisheries", School of Industrial Fisheries, Cochin University of Science and Technology, Mar7-9,2013.
- 33. Attended a Workshop on Reliability Theory and Survival Analysis, CUSAT, December 31 January 2, 2014.
- 34. Participated in International Workshop on Reliability and Time Series Methodology Relevant to Business and Industry, CUSAT, January 5-7, 2015
- 35. Delivered a talk on "Statistics in Reliability" at Annual Conference of Kerala Statistical Association, Department of Statistics, Sree Kerala Varma College Trissur, January 9,2015.
- 36. Attended one day workshop on Statistical Methods for "Analysis of Business Data", Dept. of Statistics, CUSAT, 7th February 2015.
- 37. Delivered a technical session on "Laboratory Experiments Research, Design of Experiments, Concepts of Sampling and Hypothesis Testing", Govt. Engg. College Trivandrum, 31st July 2015.
- 38. Organized and attended one day workshop on "Official Statistics-Indian Context", 20th October, 2015, Dept. of Statistics, CUSAT.
- 39. Participated and delivered an invited talk on International Society for Business and Industrial Statistics(ISBIS) 2016 conference, 8-10, June 2016, UPC Barcelona, Spain.
- 40. Delivered an invited talk on One day Seminar on "Applied Statistics" organized by St Thomas College, Thrissur.
- 41. Organized Virtual workshop on "BAYESIAN MODELING: COMPUTATIONS AND APPLICATIONS" for researchers and faculty at Cochin University of Science and Technology, CUSAT. Bimonthly- April 2017-August, 2017.
- 42. Resource person for "A Workshop on Time-to –events and Time series Data Analysis using R, organized by Department of Statistics, Cochin University of Science & technology, 15-18, December 2017.
- 43. Presented the paper" Bivariate Distributions with Transmuted conditionals" at IISA International Conference on Statistics-2017 at HICC, Hyderabad, 27-30, December 2017.

- 44. Delivered an invited talk" Modelling lifetime incorporating load share and frailty" at National Seminar on recent trends in Statistics(NSRTS) University of Calicut, 13-15 March 2018.
- 45. Organized, Chaired and delivered invited talk at ISBIS 2018 meeting in Business and Industry, University of Piraeus, Greece, June 4-6,2018.
- 46. Organized and resource person for 'A workshop on Time to Events and Time series Data Analysis using R held at department of Statistics, during 27-29, Sept 2018.
- 47. Attended the workshop "Time series using R" at University of Madras on 20/12/2018.
- 48. Delivered an invited talk at the international conference on Advances Statistical methods and Data Science-2018 during 21-22, Dec,2018 at University of Madras.
- 49. SPC member the ISBIS 2019 Satellite meeting to be held at Bank Negara, Kuala Lumpur, Malaysia during August 15 and 16, 2019.
- 50. Leadership for Academicians Programme (Domestic component) conducted by Tata Institute of Fundamental Sciences. August 19, 2019 to August 30, 2019.
- 51. Leadership for Academicians Programme (Foreign component) conducted by University of Pennsylvania. USA. Sept 16, 2019 to Sept 21, 2019.
- 52. SPC Member, "International Conference on Data Analytics for Business and Industry" October, 26-27, 2020, University of Bahrain, Bahrain.
- 53. SPC Chair, International webinar on Advanced Statistical Techniques in Business and Industry, Department of Statistics, CUSAT. Dec 28-30, 2020.
- 54. Presented an Invited talk entitled "On Mean Time to Failure of Age Replacement Models.", Fifth International Conference on Statistics for Twenty first century 2019 (ICSTC-2019) organized by Department of Statistics, University of Kerala, Trivandrum, during 18-20, December 2019. 52.
- 55. Delivered a technical session on "Design of Experiments for Engineers, College of Engineering, Perumon, 10/02/2020.
- 56. Resource Person for Research Methodology Workshop/Faculty Development Programme (FDP), organised by Sydenham Faculty Development Centre (SFDC), from 8th June, 2020 to 14th June, 2020 in association with Sardar Patel University, Vallabh Vidyanagar, Swami Ramanand Teerth Marathwada University, Nanded and S.K. College, Nerul under PMMMNMTT, MHRD, New Delhi.
- 57. Resource Person for FDP on Mathematics for Data Science, Organized by Muthoot Institute of Technology under KTU during August 10, 14, 2020.

- 58. Invited talk on "Modelling longtime survivors". International Virtual Conference On Advanced Statistical Techniques In Bussiness & Industry, A Regional Virtual Conference of International Society for Business and Industrial Statistics (ISBIS), 28-30 December 2020.
- 59. Invited talk "On Modeling Survival Data with Covariate Driven Lag Time" VisionarInnovations in Statistical Theory and Applications.(VISTA-2021), 24-28, February, 2021 (On-line), In conjunction with the 23rd Annual Conference (On-line) of Society of Statistics, Computer and Applications (SSCA)
- 60. Resource person, Refresher Course in Data Analytics and Machine Learning, 3-02-2021 to 08-03-2021, UGC-HRDC, University of Kerala.
- 61. Invited speaker in "Webinar on "Building trust in Official Statistics", October 20, 2020, organised by University of Calicut.Kerala.
- 62. Panelist on "Teaching statistics online during the pandemic sharing experiences from multiple continents" organised by section "Teaching Statistics in Health Sciences (TSHS)" American Statistical Association.
- 63. Organized the invited session "IPS: Modern Statistical Techniques for Reliability Analysis" and presented a talk titled "Dynamic Models for Left Censored Data" the Virtual ISI World Statistics Congress 2021 held on 11-16 July 2021.
- 64. International Conference(VIRTUAL MODE) On Emerging Trends In Statistics And Data Science In Conjunction with the 40'th Annual Convention Of Indian Society of Probability & Statistics (ISPS) 7-10 September, 2021.
- 65. PRESENTED AN INVITED TALK SIXTH INTERNATIONAL WEBINAR ON RECENT IN STATISTICAL THEORY AND APPLICATIONS-2022 [WSTA-2022], UNIVERSITY OF KERALA, 29 June 02 July 2022.

Residential Address: Flat No 2A, J M Paradise, Behind Thejus Auditorium. Palarivattom, Junction, Cochin-682025. Kerala, India.