


NAME	Dr. BINDU P. P.	
DESIGNATION	Assistant Professor	
QUALIFICATION	M. Sc; B. E., Ph. D, FSAB	
EMAIL ID	ppbindukannan@gmail.com	
<b>TEACHING INTERESTS</b>		
Biostatistics, Computational Statistics, Sampling Theory, Design of Experiments, Distribution Theory, Reliability Theory, Survival Analysis, Statistical Inference and Statistical Programming Languages.		
<b>RESEARCH AREAS</b>		
Biostatistics, Computational Statistics, Distribution Theory, Reliability, Statistical Genetics, Statistical Inference and Microarray Modelling.		

#### **ACADEMIC/PROFESSIONAL QUALIFICATIONS**

NAME OF THE PROGRAMME	INSTITUTION/UNIVERSITY	YEAR OF PASSING
B. Sc. Mathematics	Providence Women's College, Calicut, Calicut University	1994
M. Sc. Statistics	Calicut University	1996
CSIR JRF	Council of Scientific and Industrial Research, New Delhi, India	1997
B. Ed. Mathematics	Govt. College of Teacher Education, Kozhikode, Calicut University	1998
Certificate Course in Software Applications	Washtenaw Community College, Michigan, USA	2004
Certificate Course in Bioinformatics	Anna University, Madras	2007
Training in Gender sensitization	Center for Women Studies, Vimala College, Thrissur	2013
Ph. D	M. G. University	2014
Certificate Course in Descriptive Statistics Using R	NPTEL	2018
Certificate Course in Big data Computing	NPTEL	2018
Certificate Course in Introduction to R Programming	NPTEL	2019

**CAREER HISTORY/TEACHING EXPERIENCE**

DESIGNATION	INSTITUTION/UNIVERSITY	YEAR OF SERVICE
Lecturer in Statistics	E. M. E. A. College, Kondotty, Affiliated to University of Calicut	01-09-2005 to 09-07-2008
Assistant Professor	Vimala College, Thrissur	01-10-2012 to 08-10-2013
Assistant Professor	T. M. Govt. College, Tirur	09-10-2013 to 03-06-2014
Assistant Professor	Govt. Arts & Science College, Kozhikode	04-06-2014 to present

**MPHIL/PHD THESIS**

SL.NO	TITLE	GUIDE NAME	INSTITUTION	MONTH/YEAR
1.	Statistical Applications in Microarray Technology and Bioinformatics	Dr. Sebastian George	St. Thomas College, Pala, Mahatha Gandhi University, Kottayam	February 2014

**RESEARCH PROJECTS/GRANTS RECEIVED**

SL.NO	TITLE	INVESTIGATORS	SPONSORING AGENCY	AMOUNT	MONTH/YEAR
1.	Statistical Applications in Microarray Technology and Bioinformatics	Bindu P. P.	DST, India	Rs. 9,01,666	09-11-2009
2.	Statistical analysis of seasonal variation and disease outbreaks in Kerala	Bindu P. P.	UGC	Rs. 1,50,000	Sanctioned for 2015-17
3.	New Statistical Methods for identification and Ranking of Differentially expressed genes in Microarray.	Bindu P. P.	DST-SERB	Rs. 11,79,640	29-03-2019

**AWARDS/ACHIEVEMENTS/OTHERS**

SL.NO.	NAME OF AWARDS/ ACHIEVEMENTS/OTHERS	DESCRIPTION	MONTH/ YEAR
--------	--	-------------	----------------

1.	Best oral (Scientist) Award	Best oral presentation Award in 34th Kerala Science Congress 2022 for the paper entitled “Identification of differentially expressed gene in Covid-19 gene expression data”	10-11, February 2022
2.	Best Poster Award	Best Poster Award in 33rd Kerala Science Congress 2021 for the poster entitled “New Error Distribution for Microarray Gene expression Data”	25-30, January 2021
3.	Best oral (Scientist) Award	Best oral presentation Award in 32 <sup>nd</sup> Kerala Science Congress 2020 for the paper entitled “Identification and ranking of differentially expressed genes in microarray studies”	25-27, January 2020
4.	Best Poster Award	Best Poster Award in 31 <sup>th</sup> Kerala Science Congress 2019 for the poster entitled “A new family of alpha power transformed Fréchet distribution and its applications in rainfall data analysis”	2-3, February 2019
5.	Best Poster Award	Best Poster Award in 30 <sup>th</sup> Kerala Science Congress 2018 for the poster entitled “New family of Multimodal skewed slashes Laplace distributions and its applications”.	27-30, January 2018
6.	Selected for the Best Student Speaker section	Presented paper in the Best Student Speaker section in the 22 <sup>nd</sup> Annual Conference of ‘The International Environmetrics Society (TIES)’	January 2012
7.	Fellow Award 2012	Awarded by the society for applied biotechnology in recognition of the outstanding achievements and contributions to the field of Bioinformatics	November 2012
8.	Women Scientist Fellowship	Ministry of Science & Technology, DST, India	November 2009
9.	Selected for M.S. / Ph.D Program in Biostatistics of School of Public Health, University of Michigan, USA	Selected for the Masters and Ph.D program in Biostatistics, University of Michigan (which is one among the first 11 Universities in USA).	September 2004
10.	Junior Research Fellowship of CSIR, India.	Junior Research Fellowship in Mathematical Science, Council of Scientific and Industrial Research, India.	July 1997
11.	Third Rank for M.Sc. Statistics	Third rank for M.Sc. Statistics, University of Calicut	August 1996
12.	Individual First prize and team prize in Dr. U. S. Nair Memorial Ever rolling trophy Quiz Competition conducted by Kerala Statistical Association	Dr. U. S. Nair Memorial Ever rolling Trophy Quiz Competition in Statistics conducted by Kerala Statistical Association	1993 and 1994
13.	General Proficiency Prize in Mathematics	Awarded by Providence Women’s College, Calicut	1994

## **JOURNAL PUBLICATIONS**

## International

SL.N O.	TITLE	NAME OF JOURNAL / VOL. NO / ISSUE NO / PAGE NOS	ISSN NO	MONTH / YEAR
1.	Asymmetric double Lomax distribution: theory and applications (Bindu Punathumparambath and Sangita Kulathinal)	Journal of Kerala Statistical Association, 33, 21- 49		2023
2.	On record based Transmuted Inverse Exponential Distribution	International Journal of Statistics and Applied Mathematics, 7, 25-30		2022
3.	New approach for estimating Differentially expressed genes in Microarray	Advances and Applications in Statistics, 66(2), 191-208		2021
4.	Impact of Multiple Time Scales in Survival Analysis (M. Vijayakumar, Anwar Shameem Z. A., and Bindu Punathumparambath)	Compliance Engineering Journal, 12(7), 603-610		2021
4.	Slash Exponential distribution: Theory and Applications	Bulletins of Mathematics and Statistics Research, 8(4), 38-49.	<b>ISSN: 2348-0580</b>	November 2020
5.	Generalized p-value approach for Multiple Hypothesis Testing in Microarray	JP Journal of Biostatistics, 17(2), 443-451	ISSN: 0973-5143	October 2020
6.	Compound Exponential Power Distribution and its Applications to Microarray	International Journal of Scientific Engineering and Research, 8(4), 4-8.		April 2020
7.	Length Biased Rani Distribution with Survival Data Analysis (M. Vijayakumar, Anwar Shameem Z. A., and Bindu Punathumparambath)	High Technology Letters, Volume 26, Issue 6, 559-575.	ISSN NO : 1006-6748	2020
8.	Weighted Two Parametric Rama Distribution with Survival Data Analysis (M. Vijayakumar, Anwar Shameem Z. A., and Bindu Punathumparambath)	Journal of Xi'an University of Architecture & Technology, 12(4), 5840-5857	ISSN No : 1006-7930	2020
9.	Stress-Strength Reliability of type II compound Laplace distribution	International Research Journal of Engineering and Technology, 3(2), 1-4	ISSN 2395-0056	February 2016

10.	Double Lomax Distribution and its Applications (Bindu Punathumparambath and Sangita Kulathinal)	STATISTICA,75(3),331-342	ISSN 1973-2201	2015
11.	Error Distribution for Microarray Gene Expression Data	VIRJ for Pure and Applied Sciences, 1(1), 41-57	ISSN 2347-3835	September 2013
12.	Statistical methods for identifying differentially Expressed genes in microarray data	International Journal of Scientific & Engineering Research, 4(9), 1405-1409.	ISSN 2229-5518	September 2013
13.	A new family of skewed slash distribution generated by Cauchy kernel.	Communications in Statistics-Theory and Methods, 42, 2351-2361.	ISSN:0361-0926	May 2013
14.	Identification of plant extracts containing protease inhibitors against the gut protease of podopptera mauritia Boisdual (Lepidoptera: Noctuidae).	Acta Biologica Indica, 2(2), 451-455,	ISSN 2249-9075	2013
15.	Asymmetric type II compound Laplace distribution and its application to microarray gene expression (Bindu Punathumparambath, Sangita Kulathinal and Sebastian George)	Computational Statistics and Data Analysis, 56, 1396-1404.	ISSN: 0167-9473	August 2012
16.	A New family of skew Slash logistic distributions. (Bindu Punathumparambath and Sebatian George)	Journal of Applied Statistical Sciences, 19(3), 9-16	ISSN: 1067-5817	2012
17.	The multivariate skew-slash t and skew-slash Cauchy distributions.	Model Assisted Statistics and Applications, 7, 33-40.	IISN: 1574-1699	2012
18.	The multivariate asymmetric slashes Laplace distribution and its applications.	STATISTICA, 72(2), 235-249	ISSN 1973-2201	2012
19.	Two component mixed Laplace model for microarray gene expression data.	JP Journal of Fundamental and Applied Statistics, 2(1), 15-25.	ISSN: 2249-2291	2012

<u>20.</u>	A new family of skewed slash distribution generated by normal kernel.	<i>STATISTICA</i> , 71( 3), 345-353	ISSN 1973-2201	2011
<u>21.</u>	Statistical Techniques for microarray Technology	Journal of Informatics and Mathematics, 3(3), 257-275	ISSN: 0975-5748	2011
<u>22.</u>	Estimation of P(X>Y) for double Lomax distribution	Prob Stat Forum, 4 (1), 1-11	ISSN 0974-3235	2011

#### NATIONAL LEVEL

SL.NO.	TITLE	NAME OF JOURNAL / VOL. NO / ISSUE NO / PAGE NOS	ISSN NO	MONTH / YEAR
1.	Survival Analysis of cancer patients using parametric and non parametric methods (Raisa and Bindu P. P.)	Research Journal Govt. Arts & Science College, 6(1), 9-19	ISSN 2277-4246	June 2015
2.	Time Series Modelling of the Silver Price Data (Anusha and Bindu P P)	Research Journal Govt. Arts & Science College, 6(1), 64-88	ISSN 2277-4246	July 2016
3.	Generalizations of Exponential distribution and its Applications in Life Time Data Analysis (Nihala and Bindu P P)	Research Journal Govt. Arts & Science College, 6(1), 9-19	ISSN 2277-4246	July 2016
4.	Statistical Analysis of Road Accidents in Kerala (Raisa and Bindu P. P.)	Reflections : A peer reviewed multi-disciplinary Research Journal for Women, 2(1)		2014
5.	Microarray Technology and Statistical Applications. (Bindu Punathumparambath, J. Sreekumar, Kannan V. M.)	<i>Proceedings of the UGC Sponsored National Workshop on Bayesian Statistics &amp; MCMC Methods using Open BUGS &amp; R</i> , pp.43-59.		2009

#### SEMINARS/CONFERENCES/WORKSHOPS ATTENDED/PAPER PRESENTED

SL.N O	NAME OF THE PROGRAMME	NAME OF THE ORGANISER & SPONSORING AGENCY	VENUE & DATE	LEVEL
-----------	-----------------------	---	--------------	-------

1.	Invited Talk entitled “ <b>A new family of Double Pareto-type Distribution and its Applications</b> ” in the Sixth International Virtual Conference on Statistics for Twenty First Century-2020	<b>IISA</b>	Virtual Conference, 18-20, December 2020	International
2.	Presented Research Paper entitled “Identification of differentially expressed genes in microarray using generalized p-value technique ” 38th Annual conference of Indian society for medical Statistics	Indian society for medical Statistics <b>ISMS</b>	10-12, December 2020	International
3.	Presented a paper entitled “ <b>Identification and Ranking of Differentially expressed genes in Microarray Studies</b> ” International Virtual Conference 2020 on Prof. CR Rao’s School of Thought in Statistical Sciences	<b>Dept. of Statistics, Pondicherry University (A Central University) &amp; Dept. of Mathematics and Statistics, Mrs. A.V.N. College, Visakhapatnam (Almamater of Prof. CR Rao)</b>	21,22,28,29, November 2020	International
4.	Presented Research Paper entitled “ <b>Transmuted Double Lomax distribution and its Applications to Microarray</b> ” in the <b>national seminar on advanced developments in statistical theory and applications</b>	<b>Christ College, Irungalakkuda</b>	28-29, February 2020	National
5.	Presented Research Paper entitled “ <b>Identification of Differentially Expressed Genes in Microarray using Modified Generalized p-value</b> ” in the National Seminar on Theoretical and Applied Statistics	Organized by postgraduate and research Department of Farook College, Kozhikode	29-01-2020	National
6.	Presented Research Paper entitled “ <b>Identification and ranking of Differentially Expressed Genes in Microarray studies</b> ” 32nd Kerala Science Congress	Organised by Kerala State Council for Science, Technology and Environment (KSCSTE) and Yuvakshetra Institute of Management	25-27, January 2020	State level
7.	Presented Research Paper entitled “ <b>Transmuted Marshall-Olkin Laplace Distribution and its Applications</b> ” in the Fifth International Conference on Statistics for Twenty First Century- 2019	Organized by Department of Statistics, University of Kerala, Trivandrum	18-20, December 2019	International



8.	Presented Research Paper entitled <b>“Stress-Strength Reliability of Asymmetric Double Lomax Distribution”</b> , in the National Seminar on Statistical Approaches in Data Science	Department of Statistics, St. Thomas College, Thrissur, UGC	St. Thomas College, 6-7, February 2019	National
9.	Presented Research Paper entitled Asymmetric Double Lomax Distribution and its Applications, National Conference on Advances in Statistical Methods	Department of Statistics, University of Kannur	10/11/2018	National
10.	Presented a poster entitled “A new family of alpha power transformed Fréchet distribution and its applications in rainfall data analysis”, in 31 <sup>st</sup> Kerala Science Congress.	Organized by Kerala State Science & Technology, Govt. of Kerala	Fatima Matha National College, Kollam. 2-3, February 2019	State
11.	Presented Research Paper entitled <b>“A new family of skew reflected transmuted Weibull distribution and its Applications”</b> , in the International Conference on Statistics for Twenty first Centaury	Department of Statistics, University of Kerala, UGC	Kerala University, Trivandrum December 13-15, 2018.	International
12.	Presented Research Paper entitled <b>“Asymmetric Double Lomax Distribution and its Applications”</b> , in the International Conference on Statistics for Twenty first Centaury	Department of Statistics, University of Kannur, UGC	Kannur University 8-10, November 2018	National
13.	Presented a paper entitled <b>“Skewed Slash double Weibull Distribution and its Applications”</b> , in the National Conference.	Department of Statistics, Farook College, Calicut	Farook College, Calicut. during 7-8 March 2018.	National
14.	Presented a paper entitled <b>“A New Family of Skewed Slash Reflected Weibull Distribution and its Applications”</b> , in the National Conference.	Department of Statistics, St. Thomas College, Thrissur	St. Thomas College, Thrissur 15-17 February 2018.	National
15.	Presented a poster entitled <b>“New family of Multimodal skewed slash Laplace distributions and its applications”</b> , in 30 <sup>th</sup> Kerala Science Congress.	Organized by Kerala State Science & Technology, Govt. of Kerala	Brennen College, Thalassery. 28-30 January 2018	State
16.	Attended International workshop on <b>“High Performance Computing using R”</b>	Department of Statistics, St. Thomas College, Pala, DST	St. Thomas College, Pala 6-7 January 2018.	International



17	Presented a paper entitled " <b><i>A new family of Skewed Slash Beta-Laplace distribution and its Applications</i></b> ", in the three day International Seminar on International Conference on Recent Advances in Statistical Methodology with Applications in Clinical and Official Statistics	Department of Statistics, St. Thomas College, Pala, DST	St. Thomas College, Pala 3-5 January 2018.	International
18	Presented Research Paper entitled " <b><i>A new family of Skewed Slash Reflected Distributions Generated by the Laplace Kernel and its Applications</i></b> ", in the International Conference on Statistics for Twenty first Centaury	Department of Statistics, University of Kerala, UGC	TECHNOPARK, Trivandrum December 13-15, 2017.	International
19	Attended five day workshop on <b><i>Mathematical and Statistical Computations using R and Python</i></b>	Department of Statistics, Govt. Arts & Science College, Kozhikode, Calicut DCE, Govt. of Kerala	Govt. Arts & Science College, Calicut, December 4 <sup>th</sup> to 8 <sup>th</sup> 2017	National
20	National Seminar on <b><i>Statistical Computing using R</i></b>	Department of Statistics, Farook College, Calicut, UGC	Farook College, Calicut 23 <sup>rd</sup> March 2017	National
21	National seminar on Advances of Statistics in Applied areas. Presented paper entitled, " <b><i>Compound Exponential distribution and its Applications</i></b> "	Department of Statistics, St. Thomas College, Thrissur	St. Thomas College, Thrissur, 28 <sup>th</sup> February 2017	National
22	National conference on Advances in Statistical Sciences. Presented paper entitled, " <b><i>A new family of skewed slash distribution generated by student t kernel and its Applications</i></b> "	Department of Statistical Sciences Kannur University	Kannur University, 17 <sup>th</sup> to 18 <sup>th</sup> February 2017	National
23	29 <sup>th</sup> Kerala Science Congress. Presented a paper entitled " <b><i>Stress Strength Reliability of Compound Exponential and its Application</i></b> "	Govt. of Kerala	Marthoma College, Thiruvalla, January 28 <sup>th</sup> to 30 <sup>th</sup> 2017	State level
24	International conference on Statistics for 21 <sup>st</sup> Century - 2015 Presented a paper entitled " <b><i>Application of Microarray in Molecular Epidemiology of Cancer</i></b> "	Department of Statistics, University of Kerala, UGC	Techno Park, Trivandrum, December 21-23, 2016	International
25	National Seminar on Statistics for Psychological and Educational Assessment. Presented a paper entitled, " <b><i>Bayesian Methods for Social Science Research</i></b> "	Department of Statistics, Govt. Arts & Science College, Kozhikode, Calicut UGC	Govt. Arts & Science College, Calicut, March 1 <sup>st</sup> to 3 <sup>rd</sup> 2016	National

26	28 <sup>th</sup> Kerala Science Congress. Presented a paper entitled “ <b><i>A new family of skewed slash distribution generated by Laplace kernel and its applications</i></b> ”	Govt. of Kerala	Calicut University, January 29-30, 2016.	State level
27	International conference on Statistics for 21 <sup>st</sup> Century - 2015 Presented a paper entitled “ <b><i>A New Family of Multimodal Skewed Slash Laplace Distributions and its applications</i></b> ”	Department of Statistics, University of Kerala, UGC	December 17-19, 2015	International
28	Workshop on <b><i>Advanced Statistical Theory and Applications</i></b>	Department of Statistics, University of Calicut, UGC	University of Calicut, December 9-10, 2015	International
29	Workshop on <b><i>Distribution theory</i></b>	Department of Statistics, University of Calicut.	Department of Statistics, University of Calicut, 3rd March 2015.	State Level
30	27 <sup>th</sup> Kerala Science Congress. Presented a paper entitled “ <b><i>Detection Limit Problem in Environmental data analysis</i></b> ”	Kerala State Science & Technology, Govt. of Ke	Vijaya Camelot International Convention center, Alappuzha, 27-29 January 2015.	State Level
31	National Seminar on Inter Disciplinary realms of Statistics. Presented a paper entitled “ <b><i>Multiple Hypothesis testing of Microarray Experiments using generalized p values</i></b> ”	Department of Statistics, Sree Kerala Varma Colle Thrissur and Kerala Statistical Association	YMCA International Conventional Center Thrissur, 09, 10 January 2015	National
32	National workshop on <b><i>Bioinformatics</i></b>	Organized by Govt. Arts and Science College, Kozhikode, Directorate of Collegiate Education, Govt. of Kerala	Govt. Arts and Science College, Kozhikode, 12-13, January 2015	National
33	National workshop on Statistical Tools in Medical Research. Presented a paper entitled “ <b><i>Bayesian methods</i></b> ”	Organized by Providence Women’s College, Kozhikode, Kerala State Council for Science,	Providence Women’s College, 06-01-2015	National

	<i>for sample size calculation in clinical Trial”</i>	Technology and Environment		
34.	National workshop on Biostatistical Aspects of Clinical Trials and its Implementation Through R. Presented a paper entitled <b>“Application of Bayesian methods for analysis of clinical Trial data”</b>	PG and Research Department of Statistics, Farook College, Kozhikode, UGC	Farook College, Kozhikode, 18-19, December 2014.	National
35.	One day workshop for internal Mentors/coordinators of Walk With a Scholar Programme	Collegiate Education department , Govt. of Kerala	Govt. arts & Science College, Kozhikode, 17-10-2014	State
36.	Presented a paper entitled <b>“New Methods for Ranking Differentially Expressed genes in Microarray”</b> , National Seminar on Mathematics with applications to Statistics.	Organized by Vimala College, Thrissur, Kerala, India, UGC	Vimala College, Thrissur, 22-23, August 2014	National
37.	<b>“Statistical Applications in Microarray Technology”</b> , in the International Conference on Stochastic Models & Annual Conference of Kerala Statistical Association (KSA)	St. Thomas College, Pala, Kerala, India, UGC	3-4, January 2014	International
38.	<b>“Application of Hidden Markov Models in Microarray Analysis”</b> , National Conference on Applications of Discrete and Fuzzy mathematics.	Govt. Arts and Science College, Kozhikode, India, Collegiate Education Department, Kerala	25-26, November 2013.	National
39.	One day National Seminar on Topology and Geometry	T. M. Govt. College, Tirur, Kerala, Collegiate Education Department, Kerala	11 October 2013	National
40.	<b>“Methods for Ranking Differentially Expressed Genes in Cancer Microarray”</b> , First international and third national conference in Biotechnology, Bioinformatics and Bioengineering	Society of Applied Biotechnology, India.	Thirupathi, 28-29, July 2013	International
41.	International Seminar on Statistical Research	Department of Statistics, St. Thomas College, Thrissur. UGC	St. Thomas College, Thrissur	International

42	National Workshop on <b><i>Recent Developments in Statistics with Special Emphasis on Computational Statistics.</i></b>	University of Kerala, UGC	Kerala University, 1-7 March 2013	National
43	<b><i>“Statistical Applications in Microarray Technology”</i></b> , National Seminar on Statistical Theory and Applications.	Department of Statistics, St. Thomas college, Pala and Kerala Statistical Association.	St. Thomas College, Pala, 15-16 March 2013	National
44	<b><i>“Applications of Microarray Technology to identify differentially expressed genes in Acute Leukemia”</i></b> , National Conference on Biological Science.	Department of Zoology, University of Calicut. UGC Sponsored.	Calicut University, 11-13 March 2013	National
45	<b><i>“Application of Hidden Markov Models in cDNA Microarray Analysis”</i></b> , National Conference on Statistics for Twenty- first Century- 2012 [NCSTC-2012]	Department of Statistics, University of Kerala. UGC Sponsored.	Kerala University, 10-12 December 2012	National
46	<b><i>“Application of Microarray in Molecular Epidemiology of Cancer”</i></b> , National Symposium on Innovative Approaches and Modern Technologies for Crop Productivity, Food Safety and Environmental Sustainability	Society for Applied Biotechnology, India	Hotel Mongala Tower, Thrissur, 19-20 November 2012.	National
47	<b><i>“Statistical Applications in Molecular Epidemiology of Cancer”</i></b> , International Conference on Epidemiology.	St. Thomas College, Pala, UGC and ICMR	St. Thomas College, Pala, 16-18 August 2012.	International
48	<b><i>“Statistical methods for detecting differentially expressed genes in microarray experiments”</i></b> , National Seminar on Emerging Trends in Biotechnology and Microbiology.	St. Thomas College, Pala	St. Thomas College, Pala, 29-30 March 2012	National
49	<b><i>“Generalized p value approach to detect differentially expressed genes in microarray experiments”</i></b> , National Seminar on Recent Advances in Statistics and Related Areas & Annual Conference of Kerala Statistical Association	University of Calicut, Kerala, India. UGC	University of Calicut, Kerala, India March 15-17, 2012.	National
50	International workshop on <b><i>Quantitative Methods for Environmental Data Analysis with Statistical Package R</i></b>	Jointly organized by C. R. RAO AIMSCS, Gachibowli, Hyderabad, University of Hyderabad, Gachibowli, Hyderabad, India and International Statistical Institute.	C. R. RAO AIMSCS, Gachibowli, Hyderabad, 1-2 January 2012	International

51	<b><i>“Statistical methods for identifying differentially expressed genes in environmental microarray data”</i></b> , in the Best student paper presentation section, <b>22<sup>nd</sup> Annual Conference of ‘The International Environmetrics Society’ (TIES 2012)</b> ,	Jointly organized by C. R. RAO AIMSCS, Gachibowli, Hyderabad, University of Hyderabad, Gachibowli, Hyderabad, India and International Statistical Institute.	C. R. RAO AIMSCS, Gachibowli, Hyderabad, 3-6 January 2012	International
52	<b><i>Presented a poster entitled “The Detection Limit Problem in Environmental Data Analysis”</i></b> , 22 <sup>nd</sup> Annual Conference of ‘The International Environmetrics Society’ (TIES 2012)	Jointly organized by C. R. RAO AIMSCS, Gachibowli, Hyderabad, University of Hyderabad, Gachibowli, Hyderabad, India and International Statistical Institute.	C. R. RAO AIMSCS, Gachibowli, Hyderabad, 3-6 January 2012	International
53	<b><i>“Multiple hypotheses testing of microarray experiments using Generalized p values”</i></b> , International Conference (ISPS 2011)	Cochin University of Science and Technology, Kerala, India and Society for Probability and Statistics.	Cochin University of Science and Technology, Kerala, India. December 19-22, 2011.	International
54	ERUDITE Lectures by Prof. Thomas Mathew, University of Maryland, Baltimore, USA	Department of Statistics, University of Calicut. Government of Kerala, under ERUDITE Scheme.	University of Calicut. 6-17 June 2011	National
55	Work shop on <b><i>Statistical Applications in Industry, Business, Agriculture and Ecology</i></b>	National Academy of Science, Bangalore and St. Thomas College, Pala.	St. Thomas College, Pala, 26-28 March 2011.	National
56	<b><i>“Statistical Model for microarray gene expression data”</i></b> , 23 <sup>rd</sup> Kerala Science Congress	Kerala Science Congress Association. Department of Science and Technology, Government of Kerala.	Center for Earth Science Studies, Kerala, India. January 29-31, 2011	National
57	<b><i>“Estimation of <math>P(X &gt; Y)</math> for the asymmetric Laplace distribution and its application to microarray analysis”</i></b> , International Conference on Acturial Statistics, Biostatistics and Stochastic Modelling (INCABS 11)	Kannur University, Kerala, India. UGC and ICMR	Kannur University, Kerala, India. January 10-14, 2011.	International
58	<b><i>“The Error distributions for cDNA microarray gene expression data”</i></b> , International Conference on Advances In Statistical Science (AISS 2010), in Celebration of 90 <sup>th</sup> Birth Anniversary of Prof. C.R.Rao.	Indian Statistical Institute, Kolkata, India.	Indian Statistical Institute, Kolkata, India. January 10-11, 2010.	International

59	National Work shop on <b><i>Statistical Genetics</i></b>	Indian Statistical Institute, Kolkata, India.	Indian Statistical Institute, Kolkata, India. January 12-14, 2010.	National
60	<b><i>“A two component mixed Gaussian distribution for microarray gene expression data”</i></b> , International Conference on Mathematical Sciences in Honour of Professor A. M. Mathai	St. Thomas College, Pala, Kerala, India. UGC and DST.	St. Thomas College, Pala, Kerala, India. January 3-5, 2011.	International
61	International Work shop on <b><i>Bayesian Computation Using OpenBUGS (and R)</i></b>	Jointly organized by Department of Biostatistics, Christian Medical College, Vellore and the Indic Society for Education and Development, Nashik, India	Christian Medical College, Vellore. 22-26, November 2010.	International
62	Presented a poster entitled <b><i>“Microarray Technology and Statistical Applications”</i></b> , 97 <sup>th</sup> Indian Science Congress	Indian Science Congress Association and Government of India.	Kerala University, 3-7 January 2010	National
63	Presented a poster entitled “Reliability and applications of Type II Compound Laplace distribution”, 97 <sup>th</sup> Indian Science Congress	Indian Science Congress Association and Government of India.	Kerala University, 3-7 January 2010	National
64	International work shop on “Statistics in Genetics”	Center for Population Studies, Department of Statistics, Cochin University of Science and Technology	Cochin University of Science and Technology, 29-31 December 2009	International
65	Presented a paper entitled <b><i>“Statistical Models for Microarray Gene differential expression data”</i></b> , National Workshop on Bayesian Statistics & MCMC Methods using BUGS & R	St. Thomas College, Pala. UGC	St. Thomas College, Pala, June 26-30, 2009	National
66	ERUDITE Lectures by Prof. N. Balakrishnan, University of MacMaster, Canada.	Department of Statistics, Cochin University of Science and Technology. Government of Kerala, under ERUDITE Scheme.	Cochin University of Science and Technology , 16-20 November 2009	National
67	National Workshop on <b>Fractional Calculus and Statistical Distributions</b>	Center for Mathematical Sciences, Pala Campus. DST	Center for Mathematical Sciences, Pala Campus.	National



			25-27 November 2009	
68.	National Seminar on <b><i>Statistical Computing</i></b>	Department of Statistics, University of Calicut	University of Calicut. 05-06 March 2009	National
69.	Presented a paper entitled <b><i>“Asymmetric Double Lomax distribution and its applications in microarray gene expression studies”</i></b> in the UGC Sponsored workshop on <b><i>Modern Applied Statistical Methods in Statistical Softwares</i></b>	Department of Statistics, Nirmala College, Moovattupuzha, Kerala.	Nirmala College, Moovattupuzha, Kerala. February 24-26, 2009.	National
70.	Presented a paper entitled <b><i>“On generalizations of Lomax distribution and its applications”</i></b> , International Symposium on Probability Theory & Stochastic Processes in honour of Professor S. R. S. Varadhan FRS	Cochin University of Science & Technology, Kerala, India. Indian Science Lab, CSIR, DST, NBHM and Kerala Mathematical Association.	Cochin University of Science & Technology, Kerala, India. February 6-9, 2009.	International
71.	International Workshop on Bayesian Statistics Using OpenBUGS and R	Jointly by Indic Society for Education and Development and St. Thomas College, Pala.	St. Thomas College, Pala. 8-12 December 2008.	International
72.	One day workshop on <b><i>Research Methodology</i></b>	All Kerala Research Scholars Association	Calicut University, 19 June 2008.	National
73.	Workshop on <b><i>Restructuring Undergraduate Education: Interdisciplinary Approach and sharing the Resources</i></b>	MEA Sullamussalam Science College, Arecode. The Kerala State Higher Education Council.	MEA Sullamussalam Science College, Arecode. 10-11 March 2008.	Regional
74.	Workshop on <b><i>Distribution Theory and one day Seminar on Simulation Technique.</i></b>	Department of Statistics, University of Calicut. UGC	Department of Statistics, University of Calicut. 11-13 March 2008.	National
75.	Seminar entitled <b><i>Advances in Statistical Computing</i></b>	Department of Statistics, Farooke College, Kerala, UGC	Farooke College, Kerala, India during 17-19 March, 2008.	National
76.	Seminar on <b><i>Modern trends in Biotechnology</i></b>	Department of Zoology, Government College Kodenchery, Kerala. Government of Kerala.	Government College, Kodenchery, Kerala. 22 January 2008.	National
77.	Seminar on <b><i>Gender Equality</i></b>	Department of Women Studies, University of Calicut, Kerala.	University of Calicut, Kerala,	National



		UGC	India during 07-08 March, 2007.	
--	--	-----	------------------------------------	--

#### **ORIENTATION/REFRESHER COURSES ATTENDED**

SL.NO	NAME OF THE PROGRAMME	NAME OF THE ORGANISER	MONTH/ YEAR
1.	83 <sup>rd</sup> Orientation Programme	Academic Staff College, University of Calicut	March 2014
2.	9 <sup>th</sup> Refresher Course in Computer Science	UGC HRDC, University of Calicut	10 August 2016 to 30 August 2016

#### **WORKSHOP/SEMINARS ORGANIZED**

SL. NO	NAME OF THE SEMINAR	NAME OF THE ORGANISER & SPONSORING AGENCY	VENUE & DATE	POSITION HELD	LEVEL *
1	National pre-seminar workshop on <i>“Big Data Analytics”</i>	Directorate of Collegiate Education, Govt. of Kerala	Govt. Arts & Science College, Calicut, 13 <sup>th</sup> to 14 <sup>th</sup> December 2016	Co-ordinator	National
2.	National Seminar workshop on <i>“Statistical Methods and Applications”</i>	Directorate of Collegiate Education, Govt. of Kerala	Govt. Arts & Science College, Calicut, 15 <sup>th</sup> to 17 <sup>th</sup> December 2016	Co-ordinator	National
3.	National Two Day workshop on Method	DST-SERB, Govt. of India, as part of SSR policy associated with Major Research project of Dr. Bindu P. P.	Govt. Arts & Science College, Calicut, 10 <sup>th</sup> to 11 <sup>th</sup> March 2020.	Co-ordinator	National

#### **BOOKS REVIEWED**

SL.NO	TITLE	AUTHOR NAMES	ISBN NO.	MONTH/ YEAR
1	INTRODUCTORY STATISTICS, 10 <sup>th</sup> EDITION Pearson International	Neil A. Weiss, Ph.D.	ISBN 978-0-321-98917 -8	October 2014
2.	Probability & Statistics for Engineers & Scientists	Ronald E. Walpole <i>Roanoke College</i>	ISBN 10: 0-321-62911-6	March 2016

	NINTHE DITION Prentice Hall /Pearson	Raymond H. Myers <i>Virginia Tech</i> Sharon L. Myers <i>Radford University</i> Keying Ye <i>University of Texas at San Antonio</i>	ISBN 13: 978-0-321-62911 -1	
--	---	--	-----------------------------------	--

#### PROFESSIONAL AFFILIATIONS/MEMBERSHIPS

- Life member of Kerala Statistical Association
- Life member of Indian Science Congress Association
- Life member of Society for Applied Biotechnology, India

#### INVITED TALKS/IN MEDIA/ANY OTHER

- “Scope of Statistics” at the Webinar of MAMO College, Mukkom, Calicut, Organized by the Department of Mathematics & Statistics in connection with National Statistics Day on 15<sup>th</sup> July 2020.
- “Some aspects of Statistical distributions and its applications” at SNG College, Chelannur, Calicut, in the Interdisciplinary Seminar organized on 7<sup>th</sup> December 2018.
- “Scope of Higher Studies and career opportunities in Statistics” at Zamorins Guruvayurappan College, Kozhikode, in connection with the orientation program for first year B. Sc. Mathematics Students on 12th July 2018.
- “Scope of Higher Studies and career opportunities in Statistics” at Sree Gokulam College, Balussery Kozhikode, Organized by the Mathematics Association on 28th June 2018.
- “Scope of Higher Studies and career opportunities in Statistics” at Zamorins Guruvayurappan College, Kozhikode, Organized by the Mathematics Association on 20th January 2018.
- “Introduction to R Programming” at UGC HRDC, Calicut University, 5<sup>th</sup> December 2017.
- “Administrative Statistics” during the National Statistics Day 2017 Celebration organized by NSSO, Calicut Region Office, on 29<sup>th</sup> June 2017.
- “Introduction to R Programming” at UGC HRDC, Calicut University, 13<sup>th</sup> May 2017.
- Advances in Research Methodology: Data collection and Quantitative analysis on research data” at SAFI Institute of Advanced Study (SIAS), Vazhayoor, in the Two days National workshop on “Emerging challenges in Research Methodology, Statistical analysis and Manuscript writing Practices” on 5<sup>th</sup> April 2017.
- “Career and Research opportunities in Statistics” at Govt. College Koduvally, Calicut, Organized by the Department of Statistics, 16th March 2017.

<ul style="list-style-type: none"> <li>• “Research opportunities in Statistics” at Vimala College, Thrissur, Organized by the Department of Statistics, 27th February 2017.</li> </ul>
<ul style="list-style-type: none"> <li>• “Career opportunities in Statistics” at Malabar Christian College, Calicut, Organized by the Department of Statistics, 20th January 2017.</li> </ul>
<ul style="list-style-type: none"> <li>• “<i>Statistics in Every Day Life</i>” at MAMO College, Mukkom, Calicut, Organized by the Department of Mathematics on 18<sup>th</sup> January 2017.</li> </ul>
<ul style="list-style-type: none"> <li>• “Introduction to R Programming” at UGC HRDC, Calicut University, 11<sup>th</sup> January 2017 in connection with Training program for Research Scholars.</li> </ul>
<ul style="list-style-type: none"> <li>• “Career opportunities in Mathematics” at T. M. Govt. College, Tirur, Organized by the Mathematics Association on FN of 30th December 2015.</li> </ul>
<ul style="list-style-type: none"> <li>• “Statistical Data Analysis using EXCEL ” at New Nalanda Hotel, Kozhikode, organized by Directorate of Higher Secondary Education, Trivandrum, 16<sup>th</sup> December 2015.</li> </ul>
<ul style="list-style-type: none"> <li>• “Statistical Data Analysis using EXCEL ” at New Nalanda Hotel, Kozhikode, organized by Directorate of Higher Secondary Education, Trivandrum, 8<sup>th</sup> December 2015.</li> </ul>
<ul style="list-style-type: none"> <li>• “Scope of Higher Studies and career opportunities in Mathematics and Statistics” at Govt. Arts &amp; Science College, Kozhikode, Organized by the Mathematics Association on 15th July 2015.</li> </ul>
<ul style="list-style-type: none"> <li>• “Scope of Higher Studies and career opportunities in Statistics” at Zamorins Guruvayurappan College, Kozhikode, Organized by the Mathematics Association on 24th January 2015.</li> </ul>
<ul style="list-style-type: none"> <li>• “Scope of Higher Studies and career opportunities in Statistics” at Farook College, Kozhikode, Organized by the Statistics Association on 11th December 2014.</li> </ul>
<ul style="list-style-type: none"> <li>• “Scope of Higher Studies and career opportunities in Mathematics and Statistics” at T. M. Govt. College, Tirur, Organized by the Mathematics Association on FN of 13th November 2014.</li> </ul>
<ul style="list-style-type: none"> <li>• “R Program for Mathematicians” at T. M. Govt. College, Tirur, Organized by the Mathematics Association on AN of 13th November 2014.</li> </ul>
<ul style="list-style-type: none"> <li>• “Scope of Higher Studies for Chemistry graduates ” to B. Sc. Chemistry students of Vimala College, Thrissur, Organized by the Chemistry Association 2012-13 on 26<sup>th</sup> March 2013</li> </ul>
<ul style="list-style-type: none"> <li>• “Statistics: An Excellent Career Choice ” to B. Sc. Statistics students of Vimala College, Thrissur Organized by the Statistics Association 2013-14 on 01<sup>st</sup> August 2013</li> </ul>

POSITIONS HELD IN COLLEGE	
•	Chief Superintendent of Examinations, Government Arts and Science College, Calicut, January 2018 to April 2018.
•	Member of NAAC Steering Committee, Govt. Arts & Science College. 2016-17
•	Nodal Officer AISHE, Government Arts and Science College, Calicut, 2015- present.
•	Member of editorial board of Research Journal of Government Arts and Science College, Calicut – 2014-2015 & 2016-17.
•	Co-ordinator of the Govt. Arts & Science College Website (2014-2018)
•	Mentor of the Walk With Scholar Program, Government Arts and Science College, Calicut (2014-2018)
•	Member of CQAC Govt. Arts & Science College (2014-15)
•	Member of Executive Editorial Committee of, Reflections-A peer reviewed multi-disciplinary Research Journal for Women, Thrissur, Kerala, 2013 to present.
•	Member of the Editorial Committee of Vimala International Science Research Journal for Pure and Applied Sciences ( 2013 to present)
•	Member of the Editorial Committee of Vimala International Science Research Journal for Pure and Applied Sciences ( 2013 to present).
•	Member of the Editorial Committee of the Journal, Reflections (2013 to present)
•	Co-ordinator of the Under Graduate Tutorial System of T. M. Govt. College, Tirur (2013-14).
•	Co-ordinator of RUSA of T. M. Govt. College, Tirur (2013-14)
•	Mentor of the Walk With Scholar Program, T. M. Govt. College, Tirur (2013-14)
•	Co-coordinator of Nature club, E.M.E.A. College, Kondotti during 2007-2008

#### PG PROJECTS GUIDED

SL.NO	TITLE	MONTH/ YEAR
1.	Statistical Modelling of the Mosquito borne Disease Data in Kerala	2020
2.	Statistical Modelling of the non Mosquito borne Disease Data in Kerala	2020

3.	Time series modeling of rain fall data in Kerala	2019
4.	Modelling and Forecasting Marine fish production in Kerala using Time Series Regression	2019
5.	Generalizations of Weibull distribution and its Applications	2018
6.	Generalizations of Gumbel distribution and its Applications	2018
7.	Study of Socio Economic status of Kudumbhasree workers in Tirur	2018
8.	Time Series Modelling of Foreign Tourist Arrivals in Kerala	2017
9.	Crime against Women: a statistical analysis across India and Kerala	2017
10.	Statistical analysis of road accident in Kerala	2017
11.	Stress strength reliability of Generalizations of Laplace distribution and its Applications	2016
12.	Statistical Modelling of the communication Disease Data in Kerala	2016
13.	Statistical Analysis Cancer incidence in Kerala	2016
14.	Statistical Modeling of Gold and silver price data	2015
15.	Process capability indices of Gaussian and non-Gaussian distributions	2015
16.	Lifetime Distributions	2015
17.	Statistical Analysis of Survival Data	2014
18.	Statistical Analysis of Traffic Accident data	2014

#### UG PROJECTS GUIDED

SL.NO	TITLE	MONTH/YEAR
1.	Statistical Study of the Factors Affecting Blood Pressure	March 2014
2.	Statistical Study of the Factors Affecting Basic Pulse	March 2014