Professional Activities/ Honours

Awards and Honours

- 1. Elected member of International Statistical Institute, The Netherlands in June 2022.
- 2. Received Prof. K.S. Rao Best Researcher Award from Indian Society for Probability and Statistics during 41st Annual Convention of the Society during 11th-13th March, 2022.
- 3. Selected for Prof. D. D. Hanagal Endowment Lecture Award during 41st Annual Convention of Indian Society for Probability and Statistics during 11th-13th March, 2022.
- 4. Elected member of the Executive Committee of Indian Society for Probability and Statistics for 2023-2024.
- 5. Judge for selecting the Young Statistician Award Winner during 42nd Annual Convention of Indian Society for Probability and Statistics held in 3th-6th January, 2023.
- 6. Jury member for the Mathematical Sciences Section of 16th Chhattisgarh Young Scientist Congress-2018, held at Durg during 27-28th February, 2018.
- 7. Received Platinum Jubilee Lecture Award in the Section of Mathematical Sciences (including Statistics) at the 103rd Indian Science Congress held at University of Mysore, Mysuru during 3rd-7th January, 2016.
- 8. Jury member for the selecting Best Young Scientist in the Mathematical Sciences Section at the 103rd Indian Science Congress held at University of Mysore, Mysuru during 3rd-7th January, 2016.
- 9. Received "Bharat Jyoti Award" in 2011 by India International Friendship Society.
- 10. Chief Guest, Guest of Honour, Keynote Speaker, Plenary Speaker, Distinguished Speaker, Organizing Committee Member for various conferences and workshops.
- 11. Expert, Visitor's Nominee, Chancellor's Nominee for Faculty Selection Committees for at various academic and professional organizations, e.g., IITs, NITs and universities.
- 12. Member of Executive Council, Boards of Studies, Examination Boards and thesis examiner for large number of academic institutions.
- 13. Member of doctoral scrutiny committees of more than 100 research scholars of various departments of IIT Kharagpur.
- 14. General Proficiency Prize for the best outgoing student in M.Sc. (Statistics) programme at IIT Kanpur.

• Visits Abroad (Research)

- 1. Visited Institute of Statistics, University of Ulm, Germany during 1st-28th July, 2017 as a guest professor for collaborative research with Prof. Markus Pauly.
- 2. Visited Institute of Statistics, University of Ulm, Germany during 7th June-13th July, 2018 as a guest professor for collaborative research with Prof. Markus Pauly.
- 3. Visited Institute for Mathematical Statistics and Applications in Industry, Technical University Dortmund, Germany during 14th May-22nd June, 2019 as a guest professor for collaborative research with Prof. Markus Pauly.
- 4. Gave invited lectures in Wollongong University Australia, METU Ankara, Colombo Sri Lanka, Salzburg Austria etc.

• Editorial Duties

- 1. Associate Editor of Mathematical Methods of Statistics (Springer) since October 2024.
- 2. Associate Editor of American Journal of Mathematical and Management Sciences (Taylor and Francis) since February 2020.
- 3. Associate Editor of Journal of Indian Society for Probability and Statistics during 2006-2008.
- 4. Executive Editor of the International Journal of Mathematics and Computation October 2008-Feb 2011 and Editor March 2011 onwards.
- 5. Executive Editor of Bulletin of Statistics and Economics during Feb 2007 to October 2007 and Editor-in-Chief from November 2007 to March 2008, Editor from April 2008 to Feb 2011. Now known as International Journal of Statistics and Economics.
- 6. Editor of the International Journal of Applied Mathematics and Statistics since June 2005.
- 7. Editor of the International Journal of Mathematics and Statistics since 2013.
- 8. Executive Editor of the International Journal of Ecological Economics and Statistics June 2005-June 2006.
- 9. Guest editor of the International Journal of Ecology and Development (Vol. 4, No. W06 and Vol. 4, No. S06).
- 10. Member of the Editorial Board for the journal INFORMATION an International interdisciplinary journal published from JAPAN during 1999-2002.
- 11. Member of the Editorial Board for the journal Interstat, an online Journal from Virginia Tech. USA during 1999-2002.
- 12. Referee for most of the important national and international journals such as Statistical Papers, Statistics, J. Applied Statistics, Entropy, J. of Statistical Computation and Simulation, Journal of Applied Mathematics and Computing, J. of Multivariate Analysis, J. Statistical Planning and Inference, Statistics and Risk Modeling, Naval Research Logistics, Communications in Statistics-Theory and Methods, Communications in Statistics-Simulation and Computation, Statistics and Probability Letters, Physica A, Probability and Mathematical Statistics, Indian J. Mathematics, J. Indian Statistical Association, Environmental and Ecological Statistics, IEEE Transactions on Information Theory, Defense Science Journal, Journal of Statistical Theory and Practice, Hacettepe Journal of Mathematics and Statistics, Sankhya, Journal of Statistics and Applications, Annals of Data Science, National Academy Science Letters, Proc. National Academy Sciences, International Journal of System Assurance Engineering and Management, Journal of Inequalities and Applications, Discrete Dynamics in Nature and Society, Springer Plus, International Journal of Statistics and Reliability Engineering, Statistics and Applications etc.
- 13. Reviewer for Mathematical Reviews published by American Mathematical Society.
- 14. Member of Doctoral Scrutiny committees of very large number (more than 100) of students in the institute.

Citations and Reviews

- 1. Research Work cited in some books, dissertations and various international journals such as Journal of Biomedical Informatics, Bernoulli, Annals of the Institute of Statistical Mathematics, Statistics & Probability Letters, Statistical Methodolgy, Statistics & Decisions, Statistica Neerlandica, Communications in Statistics- Theo. & Meth., Statistical Planning & Inference, Statistical Papers, Sankhya, J. Statistical Research, Statistics, Metrika, Applied Mathematical Sciences, Revstat, J. Indian Statistical Association, International J. of Applied Mathematics and Statistics, Statistical Methodology, Computational Statistics & Data Analysis, Metron, J. Statistical Theory and Practice, Nonlinear Analysis, Theory and Methods and Applications, Quantum Information and Computation, Algorithmica, Lecture Notes in Computer Science, Lecture Notes in Artificial Intelligence, Physica Scripta, ACM Trans. Comput. Theory, Environment International, J. of Applied Statistics, The Journal of Mathematics and Computer Science, J. Iran. Statist. Soc., Revstat, Far East Journal of Theoretical Statistics, Methodol. Comput. Appl. Probab., Applied Stochastic Models in Business and Industry, IEEE Transactions on Information Theory, IEEE Transactions on Reliability, Brazilian J. of Prob. and Statistics, Applied Mathematical Sciences, International J. of Mathematics and Computer Research etc.
- 2. Published work has been reviewed/abstracted in Mathematical Reviews/ Statistical Theory and Methods Abstracts, Scopus, WoS.
- 3. My paper (with co-authors A.K. Mahapatra and P. Vellaisamy) "Reliability estimation of the selected exponential populations. Statistics and Probability Letters, (2009) V. 79, pp. 1372-1377 was among the 25 most downloaded papers at Elsevier Sciences website.
- 4. My paper (with co-authors Y. M. Tripathi and C. Petropoulos) Improved estimators for parameters of a Pareto distribution with a restricted scale. Statistical Methodology, V. 18, pp. 1-13 was among the 25 most downloaded papers at Elsevier Sciences website.

Membership of Professional Societies

- 1. Elected Member of the Executive Committee of Indian Society for Probability and Statistics for 2004-2006.
- 2. Elected General Council Member of the Forum for Interdisciplinary Mathematics for 2001-2004.
- 3. Elected Member of National Academy of Sciences (NASI), Allahabad, India since 2007.
- 4. Life member of Indian Society for Probability and Statistics since 1994.
- 5. Life member of Indian Statistical Association since 1994.
- 6. Life member of Society for Statistics and Computer Applications since 2021.
- 7. Life member of Forum for Interdisciplinary Mathematics since 2001.

• Organizing Workshops/Conferences/Invited Sessions

Name of the Workshop/Conference	Duty	Dates	No. of Participants
Ninth International Conference on Statistics for Twenty- first Century-2023 (ICSTC-2023)	Organized an invited session on "Innovations in Statistical Inference"	15-18 th December, 2023	300
Sixth International Webinar on Recent Trends in Statistical Theory and Applications (WSTA-2022)	Organized an invited session on "Estimating parametric functions for exponential populations"	29 th June-2 nd July, 2022	300
Bhāratīya Jñāna Paramparā: A UGC-HRDC Sponsored Faculty Development Program 2021 in India's Knowledge Systems (IKS): Sources, theories, Concepts and Practices	Advisor	16 th November- 7 th December, 2021	40 (FDP) + 200 (speakers and other distinguished persons)
Azadi ka Amrit Mahotsav Sanskritotsava 2021	Patron, Advisor	22 nd - 29 th August, 2021	100+&(Distinguish ed Speakers)
"Bharat-Tirtha: An International Webinar on Indology" IIT Kharagpur	Chairman	6 th -8 th November, 2020	250
TEQIP sponsored Short Term Course "Statistical Methods in Data Analysis"	Principal Coordinator	Feb 25-1 st March, 2017	40
International Indian Statistical Association Conference 2015, Pune	Organized an invited session on "Simultaneous Inference"	Dec 20-24, 2015	300
International Statistics Conference 2014: Statistics and Society in the New Information Age: Challenges and Opportunities, Colombo	Organized an invited session on "Advances in Statistical Inference"	Dec 28-30, 2014	300

DST Sponsored Internship Program for Children Science	Co-Coordinator	Dec 9-24, 2013	60
Congress at IIT Kharagpur			
99 th Indian Science Congress	Organized an	Jan 3-7, 2012	50
Association, KIET University,	invited session		
Bhubaneswar	on "Decision		
	Theory"		
DST Sponsored National Meet of	Convenor	Oct 12-15, 2011	70
Research Scholars in			
Mathematical Sciences			
Lectures for College Students	Coordinator	Jan 19,2011	70
Workshop on Statistical	Convener	Feb 24, 2007	150
Applications in Defense			
Research, IIT Kharagpur			
International Conference on	Organized an	Dec 28-29, 2006	150
Multivariate Statistical Methods	invited session		
in the 21 st Century, The Legacy	on "Ranking		
of Prof. S.N. Roy, Indian	and Selection		
Statistical Institute, Kolkata	Procedures"		
Workshop on Quantum	Secretary	Feb 15-18, 2005	100
Information, Computation and			
Communication, IIT Kharagpur			
XXVII Indian Social Science	Convener	Dec 3-7, 2003	50
Congress, IIT Kharagpur.	Statistics and		
	Mathematics		
	Section		
International Conference on	Organized an	Dec 27-29, 2004	200
Interdisciplinary Mathematical &	invited session		
Statistical Techniques, Lucknow	on "Ranking		
	and Selection		
	Procedures"		
International Conference on	Organized an	Dec 21-23, 2002	250
Statistics, Combinatorics and	invited session		
Related Areas, Allahabad	on "Decision		
,	Theory"		
MATHWORX-2002	Convener	July 13-14,	200
(Mathematics Workshop, IIT		2002	
Kharagpur)			
POLYGON (Mathematics	Coordinator	Oct 13-14, 2001	40

Workshop, IIT Kharagpur)			
MATHWORX-2K+1 (Mathematics Workshop, IIT Kharagpur)	Coordinator	July 14-15, 2001	300
MATHWORX-2K (Mathematics Workshop, IIT Kharagpur)	Coordinator	July 15-16, 2000	250

Invited Lectures & Session Chair

- 1. Delivered invited lectures on "Evolution of Number System: An Indian Contribution" in 'RC in Perspective of Indian Knowledge System' organized by Malviya Mission Teacher Training Centre, The University of Burdwan on 20th September, 2024.
- 2. Delivered series of lectures on "Probability and Distributions" in the short term course on 'Basic Probability and Statistics' for the engineers of TVS Motors Company at Hosur, during 03-04 September, 2024.
- 3. Delivered the Inaugural Lecture in the "Monthly Research Lecture Series" at Mahindra University, Hyderabad on "Bootstrap Procedures and Applications: Testing against ordered alternatives in One-Way and Two-Way ANOVA Models" on 28th August, 2024.
- 4. Delivered an expert lecture under the Aryabhata Lecture Series on "History of Statistics and Contributions of Prof. P.C. Mahalanobis" as Celebration of National Statistics Day-2024 organized by Department of Mathematics and Statistics, Central University of Punjab on 5th July, 2024.
- 5. Delivered Keynote address on "Detecting similarity between cancer survival times using an overlap index" in International Conference on Recent Advances in Mathematics and Data Science, Department of Mathematics, Bioinformatics and Computer Applications, MANIT, Bhopal, 27th-28th June, 2024.
- 6. Delivered invited lecture on "Historical development and present research trends in probability and statistics" in the Department of Basics Sciences, Institute of Infrastructure, Technology, Research and Management, Gujarat, 20th June, 2024.
- 7. Delivered plenary lecture on "New tests for simultaneous ordering in a two-way additive ANOVA" in Ninth International Webinar on Recent Trends in Statistical Theory and Applications 2024 (WSTA-2024), Kerala University, Trivendrum, 29th June 02nd July 2024.
- 8. Delivered invited lecture on "Two Problems in Multivariate Analysis" in 3-Day Workshop on Multivariate Data Analysis and Mathematical Tools for Sciences, Engineering and Management organized by Department of Engineering Sciences, Atal Bihari Vajpayee Indian Institute of Information Technology and Management, Gwalior during 20th-22nd May, 2024.
- 9. Delivered an invited lecture on "History and current trends in statistics and data science" in the Department of Mathematics, NIT Rourkela, April 3, 2024.

- 10. Delivered invited lectures on "A new stress-strength index for comparing multiple treatments" in the Virtual Seminar on Time Series and Reliability, Department of Statistics, CUSAT, 2nd March, 2024.
- 11. Chaired a session and delivered an invited lecture on "A new index for comparing relative group effects" in the International Workshop on Stochastic Models in Data Science, Department of Mathematics and Statistics, IIT Tirupati, February 17-20, 2024.
- 12. Delivered an invited lecture on "Inference on the common mean direction of several Fisher-von Mises-Langevin distributions" in the National Conference on Recent Advances in Statistics and Data Science, Department of Statistics, Sri Padmavati Mahila Visvavidyalayam, Tirupati, February 18-19, 2024.
- 13. Delivered a plenary lecture on "Testing for ordering of treatment effects in balanced two-way crossed heteroscedastic ANOVA" in the International Conference on Recent Advances in Probability and Statistics in Interdisciplinary Research RAPSIR-2024, Department of Statistics, University of Allahabad, February 6-8, 2024.
- 14. Delivered invited lectures on "Estimating parameters of selected populations" in the 7-day High-End Workshop on Statistical Modelling in Ranking and Selection organized by Department of Mathematics, IIT Indore during January 18 24, 2024.
- 15. Delivered an invited lecture on "Measurements in ancient Indian civilization and evolution of modern number system" in the International Conference on the History of Mathematics organized by the Centre for Indian Knowledge Systems, IIT Guwahati, January 19-21, 2024.
- 16. Delivered a plenary lecture on "Testing for trend in Two-way heteroscedastic additive ANCOVA model" in the National Conference on Data Science and Applied Statistics, Dept. of Statistics, School of Mathematical Sciences, K.B. C. North Maharashtra University, Jalgaon, 12th -13th January, 2024.
- 17. Participated in the panel discussion as an expert on "Importance of Mathematics and Computing for All Round Development of our Nation" in the 10-th International Conference on Mathematics and Computing (ICMC 2024), Kalasalingam Academy of Research and Education, Krishnankoil, Srivilliputhur, Tamil Nadu, January 02 07, 2024.
- 18. Chaired a session and delivered a plenary lecture on "Testing against ordered alternatives in two-way heteroscedastic ANCOVA models without interaction" in the International Conference on Statistics, Data Science and Reliability: Exploring Trends, Methods & Applications in Conjunction with 7th Convention for Indian Association for Reliability and Statistics, Department of Statistics, M.D. University, Rohtak, 24th-26th December, 2023.
- 19. Chaired a session and delivered a plenary lecture on "Testing against Ordered Effects of Both Factors in Two-Way ANOVA Models" in Ninth International Conference on Statistics for Twenty First Century-2023 (ICSTC 2023), Kerala University, Trivendrum, 15th 18th December, 2023.
- 20. Delivered invited lectures on "History and Current Trends in Statistics and Data Science" in One week training Programme on "Empowering Agriculture Students with Digital Tools and Resources" organized by Division of Statistics and Computer Science SKUAST, Jammu during 6th-12th December, 2023.

- 21. Delivered an invited lecture on "Current Trends in Statistics and Data Science" in Department of Mathematics, Amrita Vishwa Vidyapeetham, Coimbatore, November 9, 2023.
- 22. Delivered and invited lecture on "Historical Development and Current Research Trends in Probability and Statistics" in the Second Research scholar day organized by the Department of Applied Mathematics, Vidyasagar University, Midnapore during 12th October, 2023.
- 23. Chaired a session on "Re-evaluation of Indian Genesis" during Samvaad-2023 organized by Partha Ghosh Academy of Leadership, IIT Kharagpur, 7th October, 2023.
- 24. Delivered a lecture on "Algorithms in Ancient Indian Mathematics" in Sanskrit Saptah organized by Centre for Excellence in Indian Knowledge Systems, IIT Kharagpur during 31st August-5th September, 2023.
- 25. Delivered lectures on "Failure Data Analysis-Parametric" in the Short Term Course "RAMS for Railway Systems organized by Subir Chowdhury School of Quality and Reliability, IIT Kharagpur during 3rd-7th July, 2023.
- 26. Chaired a special session in Honour of Professor A.M. Mathai during Eigth International Webinar on Recent Trends in Statistical Theory and Applications 2023 organized by Department of Statistics, University of Kerala, Trivandrum during 29th June-2nd July, 2023.
- 27. Delivered a Plenary lecture on "Order Restricted Inference in One-way ANCOVA" in the Special Session in Honour of Professor S.N Roy during Eigth International Webinar on Recent Trends in Statistical Theory and Applications 2023 organized by Department of Statistics, University of Kerala, Trivandrum during 29th June-2nd July, 2023.
- 28. Delivered lectures on "Principal Component Analysis: Concepts, model and applications" in the short term certificate course "Multivariate Data Analysis with Applications" organized by Dept. of ISE, IIT Kharagpur during 26th June-2nd July, 2023.
- 29. Delivered a series of lectures on "Probability and Statistics Basics" in the Training Program on Reliability Engineering to Engineers of TVS Motors Company, Hosur, Tamilnadu during 22nd-23rd June, 2023.
- 30. Delivered a lecture on "History and Foundations of Statistics" in One Day seminar on "Foundations of Various Branches of Mathematics" organized by Department of Mathematics, Kharagpur College, Kharagpur on 15th May 2023.
- 31. Delivered a lecture "On a New Index for Comparisons of Group Effects" in the Colloquium Lecture Series in the Department of Mathematics, IIT Madras on 27th April, 2023.
- 32. Delivered an invited lecture on "Glimpses into the Wonderful World of Numbers" in "Nurturance Programme for NTS awardees" held at IIT Kharagpur during 19 -23th December, 2022.
- 33. Delivered a plenary lecture on "Bootstrap likelihood ratio test for two-way crossed ANOVA" in the Eight International Conference on Statistics for Twenty-First Century-2022 (ICSTC-2022) held at Kerala University Trivendrum during 16th-19th December, 2022.

- 34. Delivered an invited lecture on "History and Current Trends in Statistics and Data Science" in the Colloquium Lecture Series in the Department of Mathematics, IIT Ropar on 8th December, 2022.
- 35. Delivered an invited lecture on "History and Developments in Indian Mathematics From Ancient to Modern" in Session on "Ganita" during Faculty development Programme about Indian Knowledge Traditions organized by Centre of excellence for Indian Knowledge Systems, IIT Kharagpur during 22nd November 9th December, 2022.
- 36. Delivered a Plenary lecture on "Statistical Inference for Analysing Data from Clinical Trials" in the Plenary session "Analytics in Ayurvedic decision Making" in A National symposium "Ayurdhara: the Ayurveda Continuum" organized by Centre of excellence for Indian Knowledge Systems, IIT Kharagpur during 4th 5th November, 2022.
- 37. Delivered an invited lecture on "Origin of the Number System: India's Gift to Mankind" during Lecture Series on Indology for international students organized by International Relations Cell, IIT Kharagpur during 13-15th September, 2022.
- 38. Delivered an invited lecture on "Estimating a new stress-strength index for several exponential populations" in International Workshop on Integrated Approaches of Stochastic Modeling and Data Science for Sustainable Development in conjunction with Diamond Jubilee Celebrations of Department of Statistics, SV University, Tirupati 7th 11th September, 2022.
- 39. Delivered a Plenary lecture in honour of Late Prof. S.N. Roy on "A parametric bootstrap likelihood ratio test for two-way ANOVA under heteroscedasticity" in the Sixth International Webinar on Recent trends in Statistical theory and Applications-2022 (WSTA_2022) in Conjunction with Fifth Annual Convention of Statistics Fraternity Kerala during 29th June 2nd July, 2022.
- 40. Delivered invited lectures on "Bootstrap Tests for ANOVA in Normal and Langevin Populations Under Heteroscedasticity" in Short Term Training Program "Emerging Applications of Mathematics and Statistics in Engineering Science and Technology" (EAMSEST-2022) organized by Department of Mathematics, National Institute of Technology, Rourkela during 9th 15th May, 2022.
- 41. Delivered invited lecture on "Bootstrap Tests for One Way ANOVA under Heteroscedasticity and Unbalanced Data" in the Department of Mathematics, IIT Madras on 25th April, 2022.
- 42. Delivered invited lecture on "Developments in Data Science and Statistics" in the Department of Mathematics and Actuarial Science, CRESCENT Institute of Science & Technology, Chennai on 25th April, 2022.
- 43. Delivered distinguished invited lectures on "History and Current Research in Data Science" and "Origin of Modern Numerals: India's Gift to Civilization" in the "8th Guru Dakshta", a faculty induction program organized by UGC-HRDC University of Allahabad during 23rd March- 22nd April, 2022.
- 44. Delivered invited lecture on "Inference on the Common Mean Direction of Several Langevin Populations" 3rd International Conference on Mathematical Techniques and Applications" organized by Department of Mathematics, SRM Institute of Science and Technology, Chennai during 23rd-25th March, 2022.

- 45. Delivered D. D. Hanagal Endowment Lecture on "Inference Procedures for Exponential Models with a Common Minimum Guarantee Time" and chaired a session on "Design & Analysis of Experiments" during International Conference on Statistics and Data Science: Theory and Practice for Progress and Prosperity in Conjunction with 41st Annual Convention of Indian Society for Probability and Statistics during 11th-13th March, 2022.
- 46. Chaired Prof. P.V. Sukhatme Endowment Lecture by Prof. P.G. Sankaran on "Proportional Cause-specific Hazards Model for Recurrent Events" during International Conference on Statistics and Data Science: Theory and Practice for Progress and Prosperity in Conjunction with 41st Annual Convention of Indian Society for Probability and Statistics during 11th-13th March, 2022.
- 47. Delivered Expert Talk on "Heuristic Tests for Homogeneity of Effects Against Ordered Alternatives in Completely Randomized Designs with Heterogeneous Variances" in pre-Convention International Workshop on Innovations on Data & Statistical Sciences jointly organized by Department of Statistics, Osmania University, Hyderabad and Indian Society for Probability and Statistics on 10th March, 2022.
- 48. Delivered a lecture "History and Recent works in Statistics and Data Science" as a Chief Guest in the Annual Inter College Festival "Simulation-22" of Department of Statistics, Sri Venkateswara College, University of Delhi on 9th March, 2022.
- 49. Delivered Expert Talk "Science behind Indian Mathematical, Geometrical and Computational Systems" in International Workshop on Indian Knowledge Systems jointly organized by CoE-IKS, IIT Kharagpur and Department of Yogic Art & Science, Visva-Bharati during 7th-8th March, 2022.
- 50. Delivered a Distinguished Speaker Talk on "Developments in Statistics and Data Science" on the occasion of National Science Day Celebrations 2022 in National Institute of Technology Andhra Pradesh on 28th February, 2022.
- 51. Delivered invited lecture on "Tests for Homogeneity of Stress-strength Indices in Exponential Models" in Annual Conference on Recent Advances in Statistical Theory and Applications (RASTA 2022) organized by ICAR National Academy of Agricultural Research Management in conjunction with 24th Annual Conference of the Society of Statistics, Computer and Applications during February 23-27, 2022.
- 52. Delivered invited lectures on "Estimating of Direction Parameters" for celebration of Vigyanutsav organized by Department of Statistics, Central University of Haryana under the aegis of Azadi Ka Amrit Mahotsava on 14th February, 2022.
- 53. Delivered invited lectures on "Estimating Ordered Parameters" and "Estimating Mean Under Restrictions in Normal and Exponential Populations" for celebration of Vigyanutsav organized by Department of Statistics, Central University of Haryana under the aegis of Azadi Ka Amrit Mahotsava on 9th February, 2022.
- 54. Delivered lectures on "Use of Optimization in Statistical Inference" in one-week faculty development programme on "Optimization: The Omnipresent" organized by Motilal Nehru College in collaboration with Hansraj College during 4th-9th February, 2022.
- 55. Delivered Keynote lecture "Estimating Parameters in Scale Mixtures of Location-Scale Distributions in the 8th International Conference on Mathematics and Computing (ICMC 2022), VIT, 6-8th January, 2022.

- 56. Delivered Expert Talk "Origin of Modern Number System" in National Symposium on Mathematical Sciences and Applications (NSMSA-2021) on the occasion of National Mathematics Day (On Srinivasa Ramanujan's 134th birth anniversary) organized by Department of Mathematics, PDPM IIITDM Jabalpur on 22nd December, 2021
- 57. Delivered invited lecture "Estimation of new stress-strength index for exponential populations with a common location" in the International Conference (Online) on Recent Applications of Statistical Techniques and Analysis (RASTA-2021), Banaras Hindu University, 15-17th December, 2021.
- 58. Delivered invited lecture on "Indian Mathematics" in Bhāratīya Jñāna Paramparā: A UGC-HRDC Sponsored Faculty Development Program 2021 in India's Knowledge Systems (IKS): Sources, theories, Concepts and Practices organized by Rashtram School of Public Leadership and Rishihood University, Sonipat during 16th November 7th December, 2021.
- 59. Delivered 18th Siksha O Anusandhan Fortnightly Academic Lecture (SOAFAL) on 23rd October, 2021 in Siksha O' Anusandhan University, Bhubaneswar.
- 60. Delivered invited lecture "Indian Contribution to Modern Number System" in Orientation Program on Vedic Mathematics organized by State Council for Educational Research and Training, U.P., Lucknow during $21^{st} 22^{nd}$ September, 2021.
- 61. Delivered invited lecture "Inference on a new stress-strength index" and chaired a session in International Conference (Virtual Mode) on Emerging trends in Statistics and Data Science in conjunction with 40th Annual Convention of ISPS, 7th 10th September, 2021.
- 62. Delivered an invited Expert Talk "Current Trends in Statistics and Data Science" in the Department of Statistics, CHRIST University, Bengaluru on 28th August, 2021.
- 63. Delivered an invited Expert Talk "Recent Trends in Statistical Research" in National Webinar on Recent Trends in Statistical research in Janki Devi Memorial College, University of Delhi on 27th August, 2021.
- 64. Delivered Expert Talk as Guest of Honour "Indian Origin of Modern Numerals and Decimal Place Value System" in International Conference on Ancient Indian Wisdom: Panacea for Sustainable Well-Being (ICON) organized by School of Management Sciences, Varanasi during 26-27th June, 2021.
- 65. Delivered invited Expert Talk "On the Problem of Estimating Parameters of Directional Distributions" in 14th Chandigarh Science Congress (CHASCON 2020), organized by Panjab University, Chandigarh during 17-19 December, 2020.
- 66. Delivered invited lecture "Likelihood ratio and parametric bootstrap tests for analysis of variance under heteroscedascticity" in Two Day National e-Conference on Essence of Mathematics in Engineering Applications (EMEA-2020), KL University, Andhra Pradesh during 2-3rd December, 2020.
- 67. Delivered lecture on "Introduction to Data Science and Data Analytics for Mine Management" in the short term course "Advances in Technology and Tools in Surface Mining Practices" organized by IIT Kharagpur during August 27 to 31, 2020.
- 68. Delivered invited lecture "Improved equivariant estimation in location-scale models" in the Statistica Colloquim, Faculty of Statistics, TU, Dortmund on 28th May, 2019.

- 69. Delivered lectures on "Applications of Fourier Transform in Statistics" in the short term course "Series, Transform Techniques and Their Applications" organized by IIT Kharagpur during February 25 to March 1, 2019.
- 70. Delivered invited lectures on "Analysis of Variance" in Workshop on Application of Statistical Methods using Statistical Software in the Department of Statistics, Visva-Bharati University, Santiniketan during 27th -31st August, 2018.
- 71. Delivered invited lecture "Estimation of Parameters in Directional Distributions" in the University of Salzburg, Austria on 7th July, 2018.
- 72. Delivered lectures on "Univariate Statistics, Parameter Estimation, Tests of Hypotheses and Regression" in the short term course "Fundamental Concepts of Image Processing for Interpretation of Remote Sensing Data" organized by IIT Kharagpur during 16-27th April, 2018.
- 73. Delivered invited lecture "On efficiency and robustness of estimators for parameters in Langevin and Mixture Langevin models" and chaired a session in Third International Conference on Statistics for Twenty First Century held in the Kerala University Trivandrum during 14-16th December 2017.
- 74. Delivered invited lecture "Classification Rules for Exponential Distributions under Restrictions on Parameters" at Institute of Statistics, University of Ulm, Germany on 7th July, 2017.
- 75. Delivered lectures on "Distributions and Statistical Inference" in the Short term course on "Autonomous Rescue Robots and Intelligent Sensing of Environment" organized by IIT Kharagpur during June 20-July 2, 2017.
- 76. Delivered invited lectures on "Data Analytics" in the Department of Computer Science and Engineering at National Institute of Science and Technology (NIST), Berhampur during 17-19th March, 2017.
- 77. Delivered a series of lectures on "Probability, Statistical Inference and Regression Analysis" in the Short term course "Statistical Methods in Data Analysis" organized by the Department of Mathematics, IIT Kharagpur during Feb 25-1st March, 2017.
- 78. Delivered lectures on "Statistics, Probability and Error Modeling" in short term course on "Advanced Surveying and Geo-information for mining and geo-spatial industries" organized by the Department of Mining Engineering, IIT Kharagpur during January 18-20, 2017.
- 79. Delivered an invited lecture "Estimating parameters of directional distributions" in Department of Mathematics, IIT Bombay, 2nd January, 2017.
- 80. Delivered an invited lecture "New classification procedures under restrictions on parameters" in Department of Statistics, University of Mumbai, 3rd January, 2017.
- 81. Delivered invited lectures on "Methods of Regression Analysis" in the Short Term Course "Role of Mathematical Science in Engineering and Technology" during October 19-23, 2016 at Motilal Nehru National Institute of Technology, Allahabad.
- 82. Delivered plenary lecture in DST Sponsored Inspire Internship Camp for school children on "Glimpses into the Wonderful World of Numbers" at Government V.Y.T. Post Graduate Autonomous College, Durg during 22-26th October, 2016.

- 83. Delivered lectures on "Distributions, Estimation, Testing and Regression" in UGC sponsored refresher course at Lakshmibai National Institute of Physical Education, Gwalior on 16-17th September, 2016.
- 84. Delivered lectures on "Regression Analysis" in the Short Term Training Program on "Probability and Statistics with Applications in Science and Engineering" organized by the Department of Mathematics, National Institute of Technology, Raipur during August 17-21, 2016.
- 85. Delivered an invited lecture "Improved Estimation of Location and Scale Parameters in Scale Mixture Distributions" in International Conference on Recent Advances in Statistics, University of Mumbai, 27-29th June, 2016 and chaired a session.
- 86. Delivered series of lectures on "Linear Algebra, Probability, Distributions and Statistical Inference" in the Short Term Course "On 3D Reconstruction using Geospatial Data and Image Analysis for Situational Awareness in Hazardous Environment" organized by the Department of Mining Engineering, IIT Kharagpur during May 16- 21, 2016.
- 87. Delivered Platinum Jubilee Award Lecture "On the problem of estimating parameters of directional distributions" in 103rd Indian Science Congress, University of Mysore, 3-7th January, 2016 and chaired a session.
- 88. Delivered lectures on "Probability and Statistical Inference" in UGC sponsored refresher course at Lakshmibai National Institute of Physical Education, Gwalior on 17th September, 2015.
- 89. Delivered a series of lectures on Probability during 2-3rd January, 2015 for students of National Institute of Technology, Agartala under project "Ishan Vikas" sponsored by MHRD, New Delhi.
- 90. Delivered an invited lecture "Inference on parameters of directional distributions" and organized an invited session "Advances in Statistical Inference" in International Statistics Conference 2014: Statistics and Society in the New Information Age: Challenges and Opportunities, Institute of Applied Statistics Sri Lanka, 28-30th December, 2014.
- 91. Delivered a series of lectures on Computational Methods in Statistics in "Workshop on Advanced Computational Mathematics" at Department of Mathematics, National Institute of Technology, Jamshedpur during 23-27th June, 2014.
- 92. Delivered an invited lecture "Optimal properties of the MLE of the mean direction" in the Department of Statistics, Allahabad University on 20th May, 2014.
- 93. Delivered a series of lectures on distribution theory and number theory in "A Short Term Course on Cryptography" organized by the Department of Mathematics, IIT Kharagpur during 18-24 May, 2014.
- 94. Delivered an invited lecture "On efficiency and robustness of estimators for a spherical location" in Department of Mathematics and Statistics, IIT Kanpur on 16th May, 2014.
- 95. Delivered an invited lecture "On the Properties of Maximum Likelihood Estimator for Directional Parameter" in Department of Mathematics, ITER, Bhubaneswar, 25th March, 2014.
- 96. Delivered a series of lectures on Distribution Theory and Statistical Inference in Refresher Program on "Basic Theoretical Topics of Remote Sensing and GeoSpatial

- Analysis Techniques" for ISRO Scientists/Engineers, organized by Kalpana Chawla Space Technology Cell, IIT Kharagpur, 10-15th Feb, 2014.
- 97. Delivered an invited lecture and chaired a session in 41st Annual Conference of OMS & International Conference on Industrial Mathematics and Scientific Computing, KIIT University, Bhubaneswar, 4-5th January, 2014.
- 98. Delivered a lecture in Internship Camp for Children Science Congress at IIT Kharagpur in Dec 2013.
- 99. Delivered a series of lectures on Statistical Decision Theory in summer internship camp at Indian Statistical Institute, Chennai during May-June 2013.
- 100. Delivered an invited lecture in Indian Statistical Institute, Chennai in October, 2012.
- 101.Delivered an invited lecture in INSPIRE Science Camp in NIT Durgapur during 26-30 June 2012.
- 102. Delivered an invited lecture and chaired a session in the National Conference on Advances and Applications in Statistics, Panjab University, Chandigarh, 20-21 February, 2012.
- 103.Delivered an invited lecture and chaired a session in the Mathematical Sciences Section, 99th Indian Science Congress Association, KIET University, Bhubaneswar, 3-7th Jan, 2012.
- 104.Invited to deliver a talk on "Ramanujan's Mathematics: Yesterday, Today and Tomorrow" in National Academy of Sciences India organized workshop in Allahabad, 22-23 Dec, 2011.
- 105. Visited Department of Mathematics, IIT Bombay on a collaborative research scheme during 9-16th July, 2011 and delivered lecture on 'Reliability estimation in exponential populations'.
- 106.Delivered an invited lecture and chaired a session in the "New Developments in Theory and Applications of Statistics: An International Conference in Memory of Professor Moti Lal Tiku" held in Middle East Technical University, Ankara, Turkey, 2-4 May, 2011.
- 107.Delivered a series of lectures in QIP short term course on Business Research Methods organized by the Dept of Humanities and Social Sciences, IIT Kharagpur during 11-23rd July, 2011.
- 108.Delivered a series of lectures in Refresher course for Railways School teachers, South Eastern Railways on 23rd June, 2011.
- 109.Delivered a lecture on the educational excursion visit of students of Netaji Mahavidyalaya on 19th January, 2011 in the Department of Mathematics, IIT Kharagpur.
- 110.Delivered an invited lecture and chaired a session in the International Conference on Development and Applications of Statistics in Emerging Areas of Science and Technology and XXX Annual Convention of Indian Society for Probability and Statistics, University of Jammu, 8-10 Dec, 2010.
- 111.Delivered an invited lecture in a One Day Conference 'Advances in Mathematics and Statistics', IIT Kanpur, 29-31 October, 2010.
- 112.Delivered an invited lecture in the XII Ann. Conf. of Soc. for Statistics Computer and Applications, Visva-Bharati, 24-26 Feb, 2010, Santiniketan.
- 113.Delivered an invited lecture in the 7th International Triennial Calcutta Symposium. Dec 28-31, 2009, Calcutta University, Kolkata.

- 114.Delivered a series of lectures in National Workshop on Multivariate Analysis and Statistical Inference at National Institute of Technology, Jamshedpur during 22-23rd December, 2008.
- 115.Delivered an invited lecture in the International Conference on Statistical Paradigms: Recent advances and reconciliations, Jan 1-4, 2008, Indian Statistical Institute, Kolkata.
- 116. Chaired a session on Optical and Quantum Computing in the "Workshop on Physics & Technology of All-Optical Communication Components and Devices at IIT Kharagpur, October 11-16, 2007.
- 117.Invited to present a paper in the International Conference "Interdisciplinary Mathematical and Statistical Techniques" at Shanghai Institute for Advanced Studies, University of Science and Technology of China, Shanghai, China, May 20-23, 2007.
- 118.Delivered an invited lecture in International Conference on Multivariate Statistical Methods in the 21st Century, The Legacy of Prof. S.N. Roy, Dec 28-29, 2006, Indian Statistical Institute, Kolkata.
- 119.Delivered invited lectures in the "Workshop on Multivariate Statistical Methods" organized by Indian Statistical Institute, Kolkata, 23-27 December, 2006.
- 120.Delivered a series of lectures in QIP short term course on "Decision Making Tools in Engineering" organized by the Dept. of Mathematics, IIT Kharagpur from 11th to 24th December, 2006 for Engineering College teachers.
- 121.Delivered a series of lectures in QIP short term course on "Environmental Impact Assessment and Management Plan" organized by the Dept. of Civil Engg. IIT Kharagpur from 14-19th November 2005.
- 122. Delivered invited lectures in the "Workshop on Statistical Reliability in Defence Applications" organized by DRDO at Chandipur, September 28-30, 2005.
- 123. Delivered an invited lecture in the National Seminar on Mathematics at St. Xavier's College Ranchi, April 22-24, 2005.
- 124.Delivered an invited lecture and chaired a session in the International Conference on Recent Advances in Statistics, IIT Kanpur, Jan 4-6, 2005.
- 125.Delivered a series of lectures in refresher course for Kendriya Vidyalaya teachers of the South Zone during May 2003 on Probability and Statistics.
- 126. Visited Department of Mathematics, IIT Bombay on a collaborative research scheme during 21-28th February, 2003 and delivered lectures on 'Quantile Estimation' and 'Estimation of Quantile after Selection'.
- 127.Delivered a series of lectures in a UGC sponsored refresher course on Recent Advances in Applied Mathematics at Department of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, November 2002.
- 128.Delivered a series of lectures in AICTE sponsored short term course "Modern Mathematical Techniques for Computer Science, Communication and IT" organized by the Dept. of Mathematics, IIT Kharagpur from 20th to 31st May, 2002 for Engineering College teachers.
- 129.Presented an invited talk at International Conference on Statistics, Combinatorics & Related areas, Univ. of Wollongong, Australia, 2001.
- 130.Delivered a series of lectures in the UNESCO sponsored short-term course organized by the Department of Mathematics in Jan 2000.

- 131.Delivered a series of lectures in a UGC sponsored refresher course at Department of Mathematics, Sambalpur University, Dec 1998.
- 132.Delivered a series of lectures in the Summer Workshop on Multi-Criteria Decision Making organized by the Dept. of Mathematics, IIT Kharagpur, June 1995.
- 133. Gave an invited talk "Two probabilistic proofs of Stirling's Approximation" in the Annual Conf. of Jammu Mathematical Soc., Jan 1991.
- 134. Gave an invited talk on "The Pitman estimator of ordered location parameters" in Dept. of Mathematics, Univ. of Roorkee, Feb. 1990.

• Mathematics Olympiad Activities

- 1. Invited to be a Guest Faculty for the Training Camp for Indian students for International Mathematics Olympiad 2002 at Homi Bhabha Centre for Science Education, T.I.F.R. Bombay.
- 2. Invited to be a Guest Faculty for the Training Camp for Indian students for International Mathematics Olympiad 2001 at Homi Bhabha Centre for Science Education, T.I.F.R. Bombay.
- 3. Invited Guest Faculty for the Training Camp for Indian students for International Mathematics Olympiad 1996 at Homi Bhabha Centre for Science Education, T.I.F.R. Bombay.
- 4. Participated in the National Board of Higher Mathematics sponsored "International Mathematical Olympiad Problem Co-ordinators' Camp" at IIT Kharagpur, Nov 1995.
- 5. Co-ordinator for conducting Regional Mathematics Olympiad at IIT Kharagpur (2000-2003).
- 6. Organizer of Mathematics Olympiad Section of Technology General Championship at IIT Kharagpur (2005-06, 2006-07, 2007-08, 2008-09, 2009-10, 2010-11, 2012-13).

Scholarships

- 1. Integrated Scholarship of UP Govt. 1976-78
- 2. National Scholarship of Merit 1978-80
- 3. Merit Scholarship of UP Govt. 1980-82
- 4. Merit-cum-means Scholarship of IIT Kanpur 1982-83
- 5. Ph.D. fellowship of IIT Kanpur July1984-Oct1988