



Saroj Kanta Misra, Ph.D.

Designation : Professor

Department : Department of Computer Science and Engineering

(JOINED THE INSTITUTE IN 2002)

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RESEARCH INTERESTS

- Projective Geometry and Finite Geometries: Analytical study of simplexes using homogeneous coordinates in n-dimensional projective space and relationships like multiple perspective, Mobius pairs and associated quadrics. Similar study in projective geometries over finite fields
- Applications of probability and statistics in Agricultural Engineering and Computer Science

Academic Qualifications

Ph. D. (Mathematics), IIT Kharagpur, India, 1990

M. Sc. (Mathematics) IIT Kharagpur, India, 1985

Teaching Experience/Industrial Experience/Research Experience

34 years of teaching experience since 1990

PUBLICATIONS

JOURNAL ARTICLES & CONFERENCE PAPERS:

1. Arun Sanyal, **Saroj Kanta Misra**, Veronesian Pair and Associated Desmic System, Jour. Math. Phy. Sci, vol. 23, No.2, April 1989.
2. Arun Sanyal, **Saroj Kanta Misra**, Collineation of Period Three and Triply Perspective Triangles, Indian J. pure appl. Math. 21(7): 699-705, August 1990.
3. **Saroj Kanta Misra**, Arun Sanyal, Quaternions and Conjugate System of Tetrahedra, Indian J. pure appl. Math, 24(2) : 97-105, February 1993.

4. S. K. Srivastava, **S. K. Misra**, A. K. Sahu, Probability Analysis of Rainfall for Crop Planning at N. Lakhimpur, Assam Indian J. Soil Cons. 26(2): 162-165, 1998.
5. S. K. Srivastava, **S. K. Misra**, A. K. Sahu, et al, Correlation between Pan Evaporation and Climatic Parameters for Sunderbans- a case study, Jour of I.E. (India), vol-81, 55-58, Dec.2000.
6. S. K. Srivastava, **S. K. Misra**, A. K. Sahu, et al, Estimating Pan Evaporation from Metrological Data for Jabalpur, Indian J. Soil Cons. 29(3), 224-228, 2001.
7. Golak Bihari Panda, **Saroj Kanta Misra**, A Collineation Group in Projective Space of Dimension Three and Desmic System of Tetrahedrons, International journal of Geometry, Vol. 3, No. 1, 48 – 52, 2014.
8. Golak Bihari Panda, **Saroj Kanta Misra**, Co-Polar Systems Associated to a Desmic System of Tetrahedrons, Journal of the Orissa Mathematical Society, Vol 32, 26-31, July 2013.
9. Golak Bihari Panda, **Saroj Kanta Misra**, Mutually Self Reciprocal Quadrics in Projective space Attached to a Pair of Multi Associated Simplexes, Journal of the Orissa Mathematical Society, Vol 33(1), 54-64, Jan 2014.
10. Golak Bihari Panda, **Saroj Kanta Misra**, Use of Block Toeplitz Matrix In the Study of Mobius Pairs of Simplexes in Higher Dimensional Projective Space, Arnold Mathematical Journal, Volume 6, Issue 2, 189 – 197, August 2020.

ANY OTHER

Ph. D. Guidance:

Guided one Ph. D. thesis entitled “Some Studied on Properties of Simplexes Regarding Interlocking, Multiple Perspectives and Related Quadrics” submitted to Utkal University

Conferences/Workshops/Seminars Attended/Presented Papers:

- Presented a paper entitled “Quaternions and Conjugate Systems of Tetrahedra” in Ramanujan Centennial (International) Conference held during 15-18 December 1987 at the Annamalai University.
- Attended the Instructional Conference on “Commutative Algebra and its Application to Combinatorics” sponsored by Board of Research in Nuclear Science and held at Bombay University from 19/12/1988 to 06/01/1989.
- Presented a paper entitled “Quaternion and Conjugate System of Tetrahedra-II” in ICOMIDC International Symposium in Geometry and its Application, held at IIT, Delhi from 27/10/1992 to 29/10/1992.
- Attended the ISTE summer course on “Managing Change For The Growth of Technical Institutions” sponsored by AICTE from 05/06/2000 to 15/06/2000 at NERIST.

- Participated in the "AICTE sponsored HRD programme", conducted in association with BPUT & CET at Bhubaneswar from 22nd to 25th November 2003.
- Participated in the Workshop on the theme "Excellence in Teaching" titled Communicative Competence and Personality Development, conducted at Silicon Institute of Technology, Bhubaneswar from 25th November 2005 to 2nd December 2005.
- Participated in the workshop on "Interpersonal Communication Skills" organized by British Council on 16th February 2010 at KIIT University, Bhubaneswar.
- Participated in the Workshop Numerical Optimization and its Engineering Application conducted during 7th to 10th July 2011 in the Department of Basic Science & Humanities at Silicon Institute of Technology, Bhubaneswar
- Participated in the 11th AISSQ Conference on Mathematics & Reality held at IIT, Bhubaneswar on 6th and 7th October 2018.

Invited Talks/ Resource Person in Seminars/Workshops/FDPs:

- Resource Person for the Workshop on the theme "Excellence in Teaching" titled Communicative Competence and Personality Development, conducted at Silicon Institute of Technology, Bhubaneswar from 25th November 2005 to 2nd December 2005.
- Resource Person for faculty training program for the subject Mathematics-IV for BPUT during December 2005.
- Invited talk on "From Real Numbers to Octonions" in the UGC Sponsored National Seminar on Discrete Mathematics and Its application at Department of Mathematics, Pattamundai College, Pattamundai on 9th December 2012.
- Conducted Sessions in the Workshop on "Graph Theory and Applications" organized by Silicon Institute of Technology from 15th -19th December 2015.
- Conducted Sessions in the Workshop on "Mathematics for Communication Engineering", organized by Silicon Institute of Technology from 28th November 2016 to 3rd December 2016.
- Resource Person for the FDP on "Computational Linear Algebra", organized by Silicon Institute of Technology, from 10th-26th August 2020.
- Resource Person for the FDP on "Mathematical Concepts and building Blocks for Simulation", organized by Silicon Institute of Technology, during August 2023.
- Resource Person for the IMA Silvère Jubilee Workshop : Exploring Machine Learning Algorithmes, Applications and Implémentations ; organized by Institute of Mathematics and Applications, Bhubaneswar during 29th July to 9th August 2024.

- Resource Person for the Workshop on Aspects of Communications organized the Department of Basic Sciences and Hhumanities, Silicon Institute of Technology, Bhubaneswar during 6th to 8th August 2024.

Member of Professional Societies:

- Life member of Orissa Mathematical Society.
- Life member of Ramanujan Mathematical Society.
- Life member of Indian Society of Technical Education (LM 68065)