



## 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

### JOURNALS & CONFERENCES:

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 22<sup>nd</sup> to 25<sup>th</sup> 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 25<sup>th</sup> November 2005 to 2<sup>nd</sup> December 2005.
- Participated in the workshop on "Interpersonal Communication Skills" organized by British Council on 16<sup>th</sup> February 2010 at KIIT University, Bhubaneswar.
- Participated in the Workshop Numerical Optimization and its Engineering Application conducted during 7<sup>th</sup> to 10<sup>th</sup> July 2011 in the Department of Basic Science & Humanities at Silicon Institute of Technology, Bhubaneswar
- Participated in the 11<sup>th</sup> AISSQ Conference on Mathematics & Reality held at IIT, Bhubaneswar on 6<sup>th</sup> and 7<sup>th</sup> 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 25<sup>th</sup> November 2005 to 2<sup>nd</sup> 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 9<sup>th</sup> December 2012.
- Conducted Sessions in the Workshop on "Graph Theory and Applications" organized by Silicon Institute of Technology from 15<sup>th</sup> -19<sup>th</sup> December 2015.
- Conducted Sessions in the Workshop on "Mathematics for Communication Engineering", organized by Silicon Institute of Technology from 28<sup>th</sup> November 2016 to 3<sup>rd</sup> December 2016.
- Resource Person for the FDP on "Computational Linear Algebra", organized by Silicon Institute of Technology, from 10<sup>th</sup>-26<sup>th</sup> August 2020.
- Resource Person for the FDP on "Mathematical Concepts and building Blocks for Simulation", organized by Silicon Institute of Technology, during August 2023.

**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)