



Saroj Kanta Misra, Ph.D.

Designation : Professor

Department : Department of Basic Science and Humanities
(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

30 years of teaching experience since 1990

PUBLICATIONS

JOURNAL&CONFERENCES

1. G. B. Panda, **S. K. Misra**, Use of Block Toeplitz Matrix In the Study of Mobius Pairs of Simplexes in Higher Dimensional Projective Space, Arnold Mathematical Journal, 6(2), 189 – 197, 2020.
2. G. B. Panda, **S. K. Misra**, Mutually Self Reciprocal Quadrics in Projective space Attached to a Pair of Multi Associated Simplexes, Journal of the Orissa Mathematical Society, 33(1), 54 - 64, 2014.

3. G. B. Panda, **S. K. Misra**, A Collineation Group in Projective Space of Dimension Three and Desmic System of Tetrahedrons, *Int. journal of Geometry*, 3(1), 48 – 52, 2014.
4. G. B. Panda, **S. K. Misra**, Co-Polar Systems Associated to a Desmic System of Tetrahedrons, *Journal of the Orissa Mathematical Society*, 32, 26 - 31, 2013.
5. 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.
6. S. K. Srivastava, **S. K. Misra**, A. K. Sahu, et al, Correlation between Pan Evaporation and Climatic Parameters for Sunderbans- a case study, *J. of I.E. (India)*, 81, 55 - 58, 2000.
7. 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.
8. **S. K. Misra**, A. Sanyal, Quaternions and Conjugate System of Tetrahedra, *Indian J. pure appl. Math.*, 24(2), 97-105, 1993.
9. A. Sanyal, **S. K. Misra**, Collineation of Period Three and Triply Perspective Triangles, *Indian J. pure appl. Math.*, 21(7), 699-705, 1990.
10. A. Sanyal, **S. K. Misra**, Veronesian Pair and Associated Desmic System, *Journal Math. Phy. Sci*, 23(2), 161 - 169, 1989.

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 attended

- i) 11th AISSQ Conference on Mathematics & Realit, 6th - 7th Oct' 2018, IIT-Bhubaneswar.
- ii) Workshop on Graph Theory and Applications (Session Conducted), 15th - 19th Dec' 2015, Silicon Institute of Technology, Bhubaneswar.
- iii) From Real Numbers to Octonions (Invited Talk), National Seminar on Discrete Mathematics and Its application, UGC Sponsored, Department of Mathematics, , 9th Dec' 2012, Pattamundai College, Kendrapara.
- iv) Workshop on Numerical Optimization and its Engineering Application, 7th to 10th July 2011, Silicon Institute of Technology, Bhubaneswar.
- v) Workshop on Interpersonal Communication Skills, British Council, 16th February 2010, KIIT University, Bhubaneswar.

- vi) Workshop on theme on Excellence in Teaching, Communicative Competence and Personality Development, Silicon Institute of Technology, 25th Nov. - 2nd Dec' 2005, Bhubaneswar.
- vii) Resource Person for the faculty training program (Mathematics-IV), BPUT Dec' 2005.
- viii) Resource Person in the Workshop on the theme "Excellence in Teaching" titled Communicative Competence and Personality Development, Silicon Institute of Technology, 25th Nov. - 2nd Dec' 2005, Bhubaneswar.
- ix) AICTE sponsored HRD program in association with BPUT & CET, 22nd to 25th Nov'2003, Bhubaneswar.
- x) Managing Change for the Growth of Technical Institutions, ISTE summer course sponsored by AICTE, 5th June to 16th June' 2000, NERIST.
- xi) Quaternion and Conjugate System of Tetrahedra-II (presentation), Int. Symposium in Geometry and its Application, 27th – 29th Oct' 1992, IIT-Delhi.
- xii) Instructional Conference on Commutative Algebra and its Application to Combinatorics, Board of Research in Nuclear Science, 19th Dec' 1988 - 6th Jan'1989, Bombay University.
- xiii) Quaternions and Conjugate Systems of Tetrahedra (presentation), Ramanujan Centennial (International) Conference, 15 -18th Dec' 1987, Annamalai University, TN.

Member of Professional Society:

1. Life member of Orissa Mathematical Society.
2. Life member of Ramanujan Mathematical Society.
3. Life member of Indian Society of Technical Education (LM 68065)