



ABOUT ME

Dr. Sanjit Kumar Mohanty

H.O.D. Mathematics

CONTACT

✉ dr.sanjitmohanty@rediffmail.com

✉ sanjitmath@bscollege.edu.in

☎ +91-9937325552

📞 06725-262514

- Department of Mathematics,
B.S. Degree College,
Nuahat, Arakhpur,
Dist.: Jajpur.

TEACHING EXPERIENCE

Lecturer in Mathematics,
B.S. College.

Date of joining: 24/12/1998

Date of leaving: Continuing

EDUCATIONAL QUALIFICATIONS

2013	DEGREE OR STUDY NAME Ph.D. (Mathematics) University: Utkal University, Bhubaneswar
2006	DEGREE OR STUDY NAME M.Phil. (Mathematics) Division/Grade: 1 st Division University: Ravenshaw University, Cuttack
1997	DEGREE OR STUDY NAME M.Sc. (Mathematics) Division/Grade: 1 st Division University: Berhampur University, Berhampur.
1995	DEGREE OR STUDY NAME B.Sc. (Mathematics Honours) Division/Grade: 1 st Division with Distinction Institution: Dhenkanal Govt. College, Dhenkanal. University: Utkal University, Bhubaneswar.

OTHER QUALIFICATION	DEGREE OR STUDY NAME M.Sc. (Statistics) University: Utkal University, Bhubaneswar PGDCA (Computer Science)
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ADMINISTRATIVE RESPONSIBILITIES

1. Time-table & work load
2. In-charge of Admission Committee
3. Member of the Research Committee
4. Member of NAAC Committee
5. In-charge of Computer, CCTV & Biometric
6. Annual Budget Committee
7. Member of IQAC Committee
8. Member of Discipline Committee
9. In-Charge of College Website



CAREER PROFILE



AREA OF INTEREST/SPECIALIZATION

Numerical Analysis, Complex Analysis, Real Analysis, Abstract Algebra, Fractional Calculus

SUBJECT TAUGHT

Numerical Analysis, Complex Analysis, Real Analysis, Abstract Algebra, Fractional Calculus, Calculus, Linear Programming, Linear Algebra, Topology, Probability, Statistics, Number Theory, Discrete Mathematics, MATLAB(Practical)

RESEARCH GUIDANCE

One M.Tech Student (Completed from Birla Institute of Technology & Science in 2023), Co-Guide of one Ph.D. student

PUBLICATION PROFILE

- [1] S.K. Mohanty and R.B. Dash (2022) 'A Quadrature Rule of Lobatto-Gaussian for Numerical Integration of Analytic Functions', *Numerical Algebra Control And Optimization*, Vol.12, No.4, Pp.705–718, [doi:10.3934/naco.2021031](https://doi.org/10.3934/naco.2021031).
- [2] S.K. Mohanty and R.B. DASH (2022) 'A Generalized Quartic Quadrature Based Adaptive Scheme', *International Journal of Applied and Computational Mathematics*, Vol.8, No.4, Art Id:191, pp.1–25. <https://doi.org/10.1007/s40819-022-01405-2>.
- [3] S.K. Mohanty (2021) 'A Triple Mixed Quadrature Rule Based Adaptive Scheme For Analytic Functions', *Nonlinear Functional Analysis and Applications*, Vol.26, No.5, pp.935–947. doi.org/10.22771/nfaa.2021.26.05.05.
- [4] S.K. Mohanty and R.B. Dash (2022) 'A Triangular Quadrature for Numerical Integration of Analytic Functions', *Palestine Journal of Mathematics*, Vol.11, No. III, pp.53–61.
- [5] S.K. Mohanty and R.B. Dash (2022) 'A Hybridize Lobatto Quadrature of Precision Eleven for Numerical Integration of Analytic Functions', *Mathematical Statistician and Engineering Applications*, Vol.71, No.4, pp.8496–8506. <https://www.philstat.org/index.php/msea/article/view/1534>.
- [6] S.K. Mohanty and R.B. Dash (2020) 'Dual Mixed Gaussian Quadrature Based Adaptive Scheme for Analytic Functions', *Annals of Pure and Applied Mathematics*, Vol.22, No.2, pp.83–92, doi: <http://dx.doi.org/10.22457/apam.v22n2a03704>.
- [7] S.K. Mohanty (2020) 'A Mixed Quadrature Rule Using Clenshaw-Curtis Five-Point Rule Modified By Richardson Extrapolation', *Journal of Ultra Scientist of Physical Sciences*, Vol.32, No.2, pp.6–12, <http://dx.doi.org/10.22147/jusps-a/320201>.
- [8] S.K. Mohanty and R.B. Dash (2022) 'On A New Mixed Quadrature Based Adaptive Integration Scheme for Analytic Functions', *Journal of The Orissa Mathematical Society*, Vol.41, No.01-02, pp.55-74.
- [9] S.K. Mohanty (2020) 'A Mixed Quadrature Rule of Modified Birkhoff-Young Rule and $SM_2(f)$ Rule for the Numerical Integration of Analytic Function', *Bulletin of Pure and Applied Sciences Section - E -Mathematics& Statistics*, Vol.39E, No.2, pp.271-276.
- [10] S.K. Mohanty (2020) 'A Mixed Quadrature Rule by Blending Lobatto Rule and Clenshaw-Curtis Rule due to Richardson Extrapolation', *International Journal of Scientific & Engineering Research*, Vol.11, No.5, pp.142-149.
- [11] S.K. Mohanty and R.B. Dash (2011) 'A Mixed Quadrature Rule for Numerical Integration of Analytic Functions by using Birkhoff-Young and Booles Quadrature System, *News Bulletin of Calcutta Mathematical Society*, Vol. 34, No.1, pp.17-20.
- [12] S.K. Mohanty and R.B. Dash (2011) 'A Mixed Quadrature Rule of Gauss-Legendre 4-Point Transformed Rule and $SM_2(f)$ Rule for Numerical Integration of Analytic Functions', *International Journal of Mathematical Sciences and Engineering Applications*, Vol.5, No.1, PP.243-249.
- [13] S.K. Mohanty and R.B. Dash (2010) 'A Mixed Quadrature Rule Using Birkhoff-Young Rule Modified by Richardson Extrapolation for Numerical Integration of Analytic Functions', *Indian Journal of Mathematics and Mathematical Sciences*, Vol.6, No.2, pp.221-228.
- [14] S.K. Mohanty and R.B. Dash (2009) 'A Mixed Quadrature Rule for Numerical Integration of Analytic Functions', *International Journal of Computational and Applied Mathematics*, Vol.4, No.2, pp.107-110.

[15] S.K. Mohanty and R.B. Dash (2008) 'A Mixed Quadrature Rule for Numerical Integration of Analytic Functions', *Bulletin of Pure and Applied Sciences*, Vol.27E, No.2, pp.369-372.

[16] S.K. Mohanty (2021) 'A Mixed Quadrature Rule for Numerical Integration of Analytic Functions by Using Richardson Extrapolation', *Statistical Research A Proceeding Book of International Conference on Recent Trends in Theoretical and Applied Statistics*, ISBN 978-81-951950-0-8, Pp.157-168.

[17] S.K. Mohanty and R.B. Dash (2021) 'A Mixed Quadrature Rule by Blending Lobatto Four-Point Rule and Clenshaw-Curti's five-Point Rule for Approximate Evaluation of Real Definite Integrals', *Proceedings of the 10th National Conference on Mathematics Education*, ISBN 978-81-952542-3-1, Pp.233-239.

[18] S.K. Mohanty and D. Mohanty (2020) 'Numerical Integration Through a Mixed Quadrature Rule', *Proceedings of the 9th National Conference on Mathematics Education*, ISBN 978-81-952542-3-1, Pp.113-122.

AUTHOR OF BOOKS

- ଉଚ୍ଚମାଧ୍ୟମିକ ଗଣିତ-୧, ଏକାଦଶ ଶ୍ରେଣୀ
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- ଉଚ୍ଚମାଧ୍ୟମିକ ଗଣିତ-୧, ଦ୍ଵାଦଶ ଶ୍ରେଣୀ
ISBN: 978-93-91638-31-3

CONFERENCE PRESENTATIONS

1. Paper Presented in the INTERNATIONAL E-CONFERENCE ON NONLINEAR ANALYSIS AND ITS APPLICATIONS. Topic of the paper: A TRIPLE MIXED QUADRATURE BASED ADAPTIVE SCHEME FOR ANALYTIC FUNCTIONS. Date:29-07-2020.
2. Paper Presented in the 3rd INTERNATIONAL CONFERENCE ON MATHEMATICAL MODELLING, APPLIED ANALYSIS AND COMPUTATION-2020. Topic of the paper: A TRI-MIXED QUADRATURE BASED ADAPTIVE SCHEME FOR ANALYTIC FUNCTIONS. Date:08-08-2020.
3. Paper Presented in the INTERNATIONAL CONFERENCE ON ADVANCES IN MATHEMATICS, SCIENCE AND TECHNOLOGY (ICAMST-20). Topic of the paper: A TRIANGULAR MIXED QUADRATURE FOR NUMERICAL INTEGRATION OF ANALYTIC FUNCTIONS. Date:02-09-2020.
4. Paper Presented in the INTERNATIONAL CONFERENCE ON PRESENT SCENARIO OF MATHEMATICAL SCIENCES Topic of the paper: A HYBRIDIZE CLENSHAW-CURTIS QUADRATURE FOR ANALYTIC FUNCTIONS. Date:12-09-2020.
5. Paper Presented in the INTERNATIONAL CONFERENCE ON RECENT TRENDS IN THEORETICAL AND APPLIED STATISTICS, 2020. Topic of the paper: A MIXED QUADRATURE RULE FOR NUMERICAL INTEGRATION OF ANALYTIC FUNCTIONS BY USING RICHARDSON EXTRAPOLATION. Date:19-09-2020.
6. Paper Presented in the INTERNATIONAL CONFERENCE ON ADVANCES IN DIFFERENTIAL EQUATIONS AND NUMERICAL ANALYSIS (ADENA-2020) Topic of the paper: A LOBATTO MIXED QUADRATURE RULE OF PRECISION ELEVEN FOR NUMERICAL INTEGRATION OF ANALYTIC FUNCTIONS. Date:14-10-2020.
7. Paper Presented in the NATIONAL CONFERENCE ON MATHEMATICS EDUCATION. Topic of the paper: NUMERICAL INTEGRATION THROUGH A MIXED QUADRATURE RULE. Date:20-12-2020.
8. PAPER PRESENTED IN THE VIRTUAL INTERNATIONAL CONFERENCE ON PHYSICAL SCIENCES (ICPS – 2021). Topic of the paper: A Hybridize Quadrature rule of precision eleven for Analytic Functions. DATE:05-02-2021.
9. Paper Presented in the INTERNATIONAL VIRTUAL CONFERENCE ON COMPUTATIONAL MATHEMATICS-2K21. Topic of the paper: A MIXED QUADRATURE USING CRENSHAW-CURTIS RULE. Date:24-06-2021.
10. Paper Presented in the 4th INTERNATIONAL CONFERENCE ON MATHEMATICAL MODELLING, APPLIED ANALYSIS AND COMPUTATION-2021. Topic of the paper: A MIXED QUADRATURE BASED ADAPTIVE INTEGRATION SCHEME FOR ANALYTIC FUNCTIONS. Date:06-08-2021.

11. Paper Presented in the INTERNATIONAL CONFERENCE ON MATHEMATICAL SCIENCES (ICMS-2021). Topic of the paper: A Triangular Quadrature for Numerical Integration of Analytic functions. Date:08-10-2021.
12. Paper Presented in the NATIONAL CONFERENCE ON MATHEMATICS EDUCATION. Topic of the paper: A MIXED QUADRATURE RULE BY BLENDING LOBATTO FOUR-POINT RULE AND CLENSHAW-CURTI'S FIVE-POINT RULE FOR APPROXIMATE EVALUATION OF REAL DEFINITE INTEGRALS. Date: 20-12-2021.
13. Paper Presented in the INTERNATIONAL CONFERENCE ON MATHEMATICAL SCIENCES IN ENGINEERING AND ADVANCED TECHNOLOGIES ICMSEAT'21. Topic of the paper: A HYBRIDIZE LOBATTO QUADRATURE OF PRECISION ELEVEN FOR NUMERICAL INTEGRATION OF ANALYTIC FUNCTIONS. Date: 23-12-2021.
14. Paper Presented in the NATIONAL CONFERENCE ON NUMERICAL ANALYSIS AND APPLICATIONS. Topic of the paper: A TRIANGULAR QUADRATURE RULE FOR NUMERICAL INTEGRATION OF ANALYTIC FUNCTIONS. Date: 07-01-2021.
15. Paper Presented in the INTERNATIONAL CONFERENCE ON ANALYSIS AND DISCRETE MATHEMATICS (49TH ANNUAL CONF. OF OMS). Topic of the paper: ON A NEW MIXED QUADRATURE BASED ADAPTIVE INTEGRATION SCHEME FOR ANALYTIC FUNCTIONS. Date: 26-03-2022.
16. Paper Presented in the INTERNATIONAL CONFERENCE ON APPLIED MATHEMATICS (ICAM-2022). Topic of the paper: A GENERALIZED CLENSHAW-CURTIS QUADRATURE FOR NUMERICAL INTEGRATION OF ANALYTIC FUNCTIONS. Date: 09-06-2022.
17. Paper Presented in the NATIONAL CONFERENCE ON COMPUTATIONAL MATHEMATICS. Topic of the paper: A GENERALIZED QUADRATURE FOR ANALYTIC FUNCTIONS. Date: 23-12-2022.
18. Paper Presented in the INTERNATIONAL CONFERENCE ON MATHEMATICAL ANALYSIS AND APPLICATIONS. Topic of the paper: A GENERALIZED QUADRATURE THROUGH KRONROD-EXTENSION FOR ANALYTIC FUNCTIONS. Date: 21-01-2023.

CONFERENCE PARTICIPATION

- Participated in the INTERNATIONAL CONFERENCE ON ADVANCES IN DIFFERENTIAL EQUATIONS AND NUMERICAL ANALYSIS (ADENA-2020), Organised by Department of Mathematics, IIT Guwahati, India During October 12-15,2020.
- Participated in the Webinar & Technical Session on "MATHEMATICAL MODELING AND THE PANDEMIC" Organised by Bharata Ganita Parisad & Department of Mathematics & Astronomy, University of Lucknow, Lucknow, India During December 12-13,2020.

RESEARCH PROJECT

ASSOCIATION WITH PROFESSIONAL BODIES

- Member of National Council Teacher Scientist, India (NCTS).
- Life Member of Odisha Mathematical Society (OMS).
- Appointed as Question Paper Setter for UG Classes of Various Universities (Confidential).

OTHER ACTIVITIES

1. INDUCTION/ORIENTATION PROGRAMME

Participated in 4-Week Induction programme for "Faculty in Universities/Colleges/Institutes of Higher Education" Organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Human Resource Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from 10-11-2020 to 09-12-2020.

2. REFRESHER COURSE

- Participated in 2-Week Refresher Course on "Data Analysis with statistical Methods" (Sharpening Skills in Statistical Analysis through MS-Excel, SPSS, MATLAB and R) Organized by Teaching Learning Centre, Ramanujan

College, University of Delhi and Indian Accounting Association, NCR Chapter under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from 21-12-2020 to 03-01-2021.

- Participated in 2-Week Refresher Course on “Refresher course in Mathematics” Organized by Teaching Learning Centre, Ramanujan College, University of Delhi under the aegis of Ministry of Education Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching in collaboration with Department of Mathematics, Ramanujan College from 31-08-2021 to 14-09-2021.

3. FACULTY DEVELOPMENT PROGRAMME (FDP/STP/WORKSHOP)

- Participated in One-Week Academic Training Programme “CBCS Course Syllabus in MATHEMATICS” Organized by WB-OHEPEE, Utkal University, Bhubaneswar from 13-02-2020 to 19-02-2020.
- Participated in one-Week Faculty Development Programme on “ICT Enhanced Teaching Learning and Creating Moocs” Organized by Teaching Learning Centre, Ramanujan College, University of Delhi & IQAC, Shivaji College, University of Delhi under the aegis of Ministry of Human Resource Development, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from 18-08-2020 to 25-08-2020.
- Participated in Five-days Capacity Building Programme on “Approaches for quality Research Paper Writing in High Impact Journals” Organized by Internal Quality Assurance Cell (IQAC), Rajiv Gandhi University, Arunachal Pradesh from 02-09-2020 to 06-09-2020.
- Participated in “One-Week Online National e-Workshop on Tools for Development of Effective E-Contents and Online Teaching, Learning & Evaluation” Organized by KS Jain Institute of Engineering & Technology, Modinagar, Ghaziabad from 01-10-2020 to 07-10-2020.
- Participated in Five-days online FDP on “Recent Developments in Mathematical Sciences (RDMS)” Organized by Department of Mathematics, Central University of Jharkhand, Ranchi from 06-11-2020 to 10-11-2020.
- Participated in Nine-days FDP on “Maths India Week Celebration” Organized by Department of Mathematics, Rathinam College of Arts and Science, Coimbatore-21 from December 14 to 22, 2020.
- Participated in Three-days National Level FDP on “Data Analysis Using Ms Excel” Organized Department of Mathematics in Association with Internal Quality Assurance Cell (IQAC), Babu Banaras Das Northern Indian Institute of Technology, Lucknow from 25-12-2020 to 27-12-2020.
- Participated in Five-days Short Term Training Programme on “Academic Writing using LATEX” Organized by Applied Mathematics and Humanities Department (AMHD), Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat during January 04-08, 2021 in online mode.
- Participated in One-Week Short Term Course on “Computational Software (MATLAB & MATHEMATICA)” Organized by Applied Mathematics and Humanities Department (AMHD), Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat during May 17-21, 2021 in online mode.
- Participated in One-Week Faculty Development Programme on “Quality Assurance: The Gateway of Institutional Development” Organized by Department of Applied Science, SIRT, Sage University, Indore Supported by M.P, Council of Science and Technology, Bhopal held on August 09-13, 2021.
- Participated in Five-Days National Level Faculty Development Programme on “Teaching and Learning in Digital Era” Organized by Internal Assurance Cell and School of Computer Science, PPG College of Arts and Science, Coimbatore during August 16-20, 2021.
- Participated in Three-Days Faculty Development Programme on “Am I Ready to Do Research in Mathematics” Organized by Centre for Graph Theory in association with the IQAC, Ayya Nadar Janaki Ammal College, Sivakasi, Tamil Nadu from 20-09-2021 to 22-09-2021 under UGC Paramarsh Scheme.
- Participated in Five-Days Faculty Development Programme on “Advanced Artificial Intelligence and Machine Learning Applications” Organized by Department of Computer Science and Engineering, NIT, Warangal during October 11-15, 2021.

MISCELLANEOUS

- Participated in an e-talk entitled “Ergodic Correspondence and combinatorics” by the Abel Prize Laureate-2020, Prof Hillel Furstenberg on November-5-2020, Organized by Department of Mathematics Gujarat University, Ahmedabad, India.
- Participated in Three-days “Student-Teacher Enrichment Programme (STEP)”, Organized by Department of Mathematics and Centre for Topology and Applications (CETA) in Collaboration with Rajagiri School of Engineering and Technology, Kochi, Kerala, India from 23rd to 25th September, 2020.

- I have attended webinars hosted by prestigious institutions such as KIIT University, Anurag University, PMMMNMMT, Department of Higher Education (MHRD), JERC University, and various universities, Colleges Like Dhenkanal Autonomous College, Dhenkanal, Ekamra College, Bhubaneswar. These webinars covered diverse topics in mathematics and the implications of the New Education Policy of 2020.
- Participated in Two-days International Webinar on “Business Intelligence and Analytics for Smart Decision Making” Organized by Post Graduation Department of Business Administration, AIMIT on September 4th & 5th, 2020.

FROM MATHEMATICS DEPARTMENT

- Organized a National Label Seminar on “Recent Advances in Numerical Analysis” on 30-11-2021. Resource persons (i) Dr. Rajani Ballav Dash, Ravenshaw University, Cuttack (ii) Dr. Pradeep Kumar Parida, Central University of Jharkhand, Ranchi, India.
- I have actively supervised the Department's organization of 2 to 4 seminars annually, and I've consistently contributed by presenting papers at each of these seminars.