

**Warm Welcome
to
NAAC PEER TEAM MEMBERS
by
Department of Mathematics
CHAKDAHA COLLEGE
P.O. Chakdaha, Dist-Nadia
West Bengal, India**

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Department of Mathematics, Chakdaha College



**As are the crests on the heads of peacocks,
As are the gems on the hoods of cobras,
So is Mathematics, at the top of all sciences.
(The Yajurveda, Circa 600 B.C.)**

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

History of the Department of Mathematics

The Department of Mathematics was established in 1981. At the very beginning Mathematics used to be taught in Commerce (General/Hons.) and in H.S. classes. The curriculum in Mathematics in Science classes was established in 1983. At that time the subject used to be taught in B.Sc. (General) course only. The Honours curriculum was introduced in the year 2000. At present we also have teachers teaching courses in Commerce(Business Mathematics) and Botany(Biometry).

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Faculty of the Department

There are two posts sanctioned by the State Government. Both of them are filled. There are seven more Guest teachers. The names of the teachers are given below:

- Dr. Sadasiv Chakrabarti, Associate Professor
- Dr. Sahanous Mallick, Assistant Professor
- Sri Biswarup Chatterjee, Guest Lecturer
- Smt. Sampa Sen, Guest Lecturer
- Smt. Kamalika Das, Guest Lecturer
- Smt. Nabanita Mitra, Guest Lecturer
- Smt. Sangita Sarkar, Guest Lecturer
- Sri Sukhen Kr. Kundu, Guest Lecturer
- Sri Goutam Biswas, Guest Lecturer

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Thrust Areas of the Teaching:

- Algebra
- Analysis
- Geometry
- Dynamics and Statics
- Hydrostatics
- Probability and Statistics
- Differential and Integral Calculus
- Differential Equations
- Vector and Tensor Analysis
- Numerical Analysis
- Computer Programming

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Weekly class distribution for the teachers:

- Dr. Sadasiv Chakrabarti: **21, 1T**
- Dr. Sahanous Mallick: **21, 1T**
- Sri Biswarup Chatterjee: **06**
- Smt. Sampa Sen: **10**
- Smt. Kamalika Das: **10**
- Smt. Nabanita Mitra: **03, 1T**
- Smt. Sangita Sarkar: **03**
- Sri Sukhen Kr. Kundu: **04**
- Sri Goutam Biswas: **10**

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Subject distribution for the teachers:

- **Dr. Sadasiv Chakrabarti:** Diff. Equation(1G), Diff. Equation and Algebra(1H), Analysis(2H), Analysis and Numerical Analysis(Prac)(3H)
- **Dr. Sahanous Mallick:** Diff. Calculus(1G), Algebra(2G), Geometry and Application of Diff. Calculus(1H), Algebra(2H), PDE, Tensor and Vector Analysis, Complex Analysis(3H)
- **Sri Biswarup Chatterjee:** Integral Calculus(1G), Numerical Methods and Computer(3G), Algebra and L.P.P.(2H), Computer(Theo)(3H)
- **Smt. Sampa Sen:** Classical Algebra(2G), Business Math(B.Com 2G), Business Math(B.Com 2H)
- **Smt. Kamalika Das:** Probability and Statistics(2G), Int. Calculus(1H), Dynamics of a particle(2H), Statics(3H)

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention



Subject distribution for the teachers (continued...):

- **Smt. Nabanita Mitra:** Vector Algebra(1H), Computer(Prac)(3H)
- **Smt. Sangita Sarkar:** Diff. Calculus(1G), L.P.P.(2H), Business Math(B.Com.)
- **Sri Sukhen Kr. Kundu:** L.P.P.(2G), Dynamics of a particle(3G), Diff. Calculus(1H), Mathematical Statistics(3H)
- **Sri Goutam Biswas:** Diff. Calculus(1G), Geometry(2G), Statics(3G), Hydrostatics, Rigid Dynamics and Probability Theory(3H)

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Percentage of lectures delivered and practical classes handled by temporary faculty:

B.Sc.(General) 65

B.Sc.(Honours) 40

Student-Teacher ratio (program wise):

B.Sc.(General) 40:1

B.Sc.(Honours) 20:1

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Students profile for the student of B.Sc. (Math. Hons.):

Year	Admitted (3 years back)	Appeared	Passed	Success rate
2012	24	10	05	50
2013	33	19	10	53
2014	29	14	13	93
2015	29	27	26	96

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Final results for the students of B.Sc. (Math. Hons.):

Year	Appeared	Passed	Passed in 1st Class
2012	13	07	05
2013	33	19	04
2014	19	16	04
2015	34	29	10
2016	25	18	02

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Names of some NET/SET/GATE qualified students of our Department from 2008 onwards:

- Arkojyoti Biswas (NET)
- Amit Sarkar (NET)
- Ranjan Sarkar (SET)
- Biswamay Pal (NET, GATE)
- Bapi Dutta (NET, GATE)
- Nikunja Modak (NET)
- Debashis Biswas (NET)
- Saheb Dalapati (GATE)

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Awards/Recognition received by the faculty and students:

- Dr. Sadasiv Chakrabarti awarded Ph.D. in Pure Mathematics from University of Kalyani in 1986.
- Dr. Sahanous Mallick awarded Ph.D. in Pure Mathematics from University of Calcutta in 2014.
- Sri Bapi Dutta stood first in first class in B.Sc. Hons. examination in 2008.
- A paper entitled “Z tensor on $N(k)$ -quasi-Einstein Manifolds” by Dr. S. Mallick and Prof. U.C. De has been selected for the best article in the year 2016 by Kyungpook Mathematical Journal.

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Details of Infrastructural facilities

Library: The department has its own library which is not very rich in collection of books. Also there are facilities of printed notes.

Internet: Internet facilities for Staff and Students centrally in Central Library.

Scholarships: All students belonging to SC/ST receive scholarships from Govt.

Teaching methods adopted to improve student learning:

- Traditional Lecture Method, Practical classes with the help of computer.
- Remedial classes for weaker section of the students.
- Special Classes for Hons. Students after Test Examinations.

SWOC analysis of the Department:

- **Strength:** Highly dedicated faculty member, bright alumni's, challenging and laborious students are the strengths of the department.
- **Weakness:** Shortage of faculty and space problem and inadequate infrastructure.
- **Opportunities:** Opportunities for higher studies and majority of students join different Universities and Institutions for M.Sc. degrees and Research works.
- **Challenges:** Socio-Economic condition becomes a challenge for the students to complete the course.

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Future Plans:

To enrich Departmental Library, to arrange at least two more Sanctioned Full-time post, to provide printing facility of study materials, to build up separate Departmental Seminar room, to arrange National and International Seminars, to start PG courses.

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Dr. Sadasiv Chakrabarti

Publication:

- Metrically dense in itself sets in a measurable space, J. Natl. Acad. Math., **1**(1983), 20-24. (jointly with B.K. Lahiri)
- Transformation of sets in E_n , N.B.U. Review, **4/2**(1983), 41-42. (jointly with B.K. Lahiri)
- Density Topology in a Topological group, Indian J. Pure Appl. Math., **15/7**(1984), 753-764. (jointly with B.K. Lahiri)
- Proximal density topology in a topological group, Bull. Ins. Math. Acad. Sinica, **13/3**(1985), 257-272. (jointly with B.K. Lahiri)
- Density Topology, Math-Student, **59**(1991), 89-108. (jointly with B.K. Lahiri)

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Dr. Sadasiv Chakrabarti

Publication:continued...

- Local measurability in a topological group, Glas. Math., **22**(1987), 15-23. (jointly with B.K. Lahiri)
- Transformation of sets in topological group, Univ. Com. Acta. Math., LII-LIII, 1987, 75-89. (jointly with B.K. Lahiri)
- Sparse set topology, Bull. Cal. Math. Soc., **82**(1990), 349-356. (jointly with B.K. Lahiri)
- Differentiation of vector lattice valued set functions in a topological group, J. Indian Acad. Math., **15/1**(1993), 89-100. (jointly with B.K. Lahiri)
- Uniformity approximately continuous functions, Math. Student, **62**(1994), 173-174. (jointly with B.K. Lahiri)

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Dr. Sadasiv Chakrabarti

Publication: continued...

- Approximately continuous functions in a measure space, Vietnam J. Math., **25/1**(1997), 59-64. (jointly with B.K. Lahiri)
- A survey of the density topology, Bull. Allahabad Math., **16**(2001), 25-50. (jointly with B.K. Lahiri)
- Generalized density functions in a topological group, Indian J. Math., **41/1**(1998), 97-111.
- On some topologies connected with density of sets in a topological group, Indian J. Math., textbf44/3(2002), 281-293. (jointly with A.K. Gangopadhyay)
- Sparse set topology in a Romanovski Space, J. Math. NBU, **3/1**(2010), 21-30. (jointly with P.P. Chakrabarty)

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention



Dr. Sadasiv Chakrabarti

Ph.D. Guidance: Acted as the co-guide of two Ph.D. students in successfully guiding them to the Ph.D. degree.

- 1 Dr. Amit Kumar Gangopadhyay, 2006
Title of the Thesis: Certain properties of sets, density of sets and functions related to measurable sets.
- 2 Dr. Partha Pratim Chakrabarty, 2011
Title of the Thesis: Some properties of sets and mapping related to measurable sets and density of sets.

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Dr. Sadasiv Chakrabarti

Seminars/Symposia/Workshops/Course attended:

- 1 All India Science Congress, Tirupati, 1983.
- 2 National Symposium on Mathematics, K.U., 1985.
- 3 Refresher Course in Mathematics, Dept. of Pure Math., C.U., 1991.
- 4 National Symposium on Mathematics, K.U., 2003.
- 5 International Symposium on Mathematics, K.U., 2005.

Other Academic Performance: Acted as a member of the U.G. Board of studies in KU, took part in framing the syllabi of Hons. and General Courses in Mathematics.

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Dr. Sahanous Mallick

Publication:

- On the existence of generalized quasi-Einstein manifolds, Archivum Mathematicum (Brno), **47**(2011), 279-291. (jointly with U.C. De)
- Spacetimes admitting m-projective curvature tensor, Bulgarian Journal of Physics, **39**(2012), 331-338. (jointly with U.C. De)
- Some global properties of mixed quasi-Einstein manifolds, Mathematica Pannonica, **23/2**(2012), 277-289. (jointly with U.C. De)
- On almost pseudo concircularly symmetric manifolds, The Journal of Mathematics and Computer Science, **4**(2012), 317-330. (jointly with U.C. De)

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Dr. Sahanous Mallick

Publication: continued...

- On weakly symmetric spacetimes, Kragujevac Journal of Mathematics, **36**(2012), 299-308. (jointly with U.C. De)
- On generalized Ricci Recurrent Manifolds with Applications to Relativity, Proceedings of the National Academy of Sciences, India Section A: Physical Sciences, **83**(2013), 143-152. (jointly with A. De and U.C. De)
- Spacetimes admitting W_2 -curvature tensor, Int. J. Geom. Methods Mod. Phys., **11/4**(2014), 1450030(8 Pages) DOI: 10.1142/S0219887814500303. (jointly with U.C. De)
- On a Type of Spacetime, Mathematica Moravica, **18/1**(2014), 29-38. (jointly with U.C. De)

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention



Dr. Sahanous Mallick

Publication: continued...

- $N(k)$ -quasi-Einstein manifolds satisfying certain curvature conditions, *Mathematicki Vesnik*, **66/1**(2014), 33-45. (jointly with U.C. De)
- m -Projective curvature tensor on $N(k)$ -quasi-Einstein manifolds, *Differential Geometry Dynamical System*, **16**(2014), 98-112. (jointly with U.C. De)
- On mixed quasi-Einstein manifolds, *Annales Univ. Sci. Budapest*, **57**(2014), 59-73. (jointly with U.C. De)
- On some classes of Super quasi-Einstein manifolds, *Tamsui Oxford Journal of Information and Mathematical Sciences*, **30**(2014), 45-58.

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Dr. Sahanous Mallick

Publication:continued...

- On generalized quasi-Einstein manifolds admitting certain vector fields, *Filomat*, **29**(2015), 599-609. (jointly with U.C. De)
- A spacetime with pseudo-projective curvature tensor, *J. Math. Phys.*, **57**(2016), 062501, DOI:10.1063/1.4952699. (jointly with Y.J. Suh and U.C. De)
- Z Tensor on $N(k)$ -quasi-Einstein Manifolds, *Kyungpook Mathematical Journal*, **56**(2016), 979-991. (jointly with U.C. De)
- Spacetimes with Pseudosymmetric energy-momentum tensor, *Communications in Physics*, **26**(2016), 121-128. (jointly with U.C. De)

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Dr. Sahanous Mallick

Publication: continued...

- Some curvature conditions on $N(k)$ -quasi-Einstein manifolds, Accepted in Scientific Annals of "Al. I. Cuza" University of Iasi. (jointly with U.C. De and A. Yildiz)
- Spacetimes admitting quasi conformal curvature tensor, Accepted in Bulletin of the Iranian Math. Soc. (jointly with P. Zhao and U.C. De)
- On decomposable and warped product generalized quasi-Einstein manifolds, Accepted in Facta Mathematica. (jointly with P. Pal)
- On a type of Spacetime, Accepted in Int. J. Geom. Methods Mod. Phys. (jointly with L. Velimirovic and U.C. De)

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

Dr. Sahanous Mallick

Seminars/Symposia/Workshops attended and presented papers:

- 1 Symposium on Recent Trends in Mathematical Analysis and its Applications, Dept. of Pure Mathematics, University of Calcutta, 23-24 Nov., 2011.
- 2 National Conference on Differential Geometry and its Applications, Dept. of Mathematics, University of Allahabad, 27-28 Dec., 2014.
- 3 National Seminar on Recent Advances in Mathematics and its Applications, Dept. of Pure Mathematics, University of Calcutta, 24-25 Feb., 2016.
- 4 Introductory Workshop on Astrophysics and Cosmology, Aliah University, 27-28 Sept., 2016.

Department of
Mathematics
Chakdaha College

History of the
Department of
Mathematics

Faculty of the
Department

Other relevant
informations
regarding the
Department

Individual Profile

Thank you for kind
attention

THANK YOU FOR KIND ATTENTION