THE BHAWANIPUR EDUCATION SOCIETY COLLEGE

ACADEMIC DEPARTMENT: MATHEMATICS

FACULTY ACADEMIC PROFILE / CV

Full Name of the Faculty Member: Dr. Payel Karmakar

Designation: College Whole Time Teacher

Specialization: Pure Mathematics, Differential Geometry.

BIOGRAPHICAL SKETCH

Dr. Payel Karmakar is currently associated as College Whole Time Teacher in the Department of Mathematics of The Bhawanipur Education Society College affiliated to University of Calcutta. Prior to joining this institution, she completed her Ph.D. on "Study on Some Submanifolds of Differentiable Manifolds" from The Department of Mathematics of Jadavpur University. Before joining Ph.D., she worked as a Guest Lecturer in the Department of Mathematics of Jogamaya Devi College for 9 months. While pursuing Ph.D., she took classes of Mathematics (Algebra, Analysis) in various B.E. departments of Jadavpur University as a Research Scholar for nearly 4 years. She completed both her B.Sc. (Mathematics Honours) and M.Sc. (Pure Mathematics) from University of Calcutta securing 10^{th} Rank and 1^{st} Rank (**Gold Medallist**) respectively. She also received NBHM PG Scholarship during her M.Sc. and CSIR-UGC NET-Junior Research Fellowship later. She has total 13 research paper publications (2 SCIE, 6 WOS, 9 Scopus) in various national as well as international journals and presented papers in total 14 seminars/conferences (11 international level, 3 national level).

CONTACT INFORMATION

- **Contact Address (Office):** 5, Lala Lajpat Rai Sarani, Kolkata-700020, West Bengal, India.
- **Contact Number (Office):**
- **E-Mail ID (Official):** payel.karmakar@thebges.edu.in
- **Mobile Numbers:** 9433639584, 9073183109.

ACADEMIC QUALIFICATIONS

Abbreviation of the Degree	Name of the Dept./College/ University	Class Obtained	Area of Specialization	Year of Passing
Ph.D.	Department of Mathematics, Jadavpur University	NA	Differential Geometry	2024
B.Ed.	Department of Education, University of Calcutta	1st Class	Mathematics (Method)	2018
M.Sc. (Pure Mathematics)	Department of Pure Mathematics, University of Calcutta	1st Class	Pure Mathematics	2015
B.Sc. (Mathematics Honours)	Department of Mathematics, Asutosh College, University of Calcutta	1st Class	Mathematics Honours	2013

POSITION HOLDING (FULL TIME)

1. College Whole Time Teacher, Department of Mathematics, The Bhawanipur Education Society College, University of Calcutta, March 2025-Present.

POSITION HELD (PART TIME)

1. Guest Lecturer, Department of Mathematics, Jogamaya Devi College, University of Calcutta, 10.08.2018 to 10.05.2019.

LIFE MEMBERSHIPS

1. Calcutta Mathematical Society
2. Bharata Ganita Parisad

RESEARCH EXPERIENCE

Completed Ph.D. on "Study on Some Submanifolds of Differentiable Manifolds" from The Department of Mathematics of Jadavpur University in 2024.

RESEARCH INTERESTS

- Theory of Manifolds and Submanifolds
- Riemannian and Semi-Riemannian Manifolds
- Contact and Complex Geometry

RESEARCH PAPER PUBLICATIONS

1. Payel Karmakar and Arindam Bhattacharyya, ANTI-INVARIANT SUBMANIFOLDS OF SOME INDEFINITE ALMOST CONTACT AND PARACONTACT MANIFOLDS, Bulletin of the Calcutta Mathematical Society **(previously UGC-CARE listed)**, 112(2), 2020, 95-108.

2. Payel Karmakar and Arindam Bhattacharyya, RICCI SOLITONS ON SUBMANIFOLDS OF SOME INDEFINITE ALMOST CONTACT MANIFOLDS, GANITA **(previously UGC-CARE listed)**, 70(1), 2020, 95-104.

3. Payel Karmakar, CURVATURE TENSORS AND RICCI SOLITONS WITH RESPECT TO ZAMKOVOY CONNECTION IN ANTI-INVARIANT SUBMANIFOLDS OF TRANS-SASAKIAN MANIFOLD, Mathematica Bohemica **(Scopus & ESCI indexed)**, 147(3), 2022, 419-434, https://doi.org/10.21136/mb.2021.0058-21.

4. Payel Karmakar and Arindam Bhattacharyya, CONTACT CR-SUBMANIFOLDS OF TRANS-SASAKIAN MANIFOLDS WITH RESPECT TO QUARTER SYMMETRIC NON-METRIC CONNECTION, Gulf Journal of Mathematics **(Scopus indexed)**, 12(2), 2022, 73-85, https://doi.org/10.56947/gjom.v12i2.605.

5. Payel Karmakar and Arindam Bhattacharyya, HEMI-SLANT SUBMANIFOLD OF $(LCS)_n$ -MANIFOLD, Journal of the Indonesian Mathematical Society **(Scopus & ESCI indexed)**, 28(1), 2022, 75-83, https://doi.org/10.22342/jims.28.1.991.75-83.

6. Payel Karmakar and Arindam Bhattacharyya, *-η-RICCI-YAMABE SOLITONS ON ANTI-INVARIANT SUBMANIFOLDS OF KENMOTSU MANIFOLD WITH

RESPECT TO A QUARTER SYMMETRIC METRIC CONNECTION, Bulletin of the Calcutta Mathematical Society **(previously UGC-CARE listed)**, 114(3), 2022, 281-294.

7. Payel Karmakar, η-RICCI-YAMABE SOLITONS ON ANTI-INVARIANT SUBMANIFOLDS OF TRANS-SASAKIAN MANIFOLD ADMITTING ZAMKOVOY CONNECTION, Balkan Journal of Geometry and its Applications **(Scopus indexed)**, 27(2), 2022, 50-65.

8. Payel Karmakar, CR-SUBMANIFOLDS OF SOME LORENTZIAN MANIFOLDS AND K-MANIFOLDS, GANITA **(previously UGC-CARE listed)**, 72(1), 2022, 77-95.

9. Payel Karmakar and Arindam Bhattacharyya, TOTALLY AND C-TOTALLY REAL SUBMANIFOLDS OF SASAKIAN MANIFOLDS AND SASAKIAN SPACE FORMS, Jordan Journal of Mathematics and Statistics **(Scopus & ESCI indexed)**, 15(3B), 2022, 575-590, https://doi.org/10.47013/15.3.12.

10. Payel Karmakar and Arindam Bhattacharyya, QUASI HEMI-SLANT SUBMANIFOLDS OF TRANS-SASAKIAN MANIFOLD, Palestine Journal of Mathematics **(Scopus indexed)**, 12(1), 2023, 745-756.

11. Payel Karmakar and Arindam Bhattacharyya, QUASI HEMI-SLANT SUBMANIFOLDS OFMETALLIC RIEMANNIAN MANIFOLDS, Proc. Natl. Acad. Sci., India, Sect. A Phys. Sci. **(SCIE indexed)**, 94(1), 2024, 75-82, https://doi.org/10.1007/s40010-023-00826-y.

12. Payel Karmakar, TOTALLY CONTACT UMBILICAL SCREEN-SLANT AND SCREEN-TRANSVERSAL LIGHTLIKE SUBMANIFOLDS OF INDEFINITE KENMOTSU MANIFOLD, Mathematica Bohemica **(Scopus & ESCI indexed)**, 149(4), 2024, 603-613, https://doi.org/10.21136/MB.2024.0095-23.

13. Payel Karmakar, CONTACT SCREEN GENERIC LIGHTLIKE SUBMANIFOLDS OF INDEFINITE KENMOTSU MANIFOLD, Filomat **(SCIE indexed)**, 38(26), 2024, 9167-9184, https://doi.org/10.2298/FIL2426167K.

PAPER PRESENTATIONS IN SEMINARS/CONFERENCES

1. National Conference on Non-Linear Dynamics and Applications-2020, Jadavpur University, Kolkata, West Bengal, India.

2. International Virtual Conference on Mathematical and Computational Models-2021, Bannari Amman Institute of Technology, Tamil Nadu, India.

3. International Conference on Recent Developments in Mathematics and Mathematical Sciences-2021, Calcutta Mathematical Society, Kolkata, West Bengal, India.

4. 27th International Conference of International Academy of Physical Sciences on "Recent Advances in Differential Geometry and Topology"-2021, Central University of Punjab, India.

5. International Conference of Differential Geometry and Dynamical Systems-2021, Bucharest, Romania.

6. International Conference of Differential Geometry and Dynamical Systems-2022, Bucharest, Romania.

7. National Webinar on Recent Advances in Mathematics and its Applications-2022, University of Calcutta, Kolkata, West Bengal, India.

8. 'Two-Day' International Seminar on Physical and Mathematical Sciences-2023, Calcutta Mathematical Society, Kolkata, West Bengal, India.

9. International Webinar on Advances in Mathematical Sciences-2023, WBSU, Kolkata, West Bengal, India.

10. International Conference on Differential Geometry and Relativity-2023, SSJ University, Almora, Uttarakhand, India.

11. Three-Day International Conference on Advancement of Mathematical Sciences and Computer Vision-2023, Calcutta Mathematical Society, Kolkata, West Bengal, India.

12. Current Advances in Pure Mathematics-2024, Jashore University of Science and Technology, Jashore, Bangladesh.

13. National Seminar on Recent Advances in Mathematics and its Applications-2024, University of Calcutta, Kolkata, West Bengal, India.

14. An International Conference on Emerging Frontiers in Mathematical and Computational Sciences-2024, North-Eastern Hill University, Shillong, Meghalaya, India.

REVIEWER OF SCIENTIFIC JOURNALS

- International Journal of Maps in Mathematics (Scopus & ESCI)
- Jordan Journal of Mathematics and Statistics (Scopus)

VISION STATEMENT

- Always looking forward for a position to utilize my skills and abilities with the scope of professional as well as educational growth while being resourceful in the field of Research, Academics and Administration.
- Motivating independent and analytical thinking among the students so that they can thrive

well in their future endeavors.

- Encouraging the students to pursue knowledge through sincerity and creativity.
- Inspiring students to uplift their abilities to next level with the help of thorough research and progressive thoughts.

Signature of the Faculty Member
Date: 15th March, 2025