

Name: Dr. Palash Mandal
Designation: Associate Professor
Department: Mathematics
Qualification: M.Sc., Ph. D.

Introduction: Dr. Palash Mandal has completed his Graduation and Master degree in Mathematics from University of Kalyani in the year 2003 and 2005 respectively. He has been awarded PhD by University of Kalyani in 2017 for his work on Mathematical Biology at the Dept. of Mathematics, University of Kalyani. He has been teaching experience in Honours and General courses for almost sixteen years. Dr. Mandal taught at A. B. N. Seal College, Coochbehar (affiliated with the North Bengal University) and Hooghly Mohsin College, Hooghly (affiliated with the University of Burdwan) before joining Maulana Azad College, Kolkata (affiliated with the University of Calcutta). His present interest of research is in the area of Mathematical Eco-epidemiology. He has published research papers in reputed national and international journals.

Current Teaching:

- UG level: Honours and General courses under CBCS, 2018.
- UG level: Four-year (Honours and Honours with Research) under NEP, 2020

Publications:

1. (With Samaes. Pal) 'A diffusive predator-prey mathematical model with disease in prey population', Nonlinear Studies, International Journal, Vol.30, No. 3, 2023, PP: 937-954.
2. 'A diffusive predator-prey model having ratio-dependent functional response with disease in the prey', Journal of Scientific Research, Vol.67, Issue 2, 2023, PP: 86-95
3. 'Stability and Bifurcation Analysis of a Delayed SEIR Epidemic Model with Self-Protection', International Journal of Science and Research, Vol. 12, Issue 5, 2023, PP: 2586-2593.
4. Analysis of predator-prey model having Holling type-II functional response with disease in both species, International Journal of HIT Transaction on ECCN, Vol. 8, Issue 1A, 2022, PP: 48-62.
5. Dynamical Behavior of an Eco-Epidemiological Model with Disease in Predator', International Journal of Science and Research, Vol. 12, Issue 6, June, 2023, PP: 2562-2566.
6. 'A predator-prey model having Holling type-III functional response with disease in prey' CONSCIENTIA, Vol. IX, 2021, PP: 7-17.
7. Dynamics of modified Leslie-Gower predator-prey mathematical model with disease in prey CONSCIENTIA, Vol. X, 2022, PP: 80-96.

8. (With Samaes. Pal and Nanda Das) 'A Leaslie-Gower Holling Type-II Predator-Prey Mathematical Model with disease in prey population incorporating a prey refuge', Journal of mathematics and system science, Vol. 6, 2016, PP: 395-408. DOI:[10.17265/2159-5291/2016.10.003](https://doi.org/10.17265/2159-5291/2016.10.003)
9. (With Samaes. Pal) Analysis of predator-prey system with disease in both populations', Bulletin of Calcutta mathematical society, vol. 108(4), 2016, PP: 269-292.
10. A predator-prey model having ratio-dependent functional response with disease in the prey, Academic Journal of Hooghly Mohsin College, vol. 11, 2016, PP: 52-62.
11. A predator-prey mathematical with both the populations affected by disease, Non-Linear Studies, vol. 25, 2018, PP: 8339-850.

Participation in Seminars/ Conferences/ Workshops:

1. Presented a paper on "A predator-prey mathematical with both the populations affected by disease" in national seminar Recent Developments in Mathematics and its application (NSRDMA-2016), organized by department of mathematics, University of Kalyani, January 21-22, 2016.
2. Presented a paper on "An eco-epidemiological predator-prey model with disease in prey populations incorporating a prey refuge" in national seminar on Mathematics and its application (NSMA-2018), organized by department of mathematics, University of Kalyani, February 22-23, 2018.
3. Presented a paper on "A Leaslie-Gower predator-prey mathematical model with disease in prey population incorporating a prey refuge" in International seminar on Mathematical science and Application (NSMA-2018), organized by department of mathematics, University of Kalyani, February 26-28, 2020.
4. Presented a paper on "A modified Leslie-Gower predator-prey mathematical model with disease in prey population" in International seminar on Mathematical science and Application (NSMA-2018), organized by department of mathematics, University of Kalyani, February 26-28, 2020.
5. Presented a paper on "Analysis of predator-prey mathematical model with disease in both species" in International Conference on Applied Mathematics and Application (ICAM - 2022), organized by Department of Applied Mathematics with Oceanology and Computer Programming, (ICAM-2022), Vidyasagar University, Midnapur, June 8-9, 2022.
6. Presented a paper on "Dynamical behaviour of predator-prey model with disease in prey incorporating a prey refuge" in International conference on Mathematical analysis and applications (ICOMAA-2022), organized by department of mathematics, University of Kalyani, June 28-29, 2022.

7. Presented a paper on “Analysis of Leslie-Gower predator-prey model with disease in prey population” in one week International symposium on the scope of Intra and International Research and Collaboration in Applied Science, Engineering and Management organized by Haldia Institute of Technology, Haldia, India, May 22-29, 2022.
8. Participated in the Training-cum-Workshop on Mathematical Biology (TWMB-2022), organized by department of mathematics, University of Kalyani, September 19-20, 2022.
9. Participated in the Workshop on Advanced Mathematical Biology (WAMB-2025), organized by department of mathematics, University of Kalyani, December 16-17, 2025.
10. Participated in the national seminar on Roles of Mathematical Analysis and Models in Science and Society, organized by department of mathematics, University of Kalyani, March 16-17, 2010.

Members:

- Life Member of ‘INDIAN STATISTICAL INSTITUTE’
- Life Member of ‘CALCUTTA MATHEMATICAL SOCIETY’
- Life Member of ‘Biomathematical Society of India’

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