



Dr. Jayanta Mondal

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Specialisation: **Mathematical Biology**

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Academic qualifications:

- Ph.D in Mathematics, Jadavpur University, 2014
- M.Sc in Mathematics, Jadavpur University, 2002
- B.Sc in Mathematics, Jadavpur University, 2000

Academic Experiences:

- 2017, January-till date, Assistant Professor, Diamond Harbour Women's University
- 2006, December - 2016, January, Assistant Professor, Barasat College
- 2003, December – 2006, December, Assistant Teacher, Bawali High School (H.S).

Field of Research Interest:

- Modelling on disease Psoriasis
- Mathematical Biology on Ecology

Professional recognition, awards, fellowships received:

- 2003 UGC -NET Fellowship in Mathematical Sciences

List of Publications

Papers published in journals:

- (1) Priti Kumar Roy , **Jayanta Mondal** , Host Pathogen Interactions: Insight of Delay Response Recovery and Optimal Control in Disease Pathogenesis Engineering Letters, EL_18_4_11, Volume 18, Issue 4.
- (2) Priti Kumar Roy , **Jayanta Mondal** , Sourav Rana , Abhirup Datta Host Pathogen Interactions with Recovery Rate using Fractional-Order Derivative: A Mathematical Approach. Nonlinear Studies, Vol. 20, No. 2, pp. 251-261, 2013.
- (3) Priti Kumar Roy, **Jayanta Mondal**, Rupa Bhattacharyya, Sabyasachi Bhattacharya, and Tamas Szabados, Extinction of Disease Pathogenesis in Infected Population and Its Subsequent Recovery: A Stochastic Approach Journal of Applied Mathematics Volume 2013, Article ID 381286, 8 pages.

Articles/Chapters Published in Books:

Priti Kumar Roy, **Jayanta Mondal** and Samrat Chatterjee, Vertical Incidence Increases Virulence in Pathogens: A Model Based Study Electrical Engineering and Applied Computing, Lecture Notes in Electrical Engineering Volume 90, (**Springer**), pp.-661-674.

Paper presented in academic Seminar/Conference/Workshop with title of Papers:

1. Mathematical Modeling of Impact of Antigenic Stimulation on T-Cell Homeostasis during Primary HIV Infection, International Conference on Dynamical System: Theory and Application, Jadavpur University, 2013.
2. Extinction of disease pathogenesis in Host pathogen interactions and its subsequent recovery: A Stochastic approach, National UGC Seminar, Recent Advances in Mathematical Sciences and Applications., North Bengal University, 2011.