

CURRICULUM VITAE

Dr. Piu Samui (Ph. D.)

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Professional Experiences

- As an Assistant Professor in **Swami Vivekananda University**, Barrackpore, Kolkata-700121, West Bengal, India.
 - **Date of Joining: 01.02.2024**
 - **Experience: From 01.02.2024 to Till Date (01 + years).**

Academic Qualifications

- **Diamond Harbour Women's University**, West Bengal, India.
 - **Ph.D. in Mathematics (Mathematical Biology).**
 - **Thesis Title: "Mathematical study of Infectious diseases and its Control".**

Research Interests

- **Research Experience - 08+ years.**

Research interests - Mathematical Epidemiology, Infectious Disease Modeling, Ecological Modeling, Optimal Control Theory, Bifurcation Theory, Stochasticity, Numerical Simulation

List of Publications (Journals) (As First/Corresponding Author)

1. **Samui, Piu**, Mondal, J., Khajanchi, S. (2020), A mathematical model for COVID-19 transmission dynamics with a case study of India, **Chaos, Solitons & Fractals**, (IF: 9.922), ISSN: 0960-0779, E-ISSN: 1873-2887. 140, 110173. <https://doi.org/10.1016/j.chaos.2020.110173>
2. **Samui, Piu**, Mondal, J., Ahmad, B., Chatterjee, A. N. (2022), Clinical effects of 2-DG drug restraining SARS-CoV-2 infection: A fractional order optimal control study, **Journal of Biological Physics**, (IF: 1.86), (Q3) E-ISSN: 1573-0689, ISSN: 0092-0606, 48(4), 415 - 438. <https://doi.org/10.1007/s10867-022-09617-9>

- 3. Mondal, J., Mondal S., **Samui, Piu*** (2023), Simulation and forecasting CTLs response effectualness against global dynamics of SARS-CoV-2/HIV coinfection, **Results in Control and Optimization**, (IF: 4. 04) (Q2), E-ISSN: 2666-7207, 13(2023), 100323. <https://doi.org/10.1016/j.rico.2023.100323>
- 4. **Samui, Piu**, Mondal J, Chatterjee, A. N., Basir, F. A. (2025), Impact of awareness in self-monitoring of COVID-19: an optimal control approach with cost-effective strategy, **Results in Control and Optimization**, (IF: 4. 04) (Q2), E-ISSN: 2666-7207, 18(2025), 100513. <https://doi.org/10.1016/j.rico.2024.100513>
- 5. **Samui, Piu**, Mondal, J., Chatterjee, A. N.(2025), A delay differential equation model of SEIV in presence of media coverage, **International Journal of Nonlinear Analysis and Applications**, (IF: 0.658), ISSN: 2008 - 6822, 16 (6), 47-58. <https://doi.org/10.22075/IJNAA.2023.23412.2535>
- 6. Mondal, J., Mondal S., **Samui, Piu*** (2025), Impact of vaccination and awareness campaign in reducing Mpox transmission: A fractional mathematical study, **Journal of Applied Nonlinear Dynamics**, Manuscript ID: JAND-D-24-00022 (IF: 0.71) (Q4), ISSN: 2164-6457(Accepted).

List of Publications (Journals)

- 1. Mondal, J., **Samui, Piu**, Chatterjee, A. N. (2020), Optimal control strategies of non-pharmaceutical and pharmaceutical interventions for COVID-19 control, **Journal of Interdisciplinary Mathematics (Taylor & Francis)**, (IF: 1.79 (SCI)), ISSN: 0972-0502, E-ISSN: 2169-012X. 24(1): 125 – 153. <https://doi.org/10.1080/09720502.2020.1833459>
- 2. Mondal, J., **Samui, Piu**, Chatterjee, A. N. (2021), Effect of SOF/VEL antiviral therapy for HCV treatment: A control theoretic approach, **Letters in Biomathematics**, (IF: 1.91 (Q3), E-ISSN: 2373-7867, 8(1): 191-213. <https://doi.org/10.30707/LiB8.1.1682013528.144161>
- 3. Wang B., Mondal, J., **Samui, Piu**, Chatterjee, A. N., Yusuf, A. (2022), Effect of an Antiviral Drug Control and its Variable Order Fractional Network in Host COVID-19 Kinetics, **The European Physical Journal Special Topics**, (IF: 2.8), (Q2) E-ISSN: 1951-6401, ISSN: 1951-6355, 231(10): 1915 – 1929. <https://doi.org/10.1140/epjs/s11734-022-00476-y>
- 4. Mondal, J., **Samui, Piu**, Chatterjee, A. N. (2022), Dynamical demeanour of SARS-CoV-2 virus undergoing immune response mechanism in COVID-19 pandemic, **The European Physical Journal Special Topics**, (IF: 2.8 (SCI)), E-ISSN: 1951-6401, ISSN: 1951-6355, 231(18-20), 3357-3370. <https://doi.org/10.1140/epjs/s11734-022-00437-5>
- 5. Mondal, J., **Samui, Piu**, Chatterjee, A. N. (2022), Modelling of contact tracing in determining critical community size for infectious diseases, **Chaos, Solitons & Fractals**, (IF: 9.922), (Q1) ISSN: 0960-0779, E-ISSN: 1873-2887, 159, 112141. <https://doi.org/10.1016/j.chaos.2022.112141>
- 6. Mondal, J., Khajanchi, S., **Samui, Piu** (2022), Impact of media awareness in mitigating the spread of an infectious disease with application to optimal control, **The European Physical Journal Plus**, (IF: 3.911), (Q2) E-ISSN: 2190-5444, 137(8), 1 – 18. <https://doi.org/10.1140/epjp/s13360-022-03156-x>
- 7. Mondal, J., **Samui, Piu**, Chatterjee, A. N., Ahmad, B. (2024), Modeling hepatocyte apoptosis in chronic HCV infection with impulsive drug control, **Applied Mathematical Modelling**, (IF: 5.46) (Q1), ISSN: 0307-904X, 136 (2024), 115625. <https://doi.org/10.1016/j.apm.2024.07.032>

List of Publications (Book Chapters)

- 1. **Samui, Piu**, Mondal J. (2025), Determining pathogenic behaviors of chronic HCV infection in presence of incubation delay, **Mathematical Analysis and Applications in Biological Phenomena through Modelling**, https://doi.org/10.1007/978-981-97-9194-1_13, 478(13), 173 - 202, ISBN: 978-981-97-9194-1.

* It is declared that all the information given above is true to the best of my knowledge and belief.