

## LIST OF PUBLICATIONS

- Prasenjit Das, Debasis Mukherjee, Kalyan Das and **A.Sabarmathi** (2012). Fluctuating Role of Parameters in the Analysis of the Continuous and Discrete Version of a Susceptible-Incubated-Infected Model, *International Journal of Modern Nonlinear Theory and Application*, Vol. 1, pp.47-50.
- Prasenjit Das, Kalyan Das, Nurul Huda Gazi and **Ayyavu Sabarmathi** (2012). Delayed stochastic disease model, *Journal of Advanced Research in Dynamical and Control Systems*, Vol.4, No. 4, pp.28-42.(**Scopus Indexed**)
- M.N. Srinivas, K.S. Reddy, K. Das, **A. Sabarmathi** and P. Das (2014). Stochastic effects on an ecosystem with predation, commensalism, mutualism and neutralism, *Journal of Advanced Research in Dynamical and Control Systems*, Vol. 6, No. 3, pp. 62-78. (**Scopus indexed**)
- K. Das, **A.Sabarmathi**, M.N. Srinivas, N.H. Gazi and B.R. Kumar (2015). Trophic Cascades Scenario of a Detritus-Based Stage-Structured Model in Marine Ecology, *Journal of Nonlinear Evolution Equations and Applications*, Vol. 2014, No. 6, pp. 77-100.
- **A.Sabarmathi**, B. Rushi Kumar, Kalyan Das, “Dynamical Behavior of a Stage-Structured Delayed Fishery Model in Plankton Ecology”, Proceedings of National Conference on Pure and Applied Mathematics, VIT University, Chennai Campus, 19-20 April 2013. (The extended research article titled ‘Eco-Stage-Structured Model Analysis to Explore delay and Stochastic Effects on growth and Maturation in Plankton Ecology’ is accepted for publication in the *Journal of Nonlinear Evolution Equations and Applications*).
- **A.Sabarmathi**, M. N. Srinivas, K.Shiva Reddy, Kalyan Das, B.Rushi Kumar, “Stability of a Prey-Predator Fishery Model with Taxation & Optimal Harvesting Policy”, Proceedings of International Conference on Mathematical Computer Engineering, VIT University, Chennai Campus, 29-30 Nov 2013. (The extended

research article titled ‘Stochastic Stability of a Fishery Model with Optimal Harvesting Policy’ is accepted for publication in the *International Journal of Pure and Applied Mathematics*).

### **List of Additional Publications (which are not included in the thesis)**

- M.N.Srinivas, K.Shiva Reddy and A.Sabarmathi (2014). Optimal Harvesting Strategy and Stochastic Analysis for a Two Species Commensaling System, *Ain Shams Engineering Journal* Vol. 5, pp. 515-523. **(Scopus Indexed)**
- M.N.Srinivas, K.Shiva reddy, **A.Sabarmathi** (2013). A stochastic study of a four species syn eco-system with bio economic yielding of victim & killer, *International Journal of Advances in Engineering and Technology*, Vol. 6, No. 4, pp.1571-1584. **(Impact factor: 1.56)**
- M.N. Srinivas, **A.Sabarmathi**, K. Shiva Reddy and M.A.S. Srinivas (2014). An Optimal Harvesting Strategy of a Three Species Syn-ecosystem with Commensalism and Stochasticity, *Applications and Applied Mathematics: An International Journal*, Vol. 9, No. 1, pp.672-695. **(with Universal Impact Factor)**
- K. Shiva Reddy, M.N.Srinivas, A.Sabarmathi, Kalyan Das, N.H. Gazi (2015). Dynamics in harvested prey predator mathematical model with noise and diffusion, *International Journal of Dynamical Systems and Differential Equations*, **(Scopus Indexed)**