## **Profile of the Faculty**



Name of the Faculty: Dr. Md. Sabiar Rahman

**Designation:** Assistant Professor

Contact Details: Mob no.: 9733813314,

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**Qualification:** M.Sc. B.Ed. Ph.D.

**Specialization:** Bio-Mathematics

**Research Experience:** 8 Years

Areas of the Research: Nonlinear dynamics,

Bifurcations & Chaos, Mathematical Modelling of Ecological Systems (Effect of Refuge, Allee effect,

Harvesting), Mathematical Epidemiology, Eco-

genetic systems

## Seminar/ Conference/Workshop Attended (last 5 years):

 Attended in the National Seminar for Nonlinear Systems organized by Department of Mathematics, Visva-Bharati (a Central University), Santiniketan-731 235, West Bengal, India, during October March 17-18, 2013.

- Attended with paper presentation on the topic "An eco-epidemiological.....Allee effect" in the workshop and symposium on Applied Nonlinear Dynamics and chaos (ANDC-2014) jointly organized by GCETT, Berhampore, Msd, WB and DIET, Basantapur, Msd, WB, India, during 26<sup>th</sup>-31<sup>st</sup> May' 2014.
- Attended in a one week workshop (Teachers Enrichment )organized be National Centre of Mathematics (A joint centre of TIFR and IIT Bombay)
- Attended in the Orientation Programme organized by University of Calcutta (HRDC), West Bengal, India, during December 19, 2016 to January 14, 2017.
- Attended in the Refreshers Course organized by Jadavpur University (HRDC), West Bengal, India, during 1st December-22nd December, 2017.

## **Publications**

- (1) Mainul Haque, **Md. Sabiar Rahman**, Ezio Venturino, 2013 `Comparing functional responses in predator-infected eco-epidemics models", **BioSystems**, Elsevier. Vol. 114, No. 2, 98-117.
- (2) **Md. Sabiar Rahman**, Santabrata Chakravarty, 2013 ``A predator-prey model with disease in prey", **Nonlinear Analysis: Modelling and Control**, Vol. 18, No. 2, 191-209.
- (3) **Md. Sabiar Rahman**, Santabrata Chakravarty, 2013 "Persistence and global stability analysis of an eco-epidemiological model of the Salton Sea", **International Journal of Ecological Economics and Statistics**, Vol. 30, No. 3, 83-101.
- (4) Gui Quan Sun, Sahabuddin Sarwardi, Pallav Jyoti Pal and **Md. Sabiar Rahman**, 2010 `The spatial patterns through diffusion-driven instability in modified Leslie-Gower and Holling-type II predator-prey model", **Journal of Biological System**, World Scientific. Vol. 18, No. 03, 593-603.
- (5) **Md. Sabiar Rahman**, Santabrata Chakravarty, "An ecoepidemiological model of competitive interacting species with Allee effect", published in **International Journal of Dynamics and Control**, Springer-Verlag Berlin Heidelberg 2014, 1-14.

- (6) Mainul Haque, **Md. Sabiar Rahman**, Ezio Venturino, `Effect of a functional response-dependent prey refuge in a predator-prey model", published in **Ecological Complexity**, Elsevier B.V. 2014.
- (7) Md. Sabiar Rahman, "Modelling of an eco-genetic system: a mathematical model", Published in International journal of Ecological Economics and Statistics, 2016.