Curriculum vitae

<u>Name:</u> Dr. Ankur Jyoti Kashyap <u>Designation</u>: Assistant Professor

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Sex: Male

Educational Qualifications:

Sl. No.	Examination Passed	Year of passing	Board / Council / University	Specialization
1	HSLC/10 th Std.	2009	SEBA	Adv. Mathematics
2	HSSLC/10+2 Std.	2011	AHSEC	Physics, Chemistry, Mathematics
3	Degree (Mathematics)	2015	Dibrugarh University	Mathematics
4	Master's Degree (Mathematics)	2017	Gauhati University	Pure Mathematics
6	Ph. D. (Mathematics)	2022	Gauhati University	Nonlinear Dynamical Systems, Ecosystem Modelling, Fractional calculus.

Languages known: Assamese, Hindi, English

(Read, Write & Speak)

Academic/ Administrative Experience:

- May 2022-August 2023: Assistant Professor, The Assam Royal Global University, Guwahati
- Assistant Examination Supervisor, The Assam Royal Global University, Guwahati.
- Nodal Officer, National Academic Depository (NAD), DigiLocker, ABC, 22/12/2023 till date.

- Member, Core ERP implementation team, GCU, 29/12/2023 till date.
- Member, Criteria 2: Teaching, Learning and Evaluation, NAAC, GCU, 01/01/2024- till date.

List of Publications:

- 1. Debasish Bhattacharjee, Ankur Jyoti Kashyap, Hemanta Kumar Sarmah & Ranu Paul. Dynamics in a ratiodependent eco-epidemiological predator-prey model having cross species disease transmission. *Commun. Math. Biol. Neurosci.*, 2021 (2021), Article ID 15 (SCOPUS, ESCI).
- 2. Debasish Bhattacharjee, Ankur Jyoti Kashyap, Kaushik Dehingia & Hemanta Kumar Sarmah, Dynamical analysis of a predator-prey epidemiological model with density dependent disease recovery, *Commun. Math. Biol. Neurosci.*, 2020 (2020), *Article ID 80* (SCOPUS, ESCI).
- 3. Ankur Jyoti Kashyap, Debasish Bhattacharjee & Hemanta Kumar Sarmah. A fractional model in exploring the role of fear in mass mortality of pelicans in the Salton Sea, *An International Journal of Optimization and Control: Theories & Applications* (*IJOCTA*),11(3), 28-51 (2021), (SCOPUS). https://doi.org/10.11121/ijocta.2021.1123
- 4. Ankur Jyoti Kashyap, Willy Govaerts, Debasish Bhattacharjee & Hemanta Kumar Sarmah, Bifurcation analysis of a predator-prey system with density dependent disease recovery, *FILOMAT*, *Vol* 36, *No* 20 (2022) (SCI, IF 0.844).
- 5. Ankur Jyoti Kashyap, Quanxin Zhu, Hemanta Kumar Sarmah, & Debasish Bhattacharjee. Dynamical study of a Predator-Prey system incorporating hunting cooperation and Michaelis—Menten type Predator-Harvesting, *International Journal of Biomathematics*, *World Scientific*, (SCIE, IF 2.129) https://doi.org/10.1142/S1793524522501352.
- 6. Qianqian Li, Ankur Jyoti Kashyap, Qun Zhu, Fengde Chen, Dynamical behaviours of discrete amensalism system with fear effects on first species, *Mathematical Biosciences and Engineering*, 2024, *Volume 21*, *Issue 1: 832-860*. (SCIE IF 2.6, SCOPUS), doi:10.3934/mbe.2024035.
- 7. Yanbo Chong, Ankur Jyoti Kashyap, Shangming Chen, Fengde Chen, Dynamics Analysis of a Discrete-Time Commensalism Model with Additive Allee for the Host Species. *Axioms* 2023, *12*, *1031*. (SCIE IF 2.0,) https://doi.org/10.3390/axioms12111031
- Balajied Me Syrti, Anuradha Devi, Ankur Jyoti Kashyap, Analysis of Stability, Sensitivity Index and Hopf Bifurcation of Eco-Epidemiological SIR Model under Pesticide Application, COMMUN. BIOMATH. SCI., VOL. 6, NO. 2, 2023, PP. 126-144. (SCOPUS Q2), https://doi.org/10.5614/cbms.2023.6.2.4

9. Ankur Jyoti Kashyap, Arnab Jyoti Bordoloi, Fanitsha Mohan, Anuradha Devi, Dynamical analysis of an anthrax disease model in animals with nonlinear transmission rate, *Mathematical Modelling and Control, Volume 3, Issue 4, 2023: 370-386*, (SCOPUS, ESCI) doi: 10.3934/mmc.2023030.

Conferences Attended

- Title of talk/paper is "Coexistence and stability analysis of predator-prey model with ratiodependent functional response where both the population are affected by disease", International Conference on Advances in Mathematics and Computing (ICAMC-2020), organized by Department of Mathematics, Veer Surendra Sai University of Technology, Siddhi Vihar, Burla, Odisha-768018,India during 7th - 8th of February, 2020.
- Title of talk/paper is "An Eco-Epidemiological Model With a Predating Scavenger", International Conference on Mathematical Modelling in Applied Sciences (ICMMAS2020), organized by Department of Mathematics, Dibrugarh University, Assam, India during June 28-30, 2020.
- 3. Title of talk/paper is "A Fractional-Order Eco-Epidemiological Model With Fear Effect", 3rd International Conference on Mathematical Modelling, Applied Analysis and Computation 2020 (ICMMAAC-20) held at JECRC University, Jaipur (Raj.), India from 7th to 9th August, 2021.
- 4. Title of talk/paper is "Dynamics of an Eco-Epidemiological Model with Nonlinear Incidence Rate and Fear Effect" International conference on Advances in Differential Equations and Numerical Analysis (ADENA), October 12 15, 2020 organized by Department of Mathematics, Indian Institute of Technology, Guwahati, India.
- 5. Title of talk/paper is "Dynamical Behaviour in a Predator-Prey System with Nonlinear Harvesting", 4th International Conference on Mathematical Modelling, Applied Analysis and Computation 2021 (ICMMAAC-21) held at JECRC University, Jaipur (Raj.), India from 5th to 7th August 2021.
- 6. Attended the 13th Conference on Dynamical Systems Applied to Biology and Natural Sciences (DSABNS 2022), organized by the Mathematical and Theoretical Biology Group at the Basque Center for Applied Mathematics (BCAM) and held on February 8-11, 2022.
- Title of talk/paper is "Center manifolds, Hopf bifurcation in an epidemic model", International Conference on DYNAMICAL SYSTEMS, CONTROL AND THEIR APPLICATIONS - 2022 (ICDSCA-22) organized by department of Mathematics, IIT Roorkee, India from July 01-023, 2022.
- 8. Title of talk/paper is "Complex dynamics in an eco-epidemiological model due to non-consumptive risks", International Conference on Nonlinear Analysis and Applications-2022 (ICNAA-2022) (India and Mexico), organized by Assam Don Bosco University, Sonapur, Assam, India, Technological University of the Mixteca, Oaxaca, Mexico and Ramniranjan Jhunjhunwala College (Autonomous), Ghatkopar, Mumbai, India, November 22-23, 2022

9. Title of talk/paper is "A Fear-Affected Stage-Structured Predator-Prey Model", 6th International Conference on Mathematical Modelling, Applied Analysis and Computation - 2023 (ICMMAAC-23), held at JECRC University, Jaipur (Raj.), India from 3th to 5th August 2023.

Workshops Attended

- 1. International Workshop on "Networks and Dynamical Systems, 2021", organized by the Complex Systems and Dynamics group, Indian Institute of Technology Madras, and which was held in an online mode from August 25-28, 2021.
- 2. e-STC on "Recent development in Numerical Methods for Partial differential equations (RD-NMPDE 2022)" held online from May 30-June 03, 2022, organized by Department of Mathematics & Scientific Computing National Institute of Technology (NIT) Hamirpur, Hamirpur, Himachal Pradesh, India.
- 3. Five-day International Online Workshop on "Advanced Numerical Techniques for Differential Equations (ANTDE-22)" from June 06-June 10, 2022, organized by Department of Mathematics, Malaviya National Institute of Technology, Jaipur, India.
- Workshop on "MATHEMATICAL MODELS IN EPIDEMIOLOGY (MME) Course MTB group at BCAM" (FROM MARCH 25 TO JUNE 22, 2022 - BCAM) organized by BCAM - Basque Center for Applied Mathematics Alameda de Mazarredo, 14 E-48009 Bilbao, Basque Country - Spain.

Research Experience:

Date: 01/02/2024

- M.Sc Project guided: **04** nos.
- Research & Consultancy Projects:

Title: "A mathematical study on the transmission dynamics of Anthrax disease"

Amount sanctioned: Rs. 50000,

Funding Agency: The Assam Royal Global University, Assam.

• Reviewer Assignments: **05** nos.

International Journal of Biomathematics, World Scientific: 04

Mathematical Modelling and Control, AIMS: 01

(Ankur Jyoti Kashyap)

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