



ENLIGHTENMENT TO PERFECTION

UNIVERSITY OF NORTH BENGAL

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Raja Rammohunpur, Dist- Darjeeling, West Bengal, Pin-734013, India.

Department of Zoology

Print

**Dr. Tilak Saha**

M.Sc. (Zoology), Ph.D. (Biotechnology)

Assistant Professor (Sr.)

Members of Learned Societies: Zoological Society of India (Life Member)

Contact Addresses:

Contact No.	+91- (0353) 2776353(O), 9475098732 (M)
Mailing Address	Laboratory of Immunology Department of Zoology University of North Bengal PO-NBU, PS-Matigara Dist.-Darjeeling, West Bengal, INDIA PIN-734013
e-Mail	tilaksahanbu@gmail.com

Subject specialization: Cellular and molecular Immunology**Areas of Research Interest:** Bacterial association and invertebrate immunity**No. of Ph.D. students:** (a) Supervised: Nil (b) Ongoing:03.**No. of M.Phil. students:** (a) Supervised: Nil (b) Ongoing: Nil .**No. of Publications:** (a) Journal(s) : 07**Achievement & Awards:**

- NET-JRF 2005, SLET-2006, Best paper awarded in 1st Regional Science Congress Jalpaiguri, WBSSTC, 2016.

Professional experiences:

- UG teaching: Assistant Professor of Zoology in Acharya Brojendra Nath Seal College, CoochBehar, W.B. India (2008 to 2012)
- Assistant Professor (Stage I), Department of Zoology, University of North Bengal, Raja Rammohunpur, District Darjeeling – 734 013, W.B. India (2012 onwards).
- Assistant Professor (Stage II), Department of Zoology, University of North Bengal, Raja Rammohunpur, District Darjeeling – 734 013, W.B. India (2014 onwards).
- Associated with UGC-CSIR NET Coaching for SC/ST Students in the University of North Bengal.
- Performed as Main Invited Resorce Person in training Programme on Scanning Electron Microscopy in Plant Pathology Division of Nepal Agricultural Research Council on 6-7th January,2019.
- Performed as Judge in the 3rd Regional Science Congress 2018-19 (Jalpaiguri Government Engineering College, Jalpaiguri: 12th to 13th December, 2018).
- Performed as Judge in the District Level Student- Youth science fair 2016 (16th -17th Dec., 2016).
- Performed as Judge in the District Level Student- Youth science fair 2015 (24th Sept., 2015).
- Associated with UG/PG Examination of the University of North Bengal as Paper Setter/Moderator/Chairman of Board of Moderation.

Administrative Experiences:

- Nil

Research Projects:

- University Assisted Research Project with a grant of Rs 75,000/- completed in December, 2014
- Saha, T., Nov.,2017 Studies on immunological response of *Eisenia fetida* (Savigny) under bacterial challenge., University assisted, Completed, 2018

- Saha, T., Sept, 2013 Studies on regeneration capabilities of *Eisenia fetida* (Savigny). University assisted, Completed 2014.

Selective List of Publications:

Papers published in Journal:

- Kundu, S., Roy, I., Sarkar, B. C., Saha, T. and Mukherjee, S. 2011 Dynamic total haemocyte count and non-self surface adhesion response of haemocyte of *Bellamyia bengalensis* exposed to chlorpyrifos. *Abnseal journal of Science* Vol-IV. ISSN 0975-5624: 50-55

Paper accepted for publication in the proceeding of National Seminar:

- Saha, T. (2012) Studies on earthworms in the agricultural fields and natural vegetation areas near Coochbehar town and the effect of pesticides on their distribution. Proceedings of UGC sponsored National Seminar on "Biodiversity & Sustainability vis-à-vis Economic Development in the Northern Parts of West Bengal" on 26 & 27 August 2012 held in Raiganj Surendranath Mahavidyalaya, W.B.

Some recent publications:

- Saha T, Ranjan VK, Ganguly S, Thakur S, Barman P, Chakraborty B, Ghosh W, Chakraborty R. (2019). Taxonomic description and draft genome of *Pradoshia eiseniae* gen. nov., sp. nov., a spore-forming member of the family *bacillaceae*, capable of assimilating 3- nitropropionic acid, isolated from the anterior gut of the earthworm *Eisenia fetida* cast. *Int J Syst Evol Microbiol* (Accepted).
- Rudra Prasad Roy, Tilak Saha and Ranadhir Chakraborty 2018 Contrasting observation in culturable aerobic and micro-aerophilic heterotrophic fish gut-bacteria: Intestine-breathing *Lepidocephalichthys guntea* (Hamilton Buchannan) versus gill breathing *Labeo rohita*. *Cur Sci.* 115(3). 548-552.
- Saha T, Chakraborty B, Das S, Thakur N, Chakraborty R. (2018). *Chryseomicrobium excrementi* sp. nov., a gram-stain-positive rod-shaped bacterium isolated from an earthworm (*eisenia fetida*) cast. *Int J Syst Evol Microbiol.*68(7): doi: [10.1099/ijsem.0.002791](https://doi.org/10.1099/ijsem.0.002791).
- Ranjan VK, Saha T, Mukherjee S, Chakraborty R. (2018) Draft Genome sequence of a novel bacterium, *Pseudomonas* sp. MR02, capable of 2 pyomelanin production, isolated from River Mahananda at Siliguri, West Bengal, India Genome Announcements ASM 6: e01443-17. <https://doi.org/10.1128/genomeA.01443-17>.
- Denial Mahata, Malabendu Jana, Arundhuti Jana, Abhishek Mukherjee, Nibendu Mondal, Tilak Saha, Subhajit Sen, Chinmay K. Mukhopadhyay, Ranadhir Chakraborty, Golok B. Nando, Santi M. Mandal 2017. Lignin-graft-Polyoxazoline Conjugated Triazole a Novel Anti-Infective Ointment to Control Persistent Inflammation Scientific report (Nature Publishing Group).. 7. Article Number 46412.
- Tilak Saha, Ashim K. Chakravarty, Ranadhir Chakraborty Dynamics of Regeneration Process In *Eisenia Fetida* NBU Journal of Animal Sciences 2016 (10): 79-88. ISSN: 0975-1424.

Participation in academic Seminar/Conference/Workshop with title of papers presented:

Sl. No.	Title of the Paper presented	Title of Conference / Seminar	Organized by	Authors	International / National / State / regional / College or University level
1	Chlorpyrifos induced shift in haemocyte behaviour of <i>Bellamyia bengalensis</i> , an important bioresource of West Bengal	Trends in Biodiversity and Bioresource Management	Post Graduate Dept. of Zoology, ABN Seal College, Coochbehar in collaboration with Dept. of Forestry, UBKV		State level
2	Metabolic interaction of <i>Channa punctatus</i> and arsenic.	A journey through recent developments in Chemistry March1-2, 2012	Dept. of Chemistry ABN Seal College, Coochbehar in collaboration with Dept. of Chemistry, NBU		National level
3	"Studies on large Indian.....on their distribution"	Biodiversity and sustainability vis-à-vis Economic development in the northern part of West Bengal	Dept. of Botany, Raiganj Surendranath Mahavidyalaya, West Bengal		National Level
4	Studies on development of bacterial flatcherie in muga silkworm <i>Antheraea assama</i> , Ww.	Research in Animal Science: Development and evaluation.	Dept. of Zoology, NBU		National level
5	Poison girls(Sanskrit: Vishkanya): Myth or reality	Historian and Historiographies of India: Dimentions and Perspectives(Focus on Eastern and North-East India) held on March20-21,2012	P.G. Dept of History, ABN Seal College, Coochbehar in collaboration with Dept. of History, NBU		International level
6	"Bioprospecting Gut Microflora Of <i>Eisenia Fetida</i> For Novel Decomposer"	<i>Applied Zoology In Sustainable Development: An Update</i> January 30-February 2, 2015 held in	Department of Zoology, University of North Bengal, NBU		National level
7	Light Microscopic Study Of Coelomocytes In <i>Eisenia Fetida</i>	<i>State Science Congress</i> February 28 –March01, 2015	held in the University of North Bengal		State level
8	Poster "Telomeres and telomerase in cancer"	<i>Cancer Biology 2011: Basic theoretical Aspects</i> held Aug26-27, 2011	IIT Guwahati Biotech Hub, Assam		National level
9	Molecular Characterization of Six Novel Decomposers Isolated from the Gut of	National Conference on "Natural Resources, Diversity and Sustainable	Department of Biotechnology, NBU		National level

	<i>Eisenia fetida</i>	Development” held on 11 - 12 December, 2015			
10	Modulation of Coelomocyte Phagocytic Behavior in <i>Eisenia fetida</i> in response to <i>Bacillus thuringiensis</i> Infection	National Conference on “Natural Resources, Diversity and Sustainable Development” held on 11 - 12 December, 2015	Department of Biotechnology, NBU		National level
11	Greater Indian one-horned rhinoceros of the Kaziranga National Park, India found infected with Multiple-Antibiotic-Resistant <i>Salmonella</i> strains	2 nd International Conference on Contemporary Antimicrobial Research 15 th -17 th Dec.,2018	IIT, Kharagpur	Tilak Saha, Dibyendu Paul, Vivek Kumar Ranjan, and Ranadhir Chakraborty	International
12	Identification of a novel pathogenic strain of <i>Pseudomonas aeruginosa</i> as the causative agent of bacterial flacherie disease of <i>Antheraea assama</i> in Coochbehar district of West Bengal	Emerging areas of Sericulture: Issues , Challenges and Industrial Application for Sustainable Development and Eco-restoration on 30 th to 31 st January, 2018	Department of Sericulture, Raiganj University	Tilak Saha Supratim Kumar Das	National
13	Coelome microbiome and revelation of host- bacterial symbiosis in coelomic cavity of <i>Eisenia fetida</i>	Microbiology in the New Millennium: from Molecules to Communities , October 27-29, 2017	Bose Institute, Kolkata	Tilak Saha Ranadhir Chakraborty	International
14	Opsonization activity of amoebocytes of <i>Eisenia fetida</i> increases by exposure to <i>Bacillus thuringiensis</i>	Zoological conference, Raiganj University March, 2017	Department of Zoology, Raiganj University	Tilak Saha, Ashim Kumar Chakravarty. Ranadhir Chakraborty	National
15	Bacterial competition in the coelomic space of <i>Eisenia fetida</i>	ZooCon-2017, January, 2017	Department of Zoology, University of North Bengal,	Tilak Saha, Ashim Kumar Chakravarty. Ranadhir Chakraborty	National level
16	Tissue Reorganization During Regeneration In <i>Eisenia fetida</i>	WBSSTC-AC_College_Nov_7-8, 2016	AC_College_Nov_7-8, 2016	Tilak Saha, Ashim Kumar Chakravarty. Ranadhir Chakraborty	State level
17	A histological study to partially understand tissue reorganization during regeneration in <i>E. fetida</i>	National conference ABNSCollege, April10-11,2016	ABNSCollege, Coochbehar	Tilak Saha, Ranadhir Chakraborty	National level
18	Modulation of Coelomocyte Phagocytic Behavior in <i>Eisenia fetida</i> in response to <i>Bacillus thuringiensis</i> Infection	National Conference on “Natural Resources, Diversity and Sustainable Development” held on 11 - 12 December, 2015	Department of Biotechnology, NBU	Tilak Saha, Ashim Kumar Chakravarty. Ranadhir Chakraborty	National level
19	Molecular Characterization of Six Novel Decomposers Isolated from the Gut of <i>Eisenia fetida</i>	National Conference on “Natural Resources, Diversity and Sustainable Development” held on 11 - 12 December, 2015	Department of Biotechnology, NBU	Tilak Saha, Ashim Kumar Chakravarty. Ranadhir Chakraborty	National level
20	Lead Lecture on “Isolation of multiple antibiotic resistant <i>Salmonella</i> strains..... Kaziranga National Park”	National Conference on “Natural Resources, Diversity and Sustainable Development” held on 11 - 12 December, 2015	Department of Biotechnology, NBU	Tilak Saha, Ranadhir Chakraborty	National level
21	Invited lecture on 'Fish Immunology'	Asutosh College centenary talk on 'Fish Immunology' On November 19 th 2015	Department of Fishery, Asutosh College, Kolkata	Tilak Saha,	Asutosh College invited centenary talk
22	Light Microscopic Study Of Coelomocytes In <i>Eisenia fetida</i>	State Science Congress February 28 –March01, 2015	held in the University of North Bengal	Tilak Saha, Ashim Kumar Chakravarty. Ranadhir Chakraborty	State level
23	“Bioprospecting Gut Microflora Of <i>Eisenia fetida</i> For Novel Decomposer”	Applied Zoology In Sustainable Development: An Update January 30-February 2, 2015	Department of Zoology, University of North Bengal,	Tilak Saha, Ashim Kumar Chakravarty. Ranadhir Chakraborty	National level
24	“Studies on large Indian.....on their	Biodiversity and sustainability vis-à-	Dept. of Botany,	Tilak Saha,	National

	distribution”	vis Economic development in the northern part of West Bengal 26-27 th August, 2012	Raiganj Surendranath Mahavidyalaya, West Bengal	Subrata Saha	Level
25	Poison girls(Sanskrit: Vishkanya): Myth or reality	Historian and Historiographies of India: Dimentions and Perspectives(Focus on Eastern and North-East India) held on March20-21,2012	P.G. Dept of History, ABN Seal College, Coochbehar in collaboration with Dept. of History, NBU	Tilak Saha,	International level