

BIPRANSH KUMAR TIWARY (Ph D, M.Sc, NET)

Head of Department

Department of Microbiology

North Bengal St. Xavier's College

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Professional Career:

July 2016- Present

Working as Assistant Professor in the Department of Microbiology in North Bengal St. Xavier's College.

Administration Experiences

Head of Department

Member of Board of Studies in Department of Microbiology, University of North Bengal.

IQAC Coordinator of North Bengal St. Xavier's College

Member of Exam Committee (NBSXC)

Member of Admission Committee (NBSXC)

July 2023 – Present

State President, West Bengal, Microbiologists Society India

Research Interests:

Medical Microbiology, Molecular Biology, Computer-Aided Drug Design, Quorum Sensing

Publications in Peer-reviewed Journal

1. Saqlain Mustaq , Abdul Moin , Baishali Pandit, **Biprانش Kumar Tiwary** , Masrura Alam. (2023) Phyllobacteriaceae: a family of ecologically and metabolically diverse bacteria with the potential for different applications. Folia Microbiologica. <https://doi.org/10.1007/s12223-023-01107-2>. (Impact Factor 2.6)
2. **Biprانش Kumar Tiwary**, Runu Ghosh, Saurav Moktan, Vivek Kumar Ranjan, Priyankar Dey, Dibakar Choudhury, Somit Dutta, Dipanwita Deb, Abhaya Prasad Das and Ranadhir Chakraborty. (2017) Prospective bacterial quorum sensing inhibitors from Indian medicinal Plant extracts. Letters in Applied Microbiology. 65, 2-10 (Impact Factor – 2.85)
3. **Biprانش Kumar Tiwary**, Somit Dutta, Priyankar Dey, Mossaraf Hossain, Anoop Kumar, Sony Bihani, Ashis Kumar Nanda, Tapas Kumar Chaudhuri and Ranadhir Chakraborty. (2017). Radical Scavenging Activities of Lagerstroemia speciosa
4. (L.) Pers. Petal Extracts and its hepato-protection in CCl₄-intoxicated mice. BMC Complementary and Alternative Medicine, 17:55 (Impact Factor – 3.9)

4. **Biprانش Kumar Tiwary**, Arvind Kumar, Ravikant Pathak, Nistha Pandey, Krishnakant Yadav, Ranadhir Chakraborty (2016). The locus *pgaABCD* of *Acinetobacter junii* putatively responsible for poly- β -(1,6)-*N*-acetylglucosamine biosynthesis might be related to biofilm formation: A Computational analysis. *Advance in Microbiology*, Vol.6 No.3.
5. Kiran Pradhan, **Biprانش Kumar Tiwary**, Mossaraf Hossain, Ranadhir Chakraborty and Ashis Kumar Nanda (2016). A mechanistic study of carbonyl activation under solvent-free conditions: evidence drawn from the synthesis of imidazoles, **RSC Advance**, 6, 10743-10749. (Impact Factor- 3.9)
6. **Biprانش Kumar Tiwary**, Kiran Pradhan, Ashis Kumar Nanda, Ranadhir Chakraborty. (2016). Implication of Quinazoline-4-(3H)-ones in medicinal chemistry: A Brief review. *Journal of Chemical Biology and Therapeutics*, 1:1
7. K.B. Benzon, Hema T. Varghese, C.Y. Panicker, Kiran Pradhan, **Biprانش Kumar Tiwary**, Ashis Kumar Nanda, C. Van Alsenoy (2015) Spectroscopic and theoretical characterization of 2-(4-methoxyphenyl)-4,5-dimethyl-1H-imidazole 3-oxide, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 151, 965–979 (Impact Factor- 2.35)
8. K.B. Benzon, Hema T. Varghese, C.Y. Panicker, Kiran Pradhan, **Biprانش Kumar Tiwary**, Ashis Kumar Nanda, C. Van Alsenoy (2015) Spectroscopic investigation (FT-IR and FT-Raman), vibrational assignments, HOMOLUMO, NBO, MEP analysis and molecular docking study of 2-(4-hydroxyphenyl)-4,5-dimethyl-1H-imidazole 3-oxide, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 146; 307–322. (Impact Factor- 2.34)
9. **Biprانش Kumar Tiwary**, Sony Bihani, Anoop Kumar, Ranadhir Chakraborty, Runu Ghosh (2015) The in vitro cytotoxic activity of ethno-pharmacological important plants of Darjeeling district of West Bengal against different human cancer cell lines. *BMC Complementary and Alternative Medicine*, 15:22. (Impact Factor- 3.9)
10. Arvind Kumar, **Biprانش Kumar Tiwary**, Sangita Kachhap, Ashis Kumar Nanda, Ranadhir Chakraborty (2015) An *Escherichia coli* strain, PGB01, isolated from feral Pigeon faeces, thermally fit to survive in pigeon, shows high level resistance to

trimethoprim. *PLoS ONE* 10(3): e0119329. doi:10.1371/journal.pone.0119329 (Impact Factor- 3.5)

11. Runu Ghosh, **Biprانش Kumar Tiwary**, Anoop Kumar, Ranadhir Chakraborty (2014). Guava Leaf Extract Inhibits Quorum-Sensing and Chromobacterium violaceum Induced Lysis of Human Hepatoma Cells: Whole Transcriptome Analysis Reveals Differential Gene Expression, *PLoS ONE* 9(9): e107703. doi:10.1371/journal.pone.0107703 (Impact Factor -3.5)
12. **Biprانش Kumar Tiwary**, Anil Kumar, Ashis Kumar Nanda, Ranadhir Chakraborty (2014). A Study on Optimization of Marigold Petal Yield, Pure Lutein, and Formulation of Free-Flowing Lutein Esters, *Journal of Crop Science and Biotechnology* 17 (3) : 175 ~ 181
13. **Biprانش Kumar Tiwary**, Ravindra Kailasrao Zirmire, Kiran pradhan, Ashis Kumar Nanda, Ranadhir Chakraborty (2014) Preparation and Spectroscopic Characterization of Inclusion Complex of 2-phenyl-4h-benzo[d][1,3]oxazin-4-one and β -Cyclodextrin. *International Journal of Pharmacy and Pharmaceutical Sciences*, Vol 6, Issue 3, 176-179.(Impact Factor- 1.59)
14. **Biprانش Kumar Tiwary**, Ravi Kant Pathak, Kiran Pradhan, Ashis Kumar Nanda, Asim Kumar Bothra, Ranadhir Chakraborty (2014). Evaluation of Drug Candidature of some Quinazoline- 4-(3h)-ones as Inhibitor of Human Dihydrofolate Reductase enzyme: Molecular Docking and *In Silico* Studies. *International Journal of Pharmacy and Pharmaceutical Sciences*, Vol 6 suppl 2, , 393-400. (Impact Factor 1.59)
15. Ranadhir Chakraborty, Arvind Kumar, Suparna Saha Bhowal, Amit Kumar Mandal, **Biprانش Kumar Tiwary**, Shriparna Mukherjee (2013). Diverse Gene Cassettes in Class 1 Integrons of Facultative Oligotrophic Bacteria of River Mahananda, West Bengal, India, *PLoS ONE* 8(8): e71753. doi:10.1371/journal.pone.0071753.(Impact Factor 3.5)

Books

1. Microbes, Environment and Human Welfare (Edited), Tilak Saha, Biprانش Kumar Tiwary, Nova Science, USA (2020). ISBN- 978-1-53617-945-3.
2. Alternatives to Antibiotics: Recent Trends and Future Prospects (Edited), Tilak Saha, Manab Deb Adhikari, Biprانش Kumar Tiwary, Springer Nature (2022), ISBN- 978-981-19-1853-7
3. Extremophiles: Diversity, Adaptation and Applications (Edited), Masrur Alam, Biprانش Kumar Tiwary, Bentham Science, 2022, ISBN: 978-981-5080-36-0 (Print), ISBN: 978-981-5080-35-3 (Online).
4. Recent Trends and The Future of Antimicrobial Agents - Part I (Edited), Tilak Saha, Manab Deb Adhikari, Biprانش Kumar Tiwary, 2023, ISBN: 978-981-5079-61-6 (Print)

ISBN: 978-981-5079-60-9 (Online).

5. Recent Trends and The Future of Antimicrobial Agents- Part 2 (2023), Editors: Tilak Saha, Manab Deb Adhikari, Bipranch Kumar Tiwary, ISBN: 978-981-5123-98-2 (Print) ISBN: 978-981-5123-97-5 (Online), DOI: 10.2174/97898151239751230101, Bentham Science Publishers.

Book Chapters/ Proceedings

1. Manab Deb Adhikari, Nitya Rai, Bipranch Kumar Tiwary* Natural Quorum Sensing Inhibitors: Potent Weapon to Control Bacterial Infections, (2023) ISBN: 978-981-5079-61-6 (Print) ISBN: 978-981-5079-60-9 (Online) Pp. 1-35 (35)
2. Bipranch Kumar Tiwary, Masrura Alam* Extremophiles: An Overview 2022, ISBN: 978-981-5080-36-0 (Print), ISBN: 978-981-5080-35-3 (Online), Pp. 1-23 (23).
3. Bipranch Kumar Tiwary*, Nitya Rai Oligotrophs: Microbes at Low Nutrient Levels, 2022, ISBN: 978-981-5080-35-3 (Online), Pp. 1-23 (23). Pp. 333-355 (23)
4. Manab Deb Adhikari, Abhrajyoti Roy Choudhuri, Bipranch Kumar Tiwary, Quorum Quenching Enzymes: A Potent Alternative to Conventional Antibiotics, Springer Nature, ISBN- 978-981-19-1853-7, Page no- 57-82
5. Manab Deb Adhikari, Tilak Saha, Bipranch Kumar Tiwary, Quest for Alternatives to Antibiotics: An Urgent Need of the Twenty-First Century, Springer Nature, ISBN- 978-981-19-1853-7, Page no- 3-34
6. Bipranch Kumar Tiwary, Kiran Pradhan, Heterocyclic Scaffolds in Novel Synthetic Antibacterial Agents, Springer Nature, ISBN- 978-981-19-1853-7, Page no- 223-242
7. Bipranch Kumar Tiwary, Sawgata Nag, Manab Deb Adhikari. Bacillus thuringensis based biopesticides: An overview, Microbes, Environment and Human Welfare, Nova Science, USA, ISBN- 978-1-53617-945-3, Page no- 275-296, 2020.
8. Manab Deb Adhikari, Bipranch Kumar Tiwary, Quorum Quenchers: Next Generation Antibacterials; Microbes, Environment and Human Welfare, Nova Science, USA, ISBN- 978-1-53617-945-3, Page no- 113- 140, 2020.

Project: ICMR, Govt. India sponsored research project (IRIS ID:-2020-2501) entitled, “Identification, isolation, and bio-evaluation of natural bio-active anticancer compound from leaves of *Masea macrophyla* plant of Darjeeling district” in the Department of Biotechnology, University of North Bengal. (Co-PI)

Life Time Membership:

1. Association of Microbiologists of India (AMI)
2. Microbiologists Society, India (MBSI)

Invited Resource Person:

2nd International Conference on "Innovations in Biotechnology Research for Sustainable Bioresources and Bioeconomy: Challenges and Practices" at Sanjivani Arts, Commerce and Science College, Kopargaon held on 15th-16th February 2024

International Conference on Microbiological Research: Current Challenges and Future Perspectives (ICMR: CCFP-2024), Department of Microbiology, Bharathidasan University held on January 09-11, 2024.

International Seminar on “Microbes and Social Equity” organized by Department of Microbiology & IQAC of Bankura Sammilani College held on December 22-23, 2023.

National Seminar on “Career Opportunities in Life Science with special emphasis to Biotechnology” and One Day Workshop on “Basic Training in Modern Biology” held on 30th -31st March 2019, organized by Department of Biotechnology, Patna University, Patna.

Academic Qualifications:

Doctor of Philosophy (Ph. D.)	<i>Thesis title: Studies on antiproliferative and antibacterial activity of some Quinazoline-4-3H-ones and their dimers</i>
Master in Science (M.Sc.)	Microbiology University of North Bengal, Darjeeling, West Bengal, India
Bachelors in Science (B. Sc)	Microbiology, Honours Suri Vidyasagar College, University of Burdwan, Suri, West Bengal, India