

Dr. Raktim Ghosh, M.Sc., Ph.D.

Assistant Professor
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Qualification:

Ph.D. in Microbiology from The University of Burdwan, West Bengal

Research area

Molecular mechanisms involved in chromosome segregation, Antibiotic resistance genes, Proteomics, Molecular docking, Diagnostic microbiology

Awards and Fellowships Obtained

- **ICAR-NET** (National Eligibility Test) - 2019
- **“Outstanding paper award”** in Medical Science, 26th West Bengal State Science and Technology Congress, 2019 by Department of Science & Technology and Biotechnology, Government of West Bengal

Teaching experience [4.5 years]

Presently serving as Assistant Professor, Department of Medical Laboratory Technology, Vidyasagar Paramedical Institute (affiliated to West Bengal University of Health Sciences), Simurali, Nadia, West Bengal

August 2015 - January 2017: Guest Lecturer, Department of Biotechnology & Biochemistry, Burdwan Institute of Management and Computer Science, (affiliated to The University of Burdwan), Purba Bardhaman, West Bengal

Research Indexes (as on 30. 07. 2025):

Criteria	Google Scholar Citation	Criteria	Research Gate
Total Citation	233	Score	156.7
Hi indexed	6	Citations	223
i10 index	4	Reads	3150
Citation since 2020	222	Hi indexed	6

Publications

- A BAR homology domain containing protein, EhABP is the novel interactor of EhAK7, an aurora kinase homolog in *E. histolytica*- **R Ghosh**, P Biswas, M Das, S Pal, S Dam - Current Research in Biotechnology, 2024 [**IF- 4**]
- *In silico* analysis of a Skp1 protein homolog from the human pathogen *E. histolytica*: **R Ghosh**, P Biswas, M Das, S Pal, S Dam - Journal of Parasitic Diseases, 2022 [**Peer reviewed international journal, Scopus, PubMed**].
- Pathological aspects of microbial phospholipases. **R Ghosh**, S Pal, S Sarkar, S Dam - Phospholipases in Physiology and Pathology, 2023 [**Book Chapter, Elsevier**].
- Unraveling the interaction between a glycolytic regulator protein EhPpdk and an anaphase promoting complex protein EhApc10: yeast two hybrid screening, in vitro binding assays and molecular simulation study-The Protein Journal: S Pal, P Biswas, **R Ghosh**, S Dam. [**IF-1.4**]
- Methanolic root peel extract of *Potentilla fulgens* L. shows anti- proliferative activity on root meristematic cells of *Lathyrus sativus* L. and antiamoebic activity on trophozoites of *Entamoeba histolytica* : A Ozukum, D Laskar, S Datta, **R Ghosh**, S Dam, R Nagi, C Ranjan Deb, R - South African Journal of Botany, 2023 [**IF 3.1**].
- Molecular characterization of EhAK6, an endonuclease V domain-containing aurora kinase protein from *Entamoeba histolytica*: Protein-protein interaction, docking and functional aspect. P Biswas, **R Ghosh**, M Das, S Pal, S Dam - Current Research in Biotechnology, 2021 [**IF-3.6**].
- *In silico* analysis and molecular identification of an anaphase-promoting complex homologue from human pathogen *Entamoeba histolytica*. S Pal, P Biswas, **R Ghosh**, S Dam - Journal of Genetic Engineering and Biotechnology, 2021 [**IF 3.5**].

- Oxidative Stress in *Entamoeba histolytica*. S Dam, P Biswas, **R Ghosh** - Oxidative Stress in Microbial Diseases, 2019 [Book Chapter, Springer Nature].
- EhSir2c, a Sir2 homolog from the human pathogen *Entamoeba histolytica* interacts with a DNA repair protein, EhRAD23: Protein-protein interaction, docking and functional study. P Biswas, M Das, S Pal, **R Ghosh**, S Dam- Journal of Biomolecular Structure and Dynamics, 2021 [IF 4.4].
- Exploration of photoreduction ability of reduced graphene oxide–cadmium sulphide hetero-nanostructures and their intensified activities against harmful microbes. S Ghosh, P Das, B Bairy, **R Ghosh**, S Dam, MB Sen - Journal of Materials Science, 2021 [IF 4.5].
- Transformation of CuS/ZnS nanomaterials to an efficient visible light photocatalyst by ‘photosensitizer’graphene and the potential antimicrobial activities of the nanocomposites. P Das, K Tantubay, **R Ghosh**, S Dam, MB Sen - Environmental Science and Pollution Research, 2021 [IF 5.8].
- *Madhuca longifolia* plant mediated green synthesis of cupric oxide nanoparticles: a promising environmentally sustainable material for waste water treatment and efficient antibacterial agent. P Das, S Ghosh, **R Ghosh**, S Dam, M Baskey - Journal of Photochemistry and Photobiology B: Biology, 2018 [IF 5.4].
- A new half-condensed Schiff base platform: structures and sensing of Zn ²⁺ and H₂ PO⁴⁻ ions in an aqueous medium. S Chakraborty, S Lohar, K Dhara, **R Ghosh**, S Dam E. Zangrando, P. Chattopadhyay - Dalton Transactions, 2020 [IF 4.0].
- Understanding *Entamoeba histolytica* Pathogenesis: In Light of Recent Advancements. S Pal, **R Ghosh**, S Dam- Advances in Health and Disease. Volume 54, 2022 [Book Chapter, Nova Science Publishers].
- Green synthesis of recyclable reduced graphene oxide-gold nanocatalyst using *Alstonia scholaris*: Applications in waste water purification and microbial field: P Das, B Bairy, S Ghosh, **R Ghosh**, S Dam, A Ghorai, M Baskey - Advances in Natural Sciences Nanoscience and Nanotechnology, 2023 [IF 2.1].

Expertise

Clinical Microbiology, PCR, Molecular Cloning, Protein Purification, Pull-down Assay, Western Blot Analysis, Yeast two-hybrid screening, qRT-PCR, Immunofluorescence, *Entamoeba histolytica* trophozoite culture, Cytotoxicity evaluation of human cells, *In vitro* cellular imaging, Antimicrobial Susceptibility

Testing, Microbiological Laboratory Techniques, Isolation of pure culture, Chromatographic separation methods, Handling and Restraint of Mice, Protein 3D structure prediction, Molecular docking.

Database deposits

GenBank Accession number for 16S rRNA gene sequences (from isolated pure bacterial cultures):
MH638274, MH638275, MH638276, MH638277, MH638278, MH638279, MH638280, MH638281, MH638282, MH638283, OM108446, OM108466, OM108486, OM108654, OM112313, OM112208, OM110923, OM112310, OM112215

M.Sc Project:

Project on “*Evolution of chemoprotective role of diphenylmethyl selenocyanate on cisplatin induced oxidative and renal stress in swiss albino mice*” in the Department of Cancer Chemoprevention, Chittaranjan National Cancer Institute, Kolkata, West Bengal.

Workshop attained

Workshop on chromatography (HPTLC, HPLC, GC, GC-MS, SPME-GC-MS) from the Department of Botany, University of Calcutta, 2016.

Presentation in Conference

International Conference on Advancement in Science and Technology (ICAST-2018), organized by Indian JSPS Alumni Association in association with Department of Physics, Visva-Bharati University, Santiniketan, West Bengal.

26th West Bengal State Science and Technology Congress, 2019 organized by Department of Science & Technology and Biotechnology, Government of West Bengal.

3rd Regional Science and Technology Congress-2018, jointly organized by Sidho-Kanho-Birsha University, Purulia & Department of Science & Technology and Biotechnology Government of West Bengal.

International Seminar organized by Michel Madhusudan Memorial College, sponsored by the Dept. of Higher Education, Government of West Bengal, 2019.

Present and future strategies to combat emerging and reemerging contagious disease, organized by Dept. of Microbiology, 2020, The University of Burdwan, Purba Bardhaman, West Bengal.

Online Profiles:

ResearchGate: <https://www.researchgate.net/profile/Raktim-Ghosh-4>

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