

Name: Rimpa Mondal

Date of Joining: 04.08.2018

Teaching Experience: Have 6 Years of teaching experience.

Biography: B.Sc. Chemistry (The University of Burdwan), M.Sc. Chemistry (University of Kalyani), Qualified CSIR-UGC National Eligibility Test held in December 2019 (All India Rank-124) in Chemistry.

Pursuing Ph.D. under the supervision of [Dr. Nillohit Mukherjee](#), Assistant Professor (Indian Institute of Engineering Science and Technology, Shibpur, An Institute of National Importance) & [Prof. \(Dr.\) Sk. Faruque Ahmed](#) (Aliah University, Newtown, Kolkata)

Academic Activities/Duties: Examiner of B.Sc. Chemistry (Honours & General) and Environmental Science (ENVS) of The University of Burdwan.

Teaching Area: Physical Chemistry (as Honours subject) & Chemistry (in General course), Environmental Science (ENVS).

Administrative Experience(s):

- I. Chemistry Departmental Co-ordinator (January, 2024 – August, 2024),
- II. Joint Convener of college Website Committee,
- III. Member of Computer Maintenance and Internet Committee.

Research Experience and Topic:

- I. **Total 05 (FIVE)** years (since 2019) of research experience as a Doctoral candidate.
- II. Served as a **Project Assistant** in the project “Nanostructured Materials and Interfaces for Enzymeless Electrochemical Sensing of Serotonin and Dopamine” funded by Department of Science, Technology and Biotechnology (DSTB), Government of West Bengal, India (Grant ID: T/P/S&T/16G-49/2017) from 2019 to 2021 at Indian Institute of Engineering and Science Technology, Shibpur, Howrah, West Bengal, India.

III. Currently working as a “**Research Scholar**” (since 2021) at Aliah University, Newtown, Kolkata, India; & Indian Institute of Engineering and Science Technology, Shibpur, Howrah, West Bengal, India in Synthesis of functionalized nanomaterials and semiconductor thin films for their applications in sensitive and selective electrochemical sensing of bio-analytes. [Google Scholar](#), [Research Gate](#)

Publication Details: Total 05 (Five)

Serial No.	Title	Book/Journal	ISBN/ISSN/DOI	UGC-Care Listed or Peer Reviewed	Published By	Date of Publication
1.	Ultrafast, Selective, and ppb Level In Vitro Electrochemical Sensing of Dopamine in a Simulated Interfering Environment: Comparative Study on the Effect of Carrier Type of Electrode Materials	ACS Applied Electronic Materials	https://doi.org/10.1021/acsaelm.4c00947	Yes	American Chemical Society (ACS)	31 st July, 2024
2.	Electrochemically Grown Hole-Rich NiO(OH) Thin Films toward Hole-Mediated Very Fast	ACS Applied Bio Materials	https://doi.org/10.1021/acsabm.4c00400 ISBN: 2576-6422	Yes	American Chemical Society (ACS)	3 rd June, 2024

	and Selective Enzyme-Free Electrochemical Sensing of Dopamine under Simulated Environment					
3.	Ultrafast and selective detection of dopamine by DC sputtered highly oriented CuO thin films: Effect of electroactive interfering agents and temperature	Microchemical Journal	https://doi.org/10.1016/j.microc.2024.110729 ISBN: 1095-9149	Yes	Elsevier	10 th May, 2024
4.	Electrochemically selective detection of dopamine over serotonin by CuO/Cu₂O bulk heterostructure electrode	Bulletin of Materials Science	https://doi.org/10.1007/s12034-023-03131-x ISBN: 0973-7669	Yes	Springer Nature	23 rd March, 2024
5.	Electrochemically Deposited Cu(II)/Cu(I) Oxide Heterostructure as Highly Sensitive Platform for Electrochemical	J. Inst. Eng. India Ser. D	https://doi.org/10.1007/s40033-023-00588-2 ISBN: 2250-2122	Yes	Springer Nature	22 nd January, 2024

Invited Talk: Total 01 (One)

- 13th Prof S.P Sengupta Memorial Function & One day Seminar on Multifunctional Materials: Technology & Applications, August 09, 2024 at Indian Association for the Cultivation of Science Jadavpur, Kolkata.

Paper Title: Development of advanced semiconducting electrodes/systems for the selective and fast detection of the neurotransmitter dopamine.

Paper/Poster Presentation Details: Total 04 (Four)

Serial No.	Title	Organized By	Date	Online/Offline
1.	Electrochemically deposited CuO/Cu ₂ O bulk heterostructures for efficient electrochemical sensing of organomolecules.	Young Scientist Colloquium, 2022, Materials Research Society of India (Kolkata Chapter) at CSIR-CGCRI, Kolkata.	16.12.2022	Offline
2.	Electrochemically deposited metal oxide thin film for competitive enzymeless detection of neurotransmitter.	Govt. Engineering Collge, Bikaner in joint auspices of Condensed Matter Research Society (CMRS).	09.10.23 & 10.10.23	Online
3.	Nickel-oxy-hydroxide [NiO(OH)] thin film as a potential platform for electrochemical detection of dopamine over serotonin.	Young Scientist Colloquium, 2023, Materials Research Society of India (Kolkata Chapter) at Jadavpur University, Kolkata.	01.012.2023	Offline

4.	A competitive study on the electrochemical sensing of dopamine and serotonin with p and n-type semiconductors as the working electrodes.	4 th International Conference on Material Science (ICMS-2024), Tripura University (A Central University), Agartala, India.	31.01.2024 & 02.02.2024	Offline
----	--	---	----------------------------	---------