

Arijit Das Adhikary

Indian Institute of Technology Bombay

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Research Interest

- Gene Regulation, RNA Dynamics, Structural Biology
- **Research Goal:** Understanding functions and dynamics of regulatory RNAs involved in antibiotic resistance

Publication

Mechanistic insights into 50S precursor recognition and targeting by erythromycin resistance methyltransferase. Sombuddha Sengupta, Rajat Mukherjee¹, Michael Pils¹, Siddharam Bagale, **Arijit Das Adhikary**, Aditi N. Borkar, Pushpangadan Indira Pradeepkumar, Christoph Engel, Arindam Chowdhury, Prem S. Kaushal, Ruchi Anand*. *Science Advances*, 2025

Education

- [2022 – Present]** **Ph.D. Structural Biology**, Indian Institute of Technology Bombay.
Advisor: Ruchi Anand, Structural Biochemistry Group, Dept. of Chemistry
Thesis: Understanding mechanisms of regulation of antibiotic-resistance-conferring genes
- [2017 –2019]** **Master's in Botany**, University of Calcutta. **GPA: 3.95/5**
Advisor: Binay Chaubey; Functional Genomics Laboratory
Thesis: Isolation, characterization, and phylogeny analysis of endophytic bacteria from the

Work Experiences

- Oct – Dec [2024]** **Visiting Research Fellow**. Julius-Maximilians-Universität Würzburg
Mentor: Claudia Höbartner; **Topic:** Chemical probing of RNA
- Sep – Oct [2021]** **CSIR-Skill Development Program**, CSIR-Indian Institute of Chemical Biology
Area: Cryo-EM- Sample Optimization and 3D Structure Reconstruction
Mentor: Jayati Sengupta

Select Honors & Awards

- [2022]** **Recipient** of Joint CSIR-UGC NET Fellowship
[2020] **Recipient** of ICAR-Junior Research Fellowship
[2020] **Qualified** Graduate Aptitude Test (IIT Delhi)

Teaching & Mentoring

- **Teaching Assistant for UG Students at IIT Bombay**
Course: UG Laboratory, Dept. Of Chemistry, 2022-Present
- **Summer Interns:** Suketu Dutta, IIT Bombay (2024), Anmol Dixit, Amity University Mumbai (2024)
Kartik Dixit, IISER Mohali (2025), Subhranil Chandra, IISER Bhopal (2025)
Nishita Malhan, Brown University, USA (2025)