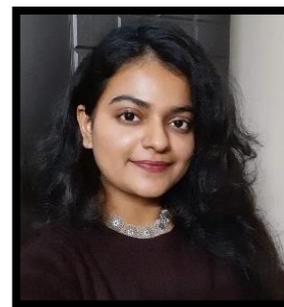


CV

ARUNIMA SINHA

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PERSONAL INFO:

DOB: 29th September 1999, 14, B.T. Road Rathtala, West Bengal, India

LANGUAGE KNOWN:

ENGLISH, BENGALI, HINDI

EDUCATIONAL QUALIFICATIONS

Degree	Institution	Board/University	Year	Marks/DGPA
M. Tech (Biotechnology)	Heritage Institute of Technology	MAKAUT	2023	9.51 DGPA
B. Tech (Biotechnology)	Haldia Institute of Technology	MAKAUT	2021	8.89 DGPA
12th (ISC)	Central Modern School	CISCE	2017	84%
10th (ICSE)	Central Modern School	CISCE	2015	86.5%

GATE 2023 Qualified – Biotechnology (IIT Kanpur)

Currently pursuing(2023-current): Doctor of Philosophy (Ph.D.)

(Supervisor: Dr. Indranath Chakraborty), School of Nano Science and Technology,

Indian Institute of Technology Kharagpur, India

(Co supervisor: Prof. Santanu Dhara), School of Medical Science and Technology,

Indian Institute of Technology Kharagpur, India

TRAINING & INTERNSHIPS

- **Industrial Visit, Indian Oil Corporation Ltd., Haldia (2020)**
Exposure to industrial-scale bioprocess and safety operations.
- **Winter Internship, IPGME&R and SSKM Hospital, Kolkata (Dept. of Endocrinology, 2019–2020)**
 - Project: “Genetic Analysis of FCPD Patients.”

- Hands-on experience in molecular biology and genetic diagnostics.
 - **Summer Internship, Bose Institute, Kolkata (2019)**
Gained experience in experimental biotechnology and research methodologies.
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RESEARCH & PROJECTS

- **M. Tech Project:**
“Association of DNA repair pathway gene’s polymorphism in pancreatic and gall bladder adenocarcinoma patients”, Heritage Institute of Technology and in collaboration with Human Genetic Unit, Indian Statistical Institute, Kolkata.
Techniques used: DNA isolation, PCR, gel electrophoresis, genetic variant analysis.
- **Poster Presentation:**
“Modified Phage Therapy – An Unstoppable Future Weapon Against Superbugs.”
Presented at NHBT-2019 (New Horizons in Biotechnology).

WORKSHOPS & CERTIFICATIONS

- **National Workshop on Application of Nuclear Science in Bio-Chemical Engineering, Agricultural Productivity & Food Safety (ANS-2019)**, Haldia Institute of Technology.
- **NPTEL Certification (IIT Madras) – Developing Soft Skills and Personality (Elite Grade, 2018)**.
- **Web Design Workshop (HTML, CSS, Bootstrap) –** conducted by MYWBUT.
- **International Seminar on Recent Advances in Molecules & Materials (2018) –** Poster on *“Lignin: A Wonder of Modern Biotechnology”*, organized by the Indian Chemical Society.
- Participated in the **“CoE Winter School on Molecular Materials and Functions -2024”** organized by the Department of Chemistry, Centre for Outreach and Digital Education, Indian Institute of Technology Madras on 04th - 08th December, 2024
- Participated in **SPARC workshop on Transmission Electron Microscopy for Advanced Nanomaterials (2025)**.
- Participated in **International Conference on Recent Advances in Medical Science and Technology (RAdMed 2025)**

SKILLS

- DNA/RNA isolation, PCR, gel-electrophoresis, cell culture assays, nanoparticle, nanocluster synthesis and characterization.
- Hands-on experience with UV-Vis, Fluorescence, Fluorescence-microscopy.
- Proficient in data interpretation, analysis, and surface morphology evaluation for understanding material stability, morphology, and functionalization using FTIR, XRD, SEM.
- Hands-on exposure to biocompatibility assays and nanomaterial–cell interaction studies.
- Soft Skills like Communication, teamwork, presentation, and leadership abilities.

Published Book Chapter

Maiti, A., Sinha, A., Sikdar, N., Chatterjee, S., Goswami, R., Kordbacheh, D. and Banerjee, S., 2025. 382 Future Vision of Protease Inhibitors in the Context of Cocktail and Singular Therapy. In *Handbook of Proteases in Cancer: Cellular and Molecular Aspects* (pp. 382-410). 2385 NW Executive Center Drive, Suite 320, Boca Raton FL 33431: CRC Press.

Upcoming Publications

- Fabrication of layer-by-layer assembled polyelectrolyte microcapsules: A laboratory experiment to introduce the polymeric self-assembly, microencapsulation process and chemistry behind it (*Journal of Chemical education*)
- Book Chapter – "Nanoparticles for Brain Drug Delivery" (Taylor & Francis)
- Understanding the colloidal particle uptake and cargo release at the Single-Cell Level: Quantitative Tools for Advancing Targeted Nanomedicine (*Nanoscale*)

DECLARATION: I hereby affirm that all information provided by me above holds true the best of my knowledge.

A handwritten signature in blue ink that reads "Arunima Sinha". The signature is written in a cursive style with a light blue background behind the text.

(SIGNATURE)