

Job Title: Project Assistant, Department of Chemistry, Ashoka University

Reports to: Dr. Sourav Chatterjee, Department of Chemistry, and Dr. Rintu Kutum, Department of Computer Science, Ashoka University

Location: Ashoka University, Plot No. 2, Rajiv Gandhi Education City, Rai, Sonapat, Haryana 131029

Experience (in years): 0-1 years

Nature of work: On-site, full time 40 hr/week

Salary (consolidated): Up to 35,000/- (based on experience)

About Ashoka University:

Ashoka University is India's premier interdisciplinary teaching and research university, an institution that has become a beacon of academic excellence in the less than 10 years since its inception. At Ashoka, we encourage you to embrace change, learn and grow continuously, and strive for excellence in what you do.

As part of our thriving and committed workforce, you will:

Be Mission-Driven: Champion interdisciplinary learning, innovative pedagogy, and academic rigor to transform Indian higher education.

Think Strategically: Collaborate with other innovative colleagues to shape the future of higher education through strategic planning and a forward-thinking approach.

Act Authentically: Embrace authenticity and integrity, fostering an inclusive and supportive environment where every voice is valued.

Take Accountability: Own your work and drive positive change, as an individual seeking to make a meaningful contribution.

Build Collaboration: Experience the power of teamwork and diverse perspectives, working collectively towards our shared goals.

Deliver Excellence: Strive for high quality in all aspects, upholding the highest standards of academic excellence, student support, and professional development opportunities.

At Ashoka University, we are on a mission to redefine higher education and create a remarkable space where innovation and collaboration thrives. As a **pioneering force in interdisciplinary learning**, we **continually grow and adapt** to stay at the forefront of educational excellence with emphasis on inclusivity and equal opportunity. Our philosophy revolves around **care, well-being, and connection**, which are deeply embedded in everything we do.

When you join our community, you become part of an extraordinary journey in which you can enhance your potential and make a meaningful impact.

About the Department of Chemistry:

At Ashoka, the Department of Chemistry teaches in an integrative and holistic manner connecting with other branches of science, physics, biology, and material chemistry. Mathematics and computer sciences play key roles in simulation of molecules and materials. As Ashoka moves to an integrative science teaching and research, Chemistry will play a major role in this development. The main aim of the department is to integrate interdisciplinary research with teaching. Chemistry will play a significant role in materials research, understanding of catalysis, nanoscale materials, harnessing of renewable energy, as well as in providing clean water, separation, and a clean environment. As a long term objective, the department will seek to carry out translation of many of the researches in the above areas for societal needs and connection with industries related to water, energy, and healthcare.

Role and Responsibilities:

The candidate will dedicatedly work in the screening of small molecule modulators for target proteins of interest using machine learning. The candidate will be responsible for literature review, drafting manuscript, experimental design and closely work with our collaborator (Dr. Rintu Kutum - Augmented Health Systems Lab, Department of Computer Science, Ashoka University). Potential candidate will have the chance to work in the intersection of drug discovery and advanced machine learning; and work in an interdisciplinary team members.

Briefly, the project focuses on developing geometric machine learning algorithms (such as predicting drug-target binding affinity with GNN) to predict active molecules against proteins of interest from a curated database (~4 million small molecules/compounds).

Qualifications and Skills Required:

- M.Sc./MS with specialization in Physical Chemistry. Candidates having strong interests towards pursuing PhD in this subject area are highly encouraged to apply.
- Candidates with additional academic exposure in computational chemistry and drug discovery are preferred (but not mandatory).
- Strong track record of outstanding academic performance.
- High presentation and report writing skills with proficiency in MS office i.e. Word/Excel/PowerPoint etc.
- Ability to work both autonomously and in a team.

Application Submission Process:

We invite you to submit your application to Dr. Sourav Chatterjee, Department of Chemistry, Ashoka University to ensure your candidacy receives the attention it deserves. Kindly follow the application submission process outlined below:

Prepare an Updated CV: Email your CV to sourav.chatterjee@ashoka.edu.in, ensuring the subject line reads as follows: “Project Assistant – Drug Target Binding Affinity – <Applicant Name>”. Also, fill up the following application form.

Submit Your Application: <https://forms.gle/KZA19Kme4zCcQij69>

Include Essential Details: Along with your latest CV with publications (can be pre-print), kindly share the following documents:

- Statement of Purpose (1 page) - your motivation for the position and long term plan.
- One letter of recommendation from the previous mentor/institute/organization (can be academic thesis/dissertation mentor)

Adherence to Deadlines: To ensure fairness and efficiency, please submit your application by **10th Sept, 2024**. Applications received after the deadline will not be considered.