

We are a company currently in stealth mode that aims to transform the development of processes for new synthetic chemical entities in the pharmaceutical industry. We combine mathematical modeling and experimentation to reduce development times and costs. One of our founders is a pioneer in the application of the “hybrid approach” to drug development and the current scientific leader in area. Our R&D lab is expected to start operations in Medellin (Colombia) in the second half of 2026 to support global pharma companies such as AstraZeneca, Pfizer, Eli Lilly, etc.

We are seeking talented chemical engineers with a PhD in Chemical engineering to join our lab. We will consider PhD candidates that are one or two years away from graduation or PhDs that graduated one or two years ago. The successful candidates will be highly productive, result-oriented individuals, who can apply fundamental chemical engineering principles to develop synthetic processes. Also, strong communication, organization, and planning skills and a high level of technical aptitude and the ability to work independently in the lab are required for this position.

The responsibilities of the role include, but are not limited to, the following:

- Make use of state-of-the-art experimental and modeling approaches and/or data analyses for the evaluation and understanding of engineering unit operations including reactions, extractions, adsorption, crystallization, and separation technologies, drying as well as particle engineering.
- Develop and demonstrate commercially viable, multi-step, organic processes for the manufacture of small-molecule advanced intermediates and active pharmaceutical ingredients and independently develop creative solutions to overcome obstacles during development.
- Independently summarize and interpret analytical data.
- Collaborate with chemists and analytical chemists to integrate synthetic chemistry knowledge into projects.
- Stay up to date with advancements in experimental and modeling approaches, incorporating them into projects as appropriate.
- Author technical reports and present technical results internally and to customers.
- Maintain lab notebooks and logbooks in accordance with company guidelines.
- Adhere to safety protocols and best practices in the laboratory.
- Supports knowledge transfer to clients.

Required skills

- Proven track record applying chemical engineering fundamentals including applied kinetics, thermodynamics, and transport phenomena
- Experience with common process modeling tools (e.g. Matlab, Python, gPROMS, etc.)
- A demonstrated understanding and working knowledge of synthetic chemistry
- Familiarity with modern laboratory instrumentation (HPLC, GC, NMR).
- Ability to successfully interact and collaborate with clients and deliver high quality data and knowledge milestones
- Values teamwork and collaboration to solve problems and design strategies.
- Proven communication (verbal and written) and interpersonal skills.

Preferred skills

- Familiarity with statistical design of experiments (DOE) and related software.
- Familiarity with common laboratory automation tools (PLCs)

Required Education and Experience

- BS in Chemical engineering
- PhD in Chemical engineering

We are offering full-time contracts with highly competitive salaries and relocation and immigration support. We will be screening candidates in June/July 2025. If you are interested in this opportunity, please submit your resume to startuppharma@outlook.com before June 30 2025.