Alta Resource Technologies, Inc.

Scientist I/II, Strain Engineering

Location: Boulder, CO
Reports To: Sr. Director of Applied Biology

About Us

Alta is reinventing how the world sources critical minerals — using protein-based chemistry to extract rare earth elements and other essential materials from challenging feedstocks with unmatched selectivity. By dramatically reducing the cost and environmental impact of mineral separation, Alta is making it possible to unlock new sources of supply for 21st-century technologies. As global demand accelerates, securing these materials has become one of the most urgent challenges facing U.S. competitiveness and national security. Backed by top investors and government partners, Alta is growing fast and hiring mission-driven scientists and engineers to help us scale our platform and transform the future of mining.

Role Summary

Alta is seeking a motivated and skilled **Scientist I/II in Strain Engineering** to join our Applied Biology team. This role will be responsible for applying principles of genetic engineering, molecular biology, and metabolic models to improve expression of target proteins from a Bacillus host. This role will be a key contributor for both high-throughput screening and scale-up fermentation and will interface across teams for continuous and systematic improvement.
A successful candidate will have expertise in Bacillus biology and will have a record of success in applications of molecular biology to improve strain function. The candidate will have experience in high-throughput genetic designs and downstream assays and be comfortable with agile workflows. The candidate will work within a multidisciplinary team to execute on multi-scale approaches to identify lead strains and expression conditions and develop robust protocols for transfer within internal and external groups. The individual will join a group of collaborative

scientists with diverse skill sets and must have strong communication and critical thinking skills with a rigorous approach to science.

Key Responsibilities

- Engineer Bacillus host strains and expression architectures using genetic manipulation techniques and molecular biology approaches.
- Leverage metabolic engineering and molecular assays towards protein expression optimization in relevant fermentation conditions to improve titer, rate, and yield.
- Develop and execute high-throughput screening assays to improve production hosts and architectures.
- Collaborate with data scientists, protein engineers, and the bioproduction team to achieve rapid scale-up of candidates determined through reliable plate-based screening approaches.
- Ensure excellent practices in documentation of all protocols and experiments.
- Effectively communicate results with stakeholders across the company.

Required Qualifications

- PhD in Synthetic Biology, Metabolic Engineering, Molecular Biology, Microbiology or a related field with 1-3+ years additional field-specific experience.
- Expertise in Bacillus biology and genetics.
- Expertise in high-throughput molecular biology.
- Experience utilizing metabolic engineering and profiling to optimize microbial hosts.
- Experience with automated workflow development.
- Experience with bioinformatics tools and sample management software.
- Demonstrated knowledge of experimental design, the scientific method, and statistical analysis.
- Strong written and verbal communication skills and ability to work within different teams.
- Strong organizational and documentation skills.

Preferred Qualifications

- Experience with metalloprotein biochemistry.

- Experience with bioconjugate chemistry.
- Experience with principles of protein production.
- Proficiency in working with data science teams for scripting pipelines and bioinformatics.

Compensation & Benefits

The starting pay range for this position is $82,000 - $120,000 commensurate with educational background and work experience.

Benefits include:

- 401(K)
- Medical, Dental, Vision plans (or equivalent)
- Flexible Time Off
- Paid Parental Leave
- Paid Sick Leave
- Company Holidays

EOE

At Alta, we are committed to diversity and inclusion. As an equal opportunity employer, all qualified candidates will be considered for employment without regard to race, color, creed, religion, age, sex or gender (including pregnancy, childbirth, lactation and related medical conditions), gender identity or gender expression, sexual orientation, marital status, national origin, ancestry, citizenship status, military service or veteran status, physical or mental disability, or any other legally protected characteristic. Alta participates in e-Verify for all positions.

If you have a disability or special need that requires accommodation at any point in the hiring process, please let your recruiter know.

How to Apply

To apply, please email your resume and a cover letter (see below) to **talent@altatech.io**.
Include your name and the job title in the subject line (i.e., [Your Name] – [Job Title]).

All applications **must include** a one-page cover letter. The cover letter should clearly state your interest in the position and our company, outline 2–3 specific technical skills or accomplishments relevant to the role, and demonstrate how your experience aligns with our mission and technology platform. We expect concrete examples that illustrate measurable impact and collaborative

problem-solving in technology development. Applications submitted without a cover letter will not be considered.