



Alta Resource Technologies, Inc.

Senior Process Engineer

Location: Boulder, CO

Reports To: VP of Engineering and Operations

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 talented **Senior Process Engineer** to join our growing Engineering and Operations team. This role will lead the design efforts for major projects with a key initial focus of scaling-up of our process from Demonstration scale to Semiworks facilities, which form a critical path for Alta's business strategy. This role will be a key contributor to our innovation pipeline.

A successful candidate should have experience with equipment and process design in the Chemicals, Petrochemicals, Oil & Gas, and/or Mining Process Industries; having worked for operating companies, EPCs and/or licensors. There should be a strong desire to collaborate across disciplines including chemistry, biology, and engineering. The role requires full-time, on-site presence at our Boulder Facility.

Key Responsibilities

Plant Design:

- Define the optimal process configuration for Alta's rare earth element Process Design Package
- Oversee and develop heat & material balances, equipment sizing, and PFD/P&ID development
 - Working/design knowledge of adsorption, column separation, chromatography, solid/liquid separation, solids handling, rotary kilns/calciners would be an asset
- Lead the detailed design work by reviewing and approving key engineering deliverables
- Provide guidance on process safety, operability and reliability in design
- Oversee and develop process simulations
- Provide input to advanced data analytics

Project Execution:

- Support project development through feasibility studies, FEED, and EPC
- Interface with suppliers, vendors and licensors to align on technical requirements and objectives
- Lead technical risk assessments including HAZID, HAZOP, LOPA and SIL studies
- Develop commissioning and performance validation plans

Design Improvements:

- Contribute to technology improvement work and optimization studies
- Work with the demonstration plant and pilot plant teams to create Design of Experiments
- Foster collaboration across various disciplines to ensure integrated and optimized design
- Interface with licensors and vendors to improve design of key equipment

Other Responsibilities:

- Support development of Engineering Standards
- Become the Subject Matter Expert (SME) in Alta's rare earth element process technology
- Mentor junior Engineers

Required Qualifications

- Bachelor's or Master's in Chemical Engineering or Metallurgical Engineering
- At least 7 years of experience in a similar position in an Engineering, Technology or Operating company (Preferably in the Chemical/Petrochemical and/or Mining Processing)
- Design of Process Plants and Equipment
- Process Safety Management
- Leading cross-functional teams

Preferred Qualifications

- Design of Mining Processing equipment including hydrometallurgy is an asset
- Operational experience in an Operating plant is an asset
- Knowledge of Industrial scale chromatography separation is an asset
- Working knowledge of scaling-up from R&D to Commercialization is an asset

Compensation & Benefits

The starting pay range for this position is [\$145,000 - \$200,00], 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.