

## **Job Description: Hydrometallurgist / Process Chemist**

**Position Title:** Process Chemist

**Location:** Las Vegas, Nevada (Hybrid possible)

**Reports To:** Technology Director

**Department:** Technology Development / Process Engineering

**Industry:** Chemical Processing / Mineral Extraction / Hydrometallurgy

**Travel Requirement:** Up to 25% (Domestic and International)

### **Company Overview**

We are a mineral extraction technology company focused on developing innovative, efficient hydrometallurgical technologies to recover critical metals from mineral resources. As we advance our technology and project portfolio, we are seeking a highly motivated Process Chemist to support chemistry development, experimental programs, data generation, scale-up, and technical process support.

### **Position Summary**

We are seeking a highly analytical and driven Chemist to join our technical team. In this role, you will support the development, optimization, and scaling of hydrometallurgical chemical processes for mineral extraction, purification, and refinement. This role is based in the Las Vegas, Nevada area, and requires travel to domestic and international production sites, laboratories, and client facilities to support testing and scale-up operations and provide technical process support.

### **Key Responsibilities**

- **Chemistry Analysis & Experimental Design:** Translate priority chemistry questions into testable hypotheses and design laboratory programs to resolve them, including controls, variables, analytical requirements, and acceptance criteria. Use thermodynamic and aqueous-chemistry tools, including OLI and HSC where appropriate, to support interpretation, identify data gaps, and define the next technical test.
- **Process Development:** Define the chemistry inputs, constraints, operating windows, and evidence required to support process design and optimization for mineral extraction, separation, and purification.
- **Scale-Up & Implementation:** Define the chemical conditions, operating windows, and measurements that must be preserved or validated as work progresses from

laboratory testing to pilot and commercial scale, collaborating closely with process and design engineers.

- **Materials Analysis:** Utilize data from advanced analytical techniques (such as XRD, XRF, ICP-OES, ICP-MS, and SEM) and define fit-for-purpose analytical methods, QA/QC interferences, and sample-handling requirements needed to answer the technical question.
- **Troubleshooting:** Conduct root-cause analysis for chemical processing issues at processing plants, providing on-site and remote technical support.
- **R&D Innovation:** Investigate novel reagents, catalysts, and processing methodologies to improve yield, reduce environmental impact, and lower operational costs in mineral processing operations.
- **Technical Reporting:** Prepare traceable and reproducible technical reports and process documentation that clearly distinguish data, interpretation, assumptions, limitations, and recommend next steps for internal stakeholders and external clients.

## Qualifications

- **Education:** Master's degree or Ph.D. in Inorganic Chemistry, Analytical Chemistry, Environmental Science, Chemical Engineering, Metallurgy, or a closely related field is strongly preferred. (A bachelor's degree may be considered with exceptional, highly relevant industry experience).
- **Experience:** 1 to 7 years of hands-on experience in inorganic or analytical chemistry, aqueous chemistry, hydrometallurgy, experimental design, or related chemical-process development. Experience with thermodynamic or speciation modeling is desirable.
- **Technical Skills:** Deep understanding of transition metal chemistry, coordination chemistry, and phase equilibria. Familiarity with mineralogy and extraction metallurgy is highly desirable.
- **Analytical Proficiency:** Hands-on experience with instrumental analysis methods used in inorganic materials characterization, including fit-for-purpose method selection or validation, matrix interferences, sample stability, and QA/QC considerations.
- **Communication:** Good verbal and written communication skills, with the ability to translate complex chemical data into actionable engineering and business insights.

## **Working Conditions & Travel**

- **Location:** This position will preferably be full-time in the Las Vegas, Nevada area. Locations in Chile are an option. This position offers flexibility for limited hybrid day-to-day data analysis, research planning, and reporting.
- **Travel:** Must be willing and able to travel up to 25% of the time. This includes domestic travel within the United States and potential international travel to processing plants, mining sites, and pilot facilities. Must possess or be eligible to obtain a valid passport.
- **Reporting:** This position reports to the Technology Director located in Santiago, Chile.

## **Physical Requirements**

- Ability to work in laboratory and heavy industrial plant environments during travel periods.
- Commitment to adhering to strict safety and PPE protocols when visiting chemical and mineral processing sites.
- Fluency in English is required. The ability to communicate in Spanish is desirable.

## **Compensation and Benefits**

Compensation will be competitive and commensurate with experience. The company offers the opportunity to play a key role in advancing innovative copper extraction technologies and to grow alongside a rapidly developing organization.