Hydrometallurgy Chemical Engineer – Fairfield, Ohio

Please send your resume to careers@nthcycle.com or contact Pat Perillo in HR directly at perillo@nthcycle.com.

Who we are.

Demand for critical minerals to power the energy transition is growing exponentially. Yet, we know mining deeper and broader, and building landfills higher and wider, works against our fight to save the planet. At Nth Cycle, we see the path forward. We believe all the critical minerals needed for the energy transition are already in circulation today. We just didn’t have a clean, profitable way of retrieving them, until now.

Nth Cycle is a metal processing technology company. Our electro-extraction technology helps battery recyclers and miners capture more critical minerals—for use in lithium ion battery manufacturing, among other things—while dramatically reducing costs and emissions. We are the heart of metals processing; we are the crucial step that profitably separates critical minerals from other elements, transforming them into production-grade feedstocks for the energy transition.

Our Culture.

We’re a dynamic team looking for a new team member who’s also passionate about addressing climate change and advancing the clean energy industry. Consistent with our commitment to diversity & inclusion, we value colleagues with the ability to work on diverse teams and with a diverse range of people.

Position description.

This position will focus on basic lab operations needed for the characterization of materials collected by an electro-extraction technology for Li-ion battery recycling. The project involves using basic lab techniques to collect samples, prepare samples for analysis, and learn multiple characterization techniques. Day-to-day responsibilities will include general laboratory operations, developing technical proficiencies for preparing, handling, and running samples through various instruments. This position will be in constant communications with suppliers, the R&D team, and Product Lead to achieve fast passed objectives as a team leader, team member, and technical contributor.

Key responsibilities and accountabilities.

- Design, develop, and commission chemical preprocessing equipment and instrumentation based on R&D optimizations.
- Establish and carry out test validation for new processes, equipment, and products made.
- Perform Inductively Coupled Plasma - Optical Emissions Spectroscopy, Fusions, and Acid / Base Chemistry with excellence.
- Manage small to large capital projects for delivering needed results within budget and schedule.
- Communicate technical results and challenges across the organization to advance product development.
- Demonstrate understanding of established manufacturing processes and equipment.
- Establish and document manufacturing methods, processes, manuals, and training.
- Demonstrate safety leadership particularly with chemical operations (gas generation, pressure vessels, exothermic reactions, corrosive materials, etc.)
- This safety consciousness should permeate beyond designs and into daily life.
- Lead or participate in safety reviews such as HAZOP, which includes providing technical assistance with corrosive material concerns, cross contamination of chemicals, etc.
- Assist in implementing environmental improvement initiatives particularly with respect to emissions, pollutants identification, effluent control, neutralization of caustics/acids, etc.

Qualifications and experience.

- Qualified candidates will possess a strong combination of the following:
  - BS or MS in a Chemical Engineering, Chemistry or Metallurgy.
  - 1-5 years experience in a related environment
  - Familiarity with chemical process scale up
  - Experience with acidic reactions and metal dissolution
  - Strong technical skills and analytical understanding
  - Flexible thinking especially while problem solving
  - Strong verbal and written/digital communication skills
  - Attention to detail and deadline and budget aware
  - Previous experience with environmental permitting - desirable
  - Previous experience/certifications in Lean manufacturing, 5S, and/or Six Sigma - desirable
  - Ability to work in a fast-paced environment.

Closing Statement.

Consistent with our commitment to diversity & inclusion, we value people with the ability to work on diverse teams and with a diverse range of people. We especially encourage members of traditionally underrepresented communities to apply, including women, people of color, LGBTQ people, veterans, and people with disabilities.

Come help us build a billion dollar company and redefine the critical minerals supply chain.