



NTH CYCLE

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

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.

You won't find another team like ours. We believe in open, honest communications, and enjoying our work while changing the world.

We're a dynamic team looking for a new team member who is also passionate about addressing climate change and advancing the clean energy industry. Come help us build a billion dollar company and redefine the critical minerals supply chain.

Position description.

Lead the technical roll out of our innovative electro-extraction solution in the mining and metals industry. Proven success navigating complex flowsheets and identifying potential plug-and-play opportunities for the Nth Cycle technology will be the key to consulting with our potential partners and generating proposals to meet their unique metals and material upgrade needs. This role will work with the research, development, and engineering teams to deliver metallurgic solutions in areas such as: selective leaching procedures for new metal feedstocks, selective precipitation processes for complex metal solutions, and development of test parameters to validate new materials, and characterize metal products. This role will mostly be hands-on laboratory efforts, but success will likely require interfacing virtually and in-person with customers and partners.

- Creating and maintaining an active feedstock database to compile methods and build knowledge base
- Develop procedures to characterize incoming feedstocks and determine pre-processing needs
- Develop and execute procedures to digest new feedstocks for specific application metrics
- Collaborate with the technical team to scale pre-processing methods for improved performance
- Develop advanced hydrometallurgic methods that utilize electroextraction as a novel replacement for classical hydrometallurgical techniques such as acid digestion and chemical precipitation
- Communicate technical results and challenges across the organization to advance product development
- Preparing and presenting metallurgic flowsheets
- Identifying potential electroextraction plug-and-play sites in pre-existing metallurgic flow sheets
- Characterization of metal and metal hydroxide products



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Qualifications and experience-3-5 years professional or academic experience in the metallurgy, mining engineering, geological engineering, or a related field with an experimental focus.

- Relevant electrochemistry related hands on experience.
- Ability to work hands-on in lab individually and as a team.
- Demonstrated aptitude in aqueous & solid metal analyses such as AA, ICP-MS, UV-vis, XRD, XRF, XPS, EDS, SEM, etc.
- Extensive experience with Microsoft Excel and other spreadsheet and modeling tools such as Matlab, Python, Comsol, etc. for quantitative data analysis and geochemical simulations.
- Strong written and oral communication skills.
- Thorough technical understanding of metal dissolution-precipitation equilibrium, kinetics, and mechanisms to allow for rapid theoretical qualitative feedstock analysis and in-depth quantitative analysis.

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.