

Senior Chemical Engineer

Area

At Lithium Americas (LAC), we believe that the development and mining of mineral resources can – and should – be done sustainably. The world is in transition toward brighter means of energy use and transportation, where lithium is an enabling ingredient. We are thus on a mission to develop and deliver lithium to the world in the most sustainable ways possible.

It starts with finding and defining accessible, lithium-rich resources. Then, it is about demonstrating the technical viability, and economic attractiveness, of novel approaches for extracting lithium while safeguarding the environment. Our plan is to develop our assets, two lithium-bearing deposits in Argentina and Nevada, into executable, low-cost, environmentally-sustainable lithium production operations. This means pursuing approaches that are energy-efficient, carbon-neutral, conservation-grounded, and technology-based. We are looking for people, with ambition, energy and talent, to join our efforts.

Role

The Senior Chemical Engineer will be the primary lead in developing chemical process models, data analysis, and evaluating competing process technology options. You will form a critical part of the technical development efforts, using your models to guide the team’s decision making on flowsheet design, pilot testing approach, and selecting technology options. The modeling and analysis will include, but not be limited to, thermodynamics and kinetics modeling, mass-energy balance calculations, and test data analysis. Focus will be on our Lithium Nevada project, a clay-based lithium resource with a process flowsheet that is under development. The role may also support process technology development for our Argentina-based project, a brine-based resource that is already under construction with our JV partner. The role may be based in Vancouver, Reno, or the Bay Area; other locations could be considered for the right candidate.

Responsibilities

As a technical lead on the team, we would look to you for:

- Developing the process models and data analytics techniques that form the basis for designing and engineering salt extraction processes from clays, from desk-top flowsheet design to commercial ramp-up facility.
- “Owning” the mass-energy balances, thermodynamics and kinetics modeling, and data analytics tools. The output of this work will inform the testing and piloting approach, and vice-versa.
- Working closely with process engineers, geologist, contractors and others to (a) build process models and simulations on sound assumptions and reliable test data, (b) identify and execute on ways to optimize cost and environmental footprints of the process plant, and (c) advance the

models and simulations through continuous improvements and iterative step-development, in line with learning from testing and piloting work.

- Support and project manage the evaluation and selection of advance process technologies through cost/benefit analysis.
- Engaging and managing relevant contractor relationships and technology partnership programs.
- Building and developing a technical team of contractors and/or internal hires.

Job qualifications

Required

- Minimum 4 years of experience in developing chemical process development projects.
- Demonstrated leadership in “owning” the model of development engineering efforts in the chemical and/or mining sector.
- Experience in developing complex mass-energy balance calculations for pyrometallurgical and hydrometallurgical processes.
- Proven ability to trouble-shoot while building or running a plant at pilot and/or commercial scale; quantify and analyze chemical reactions using thermodynamics + kinetics simulations, phase chemistry analysis, and test data inputs.
- Familiarity with software programs such as Metsim, Syscad, or similar chemical modeling platforms.
- Project management and team-leading experience.
- University-level education in chemical, mining, materials, computer or similar, with emphasis on chemical process modelling and data analytics.
- Ability to “think outside the box” and stretch yourself with ambitious, far-reaching goals.
- Strong communication and organizational skills, with the ability to bring out the best in others.

Preferred

- Direct experience as the modeling/analysis lead on a project that started from desk-top study and lead to pilot and/or commercial scale operations.
- Exposure to relevant work experience in clay and/or lithium-bearing resources.
- Exposure to the mining and/or lithium processing sector a plus.
- Experience with machine learning and “big data” approaches to solving problems a plus.

Please submit your resume, references, and a short note as to your motivations on why you’d like to pursue this role to: HR@lithiumamericas.com.

LAC is an equal opportunity employer. LAC is a Canadian listed public company with two advanced lithium development projects in Argentina and Nevada, USA.

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