

Senior Process/Chemical Engineer

Position summary

The Senior Process/Chemical Engineer will work as part of a multi-disciplinary team of engineers and scientists to design complex facilities. The candidate will provide services in support of two innovative projects: the Stable Salt Reactor - Wasteburner (SSR-W) and the WASTE To Stable Salt (WATSS) fuel processing facility. This position reports directly to the Lead Process/Chemical Engineer.

Position: Senior Process/Chemical Engineer

Status: Permanent, full-time

Location: Saint John, NB, Canada

Reports to: Lead Process/Chemical Engineer

Apply: Please submit a resume and cover letter to careers@moltexenergy.com and indicate the job title in the subject line.

NOC code: 2134

The candidate will be responsible for the design of specific process and chemical process systems, from conceptual to detailed design, according to site specifications, design criteria and safety requirements. The candidate must take into account the availability of technologies in nuclear and non-nuclear facilities.

Responsibilities

- Develop conceptual/engineering/detailed design of the chemical process systems that are feasible at an industrial scale, based on fundamental and applied research
- Undertake design tasks for the SSR-W/WATSS facilities based on regulatory and business requirements, and integrate required technologies into the facilities
- Produce key process design documentation such as Mass Balance, PFDs, P&IDs, SIDD, hydraulic analysis (line sizing, valve sizing etc.)
- Work in a fast-paced multi-disciplinary team and take the initiative to support in unconventional engineering and science related tasks
- Manage activities to the highest standards of safety, security, quality, reliability and efficiency, in conformance with established programs, policies, processes, regulations and appropriate contractual requirements
- Evaluate the feasibility of the system or component designs that are delivered by in-house teams and suppliers, and identify research and development needs
- Perform hazard analyses to identify internal and external facility hazards
- Interact with engineering service companies, manufacturers, research teams, regulators and stakeholders.
- Verify and validate process and chemical process analysis tools
- Provide technical and strategic advice to senior management

Skills, qualifications & experience

Essential:

- Advanced degree in process/chemical engineering or similar engineering discipline
- 8+ years' experience in process engineering design of complex facilities, from the conceptual phase to the detailed design phase
- Experience within the nuclear industry – particularly in a gated design process
- Solid academic foundation of the chemical and physical principles that support process engineering
- Ability to direct and supervise computer-aided engineering models for process and chemical process systems

Desired:

- Experience in plant designs that use molten salts
- Experience in chemical engineering and knowledge of materials and corrosion
- General knowledge of the nuclear industry (nuclear reactors, radioactive waste treatment plants, fuel reprocessing, etc.)
- Supplier management experience
- PEng licence in New Brunswick or commitment to obtain it

Behavioural skills & personality



- Strong problem-solving skills and technical credibility to ensure work complies with internationally accepted professional standards and scientific methods, coupled with the ability to offer new and different options to solve problems when necessary
- Strong ability to find simple and economical solutions that meet safety requirements
- Ability to take initiative and deliver results
- Effective leadership and communication skills
- Good team leadership skills with a demonstrable ability to collaborate with team members and reach consensus on the way forward
- Good time management skills, with awareness of the scope of the different engineering phases, and ability to consider potential changes and propose contingency plans
- Ability to thrive both in a relatively small structure and in relation to large service provider companies

What Moltex offers...

Moltex boasts a diverse team of professionals collaborating daily across time zones. For those on board, it is going to be a challenging and rewarding journey. The office is in the city centre with various nearby amenities. Moltex employees have access to a full range of benefits including:

- Paid vacation and personal days
- Flexible work environment
- Learning and development resources
- Excellent growth opportunities
- Optional compressed work week
- Medical, dental and vision
- 13 statutory and other holidays
- Complimentary refreshments

Moltex is an equal opportunity employer. Moltex prides itself in having a team that promotes diversity, inclusion, leadership, mindfulness, high initiative, energy and passion.