

Nuclear R&D Chemist

Position summary

The Nuclear R&D Chemist will work in Moltex's R&D department to lead and supervise chemistry and chemistry-related work that supports the development of Moltex nuclear technologies, including the Stable Salt Reactor - Wasteburner (SSR-W) and the WAste To Stable Salt (WATSS) facility.

Position: Nuclear R&D Chemist **Status:** Permanent, full-time

Location: Saint John, NB Canada

Reports to: Head of R&D

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

Responsibilities

- Conduct R&D needs analyses, including defining experiments for Moltex technologies, which are likely to include experiments related to:
 - o fuel salt/Coolant salt phase diagrams
 - o noble gas solubility in fuel/coolant
 - o miscibility of fuel in coolant
 - o evolution of properties over time
 - o redox control of fuel salt
 - o redox control of coolant salt
 - o vapour pressure
- Execute experiments defined in the R&D needs analyses
- Support the technical oversight of chemistry work packages outsourced to national laboratories, academia and similar organizations
- Perform practical and theoretical chemical investigations, including desktop studies (e.g., using of HSC/FACTSAGE) in support of the chemical processes being considered for the Moltex technologies
- Design and oversee chemical experiments, and integrate the results into the design of Moltex technologies
- Lead the analysis, interpretation, reporting and dissemination of results to the multi-disciplinary groups across North America and the UK.
- Deliver work packages and related deliverables, and manage work package schedules, budgets and resources
- Check and approve the deliverables produced by the chemistry team

Skills, qualifications & experience

- Masters' or higher degree with relevant industrial experience
- Experience leading chemistry projects with defined schedules and budgets in a commercial laboratory environment
- Experience working in a dynamic team environment
- Practical laboratory experience and willingness to work with high temperature materials
- Experience defining, planning and executing experiments
- Experience working to challenging deadlines on projects for industrial customers
- Experience leading team members (including PhD students and other placements) through experimental work packages



- Practical and pragmatic individual motivated to deliver laboratory results that move the Moltex mission forwards
- Experience specifying, procuring, using and maintaining analytical equipment

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 refreshment

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