



Role Description/Candidate Profile

Position	:	Analytical Services Technician (ICP-OES)
Department	:	R&D/Technology Group in support of Operations
Location	:	Neo Performance Materials ULC -Peterborough
Reports to	:	Manager of Technology
Date Prepared	:	February 2022

Neo Performance Materials

Our Company is one of the world's leading manufacturers of custom engineered rare earth and rare metal products. Neo operates multiple advanced downstream processing facilities. With 26 locations across 11 countries, and more than 1,800 employees, our global footprint and multiple product supply chains enables us to be a reliable supplier of advanced materials to our customers worldwide to see our major facilities across the globe.

The Neo Performance Materials ULC facility in Peterborough has produced high purity gallium and indium through recycling since 2003. Key unit process operations are leaching with mineral acids/bases, solid/liquid separation, precipitation, solvent extraction, electro-winning and electro-refining. The Technology Group, which includes R&D, Analytical and Engineering Management Services resides within the Peterborough production facility, but it works on an international platform.

Job Description

You will be joining a small, high skilled R&D group. This implies that we are seeking a candidate that enjoys hands-on work, shared responsibilities and has diversified skills. As a figure of speech we aspire to recruit an experienced ICP technologist who has mastered his/her analytical skills, but also has other skills to offer or is willing to learn them. The job description covers a wide field of knowledge from metallurgical test work to analytical chemistry combined with good interpersonal skills. The employee will have no supervisory responsibilities. It's about team work.

The employee is responsible for the successful delivery of various analytical (1st priority) and technology (2nd priority) activities within the Rare Metals Division of Neo Performance Materials ULC based in Peterborough, Ontario. The employee will report to the Technology Manager and will have the following accountabilities:

General Duties

- Maintain and operate an ICP-OES instrument, performing analyses on a variety of materials and elements (Greater than 50% of your time will be assigned to ICP analysis)
- New method development for new matrices
- Determine detection limits, analysis errors
- Maintain the QC/QA program for both ICP-OES, ICP-MS and AA
- Ordering reagents, standards, labware and other supplies as needed to operate the ICP-OES
- Install, maintain, calibrate and operate laboratory equipment (e.g. pH & conductivity meters, PSD analyzer, titration equipment, centrifuge, etc.).
- Perform other laboratory tests such as: particle size distribution, gravimetric, titration, ion chromatography, tap and bulk densities, etc.
- Prepare samples for characterization techniques conducted in-house or externally (e.g. ICP, AA, SEM, XRF, TGA, BET, PSD, XRD).
- Perform additional assignments and responsibilities as assumed or requested by the R&D Manager.

Experience and Skills Required

- **Minimum 5 years of ICP operational experience** in a metallurgical or analytical chemistry laboratory.
- Prior experience in hydrometallurgy/inorganic chemistry/materials engineering is a strong asset.
- Hands-on experience in a chemical manufacturing plant environment and/or handling hazardous chemicals is another preferred attribute.
- Candidates should possess intermediate computer skills in various types of computer software (e.g., Microsoft Word, Excel, etc.) and the Internet.
- Demonstrates strong verbal and written communication skills in English.
- Ability to work both independently and to work well with others, sometimes under time constraints.
- Strong organizational skills with **a pro-active approach** and **willingness to learn constantly**.
- Ability to multi-task and meet deadlines.
- Strong problem-solving skills, proven time management skills and **a strong attention to detail**. Solution oriented with the ability to see the overall picture of the problem.

Education

- Post-secondary education (CET, Senior Technologist, BSc) in an Analytical Chemistry, Metallurgy, Chemical Engineering, or related program.

HSE Requirements

- Follows all company health, safety and environmental policies and reports any discrepancies, incidents, accidents, or concerns to his/her manager and/or the Health, Safety & Environment Coordinator.
- Demonstrates good and safe work habits and maintains a clean working environment.
- Promotes a culture of 'safety first' in the lab at all times and is active in safety meetings and assisting in making the company a leader in safety performance.