Job Title: Stable Isotope Research Professional

Requisition Id 10855

Overview:
The Enriched Gaseous Chemistry Group is seeking a Stable Isotope Processing Research Professional who will focus on supporting research and operations associated with processing of enriched fluorinated and nonfluorinated gaseous materials of stable isotopes. The group transforms stable isotopic material into gaseous products used by science and industry for cutting edge research and live-saving technologies. This position is part of the Plasma Enrichment, Science and Engineering section in the Enrichment Science and Engineering Division (ESED), at Oak Ridge National Laboratory (ORNL) and serves the nation by advancing enrichment technologies and providing enriched stable isotopes products.

We lead the R&D and production process development for delivering stable isotopes for medical, industrial, and DOE mission critical applications. As part of our research and processing team, you will work closely with a focused group of scientists, engineers, and technicians on challenging, fast-paced technical projects and operations in support of the DOE Isotope Program, and specifically associated with the rapidly growing field of stable isotope enrichment.

Major Duties/Responsibilities:
- Research, develop and execute new methods of complex gas to gas and solid to gas conversion processing to obtain high yield of extremely pure product
- Research, develop and execute new methods and instruments to characterize thermophysical properties of fluorinated gases
- Advance enrichment technology outcomes through gas chemistry research
- Perform purification, chemical conversion, and characterization of enrich gases from enrichment devices, at near zero loss
- Perform transloading, separation, mixing, trapping and dispensing of gaseous material
- Handling of hazardous gases and fluorinated gases
- Utilize analytical equipment including mass spectrometry, electron microscopy, infrared spectroscopy and other material evaluation techniques
- Prepare reports, presentations, publications and operator aids or guidelines
- Collaborate within a multidisciplinary, multi-laboratory environment with scientists, engineers, and technicians
- Deliver ORNL’s mission by aligning behaviors, priorities, and interactions with our core values of Impact, Integrity, Teamwork, Safety, and Service.
- Promote diversity, equity, inclusion, and accessibility by fostering a respectful workplace – in how we treat one another, work together, and measure success.

Basic Qualifications:
- A Ph.D. degree in Analytical, Inorganic, or Physical Chemistry, Materials Science, Material, or Chemical Engineering, or a related discipline with a minimum of 2 years of technical experience in a lab environment. A comparable combination of education and experience will be considered.
- Safety mindset when handling with compressed, fluorinated, and/or enriched gases
- Motivated self-starter with the ability to work independently and to participate creatively in collaborative teams across the Laboratory
- Ability to function well in a fast-paced research environment, set priorities to accomplish multiple tasks within deadlines, and adapt to ever changing needs
- This position requires the ability to obtain and maintain a clearance from the Department of Energy. As such, this position is a Workplace Substance Abuse (WSAP) testing designated position. WSAP positions require passing a pre-placement drug test and participation in an ongoing random drug testing program.
- Ability to obtain and maintain a Q clearance

Preferred Qualifications:
- A Ph.D. degree with 3 years of technical experience
- Experience with lab equipment operation, start-up, and maintenance
- Experience with gas handling, gas transloading, and gas synthesis
- Experience in inorganic and/or analytical chemistry
- Experience with vacuum systems operation and maintenance
- Experience with pressure systems operation and maintenance
• Experience with Mass spectrometry or FT-IR spectroscopy
• Ability to obtain and maintain an SCI clearance
• Excellent written and oral communication skills.

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**Benefits at ORNL:**
ORNL offers competitive pay and benefits programs to attract and retain talented people. The laboratory offers many employee benefits, including medical and retirement plans and flexible work hours, to help you and your family live happy and healthy. Employee amenities such as on-site fitness, banking, and cafeteria facilities are also provided for convenience.


This position will remain open for a minimum of 5 days after which it will close when a qualified candidate is identified and/or hired.

We accept Word (.doc, .docx), Adobe (unsecured .pdf), Rich Text Format (.rtf), and HTML (.htm, .html) up to 5MB in size. Resumes from third party vendors will not be accepted; these resumes will be deleted and the candidates submitted will not be considered for employment.

If you have trouble applying for a position, please email ORNLRecruiting@ornl.gov.

ORNL is an equal opportunity employer. All qualified applicants, including individuals with disabilities and protected veterans, are encouraged to apply. UT-Battelle is an E-Verify employer.