

Radiochemist/Radiochemical Engineer - R&D Associate Staff Member

Req #13322

Overview:

Nuclear energy has been a part of Oak Ridge National Laboratory for 80 years and continues to thrive. Our focus is on building upon our legacy of innovation, translating groundbreaking scientific discoveries into practical nuclear technologies. The Nuclear Energy and Fuel Cycle Division (NEFCD) comprises over 240 researchers and technical professionals who are at the forefront of integrating various areas of expertise. Our goal is to develop and showcase innovative nuclear fuels, power systems, and supporting technologies that ensure the efficient, safe, and secure utilization of nuclear energy, both now and in the future.

The Integrated Fuel Cycle (IFC) Section of NEFCD is seeking applications for an applied research and development staff position within the Fuel Cycle Chemical Technology (FCCT) Group. This position will primarily focus on separations and radiochemistry/radiochemical engineering. The FCCT group's primary objective is to conduct advanced research in actinide chemistry across the entire nuclear fuel cycle, using principles of fundamental chemistry, materials science, and chemical engineering. The successful candidate will be responsible for applying established chemical separations principles to extract energy critical elements from minerals and unconventional sources. We are currently looking for an experienced Radiochemist/Radiochemical Engineer to join our team.

Major Duties/ Responsibilities:

- Apply fundamental chemistry and radiochemical techniques to the processing and handling of nuclear materials across the nuclear fuel cycle.
- Develop and implement independent solutions for intricate technical issues, collaborate with individuals of varying skill levels to accomplish the R&D plan, and proficiently document and communicate work in a timely manner.
- Support development and assembly of test equipment for radioactive materials and reactive gases.
- Support the development of solid phase analytical techniques for actinide and/or radioactive materials.
- Assist with experiments at scales ranging from lab- to engineering-scale, including experimental work with radionuclides and hazardous chemicals in controlled facilities or in the field.
- Assist R&D staff with the development of funding proposals as well as reporting R&D activities appropriately through journal publications, technical presentations, and reports in a timely and ethical manner.
- 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 Required:

- PhD in Chemistry, Chemical, Nuclear or Environmental Engineering, Geology, or a closely related field.
- Prior postdoctoral research experience in a relevant research area.
- Demonstrated publication excellence.

Preferred Qualifications:

- Experience working in an R&D setting.
- Experience in handling radioactive materials, particularly transuranic materials, and a range of analytical techniques.
- Demonstrated experience running and maintaining complex research equipment used for materials characterization and production.
- Demonstrated knowledge of main group and f-element chemistry and/or geochemistry.
- Experience with reactive gases at elevated temperatures, including volatility and deposition phenomena.
- Research in the application of advanced separations applied to inorganic and/or radiological systems.

Special Requirement:

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.

About ORNL:

As a U.S. Department of Energy (DOE) Office of Science national laboratory, ORNL has an extraordinary 80-year history of solving the nation's biggest problems. We have a dedicated and creative staff of over 6,000 people! Our vision for diversity, equity, inclusion, and accessibility (DEIA) is to cultivate an environment and practices that foster diversity in ideas and in the people across the organization, as well as to ensure ORNL is recognized as a workplace of choice. These elements are critical for enabling the execution of ORNL's broader mission to accelerate scientific discoveries and their translation into energy, environment, and security solutions for the nation.

ORNL offers competitive pay and benefits programs to attract and retain individuals who demonstrate exceptional work behaviors. The laboratory provides a range of employee benefits, including medical and retirement plans and flexible work hours, to support the well-being of you and your family. Employee amenities such as on-site fitness, banking, and cafeteria facilities are also available for added convenience.

Other benefits include the following: Prescription Drug Plan, Dental Plan, Vision Plan, 401(k) Retirement Plan, Contributory Pension Plan, Life Insurance, Disability Benefits, Generous Vacation and Holidays, Parental Leave, Legal Insurance with Identity Theft Protection, Employee Assistance Plan, Flexible Spending Accounts, Health Savings Accounts, Wellness Programs, Educational Assistance, Relocation Assistance, and Employee Discounts.

If you have difficulty using the online application system or need an accommodation to apply due to a disability, please email: ORNLRecruiting@ornl.gov or call 1.866.963.9545.

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.