Postdoctoral Research Associate – Polymer/Organic Chemist
Oak Ridge National Laboratory
Chemical Sciences Division
Nanomaterials Chemistry Group

Purpose
The Chemical Sciences Division at Oak Ridge National Laboratory (ORNL) currently has 4 postdoctoral positions available for a polymer/organic chemist with expertise in synthesis and characterization of polymeric materials and the small molecule analogues. The postdoctoral research associate will work on various aspects of polymeric fiber adsorbents for extraction of uranium from seawater, such as polymer synthesis, desorption, and ligand synthesis/grafting. To achieve this goal, we will utilize expertise in polymer synthesis & characterization, ligand chemistry, modeling and simulation, and structure/morphology characterization for efficient binding of uranium in seawater. The project is highly collaborative and takes advantage of expertise and facilities at ORNL including chemical and computational disciplines.

PURPOSE: Under general supervision, the Postdoctoral Research Associate will conduct research specifically in the synthesis and characterization of novel polymer fiber adsorbents, ligand synthesis and grafting to polymeric fibers, post-desorption characterization of polymeric adsorbents, or synthesis of nanoporous-based adsorbents.

Major Duties/Responsibilities
- Conduct synthesis of novel well-defined polymeric adsorbents using organic synthesis and various polymerization techniques such as RIGP or controlled polymerization methods such as ATRP and RAFT
- Conduct synthesis of novel monomers and post functionalization of polymers (polymer fibers)
- Characterize novel polymer fiber adsorbents using multiple techniques including TGA, DSC, DMA, FTIR, and NMR and uranium capacity (ICP)
- Uranium adsorption/desorption work will require for an individual to work in a radioactivity-controlled laboratory
- Responsible for presenting and reporting research results and publishing scientific results in peer-reviewed journals in a timely manner
- Ensure compliance with environment, safety, health and quality program requirements
- Maintain strong commitment to the implementation and perpetuation of values and ethics

Qualifications Required
A PhD in Chemistry, Chemical Engineering, Polymer Science and Engineering, Materials Science or a closely related field is required. Must have completed all degree requirements before starting their appointment and be within five years of receiving their Doctorate. Must possess demonstrated expertise in organic and/or polymer synthesis and characterization techniques. Excellent oral and written communication skills are necessary. A strong record of creative research demonstrated by publications in peer-reviewed journals and presentations at scientific conferences is a must. The abilities to work on multiple tasks in a limited amount of time and to independently set priorities to accomplish multiple tasks to meet deadlines are required. The incumbent must be capable of innovative, independent research yet have the ability to work collaboratively in a team environment and interact effectively with a broad range of colleagues. The ability to communicate in English to an international scientific audience is required. Working knowledge of Microsoft Office (which includes Word, PowerPoint, and Excel) is mandatory. The incumbent must be a self-starter, motivated, safety conscious and possess the abilities to work on multiple tasks in a limited amount of time and to independently set priorities to accomplish multiple tasks to meet deadlines.

The initial appointment is a temporary full-time assignment not to exceed 24 months. A list of publications and three reference letters must be emailed to PSDrecruit@ornl.gov when applying for this position.

Please include the title of the position in the subject line.
**Work Directions and Interfaces**

Position reports to under the Group Leader, Nanomaterials Chemistry Group in the Chemical Sciences Division and is mentored by a research staff member who provides technical guidance. Interfaces with administrative staff, managers, and visitors at ORNL.

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), Excel(.xls, .xlsx), PowerPoint(.ppt, .pptx), Adobe(.pdf), Rich Text Format(.rtf), HTML(.htm, .html) and text files(.txt) up to 2MB 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.

**Please apply for this position from** http://www.ornl.gov/ornl/careers

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