



Washington University in St. Louis

EARTH, ENVIRONMENTAL, AND PLANETARY SCIENCES

Postdoctoral Scientist Position in Biogeochemical Controls on Critical Element Behavior

The Aqueous Geochemistry and Mineralogy group at Washington University in St. Louis, led by Prof. Jeff Catalano, invites applications for a postdoctoral scientist position as part of a collaborative project investigating the accumulation and redistribution of critical elements in the environment. This position will specifically support investigations of the chemical speciation and solubility of rare earth and platinum group elements associated with iron oxide and clay minerals as impacted by complexation with organic and inorganic ligands as well as redox chemistry. The goal for this position is to advance science while enhancing the career development and broadening the expertise of the postdoctoral scientist. To this end, ample opportunities will be provided for training in new approaches and techniques through direct mentorship and interaction with the project team, their research groups, and the broader Washington University community. The postdoctoral scientist will be supported in developing their own research directions in addition to advancing the project goals.

The ideal candidates will have experience with adsorption processes at solid-water interfaces, the structure of iron oxide or clay minerals, the aqueous geochemistry of trace elements, or mineral dissolution and redox reactions. Familiarity with laboratory-based wet chemistry and analytical techniques is required. Prior experience with synchrotron-based X-ray spectroscopic methods, transmission electron microscopy, or metal isotope exchange techniques is desirable. Successful candidates will have demonstrated the ability to bring research projects to the stage of publication, possess clear communication skills, and exhibit a commitment to an inclusive and collaborative work environment. Travel to synchrotron lightsources is required, and it is preferable that the candidate possess a license to drive a vehicle or have the ability to obtain a license soon after starting the position.

The initial annual salary for the position is anticipated to be \$56,500 plus comprehensive benefits (see <https://hr.wustl.edu/benefits/> for additional information). A greater salary may be possible for experienced candidates. The intended duration of the position is twenty-four months with annual reappointment contingent on satisfactory performance and continued availability of funding. Further extension may be possible if additional funding becomes available. Interested applicants should send a single PDF file that includes a cover letter summarizing relevant experiences and interests, a current curriculum vitae (including full publication list), and the names and contact information for three references to Prof. Jeff Catalano (catalano@wustl.edu). A Ph.D. in Earth science, soil science, chemistry, environmental engineering, or a related field is required at the time of appointment. Applications will be reviewed as they are received, and the position will remain open until filled. Priority will be given to applications received by September 15, 2023.

Washington University in St. Louis is committed to the principles and practices of equal employment opportunity and especially encourages applications by those underrepresented in their academic fields. It is the University's policy to recruit, hire, train, and promote persons in all job titles without regard to race, color, age, religion, sex, sexual orientation, gender identity or expression, national origin, protected veteran status, disability, or genetic information. Diversity and Inclusion are core values at Washington University, and strong candidates will demonstrate the ability to create an inclusive environment in which a diverse array of researchers can learn and thrive. Each year Washington University publishes a Safety and Security brochure that details what to do and whom to contact in an emergency. This report also publishes the federally required annual security and fire safety reports, containing campus crime and fire statistics as well as key university policies and procedures. You may access the Safety and Security brochure at <https://police.wustl.edu/clery-reports-logs/>.