



Two Postdoctoral Scientist Positions in Trace Element-Mineral Interactions

The Aqueous Geochemistry and Mineralogy group at Washington University in St. Louis, led by Prof. Jeff Catalano, invites applications for two postdoctoral scientist positions as part of a collaborative project investigating the role of mineral surfaces and structures in controlling the geochemistry of rare earth and platinum group elements in weathering environments. One position will focus on adsorption processes on mineral surfaces to identify fundamental chemical trends that dictate the interfacial reaction mechanisms of these critical elements. The second position will investigate the ability of clay and oxide minerals to host rare earth and platinum group elements in their structures and the processes that potentially remobilize these elements. As part of a larger project team, the postdoctoral scientists will participate in laboratory investigations coupled to measurements at synchrotron light sources that are then linked to computational and experimental studies carried out at Pacific Northwest National Laboratory. The goal for these positions is to advance science while enhancing the career development and broadening the expertise of each 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. In addition, the postdoctoral scientists may engage with project participant Prof. Dan Giammar at Washington University for co-advising and close collaboration.

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 reactions. Familiarity with laboratory-based wet chemistry and analytical techniques, X-ray crystallography, or synchrotron-based methods is desirable, although not required. 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 light sources is required, and it is preferable that candidates 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 each position is \$53,760 plus comprehensive benefits. A greater salary may be possible for experienced candidates. The intended duration of each position is at least thirty months with annual reappointment contingent on satisfactory performance and continued availability of funding.

Interested applicants should apply at <http://apply.interfolio.com/93411>. Please include a cover letter, a current curriculum vitae (including full publication list), a two to four page statement of research interests, and the names and contact information for three references. Inquiries about the position should be directed to Prof. Jeff Catalano (catalano@wustl.edu). A Ph.D. in Earth science, chemistry, environmental engineering, soil science, or a related field is required at the time of appointment. Applications will be reviewed as they are received, and the positions will remain open until filled. Priority will be given to applications received by October 1, 2021.

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 environments in which a diverse array of researchers can learn and thrive.