

A postdoctoral research position at the intersection of surface hydrology and hydrogeology is available within the newly created Arequipa Nexus Institute for Food, Energy, Water, and the Environment. Tropical glacier melt is a significant concern for society in southern Peru. The successful candidate will quantify seasonal precipitation inputs, glacier melt, irrigation runoff, and surface water-ground water interactions across scales in the Arequipa region of Peru. Samples of water will be collected from basin agricultural areas extending up to the Coropuna ice cap and will be used to quantify the partitioning of glacial meltwater using chemical and isotopic end-members in appropriate mixing models.

The Arequipa Nexus Institute for Food, Energy, Water, and the Environment is a collaboration between Purdue University and the Universidad Nacional de San Agustín (UNSA) in Arequipa, Peru that is investigating key environmental, land use, agro-economic, and social challenges limiting the development of adaptive, profitable, and sustainable food-energy-water systems in the Arequipa Region of Peru. The postdoc will be a contributing member of this interdisciplinary research effort. More information about the NEXUS can be found here: <https://www.purdue.edu/discoverypark/arequipa-nexus/en/index.php>

Candidates for this position should have recently completed their PhD, or should expect to complete their degree requirements by the start date, in hydrology or relevant environmental science program. Previous experience with the analysis of stable isotope and environmental tracers, geochemical data, or geospatial data analysis are preferred. Candidates interested in this position should have a record of scientific achievement, excellent verbal and written communication skills, and an interest in working in an international and interdisciplinary environment geared toward investigating problems related to environmental sustainability. Past participation in international research projects and Spanish language skills are desirable. While the postdoctoral position is based at Purdue University, West Lafayette, IN USA the successful candidates will be expected to engage in field and laboratory work in Peru, primarily in the Arequipa region, maybe for multi-week periods of time. Initial appointments are for 1 year starting Jan 1, 2019 with potential renewal for a second year upon review.

The successful candidate will be co-advised by Prof. Lisa Welp (<http://www.eaps.purdue.edu/research/lwelp/>) and Prof. Marty Frisbee (<http://www.eaps.purdue.edu/frisbee/>) in the Department of Earth, Atmospheric, and Planetary Sciences. The Welp lab maintains an LGR instrument for water stable isotope analysis. Successful candidates will also have opportunities to utilize geo-referenced visualization and mapping tools like ARCGIS.

Applicants should supply (a) a curriculum vitae, including a list of publications, (b) a statement of research interests and goals (maximum 2 pages) and (c) e-mail address of three references to: Lisa Welp (lwelp@purdue.edu) and Marty Frisbee (mdfrisbee@purdue.edu). Application review will begin immediately with appointments beginning as early as Jan 2019. Marty Frisbee will be present at the Fall GSA meeting in Indianapolis, IN (November 4-7) and Lisa Welp will be present at the Fall AGU meeting in Washington D.C. (December 10-14). We would like to meet with interested candidates during those events where possible.