Assistant Project Scientist in Crop & Soil Remote Sensing

Department of Environmental Science

Job Advertisement

The Ecosystem & Soil Microbial Processes Lab led by Dr. Pete Homyak in the Department of Environmental Sciences at UC-Riverside is accepting applications for a laboratory technician. Candidates must have a B.S. (minimum requirement) and/or M.S. degree in soil science, soil microbiology, environmental science, ecology, or a closely related discipline. Required qualifications include: demonstrated proficiency running the bacterial denitrifier method for the isotopic determination of δ^{15} N and δ^{18} O of nitrate, proficiency operating a Costech EA for the isotopic determination of δ^{13} C and δ^{15} N of solids, proficiency running and maintaining a Delta V mass spectrometer, proficiency working with and deploying ISCO automated samplers, proficiency measuring soil extracellular enzymes, soil density fractionation, PyOM, soil extractable nutrients (NH4⁺, NO3⁻, NO2⁻), and soil microbial biomass C and N.

We research how soil microbial and abiotic processes control the exchange of elements such as N, P, and C across the soil–water–atmosphere interfaces to infer how anthropogenic disturbances and changes in global climate may alter ecosystem biogeochemistry and function. Several field projects are ongoing in sites along an elevation gradient in the Sierra Nevada, in several chaparral sites along an atmospheric nitrogen deposition gradient, in a rainfall manipulation experiment in a Pinyon-Juniper woodland, and in recently burned chaparral sites across California. We use several novel tools including a δ^{13} C-CO₂/CH₄ and N₂O isotopomer trace gas analyzers, LI-COR automated soil flux chambers, and instruments in FIRMS and the ESRL.

Job responsibilities include:

- Assist with research activities in the lab and field including projects led by students and postdocs.
- Coordinate the work of undergraduate research assistants.
- Learn to use laboratory instrumentation and field tools and assist with student training and sample processing and analysis.
- Train students on methods used in the lab.
- Maintain adequate inventory of laboratory supplies/consumables and oversight of laboratory safety. Operate instrumentation in the lab, FIRMS, and ESRL to process lab samples.
- Actively participate in research activities including seminars, workshops, and lab meetings.

To apply, go to: <u>https://aprecruit.ucr.edu/JPF01903</u>.

The University of California, Riverside is a world-class research university with an exceptionally diverse undergraduate student body. UCR is a member institution of the American Association of Universities (AAU) as well as the Alliance of Hispanic Serving Research Universities (HSRU). Its mission is explicitly linked to providing routes to educational success for underrepresented and first-generation college students. A commitment to this mission is a preferred qualification.

The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified candidates will receive consideration for employment without regard to race, color,

religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status, or any other characteristic protected by law.

As a University employee, you will be required to comply with all applicable University policies and/or collective bargaining agreements, as may be amended from time to time. Federal, state, or local government directives may impose additional requirements.