

Opportunity Title: ORNL Soil Biogeochemistry Post Master's Research

Associate

Opportunity Reference Code: ORNL16-66-ESD



Organization Oak Ridge National Laboratory (ORNL)

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Description The Environmental Sciences Division (ESD), <http://www.esd.ornl.gov>, and the Climate Change Science Institute (CCSI), <http://climatechangescience.ornl.gov/>, at Oak Ridge National Laboratory (ORNL), <http://www.ornl.gov>, has several positions available immediately. Some positions are in collaboration or association with the University of Tennessee (UT) or the Oak Ridge Institute for Science and Education (ORISE). Expertise or interest in soil carbon cycling, soil greenhouse gas emissions, microbial 'omics, oxidation-reduction processes of soil minerals, and phosphorus interactions in tropical and temperate environments is desired. We seek team-oriented candidates with experience or interests in experiments and observations that are interested to model or to work closely with modelers to use biogeochemical information to improve soil carbon cycle models.

The ideal candidates will interact closely with a team of soil biogeochemists, modelers, and bioinformaticists to investigate relations between geochemical and microbiological features of soils and greenhouse gas releases. The work will involve lab- and field-scale measurements of greenhouse gas emissions, microbial 'omics, phosphorus interactions including sorption, and soil geochemistry. The work may also involve literature review and data analysis. The candidate is expected to work closely with a team of modelers to utilize experimental data and observations to improve and develop models. Interest in modeling is desired but not required. Participation in scientific conferences and timely publication of results are expected for the more advanced candidates, and desired for the less experienced candidates.




Qualifications Expertise or interest in soil carbon cycling, soil greenhouse gas emissions, microbial 'omics, oxidation-reduction processes of soil minerals, and phosphorus interactions in tropical and temperate environments is desired. We seek team-oriented candidates with experience or interests in experiments and observations that are interested to model or to work closely with modelers to use biogeochemical information to improve soil carbon cycle models.

A Master's degree is required in Environmental Science, Soil Biogeochemistry, Soil Microbiology, Soil Science, Biogeochemical Modeling, or a related field. Excellent oral and written communication skills and the ability to communicate ideas clearly and effectively are required.

Applicants cannot have received the most recent degree more than five years prior to the date of application and must complete all degree requirements before starting their appointment.

This appointment is offered through the ORNL Postgraduate Research Associates Program and is administered by ORAU through the Oak Ridge Institute for Science and Education (ORISE).

Eligibility Requirements

- **Degree:** Master's Degree received within the last 60 month(s).
- **Discipline(s):**
 - **Earth and Geosciences** (21 )
 - **Environmental and Marine Sciences** (4 )
 - **Life Health and Medical Sciences** (3 )

Affirmation I certify that I have completed coursework towards a degree in science, technology, engineering, mathematics, or a related field.

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