Multiple Graduate Research Assistantships in Soil Science at the University of Tennessee

We are seeking one M.S. and two Ph.D. students in the Department of Biosystems Engineering and Soil Science (BESS) at the University of Tennessee (UT), Knoxville, TN. The applicants for these positions must have a B.S. degree (for the MS position) or M.S. degree (for the Ph.D. positions) in one of the following fields: soil science, environmental science, geochemistry, microbiology, biogeochemistry or closely related fields with demonstrated experience in soil-related research involving field and/or laboratory components. Applicants should also possess excellent academic record, strong oral and written communication skills, excellent work ethic, and the ability to work independently as well as collaboratively. Demonstrated ability in peer-reviewed publications and analytical instrumentation are a plus. Additional responsibilities include presenting research findings in professional meetings and assembling and analyzing data for journal publications. A valid driver license is also required. The successful applicants will receive a tuition waiver, a competitive stipend, and health insurance. Interested candidates for these positions should submit the application to the project investigators listed below. The application should include a recent CV, a cover letter describing experience and qualifications, unofficial copies of transcripts, GRE and TOEFL scores (if applicable), a copy of your publications (if any), and contact information for three references. The scrutiny of applications will begin immediately and will continue until suitable candidates are selected.

One M.S. and one Ph.D. positions are available to study the role of manganese in organic carbon cycling in agricultural soils. The research will involve field and lab experiments. This is a collaborative project with the Environmental Sciences Division of the Oak Ridge National Laboratory (ORNL). Dr. Sindhu Jagadamma from UT and Dr. Elizabeth Herndon from ORNL will jointly supervise the recruited students. Preferred start date is Summer or Fall 2020. Strong fundamental knowledge and skills in geochemistry and microbial ecology are required for these positions. The selected applicants will also gain access to ORNL’s research capabilities. Interested applicants should contact Dr. Sindhu Jagadamma, Assistant Professor, BESS, UT (sjagada1@utk.edu, 865-974-2690) or Dr. Elizabeth Herndon, Staff Scientist, ORNL (herndonem@ornl.gov, 865-341-0330).

One Ph.D. position is available to study the biogeochemistry of soil health practices to improve nutrient cycling and mitigate its environmental losses. More specifically, the selected student will develop a solid understanding of cover crop’s fertilizer nitrogen replacement impacts on soil carbon and nitrogen transformation, nitrogen losses, and crop nitrogen availability. The student will be involved in field experiments, greenhouse gas analysis, measuring nitrogen transport below root zone, soil and plant sample analysis, reporting, and data synthesis. The ideal candidate for this position will also have a strong understanding in soil carbon and nitrogen cycling, statistical data analysis, and excellent organizational skills. Preferred starting date is Fall 2020. The Interested applicants should contact Dr. Debasish Saha for further information or inquiries (dsaha3@utk.edu, 865-974-7003).

The University of Tennessee-Knoxville is the state's flagship research institution and is an Equal Opportunity Affirmative Action employer, located in East Tennessee close to the Great Smoky Mountains National Park. The Department of Biosystems Engineering and Soil Science comprises an energetic group of faculty members engaging in multi-disciplinary research and is especially interested in candidates who can contribute to the diversity and excellence of the academic community through research, teaching and service.