

SOIL SCIENCE PHD GRADUTE ASSISTANTSHIP

POSITION	PhD Position for Soil based Climate Change Mitigation Strategies at North Carolina State University
JOB DESCRIPTION	<p>We are seeking a highly motivated PhD graduate student interested in soil-based climate mitigation and resilience research at the lab and field scale. The individual will develop bio-physical-chemical mechanisms underlying soil carbon sequestration, nitrogen retention, and greenhouse gas (GHG) emissions mitigation from the use of soil amendments including biochar and composts. The research includes controlled lab studies (incubations, continually monitored GHG mesocosms) and analysis of soil samples from field experiments for soil physical and biochemical properties. In addition, the student will work on on-going field studies focused on GHG emissions from amendment inputs within the long-term Farming Systems Research Unit and the Center for Environmental Farming System (CEFS) in Goldsboro NC.</p> <p>Major responsibilities include: (1) conducting robust lab-scale experiments to assess soil texture-based potentials of byproducts in soil carbon sequestration, nitrogen retentions and GHG emissions mitigation; (2) experimentation using a controlled lab column design for continuous GHG measurements and SOC dynamics on emerging amendment sources; (3) evaluation of soils from field experiments on soil physical properties, soil water dynamics and carbon fractionation, (4) participate in extension activities around amendment use as a climate change mitigation strategy</p> <p>Qualifications: Msc. in a discipline relevant to soil carbon and nitrogen dynamics; experience with contemporary techniques in soil physics and biochemistry; experience using analytical equipment used to quantify GHGs and soil organic carbon and excellent writing and communication skills in English.</p>
LOCATION	<p>Crop & Soil Sciences Department, North Carolina State University, Raleigh, NC</p> <p>We are unique among our U.S. and international peers due to our broad and intensive expertise spanning land use, agriculture, and environmental protection. Our outstanding faculty and strong collaborations with other scientists at our Research I university and elsewhere make us an internationally-recognized center for innovative research and graduate training. We seek high quality students pursuing careers in soil science and related fields.</p>

	The Raleigh-Durham area consistently ranks among the best places to live in the United States, largely due to its vibrant intellectual community and ample access to recreational and cultural activities.
HOW TO APPLY:	Positions will remain open until the qualified candidate is identified. For Applicants interested in the position please contact Dr. Alex Woodley (alwoodle@ncsu.edu). Please send an updated CV including a complete list of publications and a list of references.
DATE AVAILABLE:	August 1 2023 or until a suitable candidate is identified
North Carolina State University is an equal opportunity, affirmative action employer and actively seeks diversity among its employees.	