

Soil, Plant, and Gas Sampling and Processing Technician
Undergraduate Summer Research Student Position Announcement
Applied Soil Ecology Laboratory of the Department of Soil Science, University of Manitoba, Canada

Project title: Development of Greenhouse Gas Neutral Agricultural Systems

Project description: The Soil Ecology Laboratory is currently looking for highly motivated hands-on students who enjoy working outdoors and a part of a team. The student will work on several projects examining best management practices to reduce greenhouse gas emissions from soil and animal manures. Projects include fertilizer and past manure applications to soil and its effect on nitrous oxide (N₂O) emissions, effect of cattle diet on manure properties and greenhouse gas emissions, the benefit of cover crops to reduce N₂O emissions, as well as projects involving the source, timing and placement of various fertilizers in corn and canola to reduce N₂O emissions. Please see www.soilecology.ca for more information on the research in the Soil Ecology Laboratory.

Qualifications: Enrolled in Agroecology, Agronomy, Biology, Engineering, Environment, Physical Geography, or Soil Science. Preference given to those in senior years with excellent academic achievement. Previous field/farm experience is an asset. Enjoys working outdoors. Valid Manitoba Driver's license necessary.

Duties and responsibilities: The student will be responsible for assisting graduate students and Senior Technicians in small scale research field plot maintenance, soil, manure, plant and greenhouse gas sampling. Laboratory duties include preparation of gas storage vials, soil grinding and extraction, plant grinding and plant threshing. Ensuring proper documentation of soil, plant and greenhouse gas samples and making sure field equipment is in proper working order. Individuals will report daily to a Senior Greenhouse Gas and Field Technicians.

Skills and benefits to be gained from this position: Methods for analysis of various greenhouse gases, determination of greenhouse gas fluxes using chambers, soil sampling, plant sampling / preparation for analysis, trouble shooting techniques and working in teams. Introduction to the set up and maintenance of small scale agricultural research plots.

Supervisor: Professor Mario Tenuta, Applied Soil Ecology Lab, Department of Soil Science, Faculty of Agricultural and Food Sciences

Job Terms

Number of Jobs: 4

Job dates: April 29 to August 30, 2019

Hours/week: 35

Salary: Faculty pay scale dependent on program year

Location: Frequent travel to field sites outside of Winnipeg

Other info: Transportation vehicle provided

How to Apply

Deadline: March 8, 2019

University Level: Undergraduate

Application method: E-mail

Required application materials: Resume, cover letter, transcript, and a statement indicating the school, program, and year that you are currently enrolled in

References: list of three (3) references agreed to be contacted

Notification process: email application materials to Brad Sparling, Research Technician, Applied Soil Ecology Lab at

Brad.Sparling@umanitoba.ca

Decision expected by March 16, 2019