

Job Description

Job Title:	Lab Manager: Wetland Soils and Greenhouse Gas Exchange
Department:	Geography and Environmental Management
Reports To:	Director, Wetland Soils and Greenhouse Gas Exchange Lab
Jobs Reporting:	None
Salary Grade:	USG 6
Effective Date:	September 2023

Primary Purpose

The Lab Manager: Wetland Soils and Greenhouse Gas Exchange position is responsible for managing the Wetland Soils and Greenhouse Gas Exchange Lab and supporting related field activities. The Lab Manager will maintain lab and field equipment, maintain lab safety records and provide logistical support to a wide range of ongoing research projects

The Lab Manager will work with the Director of the lab, postdoctoral fellows, graduate and undergraduate students to ensure safe and effective research operations.

Key Accountabilities

Laboratory and field safety

- Conduct monthly laboratory inspections
- Maintain chemical inventory, lab members safety training records, standard operating procedures and pre-use inspections
- Assist in the development of field safety plans and job hazard analysis
- Under the guidance of the Director, provide guidance to lab users on safe laboratory operations

Operation and maintenance of laboratory and field equipment

- Liaise with service personnel on equipment repairs
- Conduct calibration of gas chromatograph and field portable greenhouse gas analyzers
- Test laboratory and field equipment at least semi-annually and send for repairs when required
- Deployment of autochamber system for greenhouse gas monitoring

Logistical support for research activities

- Liaise with students, postdoctoral fellows and government and industry partners to support research activities
- Assist with data entry and research reporting

**All employees of the University are expected to follow University and departmental health and safety policy, procedures and work practices at all times. Employees are also responsible for the completion of all health and safety training, as assigned. Employees with staff supervision and/or management responsibilities will ensure that assigned staff abide by the above, and actively identify, assess and correct health and safety hazards, as required.*

Required Qualifications

Education

- Bachelor's or master's degree in Biogeochemistry, Earth System Science, Environmental Science, Ecology, or a related field, or equivalent experience

Experience

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- Prior experience in a laboratory setting
- Prior experience with wetland-based fieldwork a plus
- Prior experience with gas chromatography and field-based greenhouse gas measurements a plus

Knowledge/Skills/Abilities

- Competence with laboratory analysis of air samples for greenhouse gas concentrations, soil physical properties and biomass samples
- Competence with scientific computer software and basic data analysis, experience with R statistical language a plus
- Aptitude for research, strong analytical and oral and written scientific communication skills.
- Knowledge of University of Waterloo laboratory safety requirements a plus
- Knowledge of peatland carbon cycling and/or climate change research a plus

Nature and Scope

- **Contacts:** Will work with the Director of the Wetland Soils and Greenhouse Gas Exchange lab, postdoctoral fellows and students. Regular meetings with research group to plan ongoing research activities and laboratory schedules.
- **Level of Responsibility:** Director will provide guidance and ultimate oversight. Day to day laboratory operations will be managed by the Lab manager position
- **Decision-Making Authority:** Must develop options for laboratory scheduling and equipment maintenance to recommend to Director.
- **Physical and Sensory Demands:** Generally minimal demands typical of operating within an laboratory environment. Fieldwork may involve heavy loads and several kilometers of walking on rough terrain.
- **Working Environment:** Exposure to laboratory-based hazards including compressed gas cylinders. Fieldwork will include exposure to the elements (sun, rain, heat, cold), rough terrain, wildlife, etc.