



UNIVERSITY OF ALBERTA - GRADUATE STUDENT POSITION

Project Title: Greenhouse Gases Emissions from Managed Soils.

Sought degree: MSc

Supervisor: Dr. Guillermo, Hernandez Ramirez (Assistant Professor), Department of Renewable Resources

Timeline for applications: until filled

Desirable timeline for beginning the program: July 2018, September 2018, or January 2019 (flexible start date)

Project Description:

Reducing greenhouse gases emissions from soils used for agriculture and forestry is a crucial challenge for scientists, farm managers and the broader society. On-going research efforts aim at coordinating soil management practices to mitigate N₂O emissions while sustaining plant productivity. New information derived from this research will support implementation of sustainability goals of common land-use systems. This research will include multi-year field experiments, controlled assays to develop new knowledge and identify balanced solutions.

I am seeking for a responsible student interested in the project.

Initial requirements:

Knowledge of soils, plants and nitrogen cycling,

Proactive, flexible, dedicated, well-centered, responsible

Open to undertake scientific approaches and to engage intense numerical analyses, data interpretation and writing up of findings, and publications.

Other assets:

A teamwork aptitude — ability to work independently and with others,

A desire to deliver, share and present results in public,

Computer skills,

A 3.5 GPA or better, and

A valid driver license and clean driving record/abstract.

The research entails field activities. Work will involve sophisticated instrumentation to quantify fluxes, soil, and plant responses. Laboratory work (including incubation and greenhouse procedures) will involve novel approaches to discern soil processes and properties associated with fluxes. In addition to frequent interactions with UAlberta staff, collaborative work can be also conducted with personnel from provincial and federal research agencies.

Please e-mail transcripts (scanned unofficial copy), CV, a letter describing any research experience and interests (1-page), and a list of three references.

Keywords: Soil, Nitrous oxide, Greenhouse gases, Flux, Nitrogen

Annual stipend: CAD 24,600

Contact Information: ghernand@ualberta.ca

Additional Information

University of Alberta is consistently rated as one of the top 5 universities in Canada, and one of the top 100 universities worldwide. Located in Alberta's capital city, Edmonton (population of one million people), University of Alberta provides a dynamic mixture of a large research intensive university, urban culture and recreation. More than 39,000 students from across Canada and 144 other countries participate in nearly 400 programs and 18 faculties. Within the University, the Department of Renewable Resources consists of 30 faculty members, over 200 graduate students, numerous postdoctoral fellows and support staff, and offers significant research support through sophisticated laboratories and multiple field facilities.

Website

https://sites.google.com/a/ualberta.ca/agroecosystems_group/opportunities

<https://www.ualberta.ca/agriculture-life-environment-sciences/about-us/facultylecturer-directory/guillermo-hernandez-ramirez>

https://sites.google.com/a/ualberta.ca/agroecosystems_group/home

<http://www.rr.ualberta.ca/GraduateProgram>