

THE SOILED PROFILE



NEWSLETTER DEPARTMENT OF SOIL SCIENCE UNIVERSITY OF MANITOBA “bringing you the latest dirt”



UM

Faculty of Agricultural
and Food Sciences

For general inquiries or if you have material to include in the newsletter:

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Past issues of the Soiled Profile are on our webpage: umanitoba.ca/afs/soil_science/

December 7, 2020

COVID-19 Reminder

Building Access for Academic and Admin Work

Please contact Francis Zvomuya if you wish to access the building for academic and admin work. If you plan to access your office on a regular basis, your request should indicate which days of the week and approximate times you plan to be in the building. If your access will be limited, then you should seek approval ahead of each isolated visit to the building.

You are all required to follow the updated Soil Science protocols when accessing our buildings.

The following must be strictly observed:

1. All personnel approved to work in our buildings/facilities must wear a 3-ply disposable face mask while on campus. Masks are available for those currently actively working in Ellis Building or the Soil Science shed. Rob has portioned out packets of 10 masks each, wrapped in saran wrap. A table station has been set up in the hallway, across from Rob's office (Rm 303 Ellis Bldg), with a bird-house mask packet dispenser, which holds 10 packets at a time. A similar station has been set up in the shed. There is a clipboard for recording your name and the date you took a packet; bring your own pen to sign for the mask.

Remember to use a fresh mask each day. If the mask becomes wet or soiled, replace it immediately.

Please note that the **face mask packets are only for those who are actively coming to the building or the Shed to complete approved tasks**. Personnel should not come in to just get masks; we currently have a limited supply.

2. All personnel must strictly adhere to our updated COVID-19 Protocol, the Soil Science Orientation Handbook guidelines, and the approved schedules for their presence in the building.
3. All personnel must use the following link to complete a health self-assessment and to check in prior to entering the building and upon exiting the building each day: <https://forms.gle/kCz2Wshxsqu1vQiv7>. Alternatively, you may use your smartphone to scan the QR code at the ramp entrance and access the health survey & check-in/out app.
4. If you need to use a room or space or time slot for which approval was not requested, you must contact Francis Zvomuya for approval.

What's New?

Congratulations

M.Sc. student **Kristy Anderson** (supervised by Annemieke Farenhorst) successfully defended her thesis on November 2. Her thesis was titled: *Perceptions of Household Drinking Water Across a Variety of Water Distribution Systems in Three First Nations in Manitoba*. Congratulations Kristy!

Ph.D. student (now Ph.D. candidate) Ehsan Zarrinabadi (with David Lobb) successfully completed his Ph.D. candidacy exam on December 2. Congratulations Ehsan!

Don Flaten and **David Lobb** recently received the [Fellows Awards](#) at the 2020 ASA-CSSA-SSSA Annual Meeting held virtually last month.

- **Don** received the *Agronomy Society of America Fellows Award*
- **David** received the *Soil Science Society of America Fellows Award*

These prestigious awards appropriately reflect all the hard work that Don and David have clocked over the years, not only for the U of M, the Province, and nationally, but also internationally through their wide networks of collaborations. The awards are a huge recognition by members of these Societies, who nominate “worthy colleagues based on their professional achievements and meritorious service”. For perspective, a mere 0.3% or less of the Societies’ active and emeritus members may be elected Fellow. **Congratulations to you both!!!**

Upcoming

FAFS Annual Holiday Celebration: December 15 @ 3pm



THE FACULTY'S SEARCH COMMITTEE FOR DEPARTMENT HEAD, FOOD AND HUMAN NUTRITIONAL SCIENCES IS PLEASED TO ANNOUNCE:

PUBLIC PRESENTATIONS VIA MICROSOFT TEAMS

Dr. Cristina Rosell

Professor, Instituto de Agroquímica y Tecnología de Alimentos Consejo Superior de Investigaciones Científicas, Spain

Tuesday, December 8, 2020

3:00-4:00PM

MS TEAMS LINK: [DR. ROSELL](#)

Dr. Mark Kern

Professor and Coordinator of Foods and Nutrition

School of Exercise & Nutritional Sciences, San Diego State University, USA

Tuesday, December 15, 2020

11:30AM-12:30PM

MS TEAMS LINK: [DR. KERN](#)

ALL ARE WELCOME

Any questions please contact mya.kraft@umanitoba.ca

Science Societies Webinars and Online Classroom

- Standard Measurements for Soil Health-[Dec 8](#)
- Active Carbon and Soil Protein: New Frontiers for Monitoring Soil Health and Quality-[Dec 15](#)

Kirkham Conference

August 29 - September 3, 2021, Kruger National Park, South Africa

ASA, CSSA SSSA Annual Meeting

November 7-10, 2021, Salt Lake City, UT

Recent Publications

Adesanya, T., Zvomuya, F., Sultana, T., Metcalfe, C. and **Farenhorst, A.**, 2020. Dissipation of sulfamethoxazole and trimethoprim during temporary storage of biosolids: A microcosm study. *Chemosphere*.

<https://doi.org/10.1016/j.chemosphere.2020.128729>.

Amarakoon, I., Zvomuya, F., Larney, F. J., Olson, A. F., & DeMaere, P. R. 2020. Soil chemical properties following a one-time spent drilling mud application on native prairie. *Agrosystems, Geosciences & Environment*, 3, e20106.

<https://doi.org/10.1002/agg2.20106>.

Concepcion, A., **Kumaragamage, D., Akinremi, W.,** Dharmakeerthi, S., Goltz, D., and Indraratne, S. 2020. Phosphorus release from intact soil monoliths of manure amended fields under simulated snowmelt flooding. *J. Environ. Qual.*

<https://doi.org/10.1002/jeq2.20179>.

Lachance, C., **Lobb, D.A.,** Pelletier, G. *et al.* 2020. Determination of sediment sources in a mixed watershed within the Appalachian-St. Lawrence Lowland Regions of southern Quebec using sediment fingerprinting. *Environ Monit Assess* 192:603. <https://doi.org/10.1007/s10661-020-08568-9>.

Lasisi A. A., Kumaragamage D., and **Akinremi O.O.** 2020. Nitrification inhibitor reduces the inhibitory effect of N-(n-butyl) thiophosphoric triamide (NBPT) on the hydrolysis of urea. *Soil Sci. Am. J.* 84, 1782-1794.

<https://doi.org/10.1002/saj2.20122>.

Li Y., Gao X., Tenuta M., Gui D., Li X., Xue W., Zeng F. 2020. Enhanced efficiency nitrogen fertilizers were not effective

in reducing N2O emissions from a drip-irrigated cotton field in arid region of Northwestern China. *Sci. Total Environ.* 748: 141543. <https://doi.org/10.1016/j.scitotenv.2020.141543>.

Graduate Students

William Wilson Muir Graduate Fellowship

Applications for the William Wilson Muir Graduate Fellowship are being accepted on UM Learn. Before applying please ensure you review the Terms of Reference (attached and below) thoroughly:

The purpose of this fund is to support graduate students working in a research-based graduate program focusing on Agronomy in the Faculty of Agricultural and Food Sciences.

- (1) is enrolled full-time in the Faculty of Graduate Studies, in a M.Sc. or Ph.D. degree program delivered by a department in the Faculty of Agricultural and Food Sciences;
- (2) has obtained a minimum grade point average of 3.5 (or equivalent) based on the last 60 credit hours of study;
- (3) submits an application which consists of a one to two page (maximum 500 words) description of their research interest;
- (4) submits a letter of support from their graduate supervisor or proposed graduate supervisor.

How to apply:

All of the application forms and eligibility criteria can be found on the [UM Learn](#) site. To access the awards page, log into University of Manitoba UM Learn, using your username and password, and then select Faculty of Agricultural and Food Sciences Awards from your list of courses. Awards currently open for competition can be found under the path *Application Submission*. Please upload your completed application along with any supporting documents directly into the application submission folder for the specific award you wish to apply for as ONE document. The title of your application should be as follows: Name, Student Number and Name of Award.

Deadline to Apply: Friday December 11th

If you have any questions regarding this or any other award, please don't hesitate to email Agawards@umanitoba.ca

Level 1: Novice Graduate Teaching Program

Program Description

The Level 1: Novice Graduate Teaching Program (GTP), offered by the Centre for the Advancement of Teaching and Learning (The Centre), is for graduate students who are in the early stages of their teaching careers and who want to learn more about teaching in higher education.

The program is accredited through SEDA (www.seda.ac.uk), a professional association in the United Kingdom (UK) that promotes innovation and good practices in higher education.

The overall goals of the Level 1: Novice GTP are for participants to:

1. Prepare for lifelong learning in the field of higher education teaching
2. Understand ethics and integrity in teaching
3. Understand and support diversity and inclusion in teaching
4. Develop an awareness of higher education pedagogy
5. Develop professionalism in a teaching role

Program Components

There are three mandatory components to Level 1: Novice GTP:

1. Orientation
2. Two Teaching Essentials Institutes
3. Seven Workshops

The components include assessments to be completed at various stages of the program.

Program Eligibility Schedule

The Level 1: Novice GTP is available for current full-time or part-time Masters, PhD, and Post-doctoral students at the University of Manitoba. It is designed to be a one-year program with a maximum of two years allotted to complete all program requirements.

Additional Information

For further information about the Level 1: Novice GTP, please visit: <https://centre.cc.umanitoba.ca/development/gtp>
Inquires about the program can be sent to: graduateteachingprogram@umanitoba.ca

Graduate Opportunities

M.Sc. Opportunity at IISD-Experimental Lakes Area: *Phytoremediation using Wild Rice* Department of Soil Science, University of Manitoba

The MSc thesis research will focus on examining the phytoremediation potential of wild rice grown in planted rice paddies, relative to native wetland plants such as cattail and sedge. The research will be conducted at 3 sites in Manitoba: St. Francis Xavier, Teulon, and Brokenhead Ojibway Nation.

The student will be supervised by Dr. Richard Grosshans (Bioeconomy Lead at IISD and Adjunct Professor in the Department of Biosystems Engineering, University of Manitoba) and Dr. Francis Zvomuya (Professor and Head, Department of Soil Science, University of Manitoba), with additional mentorship by Dr. Vince Palace (Head Research Scientist at IISD-ELA and Adjunct in the Department of Environment and Geography, University of Manitoba).

The student will gain valuable experience working with the industry partner, Myera Group Inc., to develop and apply technical analysis and methods to current research projects. The student will also be exposed to phytoremediation and water quality monitoring field research methods employed by the IISD-Experimental Lakes Area by working with Dr. Richard Grosshans (IISD) and Dr. Vince Palace (IISD-ELA), as well as other graduate students conducting research on phytoremediation at IISD-ELA in partnership with the University of Manitoba. The student will learn in an environment that includes other scientists, graduate students, environmental managers, and members of First Nations communities. The student will be exposed to this stimulating environment, offering opportunities to network with other professionals and gain valuable alternative perspectives on their work and career paths and to present their work to a technical audience.

A graduate student stipend of \$17,500 to \$20,000/year will support the MSc student.

For more information and to apply, contact Dr. Zvomuya (francis.zvomuya@umanitoba.ca) and/or Dr. Grosshans (rgrosshans@iisd.ca).

Staff away

Lynda Whitlam: December 8, 10, and 11

Flor Toribio: December 21-23