17 May 2019

Staff/Student News and Announcements

New Soilie!
Congratulation to Rumi Munira and Md. Mofizul Islam on the arrival of their baby boy, Munif Ammar (see picture)! Munif Ammar was born on April 29. We look forward to meeting him when he visits Ellis Building this summer.

Low Flow Fume Hood Alarms, Ellis Building
There is a new procedure for personnel response to the low flow fume hood alarms in Ellis Bldg, effective immediately. See last page for details.

Upcoming:

M.Sc. Thesis Defense, Department of Soil Science
Please mark your calendars for Tony Britton's MSc Thesis Defense.
Title: Determining evapotranspiration and crop coefficient values using an adjusted Penman-Monteith equation over canola (Brassica napus) in southern Manitoba
Date: Tuesday May 28, 2019
Time: 1:00 pm
Place: 346 Ellis Building

Food Systems Student Symposium
The second annual Food Systems Student Symposium takes place Wednesday, June 26, 2019 at the University of Manitoba, 200 Robson Hall. Presented by the Food Systems Research Group at the University of Manitoba. The theme this year is Bridging the Gap: Working towards collaborative food systems research at the University of Manitoba. Graduate students are asked to relate their research to the food system as a whole in an effort to facilitate opportunities for cross-disciplinary collaborations.
Registration is open to everyone - all are welcome to attend!! Student registration is only $20! All other registration (e.g. faculty) is only $30! Registration includes coffee, snacks, and lunch

We are now accepting ABSTRACTS from graduate students conducting research related to food and food systems. All presentations are eligible for cash awards (1st place $300; 2nd place $150)! Deadline for submitting your abstract is May 24, 2019.

Students from ALL departments at the University of Manitoba are invited to submit an abstract to share their research that relates to food and food systems. There are three presentation formats to choose from. Visit our website for abstract specs.

Email your abstracts to: uomfssc@gmail.com

2019 ASA, CSSA & SSSA Annual Meeting, November 10-13, San Antonio, TX
Submit your abstract by May 29 to save money; final deadline to submit is June 11. (You have until August 29 to edit it.) Registration and Hotel Reservations are open.

CSSS/CSAFM meeting: Profiling Change: A Century of Soil Science
***Please note that the deadline for abstract submissions is Monday April 15, 2019.***
The 2019 Joint Annual Meeting of the Canadian Society of Soil Science (CSSS) and the Canadian Society for Agricultural and Forest Meteorology (CSAFM) will be held in Saskatoon, SK, July 9-13.

NB: This joint annual meeting will overlap with Rhizosphere5 in Saskatoon July 7–11th. Those who wish to register for both conferences can do so at a reduced rate. For more details, see the registration and abstract submission page and related registration link.


MEIA Training & Events

**Soil Sampling**
Wednesday, May 29, 2019, 8:00 am - 4:30 pm, St. John's College, University of Manitoba
This one-day course will provide hands-on field instruction in soil sampling and drill rig safety.
STUDENTS: Take this course along with Potable Water and Groundwater Sampling for 1.5 Credit Hours. Approval from Dr. Rick Baydack is required.
https://www.meia.mb.ca/event/162/

**Potable Water and Groundwater Sampling**
Thursday, May 30, 2019 8:00 am - 4:30 pm, St. John’s College, University of Manitoba
This course will provide students with an understanding of typical groundwater impacts focusing on the differences between light and dense non-aqueous phase liquids (LNAPL and DNAPL). STUDENTS: Take this course along with Soil Sampling (May 29) and get 1.5 credit hours. Permission must be obtained through Dr. Rick Baydack.
https://www.meia.mb.ca/event/163/

Department Staff Away:

Shu Ng is away May 1 - 21.
Graduate Scholarships

Karl C. Ivarson Scholarship for students in soil and related sciences

The Dr. Karl C. Ivarson Soil Science Scholarship provides financial support to a student entering the second or subsequent year of graduate studies in soil science (agriculture, environment, geology, agro-ecology or other related disciplines) at a Canadian university. Candidates must hold Canadian Citizenship or Permanent Residence status in Canada and be enrolled in their graduate program for at least one semester beyond the application deadline. One scholarship of $2,000 will be offered in 2019.

Scholarships are awarded using the following criteria, not listed in order of importance:

- Academic achievement
- Areas of study
- Leadership
- Career interests
- References

This scholarship was created by Dr. Karl C. Ivarson through a gift to the Canadian Foundation for Food and Agricultural Education. 2019 Application Guidelines and Application Form can be found at https://cffae.ca/ivarson-soils

Deadline for Application – 11:59 pm EDT, May 27, 2019

Graduate Opportunities

M.Sc. Opportunity: Hydrological Modelling for Soil Moisture Monitoring and Forecasting
Department of Soil Science, University of Manitoba

The Issue: Soil moisture is highly variable in space and time. Climate change is expected to produce more dramatic precipitation fluctuations causing extremes in soil moisture (i.e. drought and flood) more frequently. These extremes profoundly impact on agriculture, flood risk and infrastructure. However, monitoring and forecasting soil moisture is very challenging. Real-time soil moisture monitoring and forecasting requires a modelling approach that integrates various sources of hydrological data to simulate soil moisture levels.

The Opportunity: A research project has been funded consisting of a small-scale study to validate the Aquanty HydroGeoSphere (HGS) model in a Red River Valley (RRV) sub-watershed. The HGS physics-based simulation approach accounts for the entire terrestrial water cycle in 3 dimensions including atmospheric conditions, streamflow, groundwater movement and soil moisture content. Establishment of a RRV watershed that can be accurately simulated using HGS will provide the basis for future upscaling to the entire RRV. This is a key step to establishing a system to simulate current hydrologic conditions, including soil moisture, as well as future hydrologic conditions using weather forecast data for one of Canada’s most productive agricultural regions. This project will provide the backbone for a variety of agricultural and linked surface water management decision support systems that can utilize current and future soil moisture as a key input variable.

The Position: A Master of Science position is currently available for a qualified and highly-motivated student who is interested in 3D Hydrological Model testing for the purpose of monitoring and forecasting soil moisture. The individual must be a quantitatively-minded earth system science specialist, with knowledge of agricultural practices and landscapes in Southern Manitoba, and with an interest in studying soil moisture dynamics through a combination of advanced numerical models and field study. Strong communication and
writing skills are imperative. Previous experience with 3D hydrologic modeling software (i.e. HydroGeoSphere, FeFlow, Modflow, Hydrus, Parflow, GSFlow) would be an asset.

The position has a stipend of $22,000 per year plus the opportunity for additional money as a Teaching Assistant. Applications accepted until the position is filled. To apply, send (via email), a cover letter explaining your interest in the position, a detailed resume and two letters of reference to Dr. Paul Bullock, Professor Agrometerology (Paul.Bullock@umanitoba.ca). Please use “M.Sc. Hydrologic Modeling” in the subject line. The Department of Soil Science is committed to a training environment that embraces gender equality, diversity and encouragement of First Nation and Metis peoples and minorities.

Ph.D. and M.Sc. opportunities, Department of Soil Science, University of Manitoba

Graduate opportunities are available starting September 1, 2019 in the following areas:

- Temporal changes in soil productivity following reclamation of pipeline corridors
- Modeling changes in soil quality indicators in perennial forage systems for fall/winter grazing of beef cattle
- Organic amendment effects on vegetation response to differential reclamation topsoil replacement depths on sites disturbed by energy extraction: Statistical modeling

For more information, contact Dr. Francis Zvomuya (francis.zvomuya@umanitoba.ca).

Graduate program on crop water supply and management in rain-fed agriculture
May 1, 2019

We are seeking a highly motivated and talented candidate for a graduate program (PhD preferred) on crop water supply and management in rainfed agriculture in Atlantic Canada under climate change conditions. In Atlantic Canada, as in many sub-humid and humid regions in the world, agriculture is dominated by rainfed agriculture. Annual precipitation generally meets the basic water needs for crops. However, precipitation is not evenly distributed in time and space. There are dry and wet periods in a year and there are dry and wet areas in a field. Climate change is likely to cause temperature rise and more extreme weather events, which adds uncertainty to crop water supply. Whereas researches on crop water stress and irrigation are plenty, they are mostly done in arid regions. Conditions under rainfed agriculture are very different. The PhD student will join a diverse team of researchers to examine: 1) the effects of excessive and deficit water supply on crop growth and the environment; 2) how climate change will affect crop water supply; 3) how beneficial management practices (such as supplemental irrigation) can be used to reduce crop water stress while maintaining ecosystem sustainability.

Position description

- The position will be based in Fredericton, NB, with Agriculture and Agri-Food Canada (AAFC), and the University of New Brunswick (UNB), in Canada
- The position is available immediately and will be open until filled
- Supervisors: Dr. Li, Sheng in Fredericton Research and Development Centre (FRDC) of AAFC and Prof. Fan-Rui Meng in Forestry & Environmental Management, UNB
- Stipend: Per annual 24k – 31k for PhD and 21k – 26k for MSc (in Canadian Dollars)
- The candidate is encouraged to apply for additional scholarships and teaching assistantships provided by UNB

Requirements

- Meet UNB PhD admission requirement (https://www.unb.ca/gradstudies/admissions/index.html)
- Fluent in English (spoken and writing) and excellent academic records and research experiences
- Master degree in agricultural/biosystems engineering, agronomy, plant science, soil science, hydrology or a relevant area of agri-environmental science
• Direct research experiences on crop water stress and irrigation and agri-environmental modeling are considered assets
• Willingness to work in both field and laboratory settings
• Willingness to travel and work in remote locations

Application
• A letter of interest (one page)
• A CV describing qualifications and experience
• Unofficial transcripts
• Contact information for three references
• Email to Dr. Li, Sheng (Sheng.Li@Canada.ca)

Employment Opportunities

Assistant Professor - Soil Chemistry, Auburn University
The Department of Crop, Soil, and Environmental Sciences in the College of Agriculture at Auburn University is seeking applications for the position of Assistant Professor-Soil Chemistry. This faculty position will be a nine-month, tenure-track position with a 40% teaching and 60% research appointment. The projected start date is January 1, 2020.

Responsibilities: The successful candidate will develop a nationally recognized program which advances current understanding of soil chemical processes. The incumbent’s research program should include a fundamental soil chemistry component and an applied aspect that addresses practical issues in environmental and agronomic sciences. Research areas which complement existing expertise include speciation and reactivity of soil nutrients and/or contaminants, thermodynamics and kinetics of soil chemical processes, organo-mineral interactions in soils, soil redox processes, and principles of soil acidity. The candidate will apply these areas in investigation of chemical processes that govern the speciation, distribution, and transport of nutrients and inorganic and organic contaminants in terrestrial and aquatic ecosystems. Experience and research in applied agronomic science is preferred.

Teaching responsibilities are 7-8 hours of course credit per academic year including an upper level undergraduate/graduate soil chemistry course and a graduate level environmental soil chemistry course. The successful candidate will mentor undergraduate students and supervise graduate programs in soil chemistry. As a member of the College of Agriculture and the Alabama Agricultural Experiment Station, this position will also participate in service and outreach activities related to southeastern U.S. agriculture.

The individual will collaborate with scientists in the department, college, university and Alabama Cooperative Extension System. Opportunities for collaboration with scientists from the USDA-ARS-National Soil Dynamics Laboratory and US Forest Service are also available.

Qualifications: Minimum qualifications include: 1) an earned Ph.D. from an accredited institution in soil chemistry, environmental chemistry, geochemistry or related discipline, at the time employment begins 2) experience, training and knowledge of traditional and advanced chemical methodologies and instrumentation, and 3) documented evidence of individual and/or collaborative research in soil chemical processes across multiple ecosystems. The successful candidate must possess excellent written and verbal skills to effectively interact with diverse audiences. The successful candidate must meet eligibility requirements to work in the United States at the time of appointment and to continue working legally for the employment term. Desirable qualifications include postdoc experience and evidence of prior extramural funding success.

Application: Applicants must apply for the position by visiting the link: http://aufacultypositions.peopleadmin.com/postings/3525 and attach the following:
1. Cover letter that addresses the experience pertinent to position responsibilities,
2. Current curriculum vita,
3. Copies of ALL academic transcripts,
4. Statement of research interests and accomplishments,
5. Statement of teaching philosophy.

When prompted during the on-line process, please provide names, email addresses and phone numbers for three (3) professional references. Only complete application materials will be considered. To ensure consideration for the position, applicants are encouraged to apply by end of business June 15, 2019. The search will continue until the position is filled. Questions about this position should be directed to Dr. Joey Shaw, Search Committee Chair, email: shawjo1@auburn.edu

The University: Auburn University is one of the nation’s premier land, sea and space grant institutions with an enrollment of more than 25,400 graduate and undergraduate students. The University is located in the city of Auburn in east-central Alabama approximately 100 miles southwest of Atlanta, GA and southeast of Birmingham, AL and about 60 miles northeast of the state capital (Montgomery). Auburn University is ranked in the top 50 public universities for undergraduate programs. Interested applicants are encouraged to visit www.auburn.edu for more information.

Postdoctoral position in phosphorus cycling, University of Delaware
Environmental Biogeochemistry Laboratory (http://sites.udel.edu/ebl) at the University of Delaware is seeking a postdoctoral associate to undertake research on the speciation, transformation, and cycling of phosphorus in an estuarine gradient in Delaware. This is a part of a multi-PI project on coastal water security, therefore provides the opportunity to collaborate with various research teams on hydrogeology, microbiology, nutrient management, big data, and socio-economic dimensions. Strong analytical skills in spectroscopic and spectrometric (NMR, HPLC-MS, TCEA-IRMS, MS/MS) methods and background in nutrient biogeochemistry or environmental chemistry related to the riverine/estuarine watershed is required. The initial appointment is for one year and can be renewed for additional years based on satisfactory performance. Please submit detailed curriculum vitae and list of three references to Dr. Deb Jaisi (jaisi@udel.edu) by May 30, 2019, for early consideration, but the position remains open until filled. The anticipated start date of Aug 1, 2019.

Graduate Students

Registration Reminder: Summer 2019 & GRAD 7500 Academic Integrity

Please read the below information carefully as it concerns important information about graduate student registration.

**NB: In addition to the re-registration courses below, please register for your appropriate thesis course:**

- **Master's Thesis - 1598 - GRAD 7000 - A03**
- **Doctoral Thesis - 1603 - GRAD 8000 - A03**

*No approval form is needed for Summer registration.*

**Information for all Master's and Ph.D. students who are continuing in their programs*:**

All graduate students are required to register every academic term which includes Fall, Winter and Summer. If students do not register by **June 15, 2019**, they will be discontinued from their program of study. As Summer 2019 term is approaching, ensure you are registered for the **re-registration course**:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Term</th>
<th>CRN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master's Re-registration</td>
<td>GRAD 7020</td>
<td>Summer 2019</td>
</tr>
<tr>
<td>Doctoral Re-registration</td>
<td>GRAD 8020</td>
<td>Summer 2019</td>
</tr>
</tbody>
</table>

This re-registration should be over and above any course registration(s) you complete. So long as you are in a re-registration course for each term, you will retain status in your graduate program even if you withdraw from other courses.
*MBA and MPA students: if you need to register for re-registration only, please contact your departmental/unit graduate program assistant.

Exceptions to Summer 2019 term re-registration:
- **Students on a Parental or Exceptional Leave** do not have to register in the term(s) for which this kind of leave is approved. Students on a *Regular Leave* are still required to register for the re-registration course in each term.
- **Students who anticipate graduating in May 2019** are not required to register for the Summer 2019 term.

**Note:**
**Students who anticipate graduating in October 2019** must register for their final Thesis/Practicum/Comprehensive Exam/Project or the final course specific to their program in Summer 2019 term. Re-registration in GRAD 7020/GRAD 8020 is still a good idea in case your graduating term is delayed.

Students will not be assessed Program Fees or Continuing Fees in Summer Term. Applicable student organization and ancillary fees will be assessed. [http://umanitoba.ca/student/records/fees/988.html](http://umanitoba.ca/student/records/fees/988.html)

All course numbers and CRNs can be found by searching the Class Schedule link at [https://aurora.umanitoba.ca/](https://aurora.umanitoba.ca/).

If you have questions about registration please contact your departmental/unit graduate program assistant.

**Compulsory GRAD 7500 Academic Integrity Tutorial**

Academic Integrity is a matter of paramount importance in academia. It is the foundation of scholarly work. Breeches of Academic Integrity, whether intentional or unintentional, have potentially very serious consequences to a student’s status in the Faculty of Graduate Studies and at the University of Manitoba. To help graduate students better understand the issues surrounding Academic Integrity, the Senate of the University of Manitoba passed a motion that requires all graduate students to take a compulsory tutorial on Academic Integrity.

All graduate students must register for and complete GRAD 7500 Academic Integrity Tutorial one time. This is a zero (0) credit-hour course intended to introduce students to their basic responsibilities regarding academic integrity and to the resources available to them.

**Graduate Students who are starting their graduate program in Summer 2019, or who have not yet registered for the course, must register for GRAD 7500:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Term</th>
<th>CRN</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRAD 7500</td>
<td>Summer 2019</td>
<td>1929</td>
</tr>
<tr>
<td>GRAD 7500 (French version for USB students only)</td>
<td>Summer 2019</td>
<td>1927</td>
</tr>
</tbody>
</table>

Failure to successfully complete this course within the first term of registration will result in suspension of registration privileges, and ultimately, a failed grade and Required to Withdraw action.

**Note:**
- Please only register for GRAD 7500 once. Do not register in subsequent terms while admitted to the same degree program.
- Students on an exceptional/parental/regular leave of absence must register in GRAD 7500 upon return from leave if it has not already been completed.
- Students MUST complete GRAD 7500 even if:
They have already completed the Research Integrity course.
They have already completed a similar departmental seminar course.
Their thesis is in the middle of distribution.
They are a Visiting, Occasional, or Pre-Masters student.
A span of time of one (1) or more term(s) separates one graduate degree program from another graduate degree program (for instance, if a student completed GRAD 7500 at the Master’s level, took a break of one (1) or more terms and was admitted to another Master’s or Ph.D. program)

○ Students are not required to complete GRAD 7500 if:
  • They are a Ph.D. student who already completed GRAD 7500 during their Master’s program (without a span of time between programs)

Students must register for the course in Aurora in order to access it in UM Learn.

We strongly suggest you review the course instructions prior to starting the course: [http://umanitoba.ca/graduate_studies/htmlmail/Academic_Integrity_Instructions.pdf](http://umanitoba.ca/graduate_studies/htmlmail/Academic_Integrity_Instructions.pdf)

FAQs can be viewed at: [umanitoba.ca/faculties/graduate_studies/registration/grad7500FAQ.html](http://umanitoba.ca/faculties/graduate_studies/registration/grad7500FAQ.html).

Always remember to plan your program carefully. It is imperative that you ensure you are registering for only those courses that are a major part of your Master’s or Ph.D. program. If they are not part of your major program then they should be added through your department/unit office as an Auxiliary course “X”, Audit course “A” or an Occasional course “O”. If you have questions about this, contact your department/unit. Do not register for more courses than your program allows because you may be assessed extra fees at the time of graduation.


"Students are ultimately responsible for ensuring that they meet all degree and program requirements. The advisor (and if appropriate co-advisor), advisory committee, and unit must ensure that each student follows the guidelines and meets the program requirements. The Faculty of Graduate Studies performs a final check of program requirements for each student just prior to graduation. Students are cautioned, therefore, to periodically check all regulations with respect to the degree requirements. Failure to meet all the requirements will render a student ineligible to graduate."

Thank you for your attention to these important graduate student matters.

Andrea

Andrea J. Kailer, B. Comm. (Hons). Confidential Assistant to the Associate Deans & Programs Coordinator

Writing Tutor Support for Graduate Students
The Faculty of Agricultural and Food Sciences has partnered with the Academic Learning Centre (ALC) to offer tutoring in writing for graduate students in the Faculty. The writing tutors are Desmond Essien and Hannah Oduro-Obeng and they will offer four hours of tutoring each week through the fall and winter terms.

Tutoring sessions will begin next week in the Dafoe Library with the following Fall Schedule:

Hannah: 6:00-8:00pm on Tuesdays
Desmond: 11:30am - 1:30pm on Thursdays

Graduate Students: Appointments must be booked through the ALC’s online booking system. The procedure to book appointments is outlined in the attachment.

Faculty Members: If you would like someone from ALC to announce the service to students in your classroom, please contact them through the ALC email account to make the request: [academic_learning@umanitoba.ca](mailto:academic_learning@umanitoba.ca)
LOW FLOW FUME HOOD ALARMS, ELLIS BLDG

There is a new procedure for personnel response to the low flow fume hood alarms in Ellis Bldg, effective immediately.

If the siren activates, it means there has been an exhaust system failure and the fume hoods have stopped drawing the appropriate amount of air. Chemical exhaust could be dumping into lab and general building space.

Because the Ellis Bldg has 2 separate ventilation systems (the North Wing and the South Wing), we can initially evacuate to the other wing. If the siren has activated in both wings, then both ventilation systems have shut down and we need to exit the building. When the alarms have stopped, we are to wait 5 minutes before re-entering, this is to allow any build up of gases to be ventilated from the building.

For now, this will be an individual response and not part of the Fire Evacuation Procedure.

On campus this currently effects the Ellis Bldg, the Animal Science Bldg and the Biological Sciences Bldg. The UM Life Safety Committee is currently working on a Campus wide plan, this an interim procedure put in place to address our Department’s Due Diligence.

We will discuss this at the Spring Orientation Session, if you currently have any questions contact Rob Ellis

The following signage has been posted below all 20 Low Flow Strobe/Sirens in Ellis:

IF THE ABOVE SIREN HAS ACTIVATED,
IT MEANS THE BUILDING’S CHEMICAL FUME HOODS HAVE STOPPED WORKING

IMMEDIATE ACTION STEPS:

1. EVACUATE TO THE NORTH WING OF THE BUILDING
2. IF THE NORTH WING IS ALSO ALARMING, EVACUATE TO OUTSIDE THE BUILDING
3. WHEN THE SIREN HAS STOPPED, WAIT 5 MINUTES BEFORE RETURNING

(Effective April 2019)