**4R Nitrogen Management and Reduction in Nitrous Oxide Emissions**

**Graduate Student Position Announcements**

**in the Soil Ecology Laboratory**

**of the Department of Soil Science, University of Manitoba, Canada**

The laboratory for Applied Soil Ecology at the University of Manitoba (<http://soilecology.ca/>; Twitter @soilecologyUMan) is seeking highly motivated and talented candidates for training leading to MSc or PhD degrees. Students will undertake graduate research examining 4R Nitrogen Fertilizer Management (right source, rate, timing and placement) on canola or grain corn agronomy and N use efficiency or emissions of the greenhouse gas, nitrous oxide (N2O). Treatments examined include the range of currently available enhanced efficiency N fertilizers as well as products under development as well as in-crop N application practices including developing passive and/or active spectral sensor approaches to optimize N application rates. Candidates will have excellent oral and written skills in English and have completed a 4-year equivalent BSc in the agricultural or natural sciences, or engineering. Candidates with experience in production agriculture are encouraged to apply. Salary is $18,500/yr for two years to MSc students and $21,000/yr for four years to PhD students. Students who already have scholarships are encouraged to apply as a salary is available to them. The training is funded by several government and industry sources to projects lead by the Applied Soil Ecology Laboratory.

The Applied Soil Ecology Lab is very active in soil ecological research with state-of-the-art facilities and a diverse array of multidisciplinary projects in crop nutrient management, plant disease management, and soil ecology of major field and horticultural crops in Manitoba. The laboratory employs 4 permanent technicians, and routinely 2-3 research associates, 5-10 graduate students, and 10-15 summer students/term technicians. The University of Manitoba is in the City of Winnipeg, with a vibrant metro area of 750,000 people and is less than an hour by car to Prairie, Boreal and Canadian Shield landscapes, and the U.S.A. For more information on this opportunity please send a detailed CV, statement of relevant experience, availability, and list of three referees by email to Dr. Mario Tenuta, Professor of Applied Soil Ecology, [mario.tenuta@umanitoba.ca](mailto:mario.tenuta@umanitoba.ca), please use the subject heading “Graduate Studies 4R”. Positions are available starting April 2018 to April 2019. The Applied Soil Ecology Laboratory is committed to a training environment with gender equality and encouragement of participation of First Nations and Metis peoples and minorities.