Urban Water TMU - September 2022

News

Urban Water TMU!

With the official renaming of the university in June 2022, the Urban Water Research Centre has proudly incorporated the name of the university into its name: Urban Water TMU!

Research Proposals

Current Funding Calls

2022 NFRF Exploration

- Full Application Deadline: Sep 13, 2022 (8PM EST)

2022 Water Innovation Program Call for Proposals

- EOI Submission Deadline: September 15, 2022 (5PM EST)

2022 NSERC Collaborative Research and Training Experience (CREATE)

- Application Deadline: September 22 (if invited to apply)

NSERC Discovery Horizons Pilot

- Full Application Deadline: October 18, 2022

NSERC - Alliance International

- Deadline: No deadline (note that you can only apply once as primary applicant or co-applicant in a 12-month period)

View All SRC Funding Calls

Useful Information for Grant Writing

The following is background information to assist in writing grant proposals.

Water, Energy, and Environment - A Walkthrough of the Current State of Affairs (2022)

Read Document Here

Meet Your Colleagues

Full Members are highly involved in the Centre and are regular contributors to Urban Water research projects and initiatives.

Affiliate Members are part of the Urban Water network and contribute to specific collaborative research projects and/or specific initiatives.

See Our Full Members and Affiliate Researchers

Staff News

Welcoming Anum Khan

Welcome Anum Khan as the new Research and Operations Facilitator. Anum graduated with a Masters in Applied Science in Civil Engineering degree from TMU. Anum has a background in water and wastewater infrastructure and has played an active role in supporting education development projects domestically. Anum is passionate about supporting the next generation of water leaders through inclusive research environments.

About Anum Khan

Student Leadership Committee

to build and foster a sense of community among Urban Water TMU researchers. The group will show leadership and engage the community around urban water events and activities.

The committee is comprised of four members. The President, Jannatul Islam, the Vice President, Zanina Ilieva, the Treasurer, Brieanna Limkilde, and the Secretary, Diana Paredes, comprise the newly appointed team.

Please welcome the new UW Student Leadership Committee!

About the Urban Water Student Leadership Committee

A Summer Student Team Initiative

Allyship Network

With equity and community inclusion in mind, the 2022 Summer Student Team developed the Urban Water TMU Allyship Network. The Network supports students and identifies “Allies” for conversation, community, and connection to additional resources at TMU for support. Allies aim to support members of the community who are facing discrimination, harassment or lack of inclusion.

If you want more information on the Allyship Network or want to become an Ally to support your community, please contact Anum Khan at **a11khan@ryerson.ca**.

Learn More About the Allyship Initiative

SOPs

Laboratory safety is a key part of our daily research and wellbeing. Urban Water TMU is systematically updating our safety protocols and monitoring framework. Please see the Laboratory Safety Operating Protocols and Monthly Inspection Checklist below.

Please note that PIs are responsible for ensuring their HQPs are following the SOPs.

Laboratory Standard Operating Procedures

Laboratory Monthly Inspection Checklist

Upcoming Meetings

Urban Water TMU Student Leadership Committee Meeting:
Tuesday, September 13 (10:00AM - 10:45AM)

Urban Water TMU General September Meeting:
Wednesday, September 21 (1:00PM - 2:00PM)

- Google Meet: https://meet.google.com/iaj-ziym-wqh

Urban Water TMU EnSciMan Seminar (Dr. Kristina Hopkins):
Wednesday, October 5 (1:00PM - 2:00PM)

- Date and Location: TBA

Recent Publications

Arnott, S. E., Fugère, V., Symons, C. C., **Melles, S. J.**, Beisner, B. E., Cañedo-Argüelles, M., Hébert, M., Brentrup, J. A., Downing, A. L., Gray, D. K., Greco, D.,

within freshwater zooplankton species reduces the predictability of community-level salt tolerance. Limnology and Oceanography Letters, lol2.10277. https://doi.org/10.1002/lol2.10277

Biagi, K. M., Ross, C. A., **Oswald, C. J.**, Sorichetti, R. J., Thomas, J. L., & **Wellen, C. C.** (2022). Novel predictors related to hysteresis and baseflow improve predictions of watershed nutrient loads: An example from Ontario's lower Great Lakes basin. Science of The Total Environment, 826, 154023. https://doi.org/10.1016/j.scitotenv.2022.154023

Haroun, B., Bahreini, G., Zaman, M., Jang, E., Okoye, F., **Elbeshbishy, E.**, Santoro, D., Walton, J., Al-Omari, A., Muller, C., Bell, K., & Nakhla, G. (2022). Vacuum-enhanced anaerobic fermentation: Achieving process intensification, thickening and improved hydrolysis and VFA yields in a single treatment step. Water Research, 220, 118719. https://doi.org/10.1016/j.watres.2022.118719

Heidi Steffen, Caylin Bosch, **Gideon Wolfaardt**, & Alfred Botha. (2022). Rising environmental temperatures and polluted surface waters: The prelude to the rise of mycoses in South Africa. Water SA, 48(2 April). https://doi.org/10.17159/wsa/2022.v48.i2.3918

Holton, E., Archer, E., Fidal, J., Kjeldsen, T., **Wolfaardt, G.**, & Kasprzyk-Hordern, B. (2022). Spatiotemporal urban water profiling for the assessment of environmental and public exposure to antimicrobials (antibiotics, antifungals, and antivirals) in the Eerste River Catchment, South Africa. Environment International, 164, 107227. https://doi.org/10.1016/j.envint.2022.107227

Hyder, U. S., Kakar, F., Okoye, F., & **Elbeshbishy, E.** (2022). Management of digestate from anaerobic digestion of municipal sludge. In V. K. Tyagi, K. Aboudi, & C. Eskicioglu (Eds.), Anaerobic Digestate Management (pp. 75–110). IWA Publishing. https://doi.org/10.2166/9781789062755_0075

Ismail, A., Jang, E., Schraa, O., Walton, J. R., Zamanzadeh, M., **Elbeshbishy, E.**, & Santoro, D. (2022). Model-based investigation of the chemical phosphorus removal potential of the peroxide regenerated iron-sulfide control technology. Water Environment Research, 94(7). https://doi.org/10.1002/wer.10754

Ismail, A., Kakar, F. laqa, **Elbeshbishy, E.**, & Nakhla, G. (2022). Combined thermal hydrolysis pretreatment and anaerobic co-digestion of waste activated sludge and food waste. Renewable Energy, 195, 528–539. https://doi.org/10.1016/j.renene.2022.06.042

Johns, C., & VanNijnatten, D. (2022). Embracing Complexity in Policy Implementation Research: A Comparative Analysis of Water Policy Implementation in

https://doi.org/10.1080/13876988.2022.2086044

Mangwana, N., Archer, E., Muller, C. J. F., Preiser, W., **Wolfaardt, G.,** Kasprzyk-Hordern, B., Carstens, A., Brocker, L., Webster, C., McCarthy, D., Street, R., Mathee, A., Louw, J., Mdhluli, M., & Johnson, R. (2022). Sewage surveillance of SARS-CoV-2 at student campus residences in the Western Cape, South Africa. Science of The Total Environment, 851, 158028. https://doi.org/10.1016/j.scitotenv.2022.158028

Millar, E., **Melles, S.**, Klug, J. L., & Rees, T. (2022). Stewarding relations of trust: Citizen scientist perspectives on fostering community trust in science. Environmental Sociology, 1–20. https://doi.org/10.1080/23251042.2022.2112888

Ross, C. A., Moslenko, L. L., Biagi, K. M., **Oswald, C. J.**, **Wellen, C. C.**, Thomas, J. L., Raby, M., & Sorichetti, R. J. (2022). Total and dissolved phosphorus losses from agricultural headwater streams during extreme runoff events. Science of The Total Environment, 848, 157736. https://doi.org/10.1016/j.scitotenv.2022.157736

Sirunda, J., Oberholster, P., & **Wolfaardt, G.** (2022). Assessing the Adverse Effects of Land Use Activities on theWater Quality of Selected Sub-Saharan Africa Reservoirs Using a Combination of Water Quality Indices. Water, Air, & Soil Pollution, 233(7), 267. https://doi.org/10.1007/s11270-022-05703-9

Sühring, R., Baak, J. E., Letcher, R. J., Braune, B. M., de Silva, A., Dey, C., Fernie, K., Lu, Z., Mallory, M. L., Avery-Gomm, S., & Provencher, J. F. (2022). Co-contaminants of microplastics in two seabird species from the Canadian Arctic. Environmental Science and Ecotechnology, 12, 100189. https://doi.org/10.1016/j.ese.2022.100189

Wizenberg, S. B., Dang, M., & **Campbell, L. G.** (2022). Methods for characterizing pollen fitness in Cannabis sativa L. PLOS ONE, 17(7), e0270799. https://doi.org/10.1371/journal.pone.0270799

Yousif, M., Burdett, H., **Wellen, C.**, Mandal, S., Arabian, G., Smith, D., & Sorichetti, R. J. (2022). An innovative approach to correct data from in-situ turbidity sensors for surface water monitoring. Environmental Modelling & Software, 155, 105461. https://doi.org/10.1016/j.envsoft.2022.105461