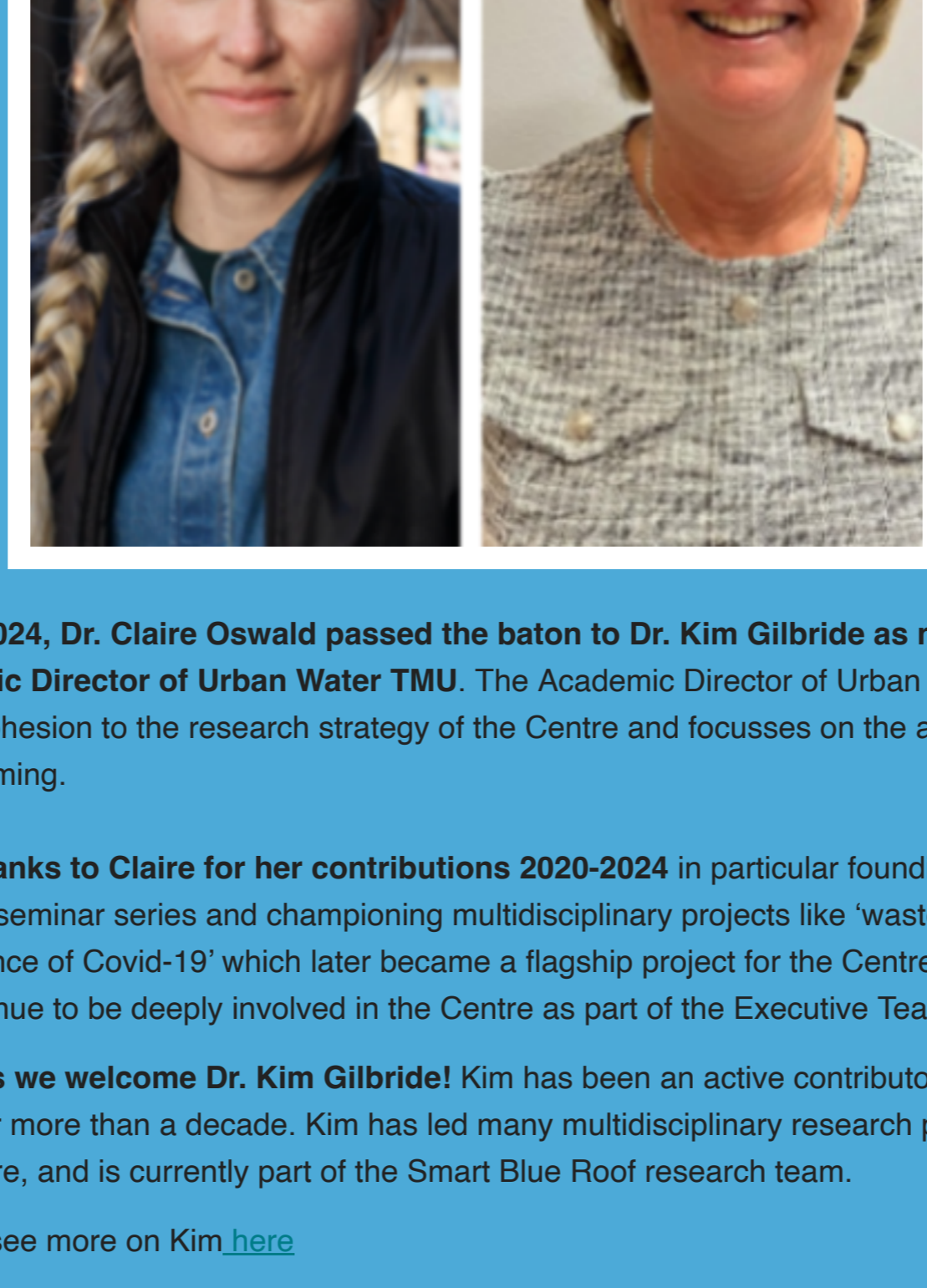


Urban Water TMU - Fall 2024

Urban Water TMU Welcomes New Academic Director Dr. Kimberley Gilbride



In Fall 2024, Dr. Claire Oswald passed the baton to Dr. Kim Gilbride as new Academic Director of Urban Water TMU. The Academic Director of Urban Water brings cohesion to the research strategy of the Centre and focusses on the academic programming.

Huge thanks to Claire for her contributions 2020-2024 in particular founding the external seminar series and championing multidisciplinary projects like 'wastewater surveillance of Covid-19' which later became a flagship project for the Centre. Claire will continue to be deeply involved in the Centre as part of the Executive Team.

With this we welcome Dr. Kim Gilbride! Kim has been an active contributor to Urban Water for more than a decade. Kim has led many multidisciplinary research projects for the Centre, and is currently part of the Smart Blue Roof research team.

Please see more on Kim [here](#)

Welcoming Mike Goffin as the new SPPDI Bruce Water Policy Fellow



Urban Water TMU welcomes Mike Goffin as the latest SPPDI Bruce Water Policy Fellow! Mike is one of Canada's most experienced water policy leaders. With more than 40 years of experience at Environment and Climate Change Canada, Mike was instrumental in negotiating the Canada-US Great Lakes Water Quality Agreement, and led in the creation of the Canada Water Agency.

Mike has generously engaged with Urban Water researchers and students and we look forward to many policy discussions and initiatives in the next year.

Please see more on Mike [here](#).

Urban Water Hosted Downstream 2024!



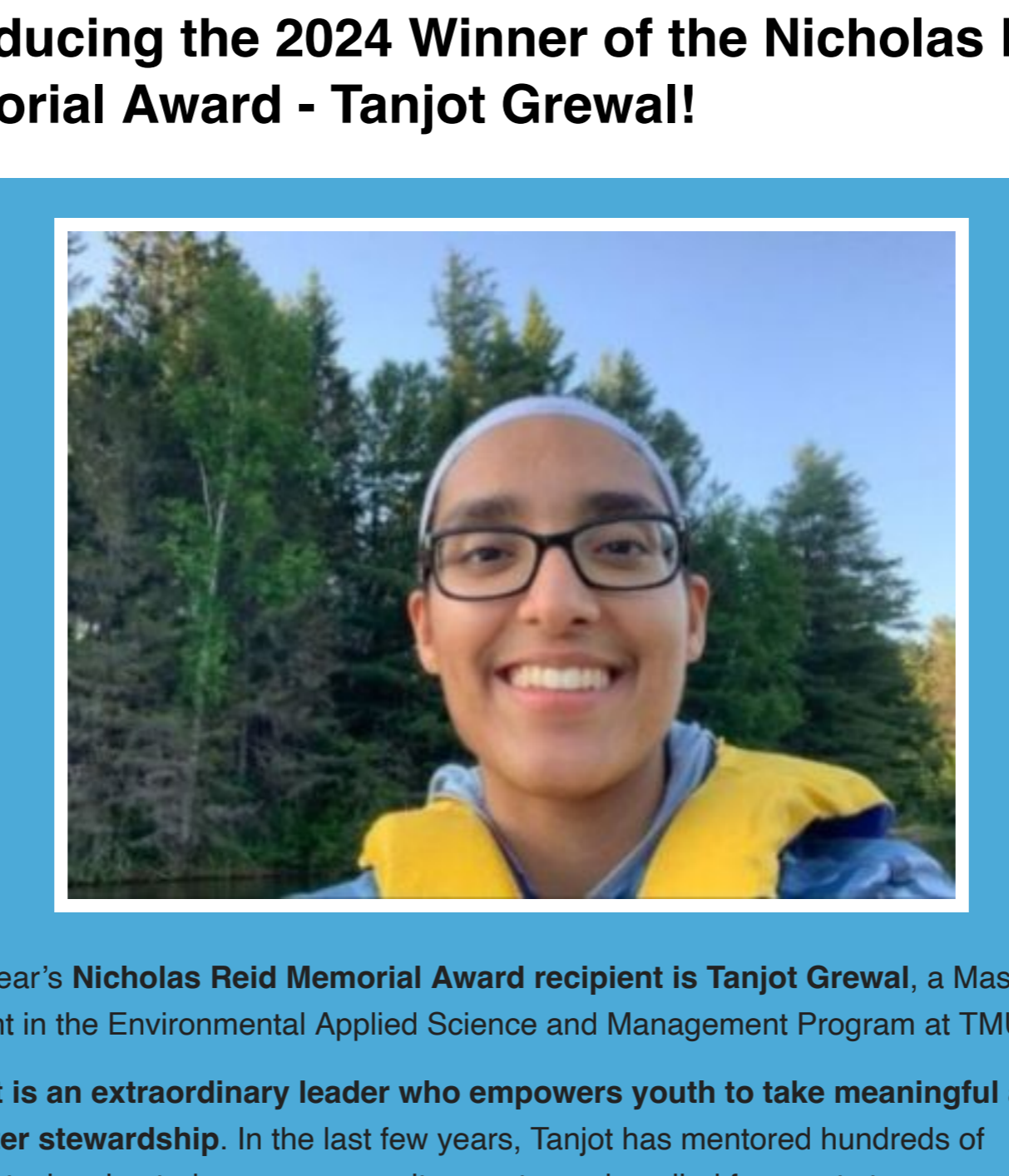
On October 25th, Urban Water TMU hosted Downstream 2024! Downstream is an immersive networking experience for young professionals creatively curated by Actual Media. Young professionals gathered in round table microsessions to pose questions to experienced professionals from the water sector.

Huge thanks to the 10 experts who provided mentorship to the more than 60 ambitious students and recent graduates!

Please see more on our website [here](#)



Greening the TMU Campus!

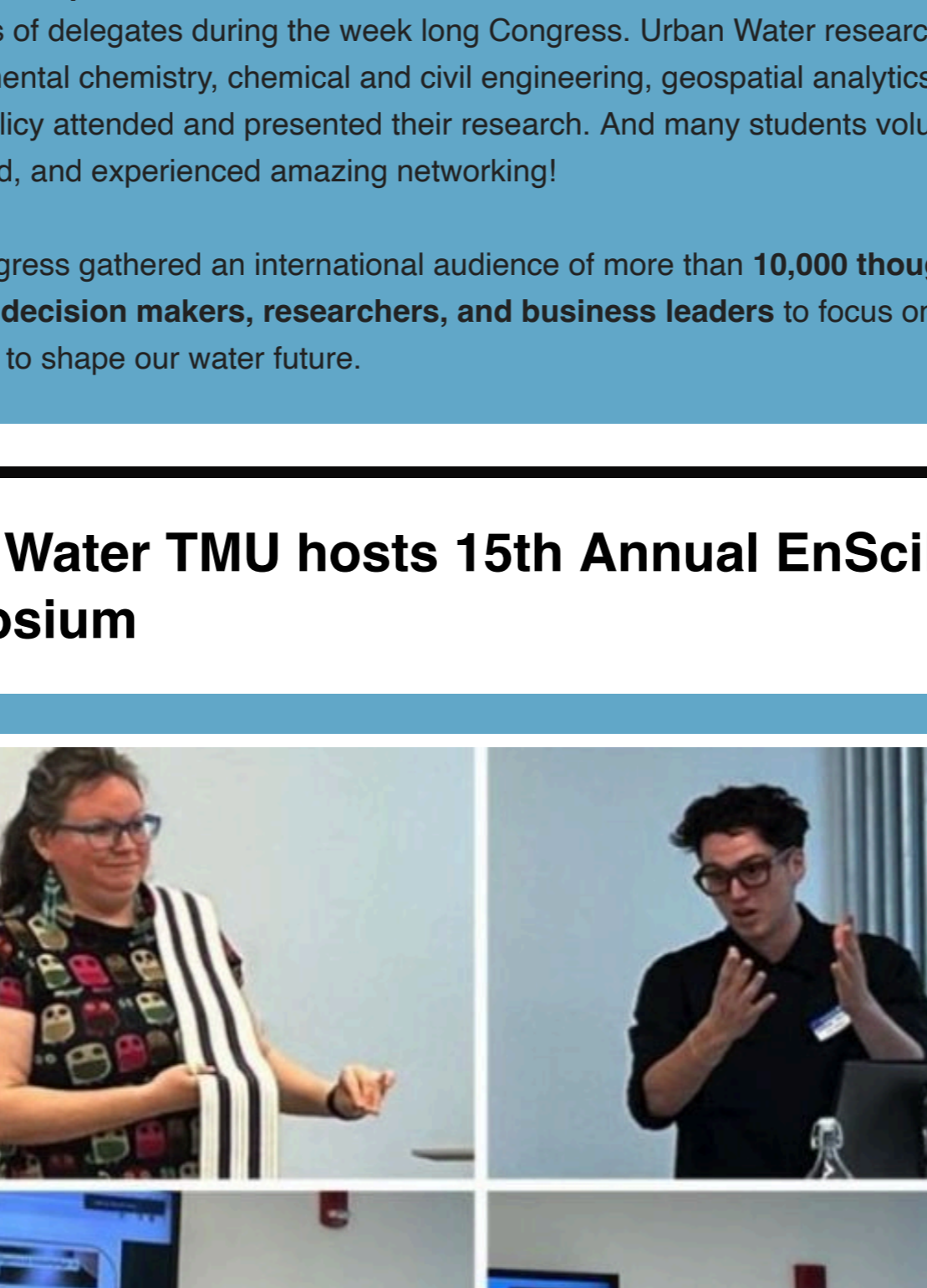


This summer, the Urban Water Student Leadership Committee engaged TRCA's Restoration and Resource Management team to plant trees downtown. The result is more than 100 new trees and shrubs planted across TMU's downtown campus in Fall 2024, with a second, student-led planting event planned in Spring 2025 in partnership with TRCA's Community Outreach and Education team.

This initiative is a great example of greening and increasing tree canopy in urban downtown environments. Well done Student Leadership Committee!

Please see more on our website [here](#)

Introducing the 2024 Winner of the Nicholas Reid Memorial Award - Tanjot Grewal!



This year's Nicholas Reid Memorial Award recipient is Tanjot Grewal, a Master's student in the Environmental Applied Science and Management Program at TMU!

Tanjot is an extraordinary leader who empowers youth to take meaningful action in water stewardship. In the last few years, Tanjot has mentored hundreds of students, has hosted many community events, and applied for grants to subsidize these activities, has brought together community and public sector organizations that wouldn't otherwise connect.

Please see more on our website [here](#)

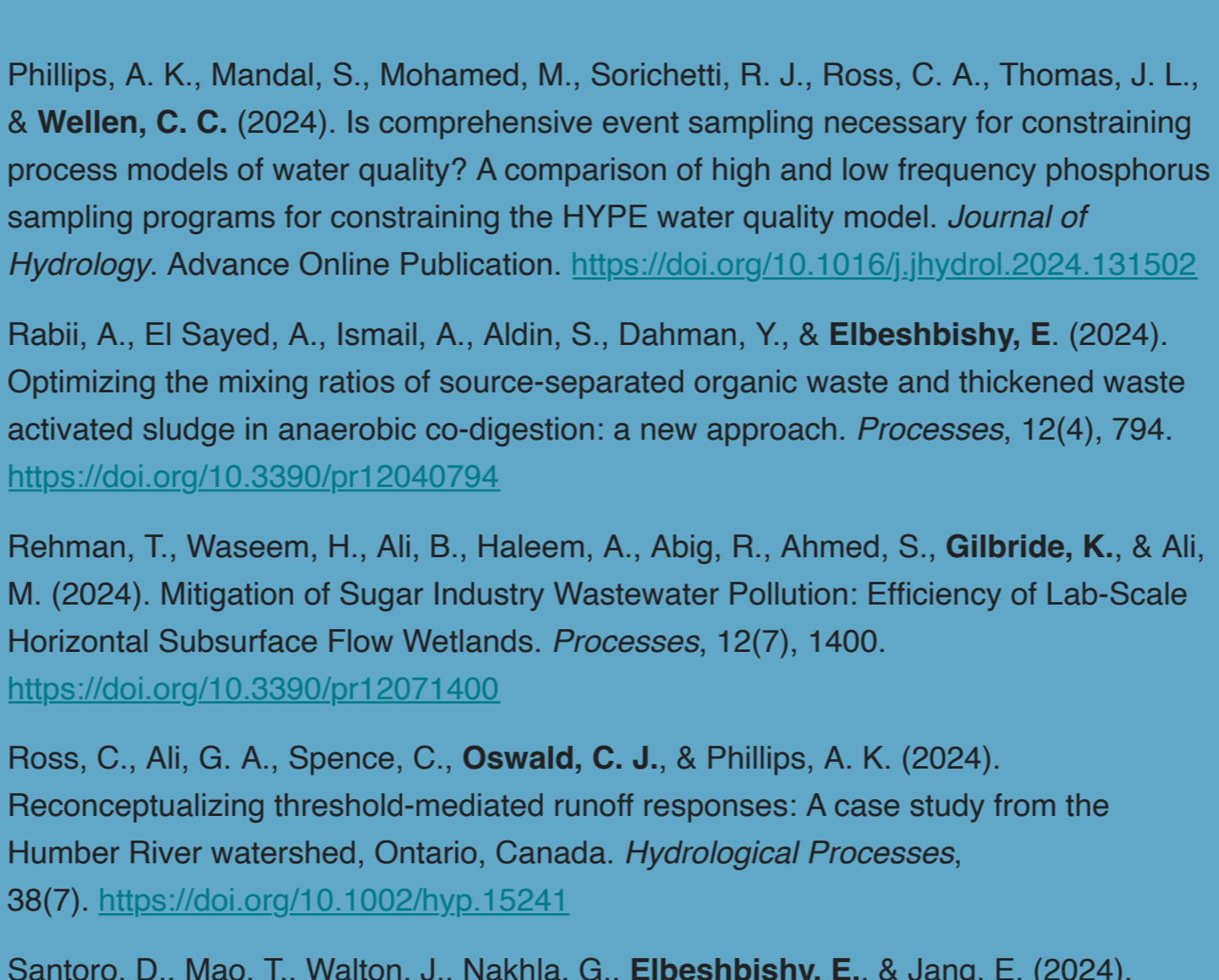
The IWA World Water Congress 2024 comes to Toronto!



Urban Water's Dr. Elsayed Elbeshbishy led the Host Organizing Committee for the International Water Association World Water Congress 2024 and galvanized TMU's participation. Urban Water had a booth in the Canadian Pavilion and met hundreds of delegates during the week long Congress. Urban Water researchers from environmental chemistry, chemical and civil engineering, geospatial analytics, and public policy attended and presented their research. And many students volunteered, presented, and experienced amazing networking!

The Congress gathered an international audience of more than 10,000 thought-leaders, decision makers, researchers, and business leaders to focus on water solutions to shape our water future.

Urban Water TMU hosts 15th Annual EnSciMan Symposium



Recently, the PhD students in the Environmental Applied Science and Management Program hosted a Symposium focused on empowering youth to become involved and tackle climate change. Speakers included thought leaders like: Imogen Coe and Brooke Filsinger from TMU, Jess Ilan Wainer from Rainforest Reliance, and Susan Debreceni from the University of Toronto Trash Team.

The Symposium brought together students and researchers from science, engineering, geography, public health, and food security, as well as, partners and collaborators from government and non-profit organizations.

Please see more on our website [here](#)

Recent Publications of Full Members

Full Members are highly involved in the Centre and are regular contributors to Urban Water research projects and initiatives. Check out their recent publications below and a full list of publications on the [UW website linked here](#).

Adekunle Alli, Y., Barmisaye, A., Onawole, A. T., Oladaye, P. O., Bankole, O. M., Kovisto, B., & Youssef, K. (2024). Coaxial electrospinning: design, characterization, mechanistic insights and their emerging applications in solar cells [Journal Article Review]. <https://doi.org/10.1016/j.nanoen.2024.112023>

Aladekoyi, O., Siddiqui, S., Hania, P., Hamza, R., & Gilbride, K. (2024). Accumulation of antibiotics in the environment: have appropriate measures been taken to protect Canadian human and ecological health? *Ecotoxicol Environ Saf*, 280. Advance Online Publication. <https://doi.org/10.1016/j.ecoenv.2024.116513>

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Calabro, P. S., Elbeshbishy, E., Laqa Kakar, F., Zema, D. A. (2024). A short bibliographic review concerning biometane production from wastewater sludge [Review article]. *Waste Manag Res*. <https://doi.org/10.1177/0734242X241252908>

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Faucht, S., Atkinson, D., Wallace, B. & Bau, D. (2024). Token Erasure as a Footprint of Implicit Vocabulary bias in LLMs. <https://arxiv.org/pdf/2406.20086>

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Hamze, A., Zakaria, B. S., Zaghloul, M. S., Dhar, B. R., & Elbeshbishy, E. (2024). Comprehensive hydrothermal pretreatment of municipal sewage sludge: a systematic approach. *J Environ Manag*, 361. <https://doi.org/10.1016/j.jenvman.2024.121194>

Hidalgo-Flosa, Y., Saavedra-Torres, M., Koivisto, B. D., Treto-Suárez, M. A., Pérez-Hernández, D., Zarate, X., & Schott, E. (2024). Exploring electronic structure and photophysical properties of metalloporphyrin-based metal-organic frameworks for photocatalysis: A quantum chemistry study. *Inorganic Chemistry Communications*, 113635. <https://doi.org/10.1016/j.inoche.2024.113635>

Klopper, K. B., Bester, E., Schalkwyk, M. V., & Wolfaardt, G. M. (2024). Mixed species biofilms act as planktonic cell factories despite isothiazolone exposure under continuous-flow conditions. *Environ Microbiol Rep*. <https://doi.org/10.1111/1758-2229.70010>

Lewin, W., Suehring, R., Fries, E., Solomon, M., Brinkmann, M., Weltersbach, M. S., Trohlow, H., & Freese M. (2024). Soft plastic fishing lures as a potential source of chemical pollution-chemical analyses, toxicological relevance, and anglers' perspectives. *Sci Total Environ*. <https://doi.org/10.1016/j.scitotenv.2024.173884>

Milotic, M., Milotic, D., & Koprivnikar, J. (2024). Dense aquatic vegetation can reduce parasite transmission to amphibians. *International journal for parasitology*. S0020-7519(24)00203-0. Advance online publication. <https://doi.org/10.1016/j.ijpara.2024.11.003>

O Dwyer, K., Milotic, D., Milotic, M., Koprivnikar, J. (2024). Behave yourself: effects of exogenous glucocorticoid exposure on larval amphibian anti-parasite behaviour and physiology. *Oecologia*. <https://doi.org/10.1007/s00442-024-05547-6>

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Rabii, A., El Sayed, A., Ismail, A., Aldin, S., Dahman, Y., & Elbeshbishy, E. (2024). Optimizing the mixing ratios of source-separated organic waste and thickened waste activated sludge in anaerobic co-digestion: a new approach. *Processes*, 12(4), 794. <https://doi.org/10.3390/pr12040794>

Fehman, T., Waseem, H., Ali, B., Haleem, A., Abig, R., Ahmed, S., Gilbride, K., & Ali, M. (2024). Mitigation of Sugar Industry Wastewater Pollution: Efficiency of Lab-Scale Horizontal Subsurface Flow Wetlands. *Processes*, 12(7), 1400. <https://doi.org/10.3390/pr12071400>

Ross, C., Ali, G. A., Spence, C., Oswald, C. J., & Phillips, A. K. (2024). Reconceptualizing threshold-mediated runoff responses: A case study from the Humber River watershed, Ontario, Canada. *Hydrological Processes*, 38(7). <https://doi.org/10.1002/hyp.15241>

Santoro, D., Mao, T., Walton, J., Nakhla, G., Elbeshbishy, E., & Jang, E. (2024). *Methods and systems for treating fluid using a chemical process under vacuum pressure* (U.S. Patent No. 20240190742). U.S. Peroxide LLC. <https://www.freepatentsonline.com/y2024/0190742.html>

Thielges, D. W., Johnson, P. T. J., Leeuwen, A. V., Koprivnikar, J. (2024). Effects of predation risk on parasite-host interactions and wildlife diseases. *Ecology* e4315. <https://doi.org/10.1002/ecy.4315>

Treitz, P. M., Atkinson, D. M., Blaser, A., Bonney, M. T., Braybrook, C. A., Buckley, E. C., Collingwood, A., Edwards, R., van Ewijk, K., Freemantle, V. et al. (2024). Remote sensing of biogeophysical variables at the Cape Bounty Arctic Watershed Observatory, Melville Island, Nunavut, Canada. *Arctic Science*, 00, 1-24. <https://doi.org/10.1139/as-2023-0043>

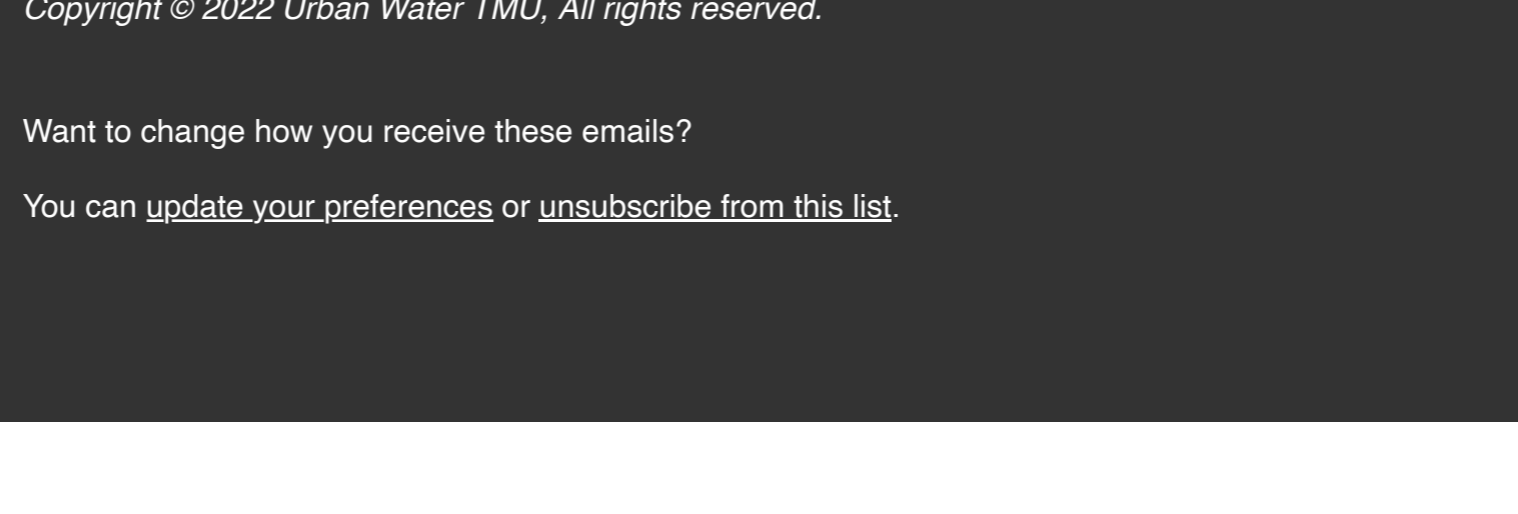
Weatherson, W. O. W., Oswald, C. J., & Roy, J. W. (2024). High-frequency data provides insight into chloride transport pathways and exceedances of chronic chloride guidelines for the protection of aquatic life in streams impacted by deicers. *ACS EST Water*. <https://doi.org/10.1021/acsestwater.3c00780>

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Wolfaardt, G., & Klopper, K. B. (2024). *Apparatus and System for Measuring Fouling Parameters in a Fluid* (U.S. Patent No. 20240264147). Stellenbosch University. <https://www.freepatentsonline.com/y2024/0264147.html>

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