



BEATY WATER
RESEARCH CENTRE



The Contaminants of Emerging Concern - Research Excellence Network (CEC-REN), affiliated with the Beaty Water Research Centre at Queen's University, is an interdisciplinary research initiative on the detection and treatment of emerging contaminants in the built and natural environment. The CEC-REN, in collaboration with Queen's University's departments Geological Sciences and Geological Engineering, Civil Engineering, and the School of Medicine, is announcing a

Postdoctoral Fellowship

in Genetic Engineering for Wastewater Treatment

This fully funded position is part of a project that will explore genetic engineering as a novel approach to improve drug removal in wastewater treatment. The overarching goal is to *upgrade* wastewater microorganisms with specific cytochrome P450 enzymes to enhance the biodegradation of emerging contaminants of concern, including steroids and antidepressants. The scientist will conduct laboratory genetic engineering work to transform cytochrome P450s into model microalga and perform controlled growth and exposure studies. The research will be supervised by Dr. Bas Vriens (Department of Geological Sciences and Geological Engineering) and Dr. Martin Petkovich (Department of Biomedical and Molecular Sciences, School of Medicine), in collaboration with a highly interdisciplinary team of water experts from the Beaty Water Research Centre, including biomedical engineers, environmental scientists, and wastewater practitioners.

Anticipated Start and Duration of Appointment: August 1, 2021 – 2-year appointment.

Required Qualifications: Applicants must hold a PhD or equivalent degree in biomedical engineering, microbiology, environmental or civil engineering, or a related field, obtained within the last five years. Expertise in microbial genetics and hands-on experience with relevant microbial engineering and characterization techniques is expected. Applicants should also have a demonstrated record of peer-reviewed publications and presentations at international research conferences, as well as good communication skills and an interest in multi-disciplinary approaches to solve complex problems.

Remuneration: No less than \$55,000 annually, commensurate with experience, including benefits.

Application Instructions: Applicants should submit (1) a cover letter, outlining their qualifications and motivations for this position, (2) a curriculum vitae, (3) two samples of research writing, and (4) the names and contact information of three references to sf60@queensu.ca. **The application deadline is June 1, 2021.** Inquiries about the project and position can be requested from Dr. Bas Vriens (bas.vriens@queensu.ca).

Employment Equity: Queen's University invites applications from all qualified individuals. We are committed to employment equity and diversity in the workplace and welcome applications from women, visible minorities, Aboriginal peoples, persons with disabilities, and LGBTQ2+ persons. We have a track record of supporting all our employees, including our Accommodation in the Workplace Policy, and will provide support in recruitment processes for applicants with accessibility needs. If you require accommodation during the application process, please contact Jyoti Kotecha at kotechaj@queensu.ca.