



MSc Opportunity at the Future Water Institute

Monitoring the Mobility of Contaminants of Emerging Concern in a Peri-urban Catchment

The Future Water Institute invites applications for a funded Master of Science (MSc) opportunity focused on investigating contaminants of emerging concern (CECs) in South African water bodies. This research addresses the increasing prevalence of CECs—such as pharmaceuticals, hormones, and personal care products—in surface water, particularly in water-scarce regions like South Africa.

Despite being consistently detected in the environment, CECs remain largely unregulated, with their toxicological impacts still under-researched. This project aims to develop a comprehensive monitoring protocol for CECs, using the Stiebeuel River catchment (located in Franschhoek) as a case study. The catchment, a microcosm of typical South African peri-urban areas, includes an informal settlement, low-income area, and agricultural land. The project will focus on identifying and quantifying CECs in the river, with the potential to expand the findings to other regions.

Candidate Requirements:

- A Bachelor of Science (BSc) degree in Chemical Engineering or related field (e.g., Civil Engineering, Environmental Sciences, Chemistry).
- Strong interest in water quality and related issues.
- A willingness to do field work such as sample collection from the study site.
- A willingness to learn laboratory techniques and analytical methods.

To apply, please submit the following via email to Kalpana Maraj at kalpana.maraj@uct.ac.za:

- CV (with contact details of two referees)
- Cover letter
- Full academic transcript

Application Deadline: 15 October 2024