

Characterisation of faecal sludge

Master and PhD

Public Health and Environmental Engineering Lab

The project

About 40 % of the World's population does not have access to sanitation and it is estimated that 60 % of all human waste enters the environment untreated. The effects of this global sanitation crisis are felt particularly hard in low- and middle-income countries. Thus, there is a dire need for faecal sludge management approaches that are compatible with the constraints of low-resource contexts. This project seeks to develop and validate novel (analytical) field-appropriate methods for the characterization of faecal sludge and address a key technical variable for the design and operation of faecal sludge treatment systems. This is an exciting opportunity to unravel the mysteries of the toilet and embark on a journey on the wonderful world of faecal sludge!



This project will combine lab and fieldwork in varied settings. Hiring at different levels depending on background and experience.

Intended start date: September 2020 or January 2021 (hiring on a rolling basis as talents are identified). For these entry points the deadline for applications is 28/February/2020.

The ideal candidate (any nationality):

- Should not be squeamish at the thought of working with poop;
- GPA of 3.5 (out of 4.0 scale) or higher;
- Degree in a relevant field: environmental (chemical or civil) engineering, microbiology, biology, environmental science, chemistry or biochemistry;
- Previous laboratory/research experience;
- Relevant field experience in low resource contexts;
- Motivation, independence, resourcefulness, scientific curiosity and passion to make a difference;
- A clean driving license.

Funding

As per our Departmental policy, a minimum funding of \$17,500 CAD per year is guaranteed for the two year MAsC or three year PhD programme (TBD based on candidate's experience and performance). Graduate funding support from the Department of Civil Engineering is granted through a variety of mechanisms including but not limited to: research grant support, teaching assistantships, awards and fellowships, and research contracts. Top-ups are available to students that receive independent research scholarships.

Note for Canadian applicants: Eligible candidates are reminded of upcoming NSERC funding deadlines for MAsC (Dec), PhD (Oct) and PDF (Oct). Québec residents are reminded that they are eligible to apply for a FRQNT scholarship (deadline: Oct) and use the training award outside Québec.

Highly qualified and motivated students will be invited to submit an application (CV, academic records and cover letter stating your motivations and interests) to caetanodorea@uvic.ca. Please cite "FS2020" on the subject line of your email.