

Inclined plate settler for humanitarian emergencies

Master or PhD opportunity

Public Health and Environmental Engineering Lab

The project

When providing water supply in humanitarian response, there is a tension between providing sufficient water (water quantity) and providing water meeting quality standards (water quality). Currently available technologies often prioritize water quality at the expense of water quantity. The Inclined Plate Settler (IPS) is a novel water treatment system designed to overcome this inadequacy by: treating a large volume (water quantity) whilst also achieving specific humanitarian water quality standards. This project seeks to evaluate its performance in the field and to identify and test modifications that may be warranted.



Intended start date: September 2020 or January 2021. For these entry points the deadline for applications is 28/February/2020.

The ideal candidate (any nationality):

- GPA of 3.5 (out of 4.0 scale) or higher;
- Undergraduate degree in a relevant field: civil/chemical/environmental 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 MSc 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 MSc (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 "IPS2020" on the subject line of your email.