

Postdoctoral Fellow in Circular Economy and Environmental Modeling

Open Plastic is an open science consortium working toward a circular economy for plastics with a strong focus on microbial and enzymatic upcycling biotechnologies. With Queen's as the lead institution, the consortium comprises >20 professors, >7 industry/municipal partners, supported by >\$8M combined by Genome Canada, NSERC, industry, and private donors. In this fully funded, two-year position, the Postdoctoral Fellow will apply their technoeconomic and LCA expertise to bring real-world impact in multiple industry sectors requiring innovations to eliminate plastic waste.

Responsibilities:

- conduct technoeconomic (TEA) and life cycle assessment (LCA) research projects for plastic re-/up-cycling
- conduct collaborative research projects with multiple academic labs and industry/municipal partners
- submit peer-reviewed journal articles
- present at international and national conferences
- assist in supervising graduate students, undergraduate thesis students, and research interns
- teaching not mandatory but opportunities are provided to assist in the postdoc's career goals

The Ideal Candidate will have:

- a PhD in chemical/bio/civil/industrial engineering, operations research, or related field
- proficiency in TEA and LCA (e.g., SimaPro, OpenLCA, BioSteam) as evidenced by peer-reviewed publications and presentations at international conferences
- experience in research projects involving waste management and recycling systems
- excellent written and verbal communication skills
- interest in collaborating with a multi-disciplinary team of scientists and engineers
- experience supervising graduate students

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 Dr. Laurence Yang at laurence.yang@queensu.ca.

Open Plastic is a Queen's University-led interdisciplinary research consortium focused on harnessing microbial technologies to drive a shift towards a zero-plastic waste future. More information:

- <https://www.queensu.ca/gazette/stories/rethinking-our-approach-tackling-plastic-waste>
- <https://openplastic.com>

Application Deadline

15 Sept 2022 (Rolling deadline)

Department of Employment

Chemical Engineering,
Faculty of Engineering and
Applied Science,
Queen's University, Canada

Supervisors

Prof. Laurence Yang
Prof. James McLellan

Start Date

Oct 2022. Flexible.

Duration of Appointment

Initial appointment is 1-year with the expectation of an extension for a second year.

Remuneration

CA\$48k/year plus benefits.

To Apply

Apply using the form at <https://forms.gle/sauuAX9MfsEc4oNJ6>, also accessed via the **Apply Now** button at <https://biosyscompute.com/career.html>.

Alternatively, applicants are welcome to email their **current CV and cover letter** (email) to laurence.yang@queensu.ca.

More information on postdoctoral fellows at Queen's: <https://www.queensu.ca/postdoc/home>