

## GRADUATE STUDENTSHIPS IN SUSTAINABLE BIOPRODUCTS & PROCESSES

Are you interested in sustainable solutions to the global plastic-waste challenges?

Are you interested in developing technology that converts a billion-dollar losses to the economy into useful products that support local communities?

Would you like to develop interdisciplinary research skills while living in a beautiful natural environment?

I am seeking one PhD and one Masters student to complete research projects in the eco-design and circular development of upcycled materials from waste marine and commodity plastic resources.

### Project A: MSc Student

This project is focused on biopolymer extraction, methods-development using green chemistry protocols and materials characterization of novel bioproducts that are environmentally safe. The candidate must have organic chemistry laboratory experience. Knowledge of chemical analytical techniques and a background in polymer chemistry is an asset.

The candidate will be registered in the Boreal Ecosystems and Agricultural Sciences Masters Program at the Grenfell campus-Memorial University of Newfoundland.

### Project B: PhD Student

This project is focused on the development of novel polymeric materials, their synthetic modification, understanding structure-property relationships of the functional materials to enhance their efficacy, life cycle assessment for understanding their sustainability compared to commercial analogues and the feasibility for scale-up for marketable solutions.

The candidate should have chemical laboratory experience in polymeric syntheses, and experience in NMR, FT-IR, mass spectrometry. Knowledge of computational techniques and toxicology is an asset.

The candidate will be registered with the Transdisciplinary Sustainability PhD program at the Grenfell campus-Memorial University of Newfoundland.

Both projects have a target start date of September 2022.

### ***Equity, Diversity, and Inclusion Statement***

I am committed to minimizing barriers to participation by all candidates while maintaining a safe and productive work environment, e.g. flexible work schedules for student parents or caregivers, and assistive technologies for students with accessibility needs in consultation with university accessibility centers. I am also committed to supporting you to succeed academically, technically and professionally.

I invite applications from all eligible applicants, including women, visible minorities, transgender individuals, those with disabilities with preference given to Canadian citizens or permanent residents.

## General Qualifications

- Candidates for the Masters/PhD programs must have completed a relevant BSc (Honours)/MSc degree and meet any additional requirements of the respective graduate programs.
- Successful candidates will have a strong record of academic achievement and accomplishment in one or more research projects.
- Record of peer-reviewed publications is an asset. Where work is attributed to multiple authors, please indicate your specific contributions.
- Students will be encouraged to apply for support from externally funded scholarships. Demonstrated competitiveness for scholarship applications is an asset.
- All work will be performed in English and candidates should have a good command of speaking, listening, reading, and writing in English. Please consult the program for recent IELTS or TOEFL test requirements.

## Submitting the Application

Please submit your:

- Cover letter
- Résumé or curriculum vitae detailing your research and work experience
- An unofficial transcript,
- A writing sample (for example, your undergraduate or Master thesis or other relevant work)
- A statement of interest indicating your interest in the project

to Dr. Shegufta Shetranjiwalla at [sshetranjiwalla@grenfell.mun.ca](mailto:sshetranjiwalla@grenfell.mun.ca) with the subject "Graduate Studentship in Sustainable Bioproducts" before **June 10<sup>th</sup> 2022**.