

## **Graduate Research Assistantship – For Immediate Start**

Doctor of Philosophy in Boreal Ecosystems and Agricultural Sciences – **Ph.D. in BEAS**  
School of Science and the Environment, Memorial University, NL

### **Project Title:**

Formulation and Product Testing of Seafood Compost

### **Project background and summary:**

Newfoundland and Labrador (NL) is surrounded by abundant natural resources, with wastes from the fishing industry often being landfilled or dumped at sea each year. This research project explores composting fish processing wastes or by-products with other natural biomass into a suitable soil amendment to improve soil quality, nutrients and crop growth. This work supports the provincial government mandate of increasing food security within the province. In this study, we will test the impact of fish processing wastes on crop growth, yields, and the phytonutrient profile of high-value crops, various compost formulations will be developed and evaluated under controlled environmental conditions. Diverting industry fish waste from landfills will create opportunities to develop compost products, improve the environment, create new economic value and jobs. Upon determining the best formulation for improved crop growth, a potential opportunity exists to develop and commercialize fish waste into a suitable formulation such as pellets, powder, or a liquid feed to enhance crop growth, yield, and phytochemical profile of high-value crops.

### **Qualifications for Admission:**

To be considered for admission, applicants shall hold an MSc degree in Agricultural Sciences, Biological Sciences, Environmental Sciences or related field from an institution recognized by the Senate or shall have qualifications and/or experience in environmental science acceptable to the Dean of Graduate Studies and the graduate committee of BEAS.

<https://www.grenfell.mun.ca/academics-and-research/Pages/school-of-science-and-the-environment/Graduate-Programs/Boreal-Ecosystems-and-Agricultural-Sciences.aspx>.

### **Project support:**

Project funding will be available for four years. A graduate research assistantship of \$ 21,000 (minimum) per year is available. Positions are contingent on funding.

**Expected starting date:** Preferably in Spring/Summer 2022

### **Further information please contact:**

Dr. Mumtaz Cheema – [mcheema@grenfell.mun.ca](mailto:mcheema@grenfell.mun.ca) OR

Dr. Raymong Thomas – [rthomas@grenfell.mun.ca](mailto:rthomas@grenfell.mun.ca) OR

Dr. Lakshman Galagedara – [lgalagedara@grenfell.mun.ca](mailto:lgalagedara@grenfell.mun.ca)