Student MES Research Position in Phytotechnologies

My phytoremediation research group is involved in research funded by national granting agencies, and industrial partnerships. I am seeking a Masters level student to explore salt remediation using both accumulator and excretor halophytes. While accumulators take up and sequester salts (requiring plant harvest) excretors or 'recretohalophytes' take up and then excrete excess salts on their leaf surfaces. The salts are then dispersed by the wind in a process referred to as 'haloconduction'. The student undertaking this project will carry out field studies using established phytoremediation field plots on: i) a contaminated roadside in the Greater Toronto Area and ii) at an industrial site in Alberta. They will examine the long-term ability of selected halophyte species to extract salt and survive under variable weather conditions and competition from other plant species. The results of this project have the potential to be broadly applied to remediate salt-affected soils while providing valuable insights into the application and implementation of biotechnology to remediate salt contaminated soils over a longer time period than typical phytoremediation studies.

While I am seeking a strong MES student to begin the Fall of 2025, there is also the opportunity for the student to begin working in May 2025 (as NSERC USRA or via other funding).

Interested applicants should contact Dr. Barb Zeeb (zeeb-b@rmc.ca).