



ses

school of environmental sciences

The Research Seminar Presentation by

Li Tian

will be held on

Tuesday April 3rd, 2018

At 2:30 pm

ALEXANDER HALL 265

Supercritical carbon dioxide explosion as a pretreatment for lignocellulosic biomass to improve biogas production during anaerobic digestion

Abstract

Anaerobic digestion (AD) decomposes organic substrates and livestock manure to produce renewable energy as methane, making it a promising technology to help Canada meet its greenhouse gas (GHG) mitigation targets. Lignocellulosic biomass, though abundant, is recalcitrant to bioprocessing due to structural and compositional barriers. Supercritical carbon dioxide explosion pretreatment (scCO₂) is one approach to improving conversion of lignocellulose to biogas. The proposed study will optimize parameters of scCO₂ on lignocellulosic biomass to enhance biogas yield during AD. This project will support renewable energy development and GHG emission mitigation.

Everyone is welcome to attend

(This is a Research Proposal presentation by students in ENVS*6900)