

Renewable Polymers and Bionanocomposites

PROJECT DESCRIPTION

Green bionanocomposites are emerging as an innovative class of biomaterials being developed today. These are prepared by combining nanoengineered biofibers with bioresins (matrices). These materials are of particular interest because they are ecofriendly, light weight, degradable and sustainable. However, challenges to these materials such as poor fiber/matrix compatibility moisture resistance, thermo-mechanical properties, fire retardancy, and energy-intensive production are extremely important to be addressed to widen their applicability and to compete with petroleum-derived counterparts. Bio-resin from renewable lipid resources will be used to prepare composite materials. The bio/nanocomposites will be characterized in detail.

FACULTY-DEPARTMENT

Agriculture, Life and Environmental Sciences – Agriculture, Food and Nutritional Science

OPEN TO STUDENTS FROM THE FOLLOWING INSTITUTIONS

Chinese universities participating in the [Double First-Class Initiative](#).

DESIRED FIELD OF STUDENT STUDY

Chemistry, Chemical Engineering, Materials Engineering, General Engineering

INTERNSHIP LOCATION

Edmonton Campus

NUMBER OF INTERNSHIP POSITIONS

2

INTERNSHIP DATES

Start: July 2, 2019

End: October 2, 2019

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.