

Hybrid Materials for Laser Applications

PROJECT DESCRIPTION

We are developing polymer hybrid materials for laser labs and laser protective materials for general use. The project will involve using low and high power lasers, also pulsed and CW lasers of various wavelengths, in order to quantify material response and to work toward minimizing laser beam damage. The intern will also work with collaborating labs in order to understand materials combustion, including the temperature - mass loss relationships and combustion gas products. The intern will learn how to perform scientific research in lasers and optics, how to measure laser beam power and size, how to study and quantify beam-solid interactions, and how to understand and control the combustion of materials at a level sufficient for high-quality scientific publication. We are also a fun lab and will be hosting other CSC scholars (graduate level) so the summer intern will find a welcoming environment.

FACULTY-DEPARTMENT

Science - Physics

OPEN TO STUDENTS FROM THE FOLLOWING INSTITUTIONS

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

DESIRED FIELD OF STUDENT STUDY

Science or Engineering

INTERNSHIP LOCATION

Edmonton Campus

NUMBER OF INTERNSHIP POSITIONS

1

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.