Bias extension test and analysis for fiber composites with a hyperelastic matrix material

PROJECT DESCRIPTION

The project is designated for the modeling and analysis of fiber reinforced composites with hyperelastic matrix materials. As such, the plane bias extension test (in house) is a necessary component of the project. At the same time, we used the existing prediction models (developed by the supervisor) to compute the deformation profiles of the composites. When the both data are obtained, we conduct comparisons (using photo imaging techniques) and thereby construct efficient and robust prediction models for the design and analysis of fiber composited subjected to large deformations.

FACULTY-DEPARTMENT

Engineering - Mechanical Engineering

OPEN TO STUDENTS FROM THE FOLLOWING INSTITUTIONS

Chinese universities participating in the *Double First-Class Initiative*.

DESIRED FIELD OF STUDENT STUDY

Solids mechanics, mathematics

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.