



Masters scholarship – Development of Harakeke Fibre/Sustainable Product (sponsored by NZ company)

Background: A private New Zealand family run business is seeking to develop a product using plant fibres - more specifically New Zealand Harakeke - instead of the commonly used animal hair or synthetic fibres for their very exciting and ground-breaking project. The family has their own private access of well-maintained and looked after Harakeke to supply the business with processed fibres.

Initial work on pulping the fibres from the harakeke muka has shown that the fibres produced were too firm/course and that some broke to release fibre fragments on use. It is thought that by developing a process to optimise the harakeke fibre bundle separation and softness, these fibres would be well suited and in turn, be able to be launched into a full-scale business. The project will include experience of working alongside a company and a Crown Research Institute.

Aim: The aim of this project is to develop a processed harakeke fibre with uniform fibre dimensions and the required softness for application to be used for a specified end product up to a draft of a production pathway (not detailed plans) that would be suited to the fibre refinement process and scale of manufacture envisaged.

Your ideal background:

- a relevant degree, BE or BSc or soon to complete - e.g. materials and process /chemical/mechanical engineering /civil
- passion for the application of sustainable materials
- a professional attitude, good writing and time management skills
- a willingness to learn, up-skill and work in multidisciplinary group
- current residency in NZ

Value: \$30,000

Application documents required

- CV including contact details for 2-3 referees (including at least one academic reference)
- Academic transcript from previous study undertaken
- A personal statement (max 1 page) describing your motivation, interests and background related to the research project

Contact: For further information/confidential discussion or to apply contact Professor Kim Pickering at klp@waikato.ac.nz by May 8th, 2022