



Photo by Gottfried Boehnke

PhD Student, Sam Behzadi (right) and Project Supervisor, Professor M.M. Farid

Biofuels have become a major priority for New Zealand as it strides to meet its Kyoto protocol and improves its energy security for the future. Sam Behzadi became interested in renewable energy while completing a BE degree in Chemical and Materials Engineering, and he specialised in biofuels as he continued his studies toward a Masters degree. In 2003, he was granted a Ph.D. scholarship at the University of Auckland's School of Engineering, exploring the production of biodiesel fuel from beef tallow. He and Professor M.M. Farid have developed a unique process using a gas-liquid reactor, which allows for the use of lower-grade and lower-cost feedstock, and ultimately reduces production costs. Working with UniServices, the process is patented and licensed to Flo-Dry Engineering Limited, on Auckland's North Shore, for commercialisation. Behzadi's goal is to advance research in bio-diesel and to develop a more economically-viable process for animal fat.