



Summer Scholarships 2015

Research subject: Reaction kinetics and phase diagram investigation for high temperature/pressure synthesis of fine chemicals.

The growth of single crystals at high temperature and high pressure is of interest for high value materials. At temperature up to 1600 degrees Celsius and pressure up to 6 GPa, the control of temperature profile is critical for the growth. This profile governs mass transport of the solute through convection and diffusion, and determines the quality of the crystals. Kinetics and thermodynamics of the reaction will be investigated.

A highly motivated research intern is required to carry out experiments to ensure high level repeatability and reproducibility of the reaction. The project is carried out with NZProduct Accelerator in collaboration with Taimana Creations of East Tamaki High Tech Precinct.

Supervisors

Prof. M.P. Taylor (mark.taylor@auckland.ac.nz), Dr Chuong Nguyen (c.nyugen@auckland.ac.nz)

To apply, please email the supervisors for details.