

PhD Vacancy – Food Structure Design – New Zealand

Project Title - Rheology of Alternate Make Cheese Formulations

Chief Supervisor – Professor Peter Munro, Riddet Institute, Massey University

Other Supervisors – Dr Peter Wiles, Fonterra Research Centre; Associate-Professor Matt Golding, Massey University; Associate-Professor Bryony James, Auckland University; Dr Pat Janssen, Massey University

This vacancy is one of a number of postdoctoral and PhD positions in Food Structure Design currently available in New Zealand. See the overall advertisement at <http://riddet.massey.ac.nz/jobs> for a description of the overall programme and its context.

The essence of the project is to investigate the rheological properties of various cheese formulations and explore relationships between the cheese manufacturing process, the product structure and the rheological properties. The cheeses will include that from a new alternate make cheese process developed by Fonterra. The project will include preparing batches of cheese in a model mixer/cooker built in a related postdoctoral project. A key feature of the research plan will be to explore changes in rheology as the total shear work exposure of a sample increases. Rheological test methods to explore for these viscoelastic cheeses will include rotating vane, back extrusion, forward extrusion, in line pressure drop and oscillatory rheometry.

The successful candidate will have completed an honours degree (1st or upper 2nd class) in a suitable major such as chemical engineering, food engineering or food technology.

The student stipend will be NZD35,000 per year tax free for 3.5 years. Funding is also available to cover PhD student fees, project costs and a limited amount of travel.

Applicants please send your CV including a statement of your research interests and goals and at least two referees, plus your university transcripts to p.a.munro@massey.ac.nz. Email enquiries can also be sent to this address.

Deadline – 16 March 2012