

2007 AINSE Research Fellowships

The second round of AINSE Research Fellowships has been announced. Two new fellows will take up their new appointments during 2008: Dr Duncan McGillivray will join the University of Auckland early in 2008, and Dr Moeava Tehei will join the University of Wollongong later in the year.

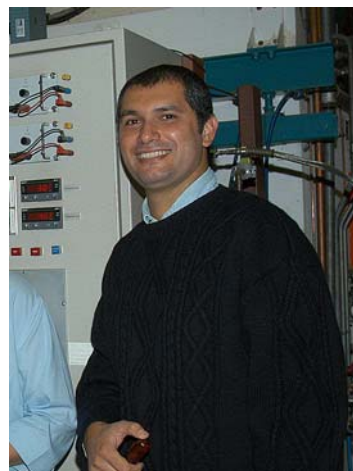


Dr Duncan McGillivray will take up his AINSE Research Fellowship on his return to University of Auckland where he completed undergraduate degrees in both Chemistry and Latin. Following an Honours at the Australian National University, McGillivray was awarded a Rhodes scholarship to the University of Oxford. His doctorate focussed on the use of neutron reflectometry to study layers of amphiphiles adsorbed at the solid/liquid interface. This research involved extensive neutron measurements, principally performed at the two largest European neutron facilities, ISIS in the UK and ILL in France. McGillivray followed this with post-doctoral research work at the NIST Center for Neutron Research in the US, developing biomimetic model membranes, and studied the structure and function of membrane-associated proteins.

Returning to ANU, he has continued to follow his interest in biological surface-related problems while also working in materials development.

At the University of Auckland, Dr McGillivray will work within the new Biological Chemistry Facility to continue his work on biological membranes, and their interactions with intra- and extra-cellular constituents which are essential aspects in an extremely large range of biological problems, including the mechanisms of diseases like Alzheimer's, the toxicity of anthrax, or the regulation of cell behaviour.

Dr Moeava Tehei completed both his undergraduate studies and doctorate at the Universite Joseph Fourier, Grenoble. His work on novel biological samples to explore the power and limitation of the neutron scattering methods was awarded the thesis prize of the French Neutron Society. Post doctoral work in New Zealand in the biomedical / biotechnology field earned Tehei the young researcher prize from the French Society in Biophysics in 2004. With a post doctoral fellowship at ILL (Institut Laue Langevin), Dr Tehei returned to Grenoble to be responsible for the IN13 spectrometer, and was later appointed as a physicist.



Dr Tehei will initially work with Dr Nick Dixon at the Centre for Medical Biosciences and the Department of Chemistry at the University of Wollongong. Future research directions for Moeava are neutron scattering research on the relation amongst dynamics, structure and function of proteins, for a better understanding of adaptation mechanisms to extreme conditions and for the optimisation of cancer treatment at the molecular drug target level.