

AINSE Research Fellowships 2009

AINSE has appointed two new research fellows who will take up their new positions in December 2009/January 2010.

Dr John Daniels



Dr John Daniels will be positioned within the Department of Materials Science and Engineering at the University of New South Wales (UNSW). John received his undergraduate degree from the Department of Physics and Materials Engineering at Monash University. He then went on to complete his PhD at Monash in 2007 for work conducted in the field of time-resolved neutron scattering in ferroelectric materials. For this work he was awarded the AINSE gold medal award, and the Mollie Holman doctoral medal.

John has since been working as a post-doctoral researcher at the high-energy x-ray scattering beamline, ID15, of the European Synchrotron Radiation Facility, Grenoble, France. At UNSW his research will focus on the use of advanced neutron and x-ray scattering techniques for component and materials design in functional, biological, and structural applications.

Dr David Turner



Dr David Turner will be undertaking his research in the School of Chemistry at Monash University. David was awarded his M.Sci in Chemistry from Kings College London in 2001 and received his PhD in Chemistry from Kings College, London in 2004. He was a post-doctoral researcher at the School of Chemistry, Monash University in 2005 and 2009 and was an ARC APD Fellow at the School from 2006 to 2008. Dr Turner has published 50 research papers in addition to two books on supramolecular chemistry and coordination polymers.

Dr Turner's research interests lie in the study of interactions between molecules – 'supramolecular interactions'. These weak interactions between molecules are ubiquitous in

everyday life, from holding together double-helical DNA strands to being between the layers in a pencil. Dr Turner's work at ANSTO will use neutrons to probe the internal structure of crystalline materials to accurately locate atomic positions. In particular the research will investigate novel materials that are capable of gas storage and will enhance fundamental research into the nature of the interactions between hydrogen and the crystalline lattice. Materials that are able to store and deliver hydrogen gas are of interest as possible 'fuel tanks' for the next generation of hydrogen-powered motor vehicles.

For further information:

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