MONASH University

MONASH CENTRE FOR
ELECTRON MICROSCOPY

SEMINAR

Getting more out of the next generation of aberration corrected microscopes

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Electron Microscopy Centre
Argonne National Laboratory
Argonne, Illinois, USA

Wednesday 18 February, 2009
11am – 12 noon
Science Lecture Theatre S11, Bldg 25

Abstract

Imaging and analysis in analytical microscopy is a staple of materials research today. The new generation of aberration corrected microscopes offer some new opportunities for improving our capabilities beyond just better image resolution. In this seminar we will discuss two aspects of these potentials.

In the first we will consider improvements possible to electron column based x-ray microanalysis and explore the question "Can we detect single atoms in the new generation of microscopes". Secondly, the development of aberration correctors allows us to dramatically increase the convergence and collection solid angles for electron scattering. Using this potential will allow us to improve dramatically the performance of a Scanning Confocal Electron Microscope, and with this develop complementary techniques for thick section and depth-slicing techniques.

Convenor: Dr. Joanne Etheridge

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Visitors are most welcome: Please note that there is a designated Visitors Car Park (N1) clearly ground-marked by white paint and tickets, at a cost of $1.4/hour for up to 3 hours, available from a dispensing machine. This high-rise carpark is located on the following Clayton Campus Map, Ref. B2.

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