



## SEMINAR

### Measuring optical properties and electronic structure and with electron energy-loss spectroscopy

**Dr Vicki J. Keast**

**School of Mathematical and Physical Sciences  
The University of Newcastle**

Thursday 5 June, 2.00pm – 3.00pm  
Science Lecture Theatre S11, Bldg 25

### Abstract

Electron-energy loss spectroscopy is extensively used to investigate the electronic structure and bonding in materials at a nanometre or even atomic scale. In particular, the low energy part of the spectrum has received much less attention despite being a rich source of information. These low energy excitations can be connected to the optical properties, including surface plasmon excitation. In this talk I will give a background to this technique, some of the possible applications and discuss some of the challenges we face with interpreting our spectra.

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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