

# Monash Centre for Electron Microscopy Seminar

## »» Frontiers of SEM and EPMA based Characterisation



Monday 3 September, 2018



2.00pm

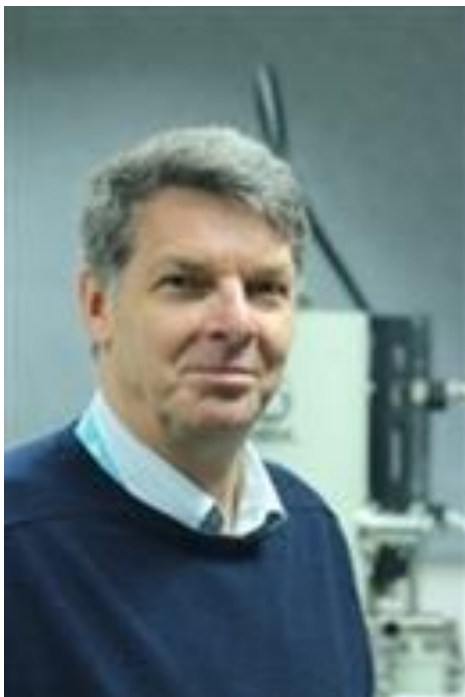


*Lecture Theatre E7, 14  
Alliance Lane, Monash  
Clayton Campus*

### Presenter

## Dr. Colin Macrae

CSIRO- Minerals, Advanced  
Characterisation Facility



Colin Macrae is a group leader at CSIRO where he directs the microanalysis and x-ray diffraction research in the Microbeam and XRD Laboratories which are the key characterisation facilities for Minerals and Mineral Processing problems. He has a strong interest in the application of high resolution microanalysis, mapping in the electron microprobe to solve industrial problems related to the minerals industry.

In recent years he has been at the forefront of the development of hyperspectral soft x-ray emission spectrometry and analysis and combining this technique with cathodoluminescence together with hyperspectral EDX collection and analysis. With the introduction of this combined technique he has lead the development of new detector systems and analysis procedures so that the both SXES and cathodoluminescence signals can be quickly analysed, the emitting x-rays and ions identified and the emission quantified. To make full use of these techniques he has recently worked on the integration of LN cold stage technology into the EPMA to reduce beam damage.

Convenor: Professor Matthew Weyland

Email: [mcem@monash.edu](mailto:mcem@monash.edu)

Tel: 9905 5563

Visitors are most welcome. Please not that there are designated visitor car parks and tickets, at a cost of \$2.00 per hour or \$10.00 all day are available from parking meters. Payment is by coin, credit card, or phone app. Further details can be found at the following links: <http://www.monash.edu/people/transport-parking/permits/metered-free> and [http://www.monash.edu/\\_data/assets/pdf\\_file/0010/71686/16P-0006-T2-Clayton-map\\_final.pdf](http://www.monash.edu/_data/assets/pdf_file/0010/71686/16P-0006-T2-Clayton-map_final.pdf)