# Frontiers in Microscopy & Microanalysis

Natural Resources Innovation and Characterisation Hub

## “Semi-automated mineral maps from any microscope with Phase Interpreter 2”

**Friday 27 November 2026**

13:00 – 14:00 (AEST)

Online seminar via Zoom

**Register:** https://qut.zoom.us/meeting/register/kMGDa6EzSo-3R8rZ-1IkUA




**Dr Marco Acevedo Zamora**

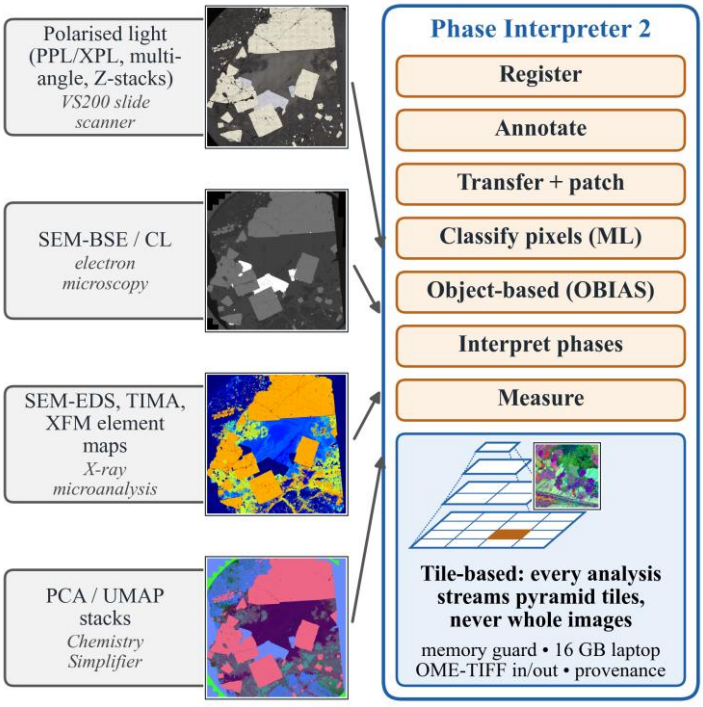
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### Abstract

**Phase Interpreter 2 is an image-analysis software that enables human–machine interaction, linking data from very large images to produce semi-automated mineral maps and improve geoscience research.**

Polarised-light scans (PPL/XPL, multi-angle, Z-stacks), SEM-BSE/CL images, SEM-EDS, TIMA and XFM element maps, and PCA/UMAP chemistry stacks are aligned, annotated and used to train machine-learning pixel and object-based (OBIAS) classifiers. Every analysis streams pyramid tiles instead of whole images, so it runs on a 16 GB laptop, with OME-TIFF in/out and full provenance. Like ImageJ and QuPath, this program provides a widely applicable digital infrastructure.


### SEMINAR HIGHLIGHTS

**Software introduction (15 min)**
What Phase Interpreter 2 does and what is new since version 1

**Image analysis workflow (10 min)**
Optical transmitted and reflected light, SEM (BSE/EDS) and other imaging integrated to train a machine-learning model

**Two applications (30 min)**
A rock thin section and a metallography alloy sample

**Scan to register**
Zoom webinar

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