

Course Outline

INCAWave 2 day course

This course is run for a maximum of 6 delegates to allow sufficient 'hands-on' practice live on the SEM.

Objectives

On this course you will learn how to:

- Set up the SEM for WD analysis
- Appreciate the requirements and settings for WD analysis
- Acquire segmented WD spectra
- Set up standards
- Do quantitative analysis using WD only
- Set up combined ED and WD analyses
- Use WD mapping
- Monitor performance and calibrate the system

Pre-requisites

Delegates should have had some basic experience of using the Inca software. This would be gained from the initial training when the system was installed.

Course outline

Introduction to the system

How the spectrometer works
Gate valve operation
Choosing SEM operating conditions

Data Acquisition

Qualitative analysis
Spectral scan
The Line Table Editor
Practical session

Quantitative analysis

Basic theory
Monitoring beam current
Acquiring and storing standards
Analysing a sample using Wave data only
Practical session

Combined ED and WD analysis using Energy+

Beam conditions for combined ED and WD
Overlaying a WD spectrum on the ED spectrum
Setting up combined ED and WD quantitative analysis
Mapping using WD
Practical session

Basic system monitoring

Spectrometer Direct Control
Calibrating the counters