

# ZEISS EVO 40XVP SEM

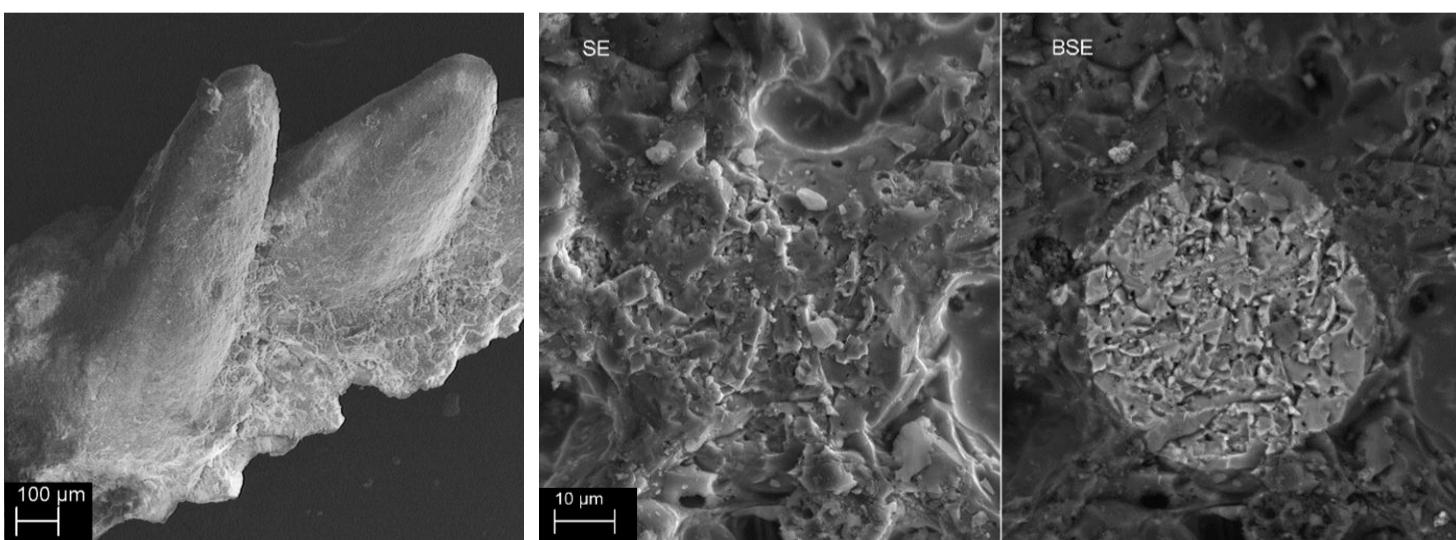
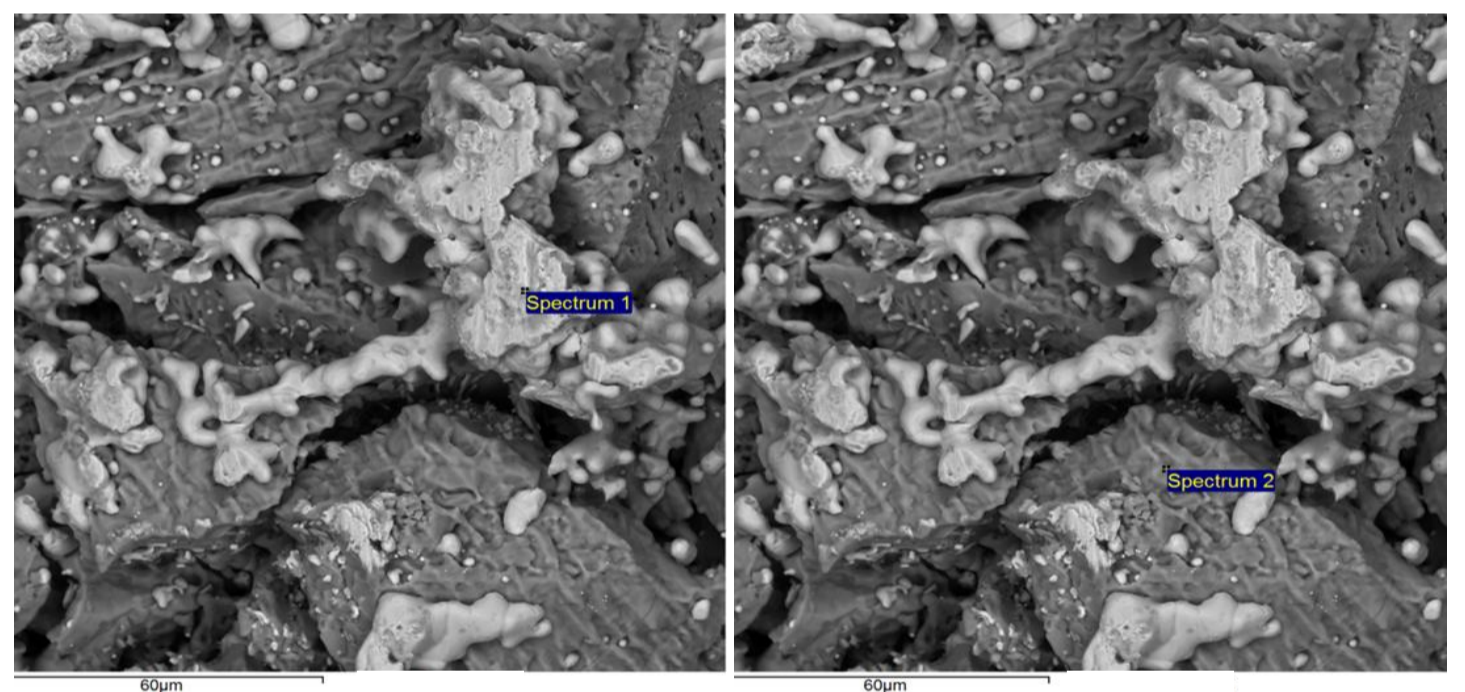
The Evo is a Variable Pressure Scanning Electron Microscope (VP-SEM) with a tungsten filament. It is suitable for lower magnification microstructural analysis at high vacuum, or for the analysis of hydrated samples at low vacuum, with a smallest particle size of approximately one micrometre.

## Key Capabilities

- Secondary Electron (SE) imaging
- Backscattered Electron (BSE) imaging
- Cathodoluminescence (CL) imaging
- Low vacuum SE imaging of moist samples
- Energy Dispersive X-ray Spectroscopy (EDS) point analysis and elemental mapping

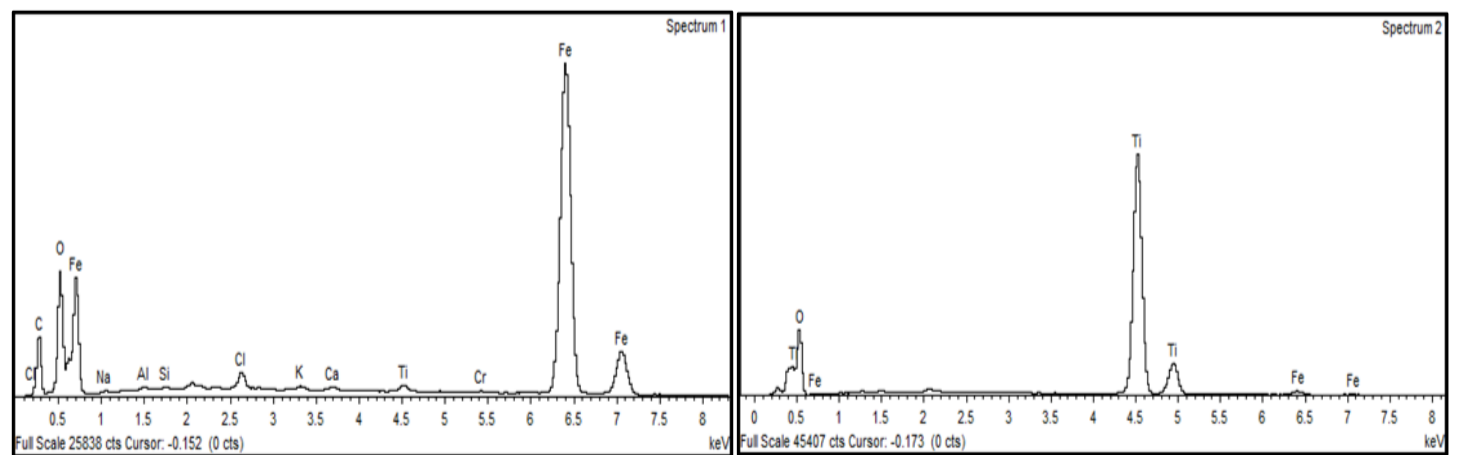
## Application Examples

- Investigation of corrosion products
- Identification and characterisation of asbestos fibres and building materials
- Measurement of discrete layers in composite materials
- Imaging of bacteria and muscle tissue
- Analysis of zircon growth structures prior to analysis by mass spectrometry



An SE image of a Stethacanthus tooth from the Carboniferous period

While its higher average atomic number makes this particle obvious in the BSE image (right), its outline is only just visible in the topographical SE image (left).



The above spectra show the elemental compositions of the two different materials that constitute the sample shown above. The brighter areas in the BSE image are iron-rich and the darker areas are titanium-rich.

## For more information

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