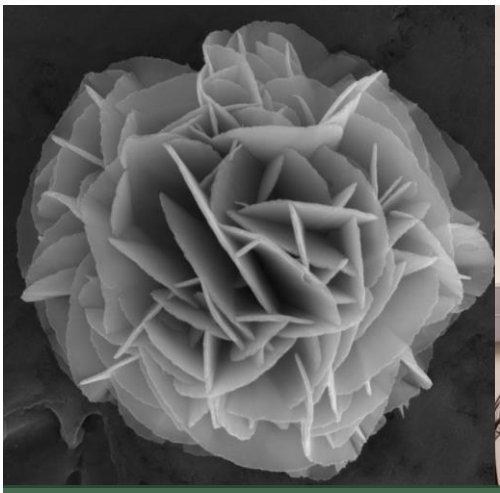
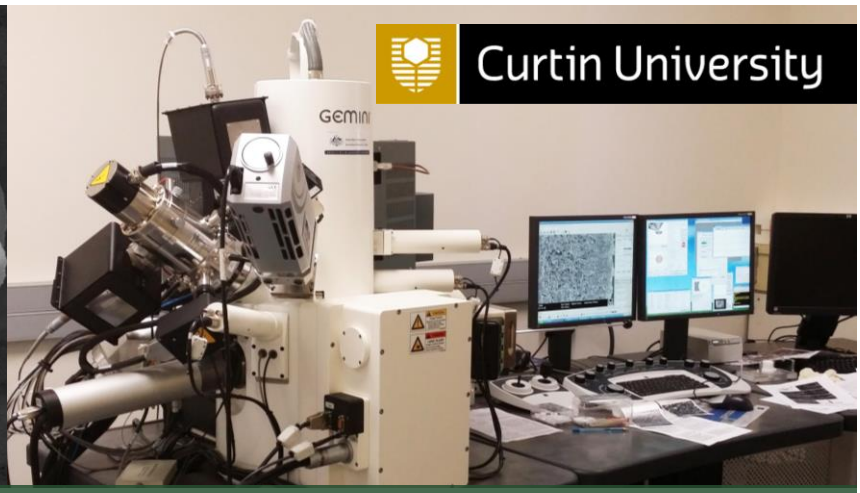




ZEISS NEON 40EsB CROSS-BEAM FESEM

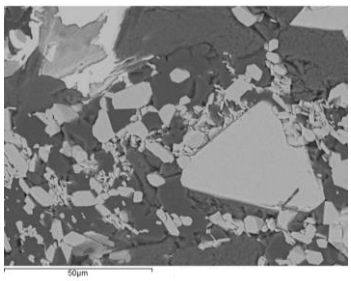
The Neon is a dual-beam Field Emission Scanning Electron Microscope (FESEM) that is also equipped with a liquid metal Ga+ ion source and a variety of gas injectors. It is routinely utilised for its excellent high resolution imaging, even at very low kV. It is also capable of single area EDS and EBSD mapping.

Application Examples

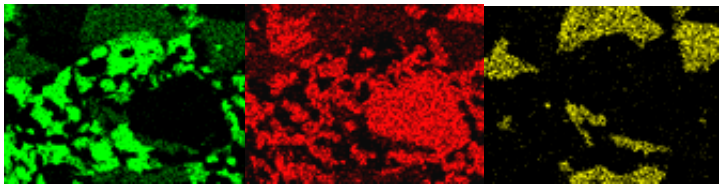
- High resolution imaging of delicate biological structures and organic materials
- EBSD mapping of terrestrial and lunar rocks to study their formation
- High resolution imaging of nanoparticles
- Identification and measurement of thin films in cross-sectional analyses
- Quantitative elemental analysis of carbon steels and other alloys

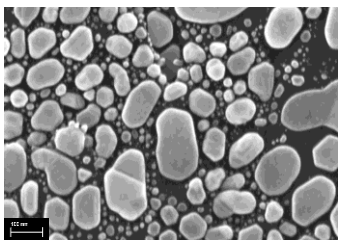
Key Capabilities

- High resolution imaging, from as low as 1kV
- Secondary Electron (SE), Backscattered Electron (BSE) and secondary in-lens imaging
- Energy Dispersive X-ray Spectroscopy (EDS) point analysis and elemental mapping
- Electron Backscatter Diffraction (EBSD) mapping

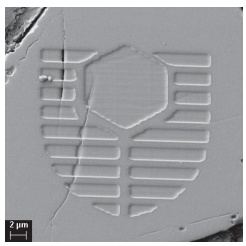


EDS maps showing Si (green) Fe (red) and Mg (yellow) in a shale sample (above)

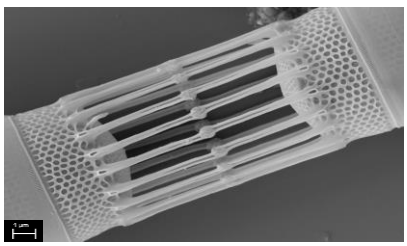




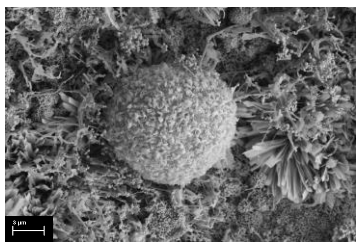
An in-lens SE image of sputtered gold particles



The Curtin University logo milled onto a quartz grain using the focused ion beam



An SE image of a marine diatom of the species skeletonema



Crystal growth in corrosion product

For more information

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