

## **TESCAN CLARA FESEM**

The CLARA is a Field Emission Scanning Electron Microscope (FESEM) with a comprehensive range of advanced detectors to enable research in the fields of earth, life, forensic and materials sciences. Its special features are its higher beam current (compatible with Oxford Symmetry EBSD speed), and its very low kV high spatial resolution imaging for delicate or non-conductive samples.

## **Application Examples**

- High resolution orientation mapping by TKD (to complement TEM and Atom Probe investigations)
- Large area survey EBSD and EDS mapping at wide range of magnifications for mineral resources and 3D-printed alloy parts
- Microstructural analysis of biological samples at very low voltage with high spatial resolution

## **Key Capabilities**

- High resolution Secondary Electron (SE) and Backscattered Electron (BSE) imaging, including both types of in-lens detector
- Energy filtering of signals at low voltage
- High resolution Electron Backscattered Diffraction (EBSD) analysis for crystallography at rapid speed
- Fast, high accuracy Energy Dispersive X-ray Spectroscopy (EDS) point analysis and mapping, including trace elements
- High quality monochromatic
  Cathodoluminescence (CL) imaging
- Low voltage (down to 100V) imaging of beam-sensitive samples
- Simultaneous, large area automated data collection of images, EDS and EBSD



SEM micrograph and EBSD map showing coarse grains in the core, and fine grains in the rim, of a gold nugget

## For more information

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