AMETEK-CAMECA

CAMECA: recent instrumental developments for trace element and isotopic microscopy and analysis.

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Cameca will highlight the unique capabilities of the NanoSIMS 50L allowing 2D and 3D imaging & mass spectrometry with 50nm lateral resolution.

Recently upgraded with a new oxygen primary ion source the instrument is used in a large field of applications in materials, earth and life sciences.

For molecular mapping down to intracellular level in life science it is most often coupled with a strategy of stable isotope labeling.

Cameca will present also its field-emission electron probe microanalyzer SX Five FE allowing improving analytical spatial resolution while keeping the advantages of WDS X-ray analyzers: sensitivity for trace elements and spectral resolution.

The latest generation of atom probe tomography (APT) instrument, model LEAP 5000, will also be introduced.

It permits chemical analysis of nm-scale volumes and interfaces based on a time of flight mass analyzer, with a spatial resolution better than 0.2nm.

It is becoming a standard in analytical laboratories with unique 3D imaging and analysis capabilities complementing both TEM and SIMS.