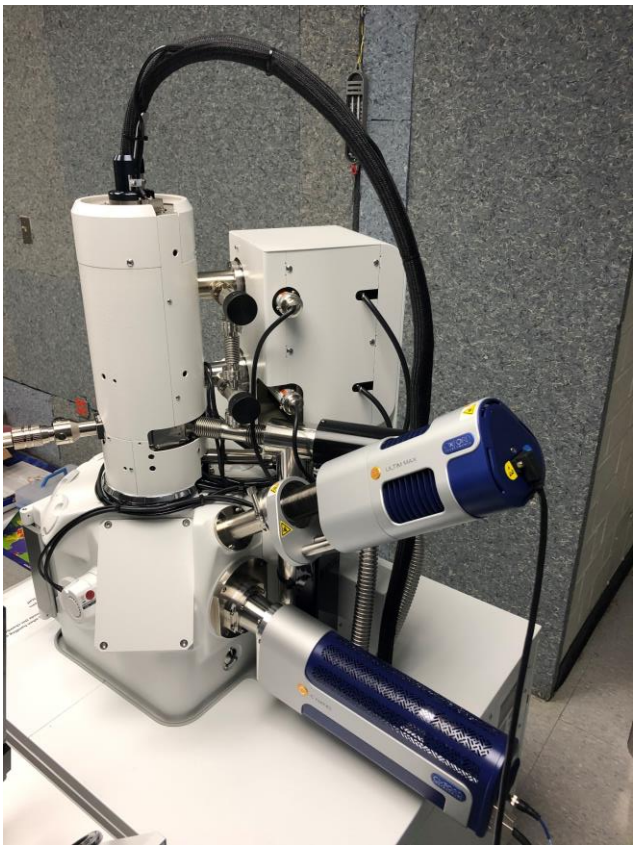
JEOL JSM-IT500HR

Field Emission Scanning Electron Microscope (FESEM)

Location: Science and Engineering South (SES), 104C



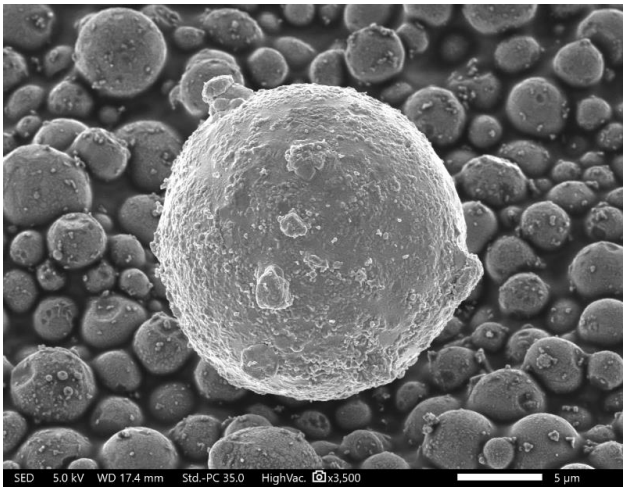
Description

The IT500HR has a high-brightness electron gun system delivering high-resolution Field Emission performance, and is a Variable Pressure SEM. Its large analytical chamber with multiple ports accommodates a variety of detectors for imaging and analysis; secondary (SED) and backscatter (BSED) electron detectors, and energy dispersive spectroscopy (EDS) and electron backscatter diffraction (EBSD) techniques.

This game-changing FESEM provides expanded performance with the ease of operation. The scope accommodates a wide variety of sample types; ranging from material science, bio-engineering, and biological specimens.

The FESEM is equipped with Zeromag and InTouchScope technology. These are key features that simplify navigation at the ease of your fingertips.

The IT500HR was installed in September 2019.



Zinc oxide

Pt/Pd coated tissue

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Technical Specifications

- Accelerating Voltage 0.5kV-30.0kV
- High brightness electron gun, long life emitter (1.5nm at 30kV, 4nm at 1kV)
- Equipped with SED, BED, EDS and EBSD
- Fully integrated and automated low vacuum system: 10 to 150Pa
- Magnification up to 600,000X
- Large eucentric stage: X=125mm, Y=100mm, Z=80mm, Tilt=-10 to 90°, Rotation=360°
- Maximum specimen size: 200mm diameter X 75mm height
- Small foot print and easy maintenance (no cooling water or compressed gas required)