

Transmission Electron Microscopy (TEM)

Category:

C. Particle Characterisation in and ex-situ

Institute: Uppsala University (UU)

Location: Ångström Laboratory
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Short Technology Description

With TEM it is possible to reveal the internal microstructure down to the atomic level. This can be combined with analysis techniques to determine the elemental composition of the sample. The Ångström Microstructure Laboratory (MSL) provides two TEM/STEM instruments with 300 and 200 kV acceleration voltages respectively. Both instruments are located in a cleanroom environment, where vibrations and other disturbances are minimized to optimize the conditions for high resolution.

Separate laboratories for sample preparation comprise a complete tool set for mechanical processing, including cutting, grinding, polishing, ultrasonic drilling, dimple grinding and ion milling. In addition to these possibilities, a Dual beam FIB/SEM system is available for TEM sample preparation.

Main Features (Equipment Capabilities):

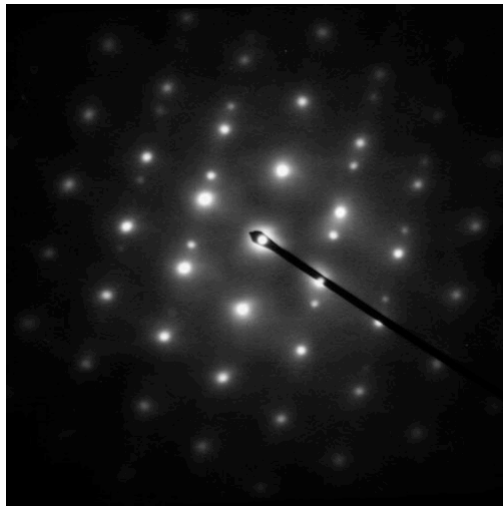
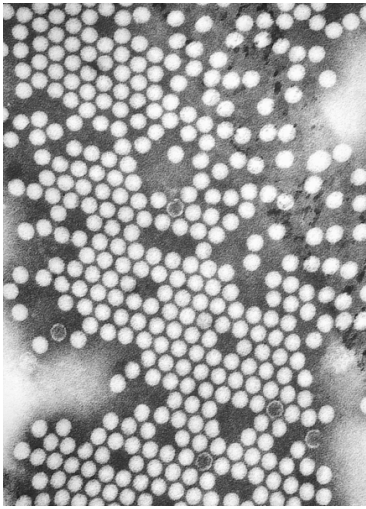
FEI Tecnai F30 ST

- 300 kV (80, 120 and 200 kV)
- FEG
- EDS / EELS
- STEM
- Resolution 2Å

JEOL 2000 FXII

- 200 kV
- Electron diffraction

Typical Samples & Images:



Any further Information: