

TRANSMISSION ELECTRONMICROSCOPE (TEM and STEM)

EMLab provides two transmission electron microscopes (TEM), both are equipped with digital CCD camera (MORADA). JEM-1011 is a high resolution TEM and Tecnai 12 is a high contrast TEM. Montaging pictures can be acquired using the iTEM software.

Tecnai 12 is equipped with additional equipment for X-ray microanalysis (EDX) and scanning transmission (STEM), use for the elemental analysis or chemical characterization of a sample. Montaging pictures can be acquired using the TIA software.

Modell/type: FEI Company Tecnai 12

Acquired in 2001

Filament: Tungsten

Accelerating voltage: up to 120 kV, operate at 80 kV

Imaging modes: Brightfield, Darkfield, STEM

Resolution: 0,2 nm

Magnifications: from 30x

Image capture: MORADA CCD (3392x2248x16bit)

Ditabis digital imaging plates

Detector: EDX

Software: iTEM and TIA



Modell/type: JEOL JEM-1011

Acquired in 2005

Filament: Tungsten

Accelerating voltages: up to 100 kV, operate at 80 kV

Resolution: 0,2 nm

Magnifications: from 30x

Image capture: MORADA CCD (3392x2248x16bit)

Ditabis digital imaging plates

Software: iTEM

