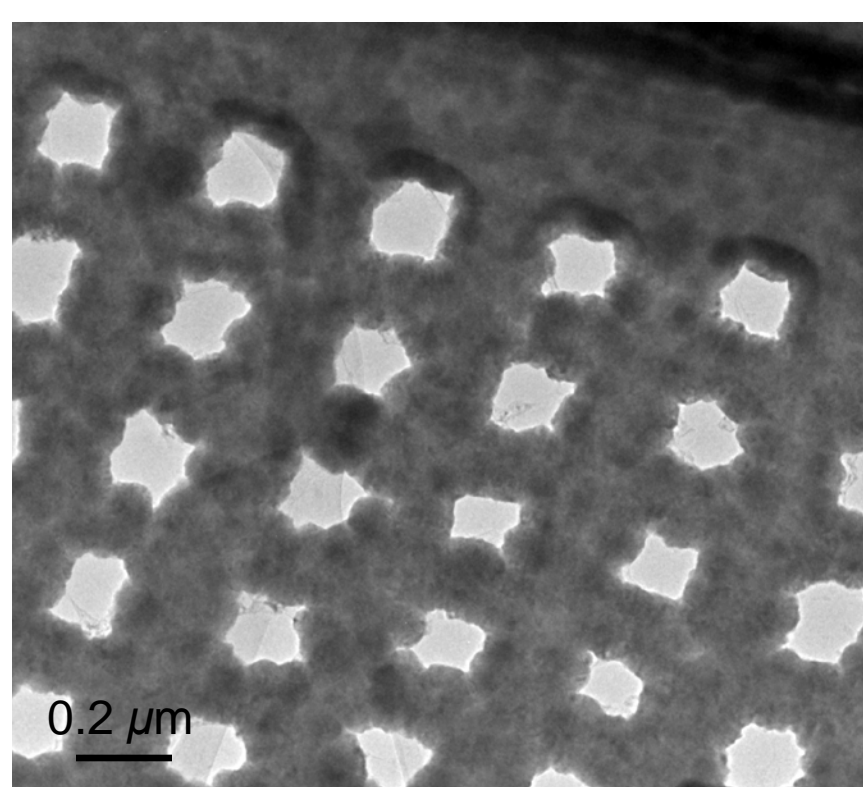


Transmission Electron Microscopy Lab (Grigg Hall 147)

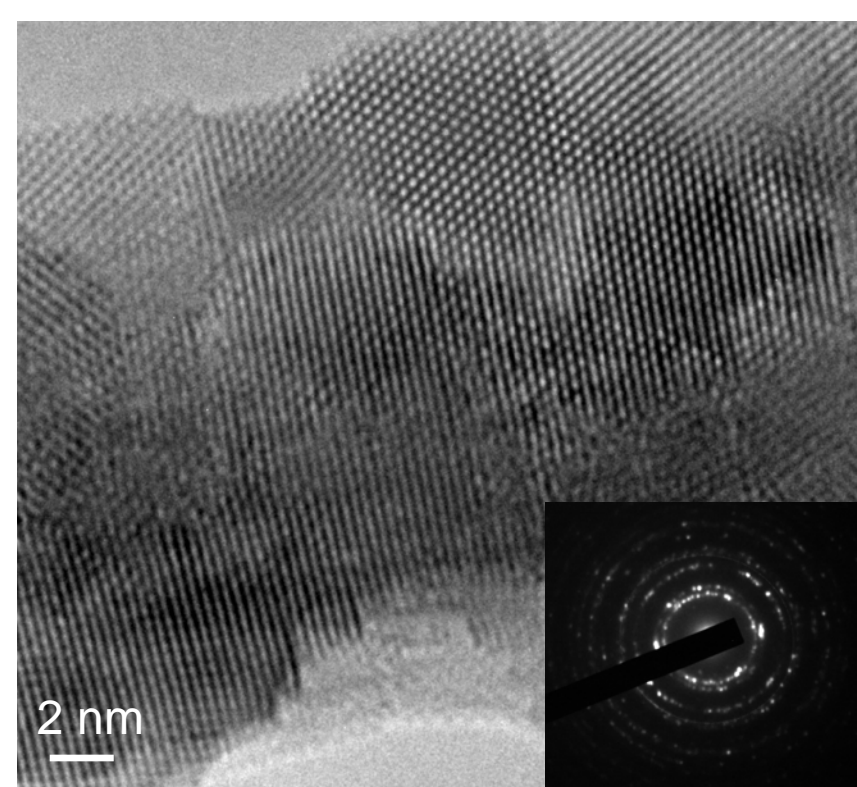
JEOL JEM 2100 LaB₆ TEM



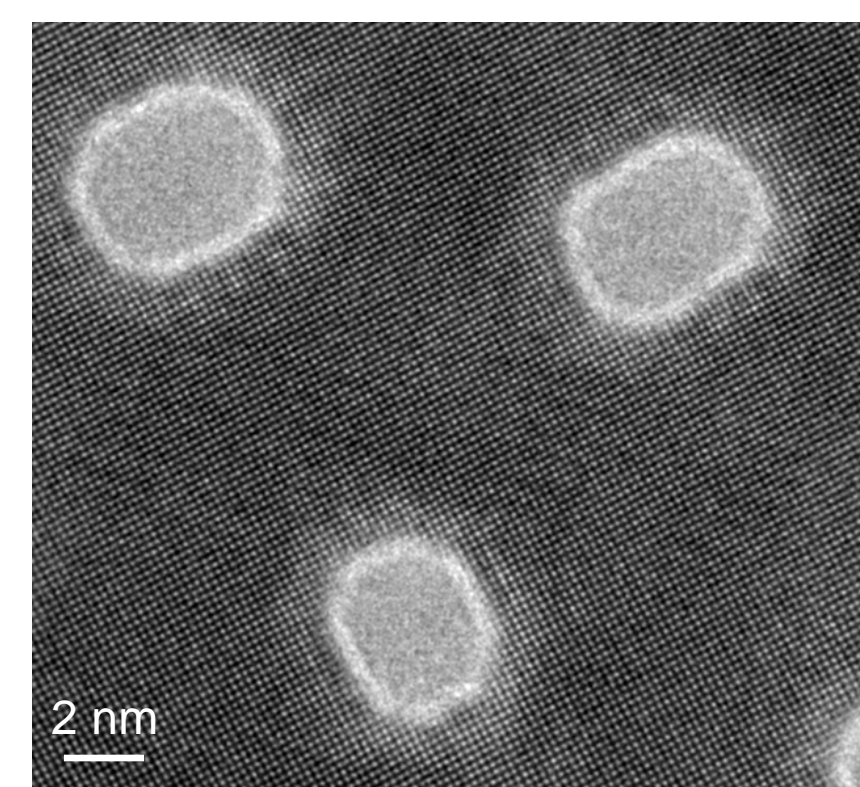
- Has 3 independent condenser lenses and produces the highest probe current for any given probe size, which allows for improved analytical and diffraction capabilities.
- The Alpha Selector™ allows a user the selection of a variety of illumination conditions, ranging from full convergent beam to parallel illumination.
- A high contrast aperture allows high contrast imaging and simultaneous EDS.
- The TEM is equipped with an Oxford INCA EDS system that enables elemental analysis and a Gatan SC1000 ORIUS™ CCD camera for image acquisition, analysis and processing.
- Point-to-point resolution: 0.23 nm and lattice resolution: 0.14 nm; specimen tilting: $\pm 35^\circ$.
- 4 specimen holders: Gatan Cryo holder ($\pm 60^\circ$), Gatan Be double tilt holder, JEOL double tilt holder and JEOL single tilt holder.



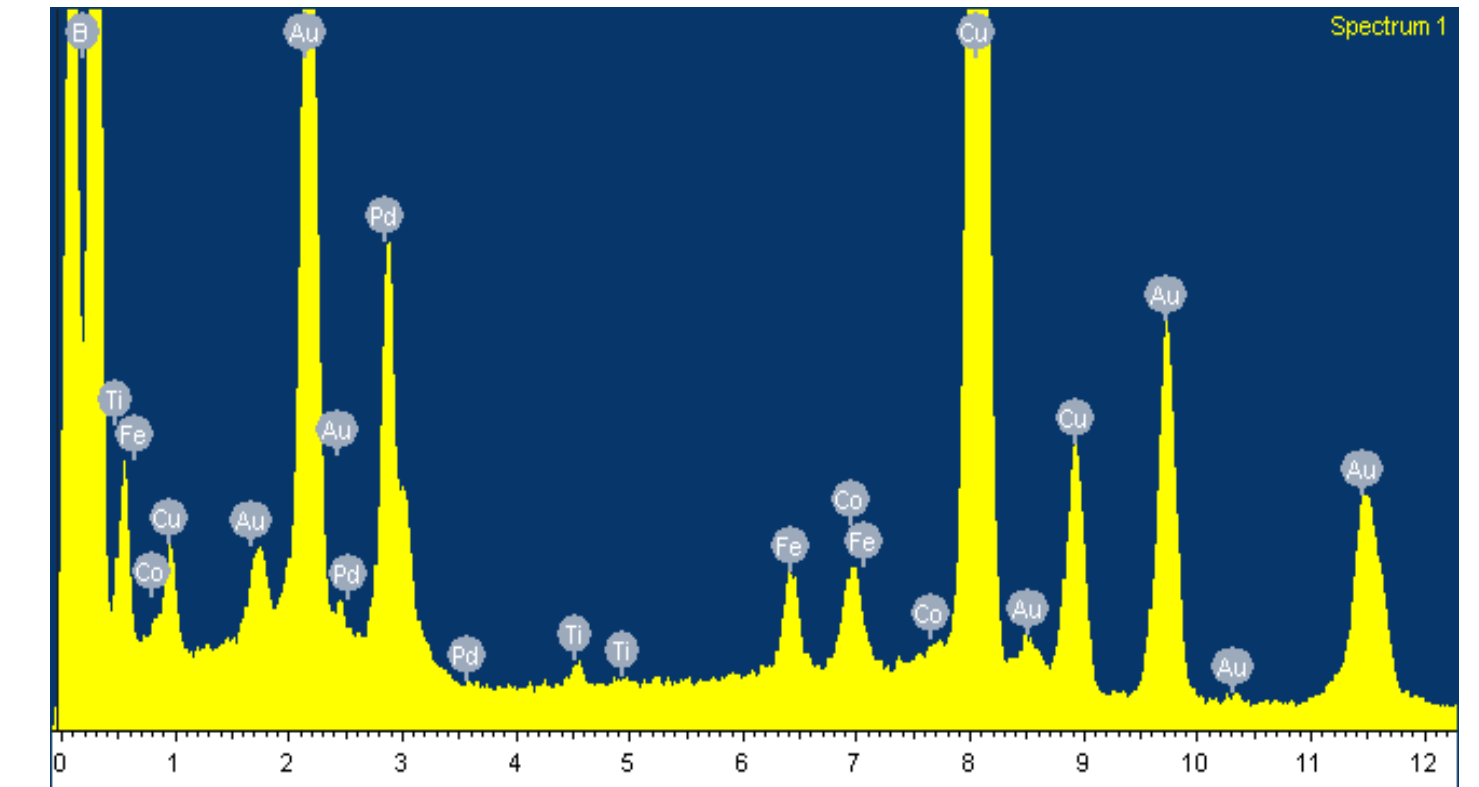
Low mag. TEM image of diatoms coated with CdS



HRTEM image of a BaB₆ nanowire
Inset: diffraction pattern

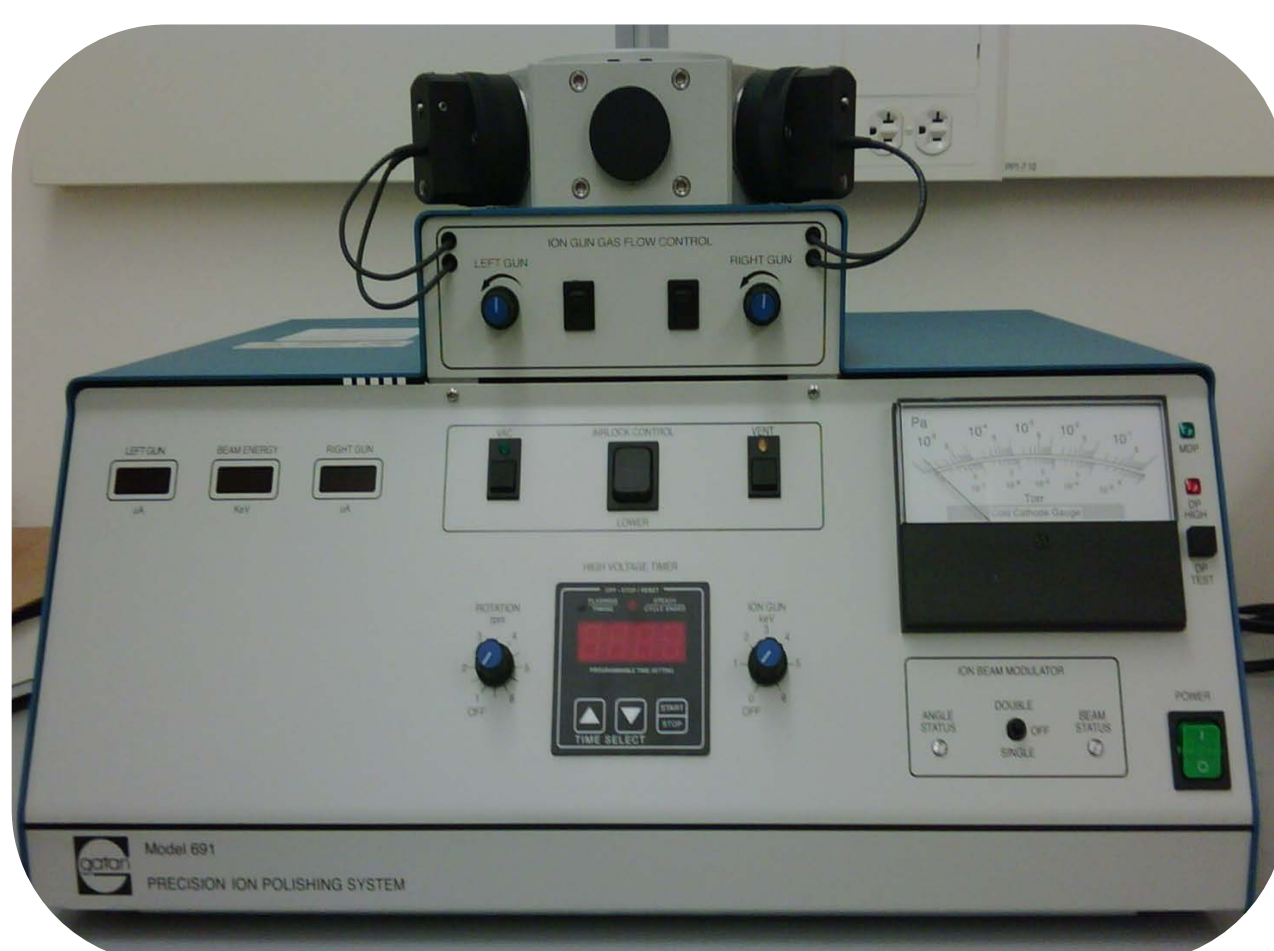


HRTEM image of Au nanoparticles
Credit: JEOL, Aaron Graham



EDS spectrum of a doped Au/Pd specimen

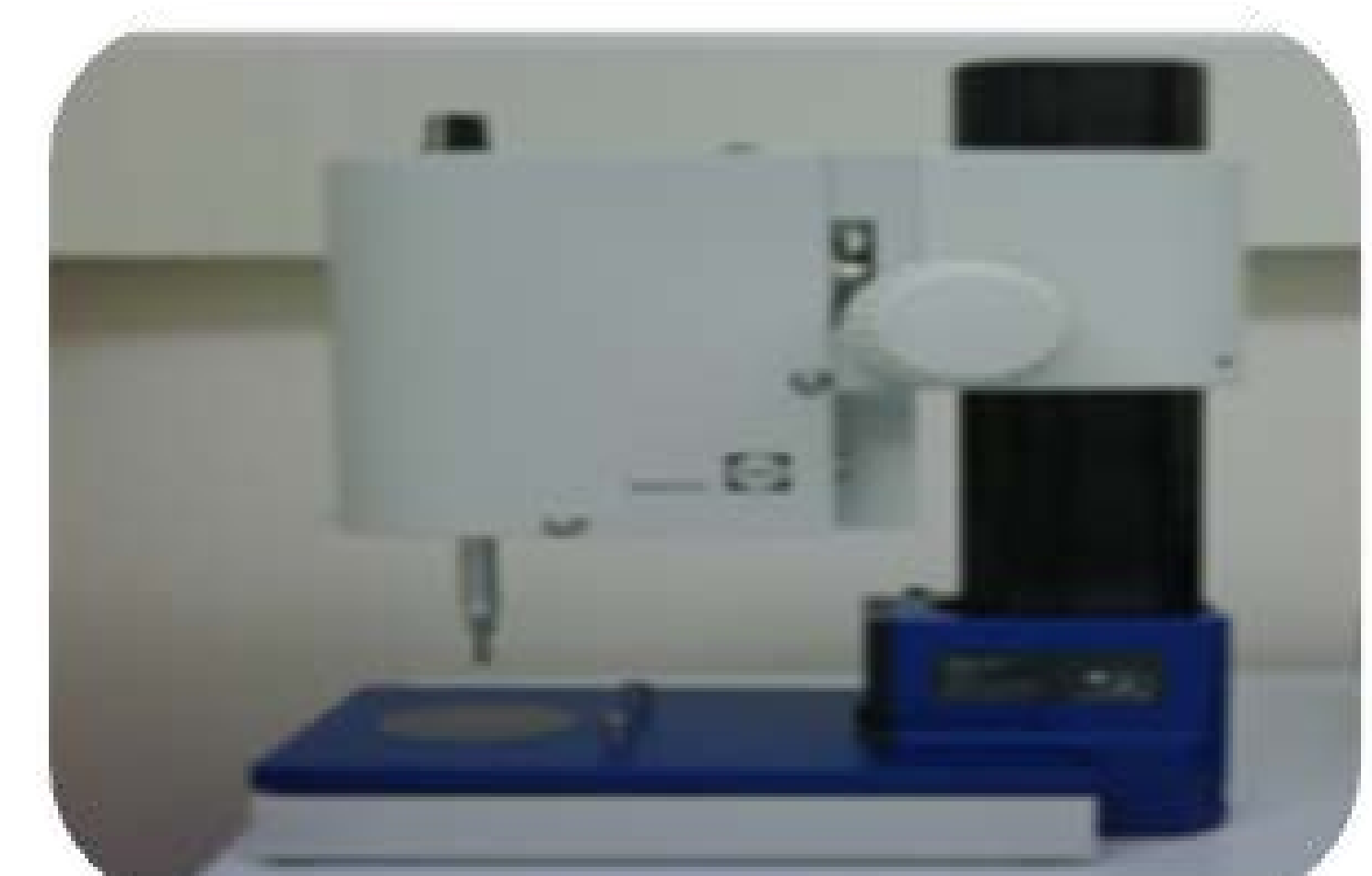
TEM Sample Preparation Equipment



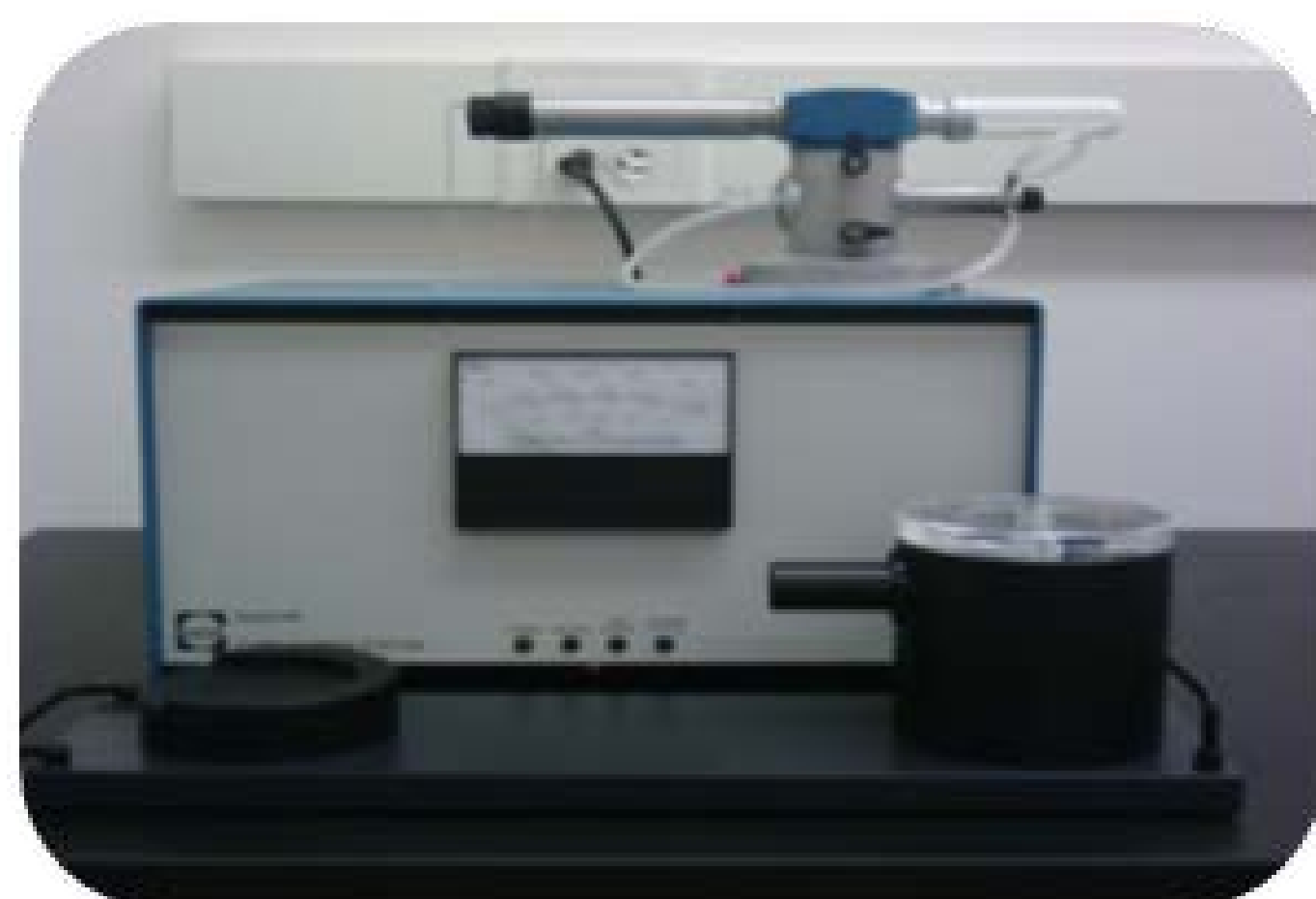
Precision ion polishing system



Dimple grinder



Ultrasonic cutter



Dry pumping station and cryotransfer system



BioWave Pro



Cryo-ultramicrotome
Credit: Boeckeler-RMC Products

Contact Information

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