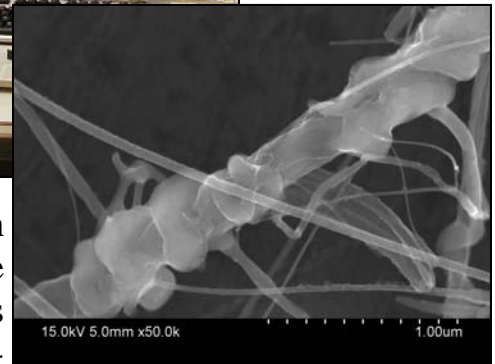
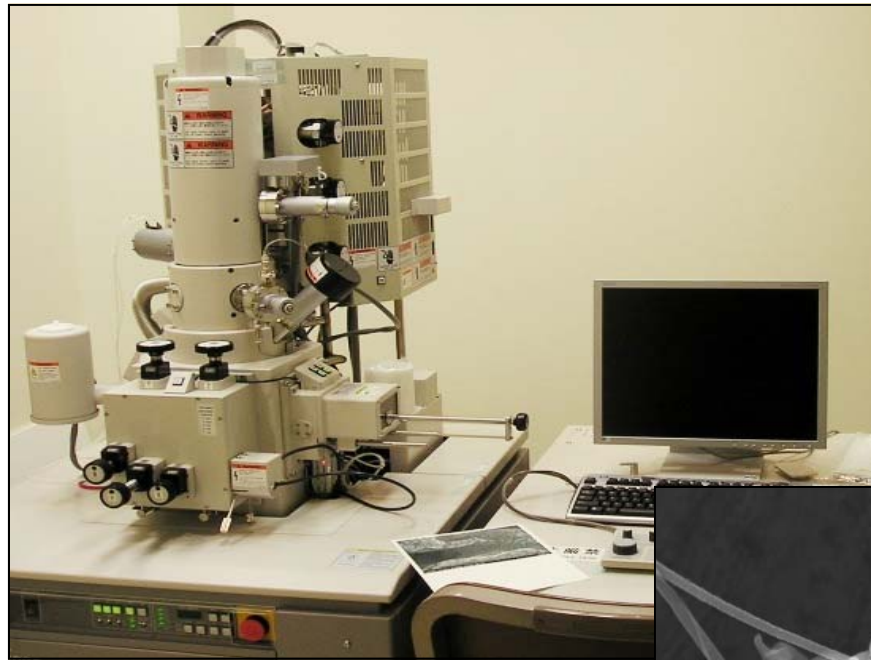


HITACHI S4800-HIGH RESOLUTION SCANNING ELECTRON MICROSCOPE

Instrument Quick Stats

- Electron beam energies can be varied from 0.5 to 30 kV.
- Specimen stage has 50 mm by 50 mm range of movement.
- Z direction working distance ranges from 1.5 to 40 mm.
- Resolution is 1 nm at an accelerating voltage of 15 kV and a working distance of 4 mm.
- Resolution is 2 nm at an accelerating voltage of 1 kV and a working distance of 1.5 mm.
- Tilt control ranges from -5° to 70° and the stage rotates 360° .
- Magnification ranges from X30 to X800,000.
- Equipped with an advanced dry vacuum system.



The High Resolution Scanning Electron Microscope (HRSEM) is used in diverse fields such as nanotechnology, materials science, ceramics, semiconductors, medical science and biology. Shown in the

photomicrograph are carbon nanotubes at a magnification of x50,000.

The Hitachi S-4800 HRSEM uses a cold field emission electron source operating at accelerating voltages of 0.5 to 30.0 kV. It can achieve an ultimate resolution of 1.0 nm at 15 kV and 2.0 nm at 1 kV. Secondary electrons (SE) and back scattered electrons (BSE) are generated by interaction between the electron beam and the specimen. The HRSEM has two secondary electron detectors: one in the sample chamber and one above the objective lens. Signals from the two detectors can be selected individually or mixed to change the proportion of SE's or BSE's that form the image.

Contact Information

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