The JN-1 Scanning Electron Microscope demonstration standard is comprised of two ½” pin stubs and a 1” mounting base.

One stub has six conductive samples consisting of an integrated circuit chip, metal spheres, a set screw, ductile metal fracture, diatoms and a TEM grid. The entire stub surface is coated with about 20nm of Au:Pd.

The second stub has non-conductive samples consisting of an integrated circuit chip, paper, glass spheres, fabric and diatoms. The stub is not coated for conductivity and is useful to demonstrate low-vacuum SEM imaging.

Also included is a 1” adapter on which to place one of the ½” stubs. The pin on the stub is captured by a spring loaded set screw so the stub is securely held without the use of tools. On the bottom of the 1” adapter there is a 4 mm internal thread which can be used by some SEMs to secure the sample on the stage. The 1” adapter does not have to be used. Curved tip tweezers should be used to handle the stubs. They are commonly available at the SEM supply houses.
JN-1 Conductive Sample Images

- Diatoms
- Set screw
- Integrated circuit

JN-1 Non-Conductive Sample Images

- TEM grid
- M60 metal spheres
- Ductile iron fracture
- Fabric
- Glass spheres
- Diatoms
- Business card
- Integrated circuit

Credits: SEM photographs taken on a JEOL Neoscope. Sample substitutions on this product will be considered. Jan. 2010