

For SEM and Dual Beam FIB procurement.

Images shall be taken in secondary electron imaging mode.

Use of NIST samples.

Please provide the following secondary electron image micrographs of each of the three NIST samples (the two Silicon Grass samples from box 1 or 2 may be treated as one sample, choose whichever sample works best for you) and for your gold on carbon sample:

1. Micrographs at each primary beam voltage of approximately 1, 2, 5, and 15 kV.
 - a. One set of digital micrographs using your selection of best conditions and best resolution and image quality. (note: for one of the voltages you may adjust the primary beam voltage to reduce charging effects) Report all instrument parameters.
 - i. One image at 10,000X to 100,000X (your choice) to show general sample details.
 - ii. One image at approximately 100,000X or greater demonstrating slightly empty magnification
 - b. One set of digital micrographs using a beam current of one nanoampere at each voltage. Report all instrument parameters.
 - i. One image at 10,000X to 100,000X (your choice) to show sample details.
 - ii. One image at approximately 100KX demonstrating slightly empty magnification
 - c. All digital micrographs shall be approximately 1024 x 1024 pixels or higher pixel density and 12 bit gray level or higher. All shall be in TIFF format with no compression. All files may be written to a CD.

Other images are welcome in addition to those listed if you feel they better demonstrate the capability of the instrument.

The deadline for submitting data on test samples will be Friday March 12, 2004.

Samples will be shipped to:

Dr. John Henry J. SCOTT – RFP 32220

NIST

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Call Gregory Ruderman at 703-787-1821 immediately if you have any questions.

Please note the technical and price submission of the RFP is still due Friday 2/20/04.