FEI Quattro S Field Emission Scanning Electron Microscope operational procedure (remote)

Microscope control window

1. Moving stage on monitor CCD camera window, click on and hold middle button and drag up the stage to about 10 mm mark position. (note: be careful! do not bump stage into sensor.)

   Use navigation camera window (bottom left window) to double click on the interest sample, then the selected sample will be moved to the center.

2. Choose detector: Choose detect "ETD" for high vacuum operation by clicking on the "detector" tab on the top menu bar

3. Choose high voltage and spot size: on Column section at the right side of the microscope control window, select proper spot size and high voltage, then click "beam on button" to turn on the beam.

4. Scanning and adjusting images: Click on upper left scanning window and

   click   to start scanning.

Choose scanning speed by clicking on plus/minus button or the scanning pull down menu on the top of the microscope control window.
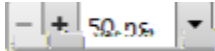
Adjust image brightness and contrast by clicking on auto brightness and

contrast button .

Focusing image by right click and drag mouse left or right on the scanning image window

5. Capture images After adjusting the scanning image, slow down the

    scanning speed, then taking image by clicking pause button once.

6. Saving images Go to file pull down menu on the top of the microscope control window, select save as to save and name the file in /shareddata folder/user folder

7. Finish: click off "beam on" button to turn off the beam. Make sure the "high vacuum" is selected in Vacuum section the right side of the microscope control window.

8. Disconnect remote access.