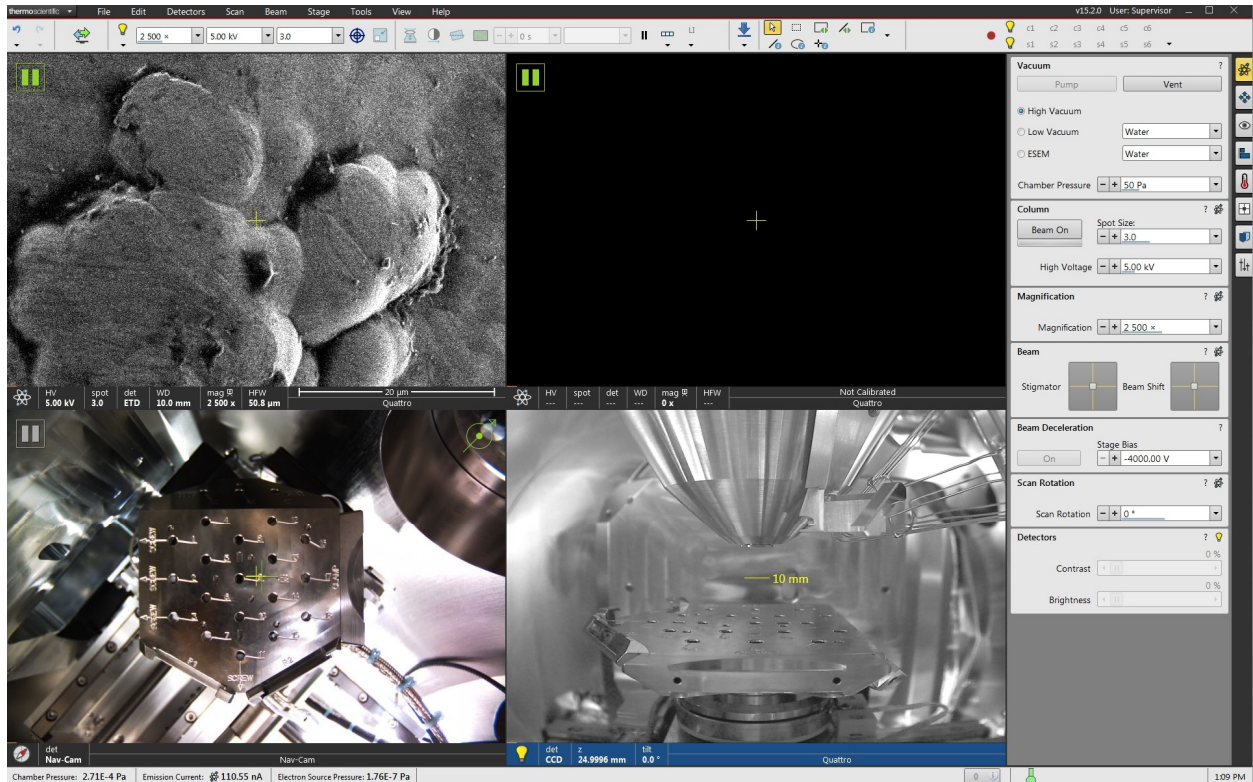
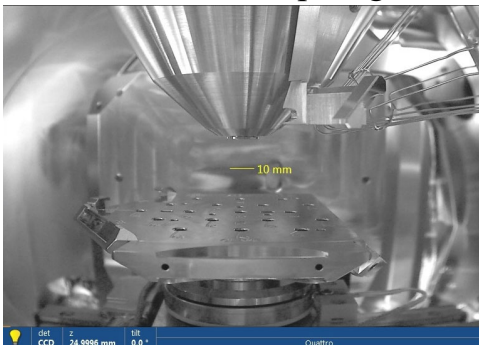


FEI Quattro S Field Emission Scanning Electron Microscope operational procedure (remote)

Microscope control window

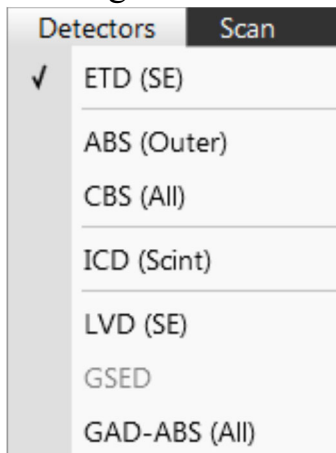


1. **Moving stage:** on monitor CCD camera window, click on and hold middle button and drag up the stage to about **10mm** mark position. (note: be careful! do not bump stage into sensor.)

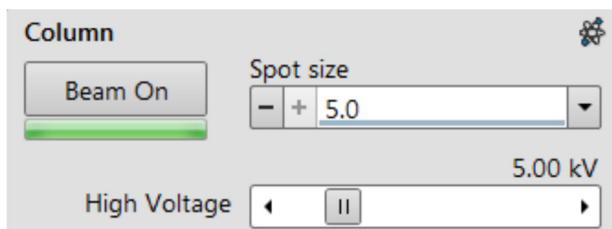


Use navigation camera window (bottom left window) to double click on the interest sample, then the selected sample will be moved to the center.

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.

Move scanning area by double clicking on one spot of the scanning image, then the spot will move to the center of the scanning imaging window.

Choose magnification by click on plus/minus or using pull down menu on the magnification section at the right side of the microscope control window.




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 at the right side of the microscope control window.
8. **Disconnect** remote access.