

How to acquire EM images

Turn on the scope

1. Turn on “high tension”
2. Turn on the screen by pushing “panel dim”.
3. Make sure the high vacuum green light (UHV) is on.

Specimen loading

4. Pull back the sample holder (black knob) by turning clockwise 180° and pulling out.
5. Place the sample on the holder using a pair of fine forceps.
6. Secure the sample in place using a needle attached to the holder. Never touch any part of the holder with your bare hand.
7. Put the hold back into the slot with the notch on the holder at 5 o'clock position and ensure the holder is snagged in (you can feel it). Wait till the red light goes off.
8. Turn the holder 180° counter clockwise. The vacuum will take the sample holder in. Let it get in gently.

Image analysis

9. Turn on light bulb “filament knob” clockwise until hearing a beep. Position, aperture, intensity and magnification are the controls that can be adjusted.
10. Align the light with aperture using “light (X, Y) and aperture (up, front one, use the big one always use the medium size).
11. Intensity should be adjusted to 1.5 to 2.
12. When using low magnification <2000x, turn the lever to point to the front.
13. When focus, always using an increment of <6!!!!
14. To acquire image, turn on the monitor and click on AMT Image Capture.
15. Save the images onto hard drive and copy to a CD.