

# T12 Quick Checklist

## Specimen holder handling:

- Cool down the microscope before inserting the specimen holder
- Use one hand to hold the stage when removing specimen holder from column

## Start up:

- Cool down the microscope
- Turn on the high tension and filament
- Center the stage before inserting specimen holder
- Once the specimen holder is inserted, do not open the column valves until the **IGP reading is below 20**
- Turn on 'Low Dose' function
- In low dose 'Search' mode, check the z height
- Switch to 'Focus' mode and press the eucentric focus button
- Switch to 'Exposure' mode
- Check condenser and objective aperture alignments
- Under 'Direct Alignments' check gun tilt, gun shift, pivot point x and y, beam shift and rotation center alignments
- Switch to 'Search' mode and align 'Search' and 'Exposure' modes
- Begin imaging

## Shut down:

- Close the column valves, center the stage and remove specimen holder
- Turn off the filament (leave the high tension on)
- Save and close your images
- If another user will be following you, refill the dewar with liquid nitrogen
- If you are the last user of the day, start the 'Cryo Cycle', remove the liquid nitrogen dewar, place Styrofoam box beneath the coils and safely store the dewar on the desktop
- Sign the log book and note any problems

## Filament:

- Turn off filament if you are out for more than **30 minutes**

If you encounter any problems, or think anything is strange with the microscope, please contact Zongli, Sarah or Remya before continuing.