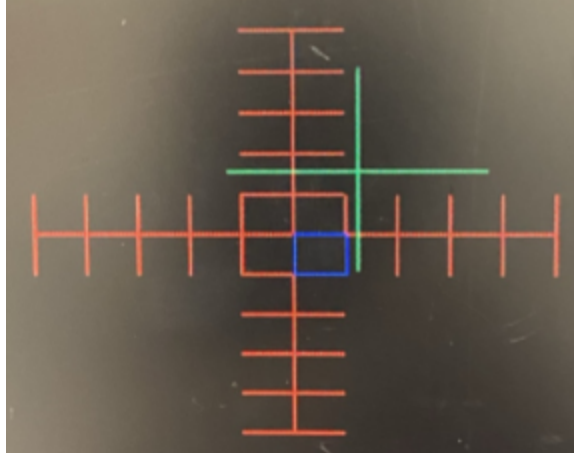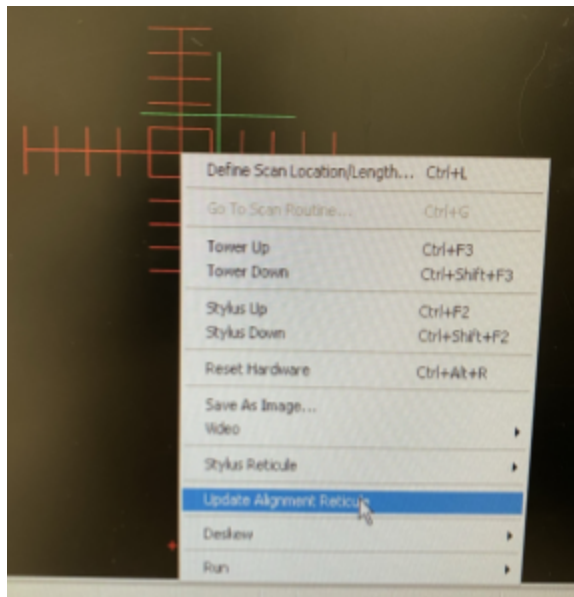Profilometer (Dektak 150)

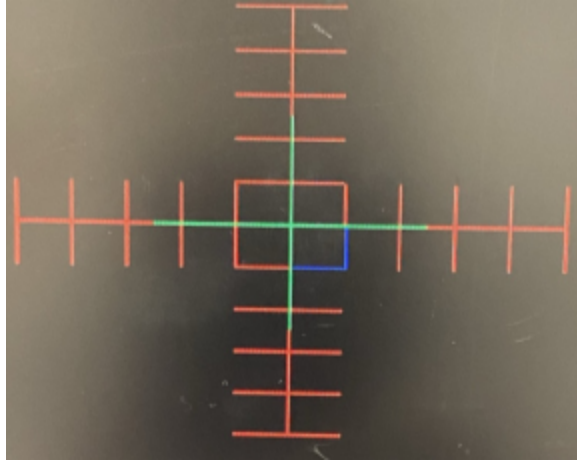1. Initializing
   a. "File"
   b. "New"
2. Align the red reticle

   a.

   b. Right click the center of red stylus reticle
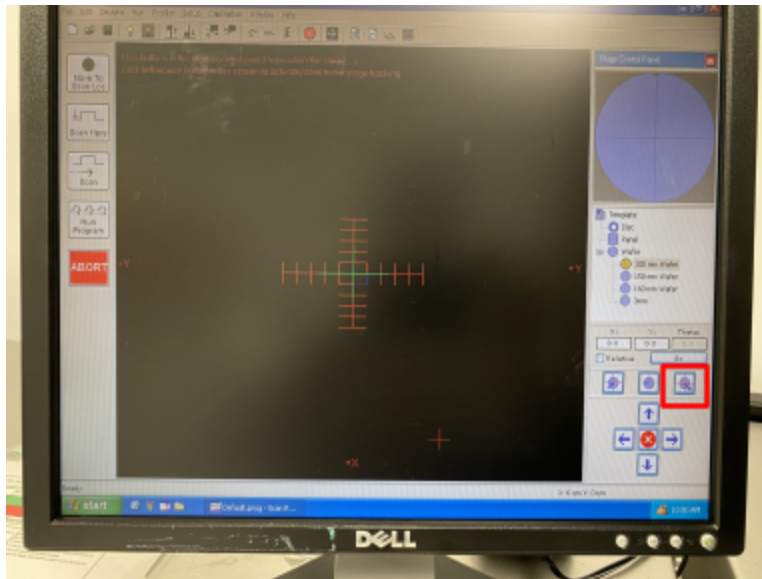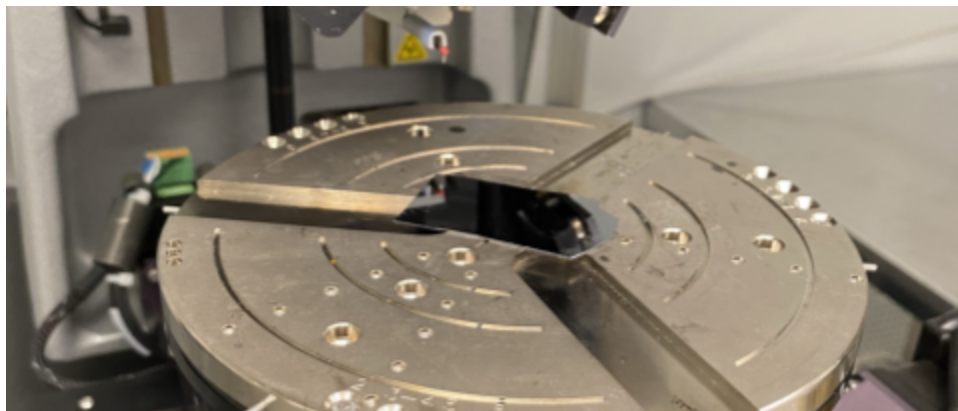

c.

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3. Sampling loading
   a. "Wafer unload"

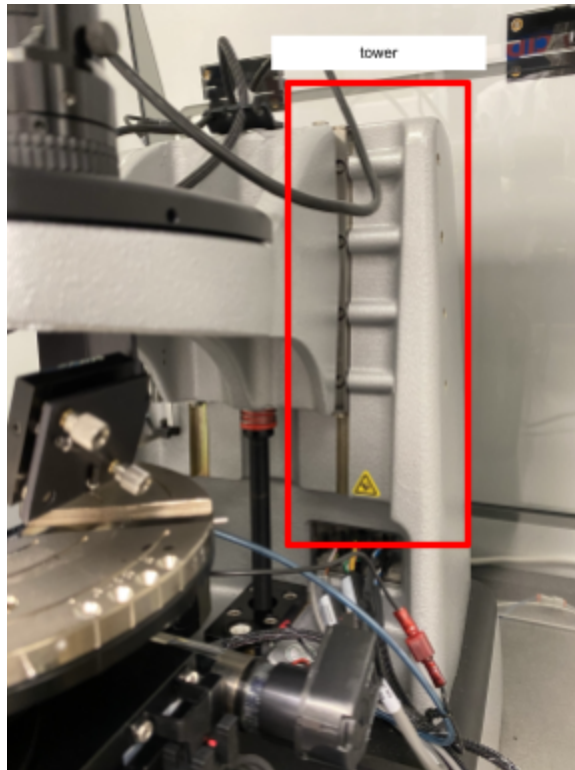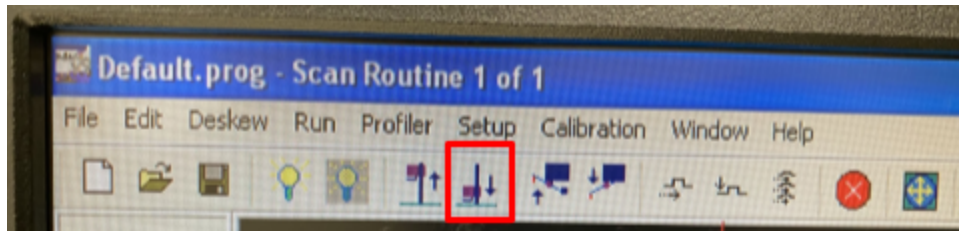   b. Place a sample

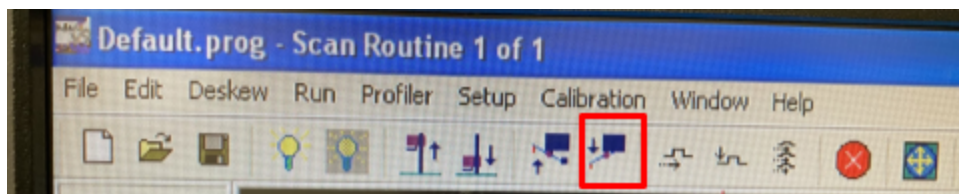c. Turn on the knob "vacuum"

d. "Wafer load"

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4. Measurement

a. "Tower down"

b. Find the position you want to measure using "X, Y stage control"
c. "Stylus down"

d. Check if the center of red stylus reticle matches with the tip of stylus
    i.   If not, manually align them using manual knobs

      ii.   If not, right click select "stylus"-"align"
- e. "Window"-"scan routine"
- f. Edit "scan parameters"
  - i. Structure height less than 1um, ->"measurement range: 6.5um"
  - ii. If the structure is over 1um (typically 3~4 um), -> "measurement range: 65um"
  - iii. If the structure is over 10um, -> "measurement range: 524um"
- g. Go back to "window" - "sample positioning window"
- h. "Scan here"
- i. Measure step height and ASH (average step height)
  - i. "R" -> "Reference"
  - ii. "M" -> "Measure"
- j. "Level" -> make two positions you think they are at the same level even
- k. Save data
  Right click

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5. Sample unloading
   - a. "Wafer unload"
   - b. Turn off "vacuum"

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6. You can leave now:)