• Cleaning Slides
  1. Rinse
     a. Rinse with acetone
     b. Wash off acetone with methanol
     c. Nitrogen dry
  2. Plasma Clean
     a. Turn on oxygen on wall, mechanical pump, and main power
     b. Set preset power and time in plasma (100 W, 300 sec)
     c. Wait until .2 Torr, then turn on oxygen (above plasma tank)
     d. Wait for time to start, then minimize reflected power and readjust forward power
     e. Record information in log book
     f. Remove sample
     g. Turn off main power, mechanical pump, and oxygen on wall
  3. Bake in oven
     a. 10 minutes, 200 C°
• Spinning on Photoresist
  1. Setup
     a. Set hotplate for 110 C°
     b. 5 sec, 500 RPM, 5 sec ramp
     c. 40 sec, 4000 RPM, 4 sec ramp
     d. 0 sec (end)
  2. Spin
     a. Spin on HDMS primer (Not necessary for glass)
     b. Spin on 1813 photoresist
  3. Bake on hotplate
     a. Harden the photoresist for 3:30 on hotplate (at 110 C°)
  4. Sign log book
• Exposing the Photoresist
  1. If UV aligner is off
     a. Make sure it has been off for at least 1 hour (check log book)
     b. Turn on power (below desk)
        • Wait 5 minutes, push start until you hear a click
  2. Exposing
     a. Place mask in holder and turn on vacuum
     b. Raise mask
     c. Place sample on platform and turn on vacuum
     d. Lower mask
     e. Raise the platform until it is just below the mask (there will be a slight change in the vacuum pressure)
     f. Set exposure time (2.7 sec)
     g. Expose (look away)
     h. Lower pedestal, then return light to left position
     i. Raise mask and remove sample
  3. Sign log book
• Developing the Photoresist
  1. Place slide in CD25 developer
     a. Allow to sit for 20 seconds (pattern should develop)
     b. Agitate for 40 seconds
     c. Rinse with DI water and then nitrogen dry
• Hardening the Photoresist in Oxygen Plasma
1. Use same steps as above for cleaning except use 50 W, 30 sec