Sample Loading/ Unloading 010/22/2018

Loading Samples

- 1. Check no stub in XPS.
- 2. Check Turbo on & back chamber at low pressure.
- 3. open gate 1.
- 4. turn off IG1.
- 5. close gate 0.
- 6. Turn Pfeiffer (Turbo) off.
- 7. close gate 2.
- 8. Wait for gate 2 to close.
- 9. open gate 3.
- 10. load stub using bottom notch.
- 11. wait for Pfieffer to stop.
- 12. hold door, close gate 3.
- 13. open gate 2.
- 14. Pfeiffer on.
- 15. wait for back chamber < 1 x 10⁻⁴ Torr.
- 16. turn on IG1.
- 17. open gate 0.
- 18. close gate 1.
- 19. wait > $\frac{1}{2}$ hour till IG1 < 5 x 10⁻⁸ Torr.

Moving sample to XPS Stage

- 1. $IG1 < 5 \times 10^{-8}$.
- 2. Raise stage (switch 7).
- 3. Move stage to (0,0,0,0) to load stub.
- 4. Lower stage (switch 7).
- 5. Center stage is x and y
- 6. Make sure transfer Arm is fully retracted.
- 7. Open gate 5.
- 8. Push sample with transfer arm onto Stage.
- 9. Unlock sample from arm.
- 10. Fully retract transfer arm to LL.
- 11. Close gate 5.
- 12. Raise stage (switch 7).

Unloading Sample

- 1. check $IG1 < 5 \times 10^{-8}$ Torr.
- 2. Move stage to (0,0,0,0) to unload stub.
- 3. lower stage (switch 7).
- 4. Make sure transfer arm is Fully retracted.
- 5. open gate 5.
- 6. move stub from XPS stage to arm.
- 7. move stub to load lock.
- 8. Fully retract Transfer arm.
- 9. close gate 5.
- 10. open gate 1.
- 11. close gate 0.
- 12. turn off IG1.
- 13. turn off Pfeiffer.
- 14. close gate 2.
- 15. Wait for gate 2 to close
- 16. open gate 3.
- 17. remove sample.
- 18. wait for Pfeiffer to stop.
- 19. hold door, close gate 3.
- 20. open gate 2.
- 21. start Pfeiffer.
- 22. wait for $P < 1x10^{-4}$ Torr.
- 23. open gate 0.
- 24. close gate 1,turn on IG1.