## **Loading Samples**

- 1. check no stub in XPS
- 2. open gate 1
- 3. turn off IG1
- 4. close gate 0
- 5. Pfeiffer (Turbo) off
- 6. close gate 2
- 7. open gate 3
- 8. load stub;
- 9. wait for Pfieffer to stop
- 10. hold door, close gate 3
- 11. open gate 2
- 12. Pfeiffer on
- 13. wait for back chamber < 1 x 10<sup>-1</sup> Torr
- 14. turn on IG1
- 15. open gate 0
- 16. close gate 1
- 17. wait >  $\frac{1}{2}$  hour till IG1 < 5 x 10<sup>-8</sup> 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. Open gate 5
- 6. Push sample with transfer arm onto Stage
- 7. Unlock sample from arm
- 8. Withdraw arm to LL
- 9. Close gate 5
- 10. 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. open gate 5
- 5. move stub from XPS stage to arm
- 6. move stub to load lock
- 7. close gate 5
- 8. open gate 1
- 9. close gate 0
- 10. turn off IG1
- 11. turn off Pfeiffer
- 12. close gate 2
- 13. open gate 3
- 14. remove sample
- 15. wait for Pfeiffer to stop
- 16. hold door, close gate 3
- 17. open gate 2
- 18. start Pfeiffer.
- 19. wait for  $P < 1x10^{-4}$  Torr
- 20. open gate 0
- 21. close gate 1,turn on IG1