Sputter Coater – 1/5

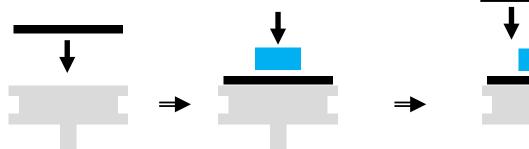
- 1. Sign in on the Sign-in Sheet and wear Gloves when using Sputter Coater
- 2. Ensure each sample is "sandwiched" by **Double-sided Carbon Tape** (**DCT**)

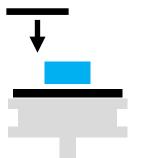
Place initial PDCT on stub a

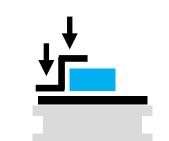
Place specimen and press down

Place top DCT over sample and initial DCT

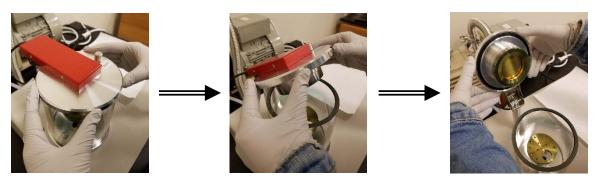
Press down on the top DCT to ensure contact

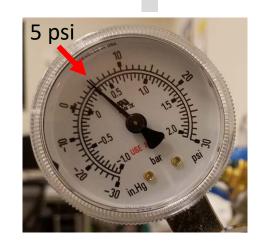






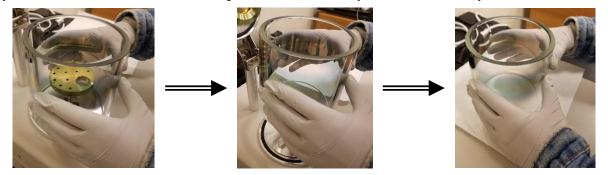
- 3. Check that the **Argon Regulator** is set to about **5 psi DO NOT ADJUST REGULARTOR YOURSELF!**
- 4. Carefully open the *Chamber Cover* using both hands





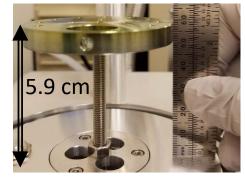
Sputter Coater – 2/5

5. Carefully remove the *Glass Cylinder* and place on top of lint-free paper

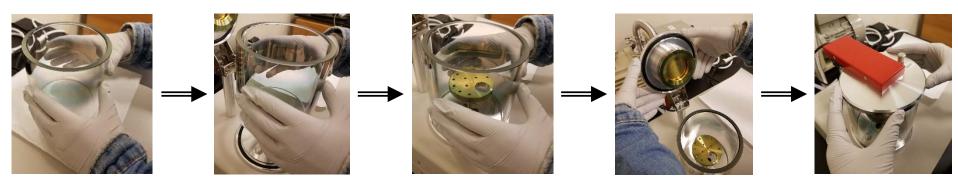


- 6. Check that the height of the *Stage* is set to about *5.9 cm*
- 7. Place SEM stubs on the *Stage*





8. Carefully place *Glass Cylinder* back and close *Chamber Cover* with both hands

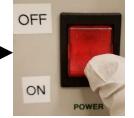


Sputter Coater – 3/5

9. Confirm the **Gas Control Knob** is set to **Closed**



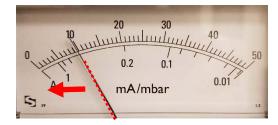
10. Turn on the *Sputter Coater* by switching to *ON* position



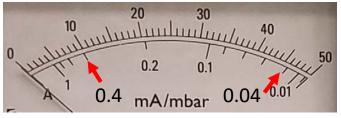
11. Allow *Chamber* to pump down to less than *0.04 mb* and hold at least *10 sec*



12. Adjust *Gas Control Knob* to achieve more than *0.4 mb* and hold at least *10 sec*



13. Repeat *Steps 11 – 12* to flush chamber again with Argon gas



15. Finally adjust *Gas Control Knob* back to *0.04 mb*

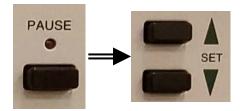


Sputter Coater – 4/5

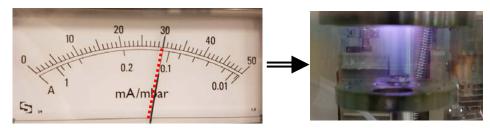
16. Check the *Timer* value is set to *10 sec*



17. If necessary, hold *PAUSE* button and reset *Timer* value using *SET* buttons



18. Briefly hold **TEST** to check sputter current is set to around **30 mA**



- 19. Press *START* to begin the Sputter Coating process
- 20. When the **TIMER** resets the Sputter Coating is complete
- 21. Close the *Gas Control Knob* and allow vacuum to reach to ~ *0.01 mb*



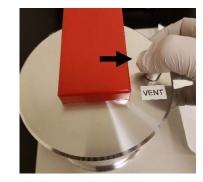
22. Turn off the *Sputter Coater* by switching to *OFF* position

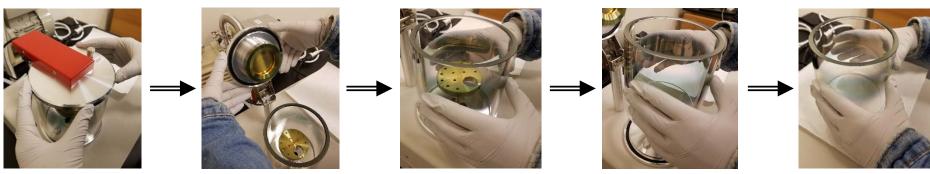


START

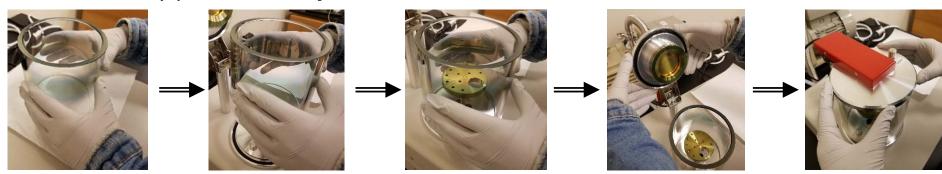
Sputter Coater – 5/5

- 23. Carefully *Vent* the chamber by pressing against the *Vent Knob*
- 24. Carefully lift the *Chamber Cover* and remove *Glass Cylinder* and place on top of the lint-free paper





- 25. Remove the SEM stubs
- 26. Carefully place *Glass Cylinder* back and close *Chamber Cover* with both hands



27. Record the *Total Sputter Time* used (in seconds) on the *Sign-in Sheet*