

Prepared samples slides/catheters as we have done before, Fixative, Osmium and Ethanol washes.

- 1- Turn CPD machine on, switch is on the back right corner.
- 2- Open CO₂ tank.
- 3- You can set up your own program however, I recommend you use the ones already programmed in. **Program 1**, catheters **1-4** (for up to 4 samples, 1holders and 2 fillers), **Program 3** catheters 1-8 (for up to 8 samples 2 holders and 1 filler), and **Program 2**, slides for 1-10 slides. It will take about two hours to run.
- 4- Sample preparation; Catheters
 - a. On a P100 plate, dispense 25 ml of ethanol (200 proof). Placed an open holder in the P100 dish as well. Open basket(s) and place bottom part in the ethanol dish. With tweezers, gently place the catheter pieces into the basket(s), when finished screw the tops back on. Do this for all the samples (up to 8).
 - b. Placed the closed basket into the sample holder (maximum of 4 baskets per holder). On a piece of paper write down their orientation, so that you know what sample is where. Place the metal mesh on holder. If running more than four samples prepare the other samples the same way.
 - c. Place the white O-ring on the table then place the metal cylinder on it. Using a syringe dispense 20 ml of 200 proof ethanol into the metal cylinder.
 - d. With the Pin (tool) get the first sample holder from the ethanol dish into the metal cylinder; repeat this with the second sample holder. Make sure you have enough ethanol in the metal container to keep sample covered.
 - e. Once both sample holders are inside the metal cylinder, placed the white filler on top.
 - f. Open CPD chamber, look inside and make sure the small stirring bar is at the bottom. With a syringe, dispense 20-30 ml of ethanol (200 proof) into the chamber.
 - g. Place the Pin on the metal cylinder and very gently transfer it to the CPD chamber. Again, make sure there is enough ethanol to cover the sample.
 - h. Close the chamber and press start.
 - i. Program will run for about two hours.

For slides;

- 1- Follow steps 1-3 above. Open CPD chamber and place the white CPD holder (cylinder) in it. Make sure the white stirring bar is at the bottom. Dispense about 25 ml of 100% ethanol into the chamber. Go back to the bench prepare your samples.
- 2- Place the metal slide holder on a petri dish containing 20-30 ml of 100 % ethanol. This holder can hold up to 10 slides.
- 3- Place your first slide at the bottom then place a washer on top of the slide, the next slide goes on top of the washer. Repeat this process until all your slides are stacked up in the

holder, then place the weight on top of the last washer, this will ensure samples are not going to float away.

- 4- Very careful bring the dish and sample holder close to the CPD chamber, with the long forceps lower the metal slide holder into the chamber. Make sure ethanol is covering the samples. Put the cover back on and run program # 2 already set up for slides.
- 5- After the program is done remove cover and take samples out. Place cover back on and turn machine off. Your samples are ready for sputtering.