



## Sample Preparation

**Instrument: Denton Vacuum. Evaporator Bench Top Turbo**

**Coating of Negative stain Grids with Carbon.**

**Instrument Location: G236D (Right side to the entrance of the core facility).**

Following protocol are the instruction guidelines for all user, please go through regular training before using

### Setup:

1. Instrument is always on and running, except in case of emergency shut down.
2. Touch the touchscreen to have active display.
3. Press the **Lift off** button to reach a certain height or max, so you have sufficient space to work.
4. Cut the carbon thread long enough to fit between the two pins at a given pole.

We have two pole designated Source A and Source B for low voltage discharge, one can use any of them at a given time or one after another.

5. Place the glass slide with grids to be coated under the pole.
6. Press the **Lift. Down** button until the chamber is completely closed.
7. Press Auto pump button and wait for vacuum to reach  $10^{-5}$  Torr.
8. Press button Screens, Press Low Voltage, Select Source A or B (where you put the carbon thread).
9. Set Point is put to 75% (do not change).
10. Press Power on wait for 3-5 sec and Press Power off, (You will see Carbon thread burning out).
11. Press Auto Vent. (Venting requires Nitrogen gas supply and its connected to Nitrogen cylinder and the flow has been adjusted), at the end you will hear a bump sound).



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12. Press Lift off to open chamber, remove your sample.
13. Please Log in the Log book.

**Cleaning Instructions.**

1. When you are finished, remove the Carbon thread and clean the stage, poles and Glass chamber with 100 % isopropanol and remove all residual carbon.

2. Close the chamber with Lift down button.

In case of accident or emergency, press the press **the red Emergency stop button** in the front and notify the Core facilities member.