DENTON VACUUM EVAPORATOR
Operating Instructions

The Denton will be found in Manual mode, please do not switch to Auto. The BACKING toggle switch will be ON; the ROUGHING, HIGH VACUUM, and VENT toggle switches should be in the OFF position. The Mechanical and Diffusion Pump toggle switches will be in the ON position.

1. To vent bell jar, leave BACKING switch in ON position; then VENT switch to ON. Wait until bell jar can be easily lifted and swing it to either the right or left side out of your way. At this time wire (left electrodes), carbon rods (right electrodes) and samples may be placed in stage area.

2. Lift and swing bell jar back to center postion. HOLD IT and gently let it down. Close BACKING AND VENT switches. Push ROUGHING switch ON (wait until chamber TC gauge located above Foreline/Chamber knob) reads slightly below 100 millitor). Push ROUGHING switch OFF and press BACKING switch ON (gauge should read 50 millitor): then press HIGH VACUUM switch (gauge should read between 20-50 millitor). At this time, liquid nitrogen may be put into funnel.

When the CHAMBER TC gauge indicates tht the pressure has fallen to zero (BACKINGand HI VAC switches open), the high vacuum gauge can be turned on. Turn it to the ZERO position and allow 30 seconds for it to warm up. Then push METER READ to light up the gauge. Rotate the gauge selector switch to the appropriate vacuum scale as required (10-4 to 10-7 Torr). We use 10-5 Torr.

NOTE: High vacuum gauge may not always work. If it does not, add additional liquid nitrogen and let evaporator set for 10-15 minutes (this will allow a high vacuum to be obtained). You may now carbon or metal coat.

3. After coating: 1) filament adjust to 0; 2) filamaent/glow power switch to OFF and then VENT switch ON. Remove specimens. Then proceed going back to step 2. Always leave Denton in the status listed in beginning paragaraph of these instructions.