**Shut down procedures for G13 for planned power outages**

1. When pumps are running (UHV):
   1. Close the shut valve from S1 to S2
   2. Follow shut down procedures for S1 until you get to the gold seal valve. **Do not open that valve!!**
   3. Close the gate valve from **turbo** to **MC**. Then close the shunt valve
      1. This is the device connected between the turbo and the mechanical pump.
      2. This device helps keep a seal on the chamber
   4. **Ion pumps** in S2 and MC should be running and **not turned off** unless the planned power outage is for longer than a few days
2. When the pumps are not running (ATM):
   1. Close the shut valve from S1 to S2 and S2 to MC
   2. Follow shut down procedures for S1 until you get to the gold seal valve. **Do not open that valve!!**
   3. Close the gate valve from turbo to MC. Then close the shunt valve
      1. This is the device connected between the turbo and the mechanical pump.
      2. This device helps keep a seal on the chamber
   4. Close the gate valve between the MC and the ion pump
   5. Unplug all the cords connected to the wall outlets in the main lab area. This includes
      1. Colutron computer
      2. Cart computer (used for RGA measurements)
      3. Power strips connected to various things along main beamline
      4. Ion supply rack