

Ar Gas Glovebox SOP

- Check gas cylinder pressure (located behind glovebox)
 - If below 400psi, do not use. Notify the Jiao group (CLB331 or jiao@udel.edu) for cylinder change
- Record date, time, H₂O & O₂ sensor reading before use and brief description of activity in log book.
- Follow listed antechamber flushing procedure when moving sample in/out of glovebox
- No liquid chemical is allowed in the glovebox unless it is approved by Dr. Jiao.
- AVOID corrosive chemicals or chemicals that poison Pt
- CLEAN UP YOUR MESS WHEN FINISHED! You can lose your access if you don't.
- Record final H₂O/O₂ sensor reading in log book when done. This helps identify problems so we can safely find a solution.

Dangerous chemicals are inside this box, so it is vital that moisture & oxygen exposure is limited!!!

Mini-Antechamber Flushing Procedure

Adding items to glovebox:

1. Fill chamber back to atmospheric pressure
2. Open latch, and put materials for transfer inside.
3. Pull vacuum for at least 5 minutes. (porous materials take even longer).
4. Flush chamber with Ar gas, and then pull/flush chamber at least 2 more times.
5. With chamber at atmospheric pressure, open door from inside.

Removing items from glovebox:

1. If atmosphere is not flushed, flush box three times following procedure above.
2. Open door, add sample from inside box.
3. Remove sample from outside box, close latch and partially pull vacuum on chamber.
 - a. Leave pressure between full vacuum and atmospheric on gauge so users do not assume that the chamber filled with Ar.