

## **FREEZE DRYER TIPS TO REMEMBER:**

November 14, 2017

Celeste Morin, x3756, Druckenmiller 243

- The volume of the freeze dry flask should be two to three times the volume of the sample.
- When the Freeze Dry system is started, the valves should all be in the vent position. (The bevel on the knob should point away from the sample port). This will allow vacuum to build up in the system.
- Always vent the vacuum line before turning off the vacuum pump.
- Make sure all vacuum lines are secured to prevent leaks.
- Wear appropriate protective attire and eye protection.
- Clean stainless steel condenser after use.
- Do not work with damaged, scratched, or chipped glassware.
- The gas ballast should be closed during the operation of the Freeze Dry System.
- Make certain that the oil in the vacuum pump is at the proper level.
- When using flammable or hazardous solvents, the vacuum pump must be vented to or operated inside a fume hood.
- If a sample is spilled in the collector chamber, it must immediately be cleaned up.
- If using chemical compounds that may cause degradation to some Freeze Dryer parts, it is imperative that the equipment susceptible to degradation be thoroughly cleaned after use. They should be removed and flushed with water.