

Instrument Use in PChem Lab

The instruments used in the PChem Lab (such as uv/vis spectrophotometer, polarimeter, etc.) either have directions on a page kept with the instrument, in the drawer dedicated to the experiment, or included with the experiment directions. However, a few separate comments about usage of computers and balances are provided in what follows.

Computer Use in PChem Lab

Computers in room next to PChem lab should be available for use during lab time. For some of the computational experiments you will be directed do computer work in that area, but other work will have to be done at home or elsewhere on campus.

Please observe all the rules regarding the use of these rooms. Food and beverages are not permitted in these rooms.

If using a computer in the Chemistry Computer Lab, move the mouse to start. The computer should already be turned on. Enter your Username and password for your OneNet Account and click OK.

Open My Documents Folder (located on the desktop) and create a new folder with your name. Under File choose Open and choose New Folder. Anything you save must be placed in your folder only. **Do not save any CAChe (Scigress) file in any other place than in your named folder!**

Expect files to be purged at the end of each semester and possibly during semester. If you need a permanent copy beyond that time you need to save to your OneNet account or on your own flashdrive.

Report any malfunctions.

Before you leave, clean up your work area. When you are done at the end of the lab, be sure to choose Log Off option after selecting Shut Down, but do not turn off computer.

Use of Balances in PChem Lab

There are three types of balances for you to use in PChem Lab

<u>Balance</u>	<u>Accuracy</u>	<u>Maximum</u>
Dial-O-Gram	$\pm 0.1\text{g}$	1000g
Ohaus Adventurer	$\pm 0.001\text{g}$	150g
Denver TR-64	$\pm 0.0001\text{g}$	61g

Select the right balance for the job. If you only need to weigh something to $\pm 0.1\text{g}$, do not use a balance accurate to $\pm 0.0001\text{g}$. Do not place an object on a balance if the object is too heavy for the balance. You will damage the balance. Always place object to weigh in plastic weigh boat (or other container) after you tare balance to zero out the weight of plastic weigh boat or container. **Do not spill anything in balance.**

If the balance pan is dirty, clean it off with a small brush. If that doesn't work, contact the instructor.

The electronic balances should read zero when turned on. If necessary, press the tare button to set the balance to zero.

Carefully, place the object on the balance pan. If there is a door, close it and let the balance stabilize before recording the weight.

After you have recorded the mass, carefully lift the object off the pan. If you have spilled anything, clean it up. Contact the instructor if you need help cleaning up a spill.

With proper care, a balance should never wear out. Please help us keep our balances clean and in working order.

To compare balances, you could weigh a quarter or other small object on each of the three balances. Record your results below.

Denver TR 64 _____ g

Mettler PC 180 _____ g

Ohaus Dial-O-Gram _____ g