

CHE 450G: Shimadzu UV-310PC UV-vis Spectrometer

This apparatus will be utilized to acquire electronic spectra.

Instructions for Use

1. Sign in on the logbook.
2. On the computer, you should see a Windows desktop. Double click on the Shimadzu directory if it is not already open. In the Shimadzu directory, double click on the UVPC icon.
3. A good set of parameters for routine use has already been saved. To load them from the UVPC program, go to the **Configure** menu and select **Load Parameters...** Select the CHE450.CFG file, open it and then exit.
4. Open the sample compartment on the instrument. Place your sample cuvette in the front cell holder and your reference (usually distilled water) in the rear one. The little black covers go on top of your cuvettes. Close the sample compartment door.
5. Click on the **Start** button. Your scan will automatically acquire.
6. When the run is completed you will be prompted for a filename. Use your initials and notebook page number such as RT154b. You are limited to 8 DOS-compliant characters for a file name.
7. Go to the **Presentation** menu to set the display limits (x and y axis values) for your data. Then use the **Plot** selection to send your printout to the printer. If you would like to take a copy of your data home with you, save the data in x-y column format.
8. If you want to plot more than one spectrum on a single plot, go to the **File** menu and select **Open...** Select your first spectrum, hit the **Open** button and then repeat for to add additional spectra. Press the **Exit** key to work with your data. If you wish to delete spectra from a multiple spectrum plot go to the **File** menu, select **Channel** and **Erase Channel**. You can delete one or all of the spectra from the plot.
9. Go to the **Presentation** menu and select either **Set Limits...** or **Radar** to display your plots. You can send your plots to the printer using the **Plot** command found under the **Presentation** menu. Make sure your plots come out in Landscape format, not Portrait.
10. Completing your experiment:
 - Remove your sample and reference from the sample compartment.
 - Clean up any spills or debris.
 - If nobody else will be using the instrument that day, turn off the lamp by going to the **Configure** menu and loading in the parameters called LITEOFF.CFG.
 - Quit the UVPC program, leaving the computer in Windows with the Shimadzu window open.
 - Sign out on the logbook. Note any problems etc. If problems encountered notify *BOTH* your TAs and instructor.