Operating Instructions for HP 1050 LC

1. To turn on the lamp: Locate the detector block (2nd section from top, first large section). On the control panel press "lamp on/off", then "enter". Note: only turn off lamp at the end of the day to keep detector readings consistent.
2. Purge the mobile phase solvent bottles with He (~10 psi).
3. On the desktop, open "HP ChemStation" on the computer, choose the "instrument online" program that corresponds to the number instrument you are working with (1 or 2)
4. Go to "Method" > "edit entire method", then press "ok". This is where run parameters are chosen (mobile phase mix, run time, etc.). You can use the current method as an example. Once the parameters are set choose "save as".
5. To turn on the pump (second block from bottom on instrument) press "pump on/off", then "enter". Press "flow" to return to pressure (bar) display.
6. In ChemStation, the icons in the top left corner of the screen toggle between a single sample and method (1 bottle icon) and a sequence of many samples and methods (3 bottle icon = sequence)
7. Go to "Sequence" > "sequence parameters".
    a. ChemStation can automatically name your data files. Choose "Prefix/Counter", and type in a data prefix of your choice. The counter numbering should be set to 1 for a new prefix. Note: the total length of a file name cannot exceed 8 characters (prefix + number).
    b. "Subdirectory" is the subfolder where your files will be saved to (C > HPChem > 1 or 2 > data > "subfolder"). Click "ok" if it asks you to create a new folder.
    c. Always check Shutdown > "Post-sequence Macro", "not ready timeout" ~10 min.
8. "Sequence" > "sequence table". This is where you can set up an injection program for multiple samples and different methods.
9. To analyze data, go to the white box that says "methods and run control" in the upper left. From the drop down menu, choose "data analysis"
    a. File > load signal, to load a file
    b. File > "snapshot" allows you to look at a run before it is finished in the data analysis window
10. The four buttons directly below the window that says "data analysis" allow you to toggle between integration, calibration, signal, and spectral tasks.
    a. Integration (far left): in the drop down menu that says "all loaded signals", choose a DAD channel. This will display the peak statistics for the chromatogram.
    b. "Spectral task" lets you view the spectrum at a specific time (or peak)
    c. Spectra > "3D plot" will produce a 3D interpretation of the run where x = time, y = wavelength, and z = absorbance.
    d. Spectra > library > open library: once a peak spectrum is displayed, a search can be performed in the library to match spectrums and compounds.
11. To change single parameters such as pump (on/off), DAD (on/off), etc., click on Instrument and the desired parameter.
12. Further help is available in Help.

Last Update: 7 September 2007 Amy Lynch and Eric Williamsen