Aviv Circular Dichroism Spectrophotometer

*Starting it up:*

1. At least 30 minutes before planned use, turn on water chiller and lamp
   * Turn the N2 regulator to between 10-20
   * Make sure computer is off, then make sure the circuit breaker power switch to CPU/Instrument is off
   * Turn on circuit break power switch labeled Lamp Power/Cooling System
   * Turn on water cooling system (power button on side of unit)
   * Wait for LED labeled Lamp Ready to come on
   * Push red button labeled Push to Start
   * Record lamp hours in logbook
2. Turn on circuit breaker power switch to CPU/Instrument, then start up computer and open software CD-400.
3. Make a folder for yourself in C:\USERS\ to save your data in.
4. Click on Configure Experiment:
   * Name experiment and write a brief description
   * Set experiment type from drop down menu (wavelength, temperature, kinetic, etc.)
   * Enter number of scans (if sample is unstable do more than 1 scan)
   * Click on Save Data Options and set which data options you would like saved with each run
   * Still within the Save Data Options, click on Data Browser, then type in file path where you want to data saved
   * Click on Experiment Configuration and configure desired parameters
   * Click Exit/Save Configuration
5. Load cuvette with blank\* and note the orientation of the cuvette and be sure to keep the same orientation each time you load a sample (orientation is important o maintain in any series of runs due to stresses in the cuvette)

\*A blank is whatever solvent you are using in your sample such as DI water, buffer, etc. It is important to record a blank so that you can subtract the solvent from your sample later.

1. Click on RUN EXPERIMENT on the bottom left of the software screen
2. Save Experiment window pops up after each run. Choose desired Store/Save Option.
3. Repeat steps 5-8 with sample instead of blank.

*Shut down procedure:*

1. Shut down computer
2. Record lamp hours in logbook
3. Turn off water chiller
4. Turn off circuit breaker power to CPU/Equipment and Lamp/Chiller
5. Continue to allow N2 to circulate through CD for 10-15 minutes to help cool down lamp
6. Turn N2 down to barely purging