Using the Ocean Optics USB4000 Spectrometer to Obtain a Spectrum

- Open SpectraSuite software by **clicking on the desktop icon**.
- Be sure that the lamp source is on – check the back of the source to be sure the toggle switch is on the on position – a green light on the front just indicates the power is on.
- Under the file menu **select new** then **select Absorbance Measurement**. This will open a wizard to help you set the spectrometer's acquisition parameters.
- You will see the source wizard which should have the source and Type (USB4000) highlighted. **Select next**.
- The set acquisition parameter wizard opens. In the integration time box **click "set automatically"**. In the Smoothing box **set the "scans to average" to 10** and the **"boxcar width" to 2**. Once completed **select next**.
- With a reference cuvette in the sample compartment **click on the yellow bulb icon** to acquire a reference spectrum. The reference cuvette can either be empty or contain the solvent that you will use for your sample. Select next.
- You must now store a dark spectrum. Insert the cuvette stuffed with a Kimwipe (you want to block the pathlength so no light reaches the detector) and click on the dark bulb.
- Now select finish.
- Place the cuvette containing your sample into the sample compartment and observe your spectrum. If the solution is too concentrated, dilution may be necessary.

General Tips:
  - Be careful not to touch the optical window part of the cuvette when handling.
  - It is best to use the same cuvette for the reference and sample spectrum and be sure to position the cuvette the same way for each measurement.
  - You should wipe off the outside of the cuvette with a Kimwipe before inserting into the sample compartment.
  - Do not place cuvettes on top of the lamp source, spectrometer, or computer.