






## *Nicolet Avatar FT-IR Barebones Guide*

1. The IR and computer should already be turned on. If they are not, turn them on and let the laser warm up for about 30 min.
2. If you wish to use a nitrogen atmosphere for your sample, be sure the nitrogen tank valve is open and turn the knob on the flowmeter until the flow is around 7. Let the nitrogen purge for a couple minutes before running any samples.
3. Open the Omnic software (double-click icon on desktop).
4. Set the number of scans by clicking Collect->Experiment Setup. Click on the Collect tab and change the number of scans as needed (default is 32).
5. Put your background sample (either a clean salt plate or pressed KBR) on the sample holder. Click on the Collect Background icon  and click OK to start the scan.
6. After collecting the background you don't need to add it to the data window (ie. click no).
7. Put your sample in the holder. Click on the Collect Sample icon . Type the name of your sample and click OK to start the scan.
8. When the sample is done being scanned, click YES to add the spectrum to the data window.
9. Save your spectrum by clicking on File->Save As and enter the filename and where you want to save it (hard drive, ZIP disk, etc).

### Data Analysis:

1. To toggle between absorbance and transmittance mode, click on the appropriate icon: . icon: Absorb % Trans.
2. To do a baseline correction, click on the . You MUST be in absorbance mode to do baseline correction, but you may go back to transmittance after this correction completes.
3. To label your peaks click on the  icon (lower left). Click on each peak of interest and press enter to mark it with the wavenumber value. If you pick a wrong peak, click on the wavenumber value then press delete and then enter.

4. Your spectra can be printed by going to File->Print.
5. More detailed information about acquisition can be printed out with the spectra.  
The templates for these can be found under the Reports menu.