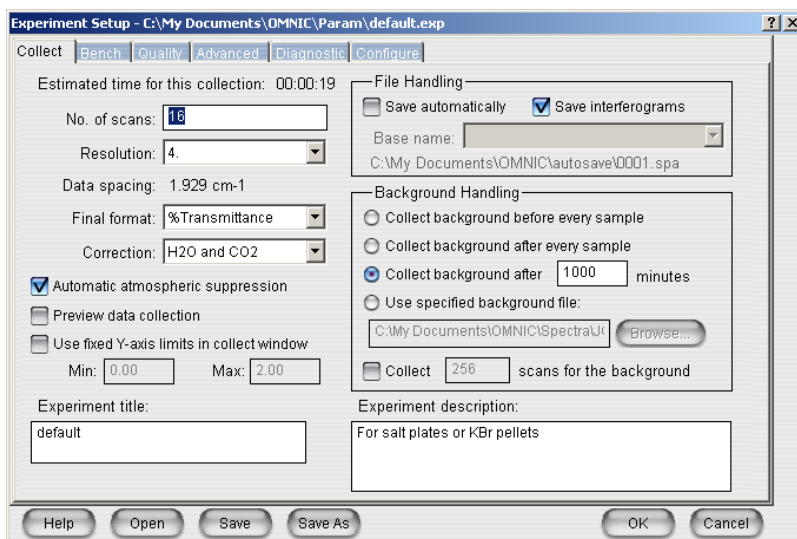



Nicolet Avatar Software Guide

1. Open Omnic Software with the icon on the desktop
2. Click ok to Smart Accessory Change.


3. To change the experimental parameters click  .



- a. You can change the number of scans and the resolution here. On the 8th floor FTIR DO NOT check the box next to “automatic atmospheric suppression” since this instrument cannot do that.
- b. On the right side you can change when the instrument requires a new background to be run (typically run before your first sample and then every hour or as needed).

4. Click Collect Background to collect for automatic subtraction.  You do not need a new window.



5. Insert your sample into the holder.

6. Click on Collect Sample  to collect the sample spectrum.


7. Enter a title (optional) and click OK.

8. After it is done collecting it will ask if you want to “Add to Window 1?” Click Yes.

9. Baseline Correction:

- a. Click on baseline button. 
- b. Click on 4-5 peaks with highest %T.
- c. Click  .

10. Find Peaks:

- a. Click  to automatically find peaks.
- b. Click to move the threshold line so that it intersects peaks, but do not put it high enough to pick up noise/baseline.

11. Zooming:

- a. To zoom: box out region of interest and then click in the box.
- b. To return to full spectrum: double click on the full spectrum at the bottom of the screen.

12. Click on File and “save as” to save your spectrum.

13. Click on the print icon to print the spectrum with labels

ATR Procedure

- 1) USE ONLY ETHANOL OR WATER, **NEVER USE ACETONE.**
- 2) USE ONLY THE COTTON SWABS AT THE SYSTEM TO CLEAN THE LENS/CRYSTAL, **DO NOT USE KIM WIPES!**
- 3) NEVER SCRAPE THE LENS WITH A SPATULA AND BE GENTLE AND CAREFUL IF YOU ARE LOADING A POWDER WITH A SPATULA.
- 4) NEVER USE THE COMPRESSION SCREW WITH LIQUIDS.
- 5) SOLIDS MUST EITHER BE FLAT SURFACES OR BE GROUND INTO FINE POWDERS. DO NOT USE COARSE, CRYSTALLINE POWDERS, THEY WILL HARM THE LENS.
- 6) ASK SARA OR JOE TO SHOW YOU PROPER RECOVERY TECHNIQUES IF YOU NEED TO RECOVER YOUR SAMPLE.