

## FTIR Procedure

1. To launch the FTIR program, double click the OMNIC icon.
2. From the Collect pulldown menu, select Setup, and select the following:
  - No. of scans = 8
  - Resolution = 2 cm<sup>-1</sup>
  - Apodization = Happ-Genzel
  - Zero filling = None
  - Final format = Absorbance
3. From the Edit pulldown menu, select Options. Click on the Collect tab at the top. Click the "Collect to New Window" box to deselect it. Click OK to close window.
4. From the Collect pulldown menu, select Background  
*(Repeat background collection every 30 min-1 hr if the humidity is high)*
5. From the Collect pulldown menu, select Collect Sample  
Place the sample in the holder in the IR, then select Yes  
Add to window = Yes
6. From the Process pulldown menu, select Automatic Baseline Correct  
old spectrum shown in red and new spectrum shown in blue  
Click on the red one  
From the Edit pulldown menu, select Clear  
From the Process pulldown menu, select % Transmittance
7. From the View pulldown menu, select Display Limits (to change axes of the graph)
8. During spectrum display, click on T (for text) at bottom of page.  
Click on peaks of interest to label.
9. From the File pulldown menu, select Print

### To Run the Next Sample

1. From the Window pulldown menu, select New Window  
(more than 7 open windows will crash OMNIC)
2. Repeat steps 4-8 above.

### **KBr Pellet procedure for solid samples**

Take about 1/8" of the solid sample on a microspatula and about 0.25-0.50 teaspoons of KBr. Mix thoroughly in a mortar while grinding with the pestle. If the sample is in large crystals, grind the sample separately before adding KBr.

Place just enough spl. to cover bottom in pellet die. Place in press and press at 5000-10000 psi. Check pellet press brochure for details. Carefully remove the pressed sample from die and place in the FTIR sample holder. The pressed disc should be nearly clear if properly made. If it is translucent, regrind and repress.