1. To launch the FTIR program, double click the **EZ OMNIC E.S.P. 5.1** icon.

2. From the **Collect** pulldown menu, select **Experiment Setup**, and be sure the following are selected:

   No. of scans = 16
   Resolution = 4 cm^{-1}
   Final format = Absorbance
   Correction = None

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. Click the **ColBkg** icon to collect a background spectrum**.** Click **OK** in the confirmation dialog box when ready. Wait for collection to complete. Click **No** in the **Add to Window?** dialog box.

5. Click the **ColSmp** icon to collect a spectrum of your sample. Type in a spectrum title and click **OK**.

   Place the sample in the holder in the IR, then click **OK** in the confirmation dialog box to begin data collection. Wait until complete. Click **Yes** in the **Add to Window** dialog box.

6. Click the % **Trans** icon to change the Y axis from absorbance to transmittance.

*To change the axis limits of the graph, (if needed): From the **View** pulldown menu, select **Display Limits.***

7. With the spectrum displayed, click the **Find Pks** icon at the top of the display and adjust the horizontal cursor to select peaks to be automatically labeled, or click on the blue **T** (for text) at the bottom left of the display to allow manual labeling of individual peaks of interest.

8. Click the **Print** icon to the left of the spectrum to print. Printing may be slow. There is no message in the program to confirm that printing has begun. Do NOT continue to click print.

<u>To Run the Next Sample</u>

1. From the **Window** pulldown menu, select **New Window**
   (more than 7 open windows will crash OMNIC)

2. Repeat steps 5-8 above.

KBr Pellet procedure for solid samples

Take about 2 mg of the solid sample and about 100 mg of KBr. Mix thoroughly in an agate mortar while grinding with the pestle. If the sample is in large crystals, grind the sample separately before adding KBr.

Place just enough ground sample mixture to cover the bottom of the pellet die. Place in the hydraulic press and press at 15000 psi for ~1 min. Carefully remove the pressed sample from the die and place it in the FTIR sample holder. The pressed disc should be nearly clear if properly made. If it is translucent, regrind and repress.

Alternatively, the ground sample/KBr mixture may be placed in the center of a square of paper with a 1/2" punched hole and pressed between metal plates to produce a disc for IR.