VII. Equipment

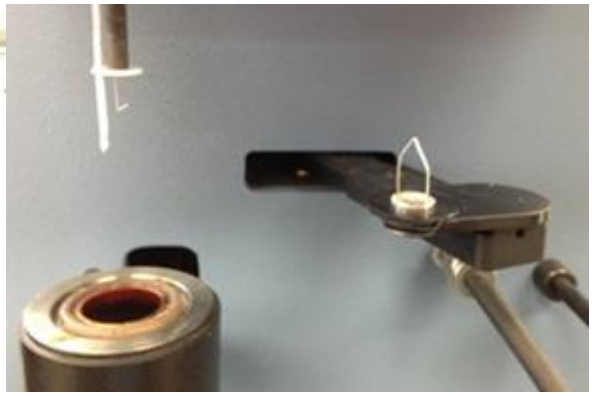
L. TA Instruments Q500 TGA

For TGA experiments, use the TGA located in the Molecular Characterization Lab on the 10th floor. TGA analysis must be run before any DSC experiments may be performed. This will prevent you from running a DSC experiment that may thermally damage your product or one that may be inaccurate due to the presence of trace solvent.

Register time on the TGA by signing the logbook in advance. There are no rules to the amount of time students may block out and some over-zealous students tend to overestimate the amount of time they need, so plan accordingly.

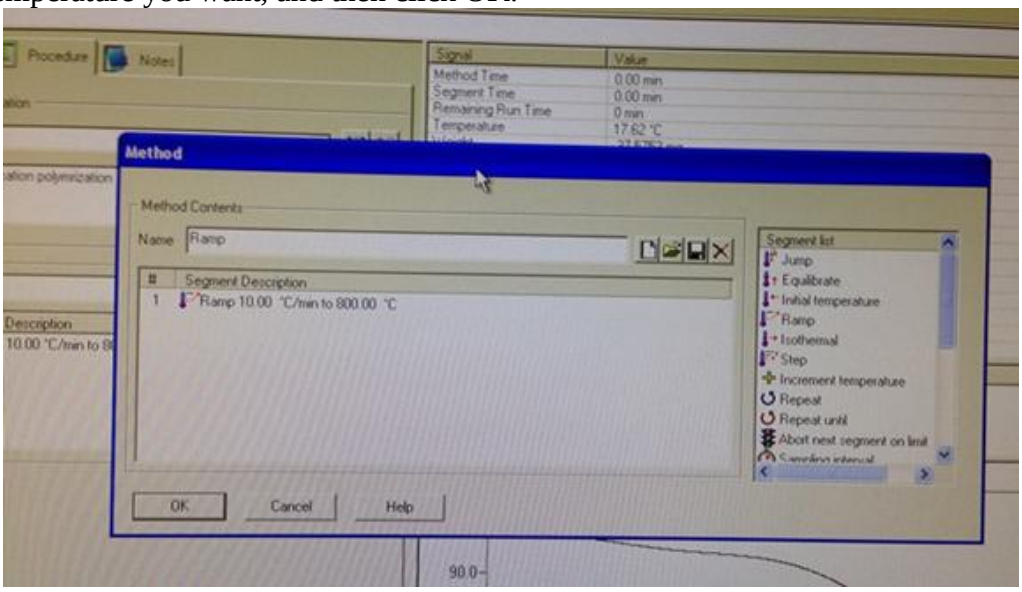
Running a TGA Experiment

1. Remove stuff on platinum pan and burn the platinum pan for a few seconds with torch as shown in picture. Put the pan on the stage after cleaning it.

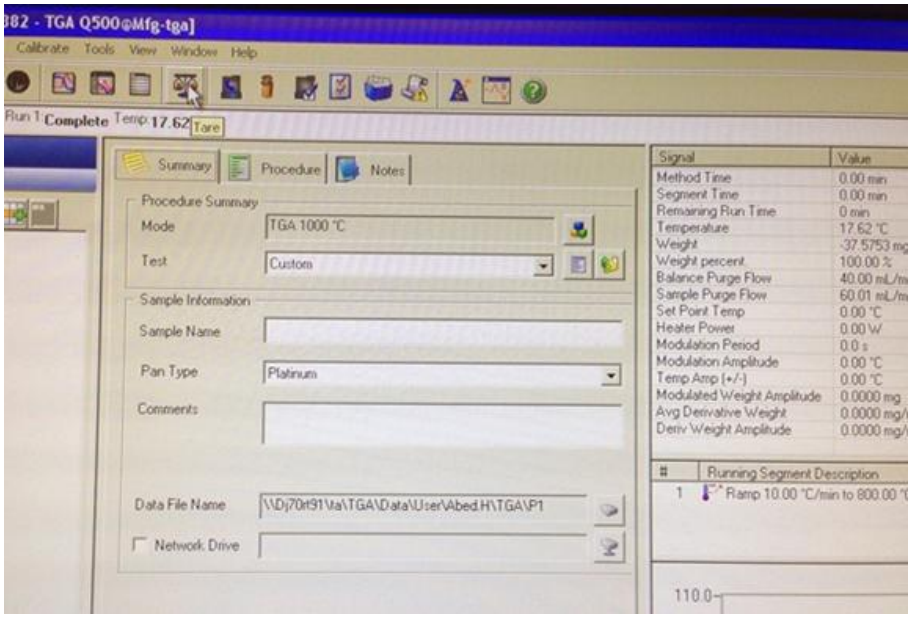


2. Switch on N2 cylinder for TGA

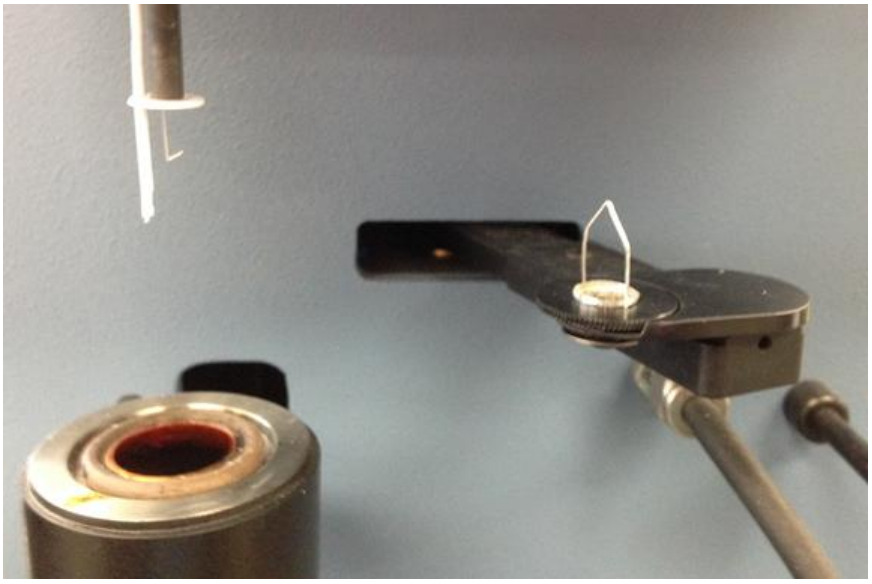
1. Open TA Instrument Explorer on the computer
2. Open Q500
3. Click Summary, put your sample's name and save your data in your own folder through Data File Name
4. Click Procedure, click Editor
5. Drag the method into the left window, for TGA, it is ramp heating rate to high temperature you want, and then click OK.



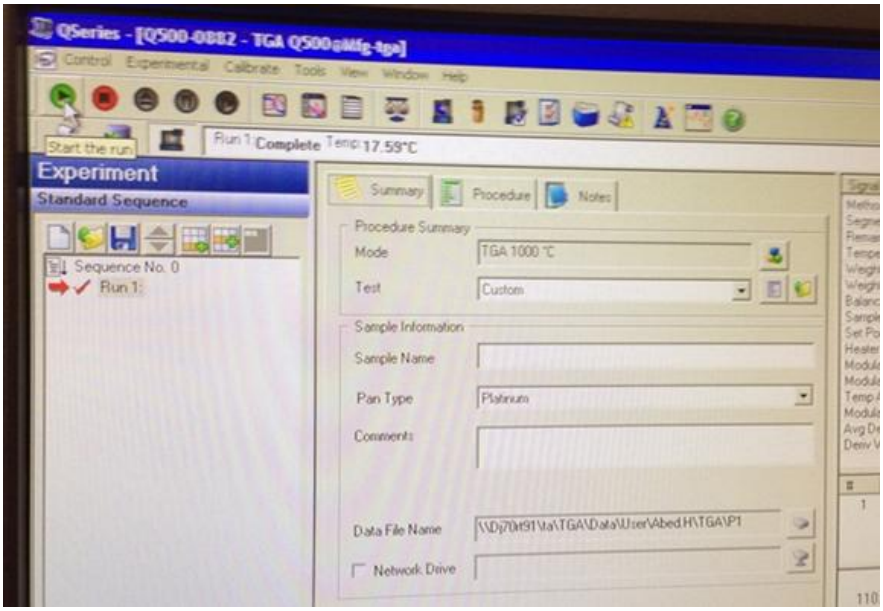
6. Click Notes, put your name in Operator
7. Click the balance symbol which is to tare the weight of pan



8. Put a few mg of your sample inside pan



9. Click the green arrow to start the experiment



10. Clean the pan and switch off N2 cylinder when your are done with the experiment