

SOP for Using UV3600 SHIMADZU Spectrometer

I. Specification

Wavelength range: 185nm -3300nm

Resolution: 0.1nm

Accuracy: UV/VIS: ± 0.2 nm / NIR: ± 0.8 nm

Format: Double Beam

Light Source: 50W halogen lamp / Deuterium lamp

II. Operation

1. Open the computer

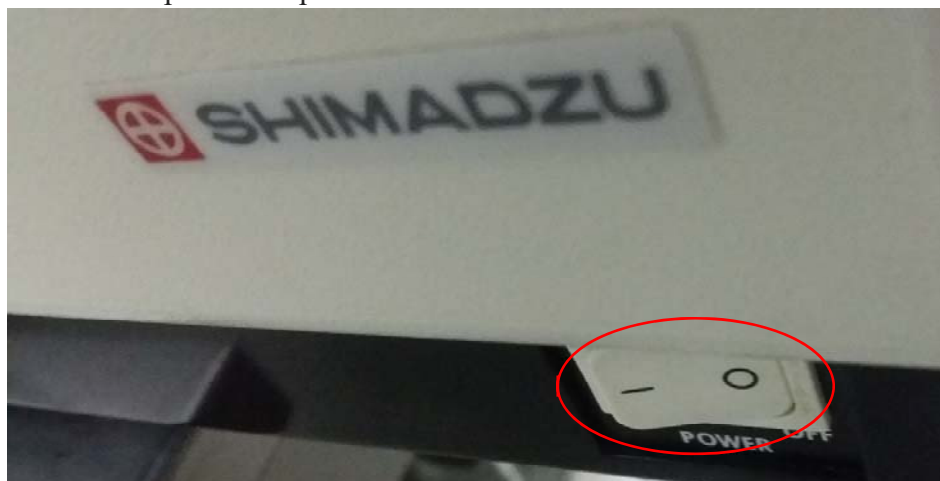
Press the power button to open the computer

Type the password **“hopelab1”** to open the computer



2. Open the spectrometer

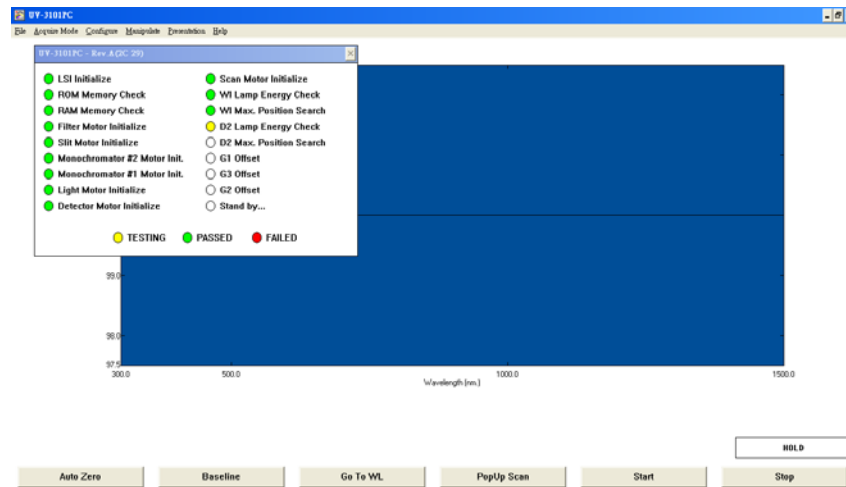
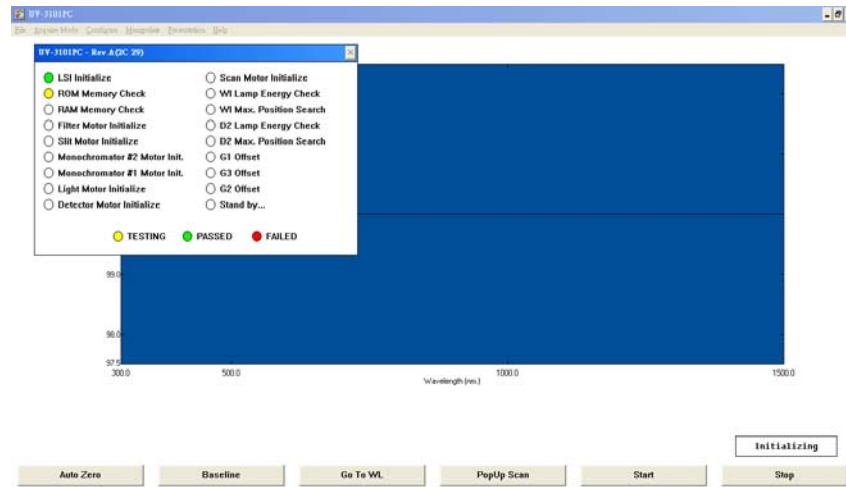
Turn on the power of spectrometer



3. Open the software

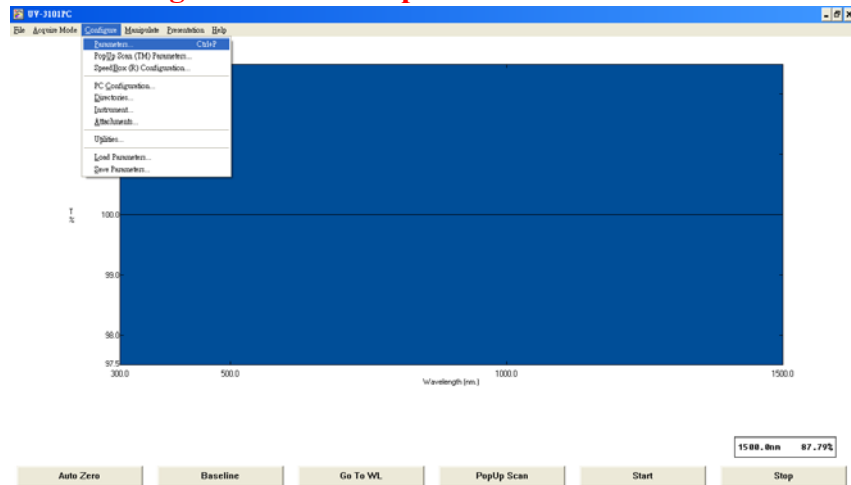
Click on the **UV-3101PC** icon in desktop screen to open software

The software will automatically test, please wait until all testing is passed



4. Setting up parameters

Click “**configure**” then click “**parameters**”



Select all parameter:

Measuring Mode: you can select **Abs or T%** if you want to measure absorption or transmission spectra. The reflection and Energy cannot work with version UV3600.

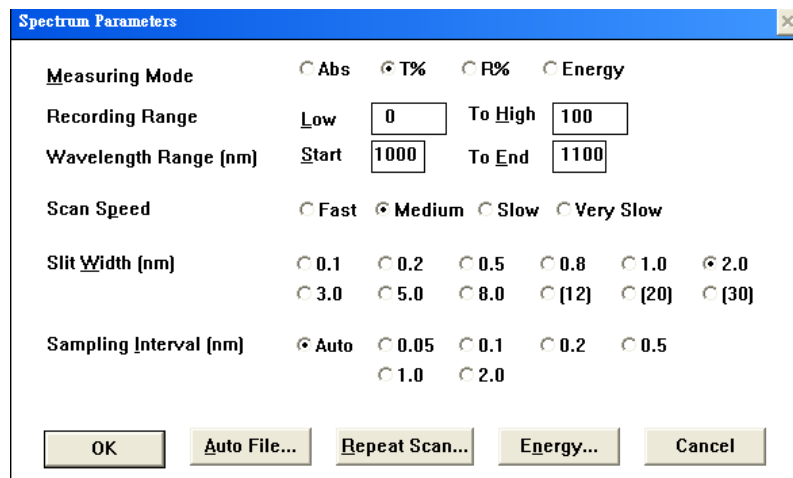
Recording Range: Normally, we choose **0%-100%**

Scan speed: Select **medium**

Slit width: Select the slit width, it is smaller, the scan time is longer.

Sampling interval: **Auto**

Select **OK**



5. Measure the background

We use the baseline correction to set the background to zero.
Put your sample substrate on the holder.



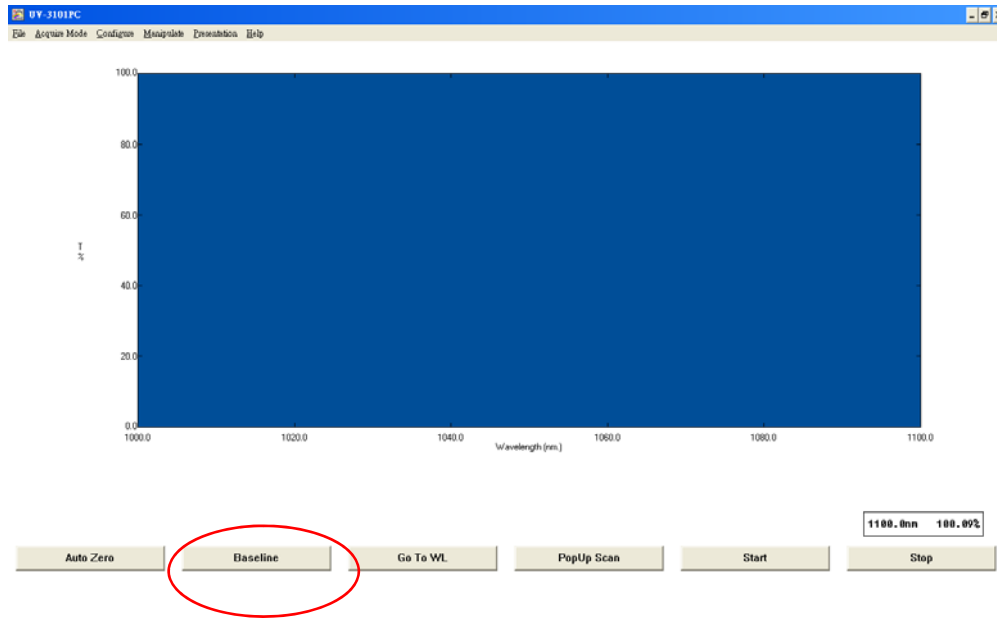
Open the sample chamber



Put substrate in the chamber, then close the chamber



Click **Baseline** and wait until the scan is finished



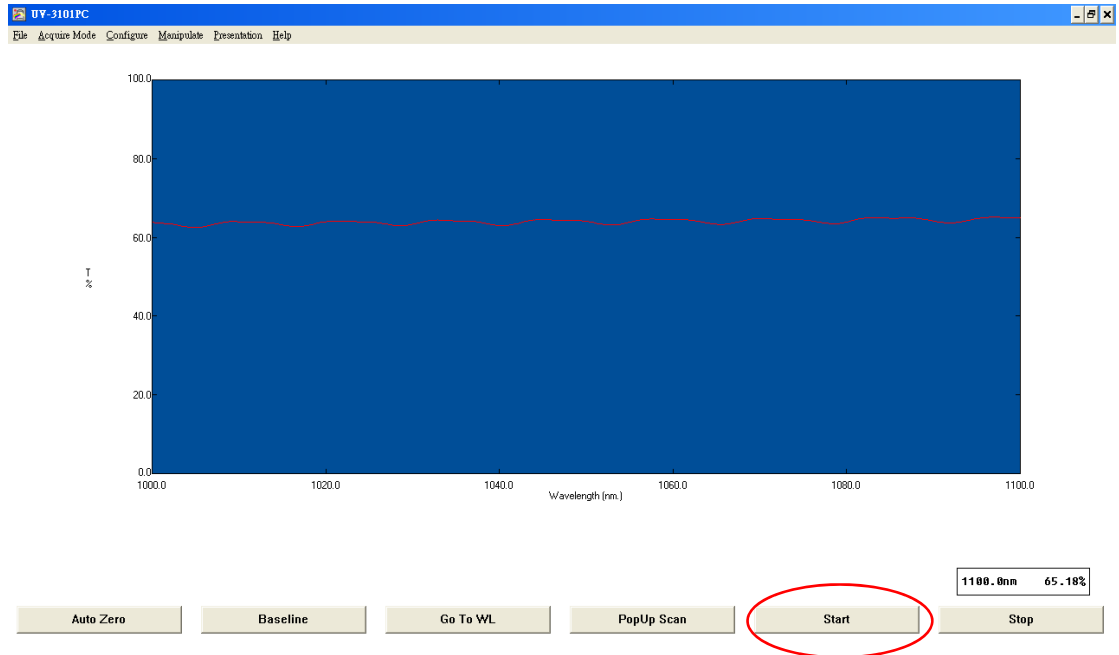
If your samples have no substrate, so the background is air. You only need to click the Baseline to correct the background.

6. Measure the spectra

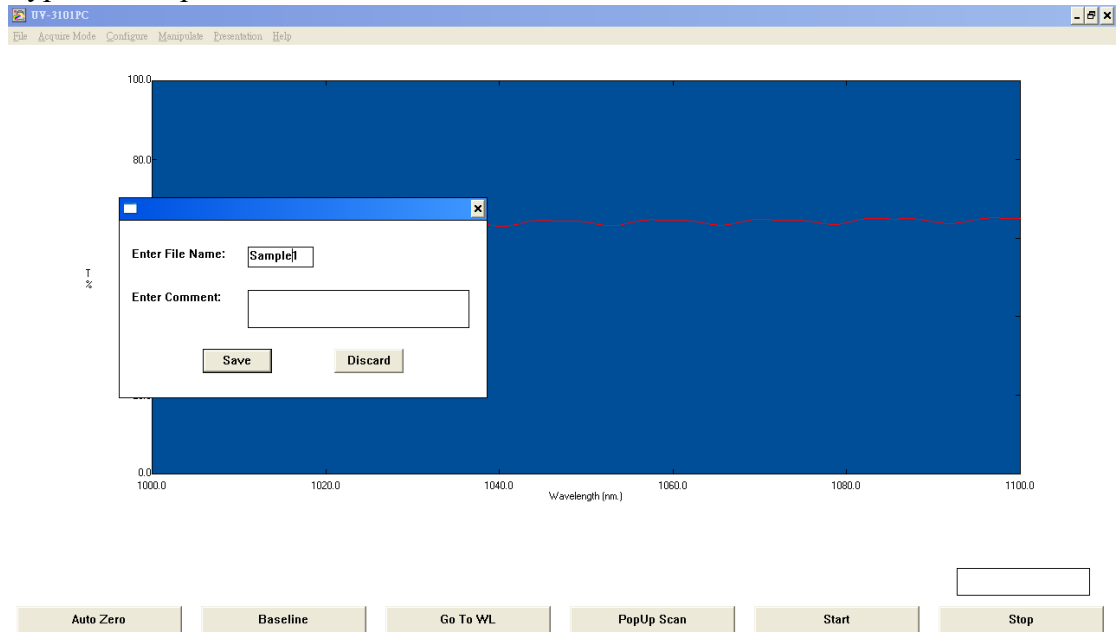
Open the chamber, replace the substrate by samples, then close the chamber



Select **start** and wait until the scan is finished

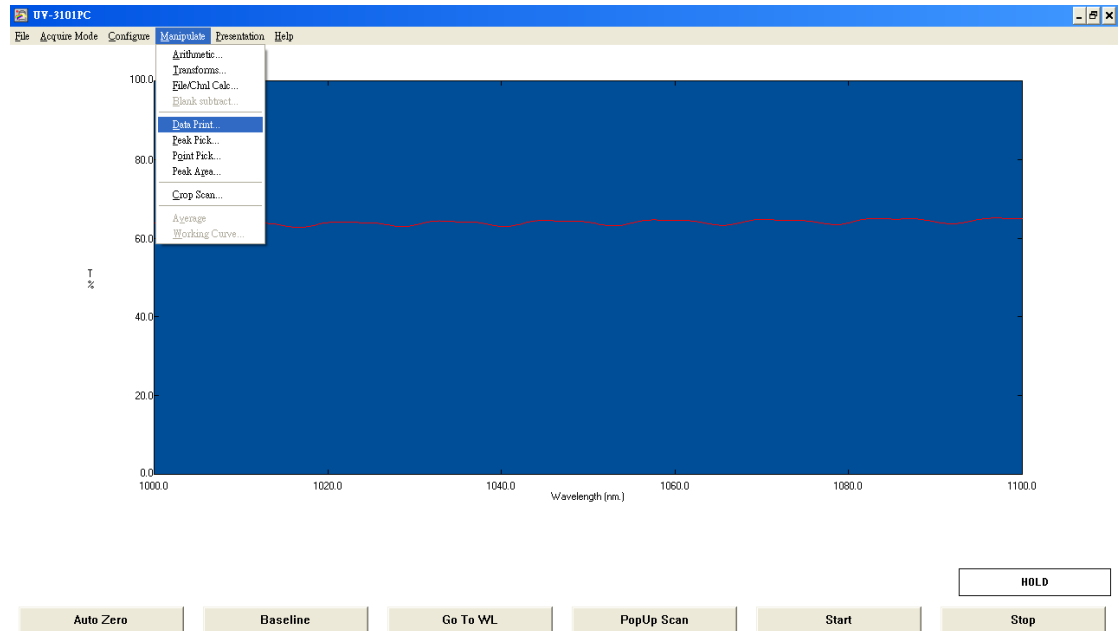


Type the sample name after the scan is finished, then click **save**

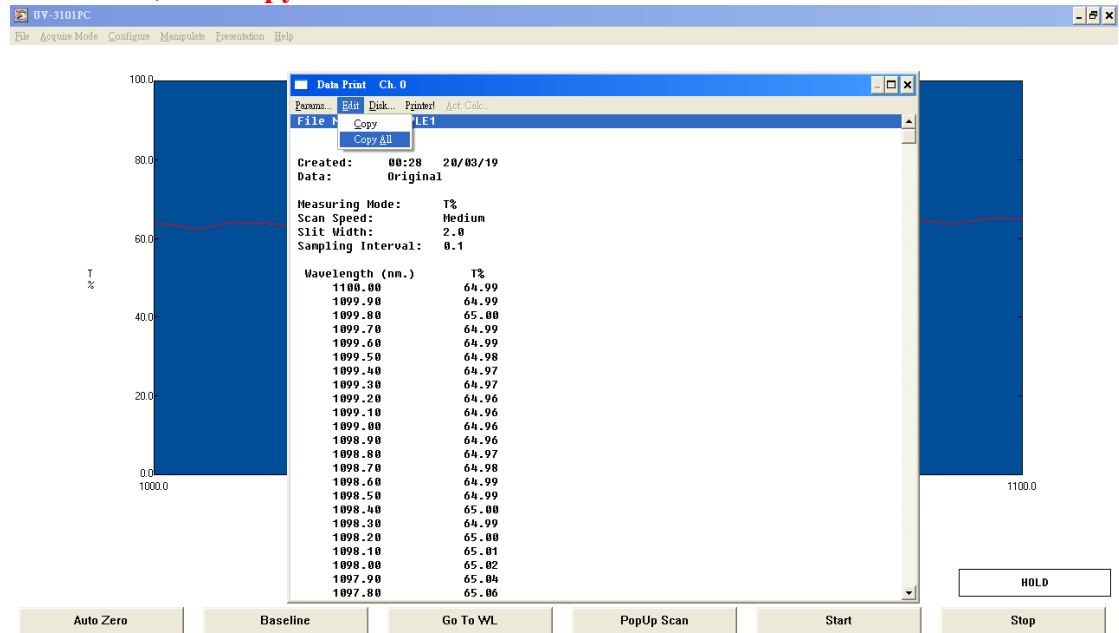


7. Save the data

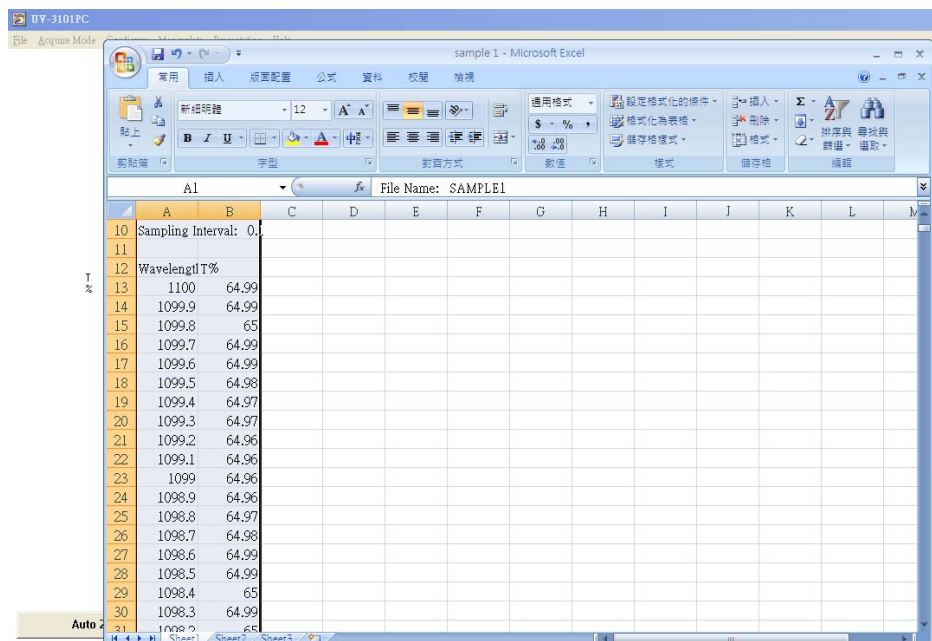
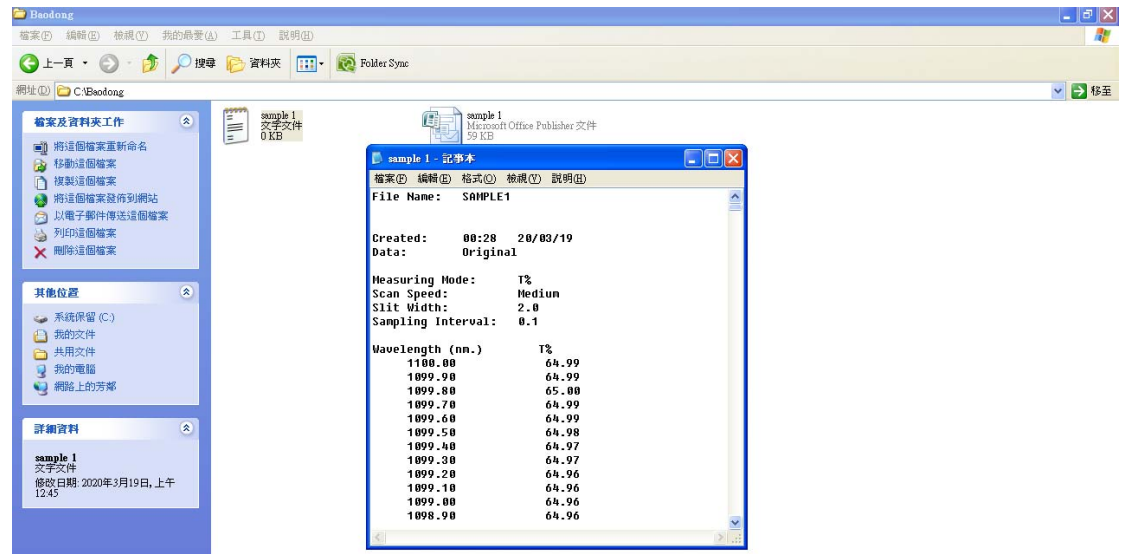
Click **Manipulate**, select data **Print**



Select **Edit**, then **copy all**



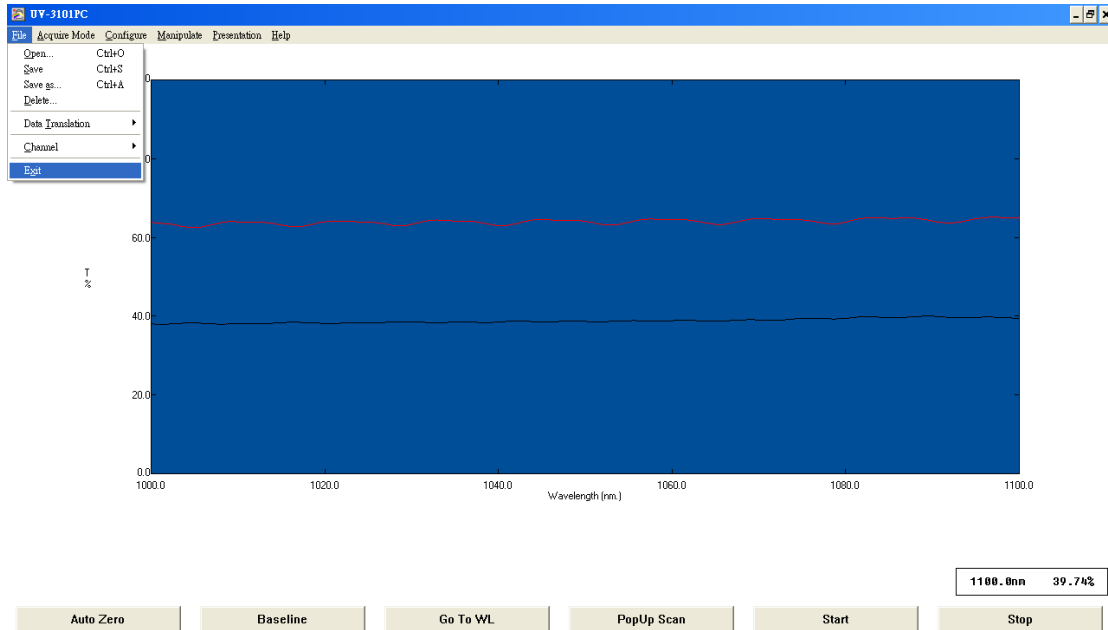
Paste your data to a text file or excel file



8. Finish measurement

After finishing the measurement, you take out your sample to chamber, then close the chamber.

Click **Exit** to close the software



Turn off the spectrometer



Copy your data

Close computer

Fill your information in using form