SOP for Using UV3600 SHIMADZU Spectrometer

I. Specification

Wavelength range: 185nm - 3300nmResolution: 0.1nmAccuracy: UV/VIS: $\pm 0.2 nm / NIR$: $\pm 0.8 nm$ 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

Spectrum Parameters						×
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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



Slect start and wait until the scan is finished

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



7. Save the data

Click Manipulate, select data Print



Paste your data to a text file or excel file

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8. Finish measurement

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

Click **Exit** to close the solfware



Turn off the spectrometer



Copy your data Close computer Fill your information in using form