Do Not Remove

Quick Start MMRC Agilent 8453 UV-vis Spectr ometer

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1. Fill out the logbook before you start.
2. Turn on the computer and video monitor
3. Login to Agilent 8453 account with password bi019
4. Turn on the spectrometer
5. Wait until the spectrometer makes clicking noises.
6. Start the ChemStation software. (If you did not wait long enough the software will not locate the spectrometer and you will get a power failure error. Quit the software and restart it).
7. The visible lamp should be on by default (clicking the visible lamp icon will turn it on)
8. If you only want to scan the visible region (350 – 1000 nm) skip step 8.
9. If you want to scan in the UV (200 -350nm) you need to turn on the UV lamp by clicking on the icon of the lamp.
10. Use both lamps if you want to scan from 200 to 900 nm.
11. Wait 15 minutes for the lamps to stabilize for best performance.
12. If you are using the UV region you need a quartz cuvette.
13. With nothing in the light path collect a blank spectrum.
14. Place your cuvette with solvent in the spectrometer and collect a spectrum.
15. Note if you are in the UV region the cuvette must be a UV cuvette for the far UV (i.e. 200- 300) it needs to be a quartz cuvette.
16. Make sure that the Absorbance is < 0.2 everywhere you will use. If not, you have either a dirty cuvette, the wrong type of cuvette, or a solvent that absorbs. If the absorbance is in the UV you cannot see the problem with you eye but if it is in the visible region then you should see color in the cuvette.
17. Now collect a bank spectrum with the solvent in the spectrometer.
18. Place your cuvette with sample in the spectrometer and collect a spectrum.
19. The software will show the spectrum to you.
20. If the sample and blank need to be run in different cuvettes they must be matched or the difference must be correct by taking Absorbance spectra of each and subtracting the solvent spectrum from the sample.
21. When done turn off the spectrometer
22. Shut down the computer and turn off the monitor.