

## HP-8452 UV-vis Instrument Management

Faculty Supervisor: Xuan Zhao ([xzhao1@memphis.edu](mailto:xzhao1@memphis.edu)) ext: -2939

Student Supervisor: N/A

### Faculty-in-charge responsibilities

1. Troubleshoot and fix problems consulting with instrument documentation and vendor engineer
2. Advise Department Chair and Facilities Committee on the necessity of instrument replacement or repair by vendor

### User Training on Instrument

1. Because many groups use UV-vis, most users should obtain training for routine use while observing members of their group.
2. Otherwise routine training will be administered when necessary.

### User Guidelines and Scheduling

1. Sign in the log book **before** you begin using the instrument.
2. Do not use the instrument unless you have been trained.
3. Make a note in the log book and report to the Faculty in-charge of any unusual behavior of the instrument.
4. Instructional courses have priority; no other user may use the instrument during the class period; The lab instructor should notify the student supervisor and/or the Faculty-in-charge of reserving the time-slot needed for the lab period in advance.
5. Repeated failure to conform to these procedures will result in loss of user privileges.

### Instructions on how to use HP 8452

Please report problems with this instrument to Xuan Zhao ([xzhao1@memphis.edu](mailto:xzhao1@memphis.edu), 901-678-2939)

#### To prepare the sample

1. Dissolve sample in clean solvent to a concentration of about 3-5mg/mL
2. Using a microliter syringe, draw up 1-3 microliters of solution

#### To prepare the instrument for a run

Before beginning, **sign the logbook**

1. Turn on the monitor
2. Open software from desktop: OLIS GlobalWorks: Open>Data Collection>HP Diode Array
3. Insert your cuvette with a solvent as reference, then click "Collect Ref"
4. Put sample in the same cuvette and click "Collect Data"
5. After done, review data and save spectra by clicking "Save Dataset"
6. Enter a file name, using appropriate subdirectories

#### To shut down

1. **Review the logbook** and add any problems encountered
2. Turn off the lamp if you are the last one using the instrument.