

JASCO CD FAQ

How do I get started?

Before you make an appointment for training, do some background reading to familiarize yourself with the principles of the technique and determine whether it's likely that it will work for your system. Finding a relevant paper in the literature or checking out one of the references on this website would be a good place to start.

How do I arrange for a training session for the instrument?

Contact Ky Lowenhaupt (bif@mit.edu) to find out how long training will take and to make an appointment when you and she and the instrument are all free at the same time.

How do I make reservations for the instrument?

The reservation for the initial training session will be made by Ky. After you're trained, you'll be able to make reservations online through the Outlook Exchange calendar if you're an MIT person. People from outside MIT will need to ask Ky to make reservations for them.

What do I need to bring with me?

You'll need to bring a CD cuvette if your lab has one. The BIF does have one you can borrow. Regular UV/VIS cuvettes do not work in the CD spec. Note that if you break the BIF cuvette we will ask you to buy a replacement.

You'll also need to bring your samples and some of the buffer they're in to use as a blank. If you have a 1 cm cuvette, you'll need 2.5 ml of sample. If you have a 1 mm cuvette, you'll need only 250 ul of sample.

Where can I buy CD cuvettes?

Hellma Cells makes CD cuvettes. (phone: 516-939-0888 or email Bryan Rubin: Bryan.Rubin@hellmausa.com) Low volume cells (1 mm pathlength) are part number 110-QS (two frosted glass sides) or 111- QS for (all sides quartz, for temperature work). There can be a long wait for these, however.

Cuvettes can also be purchased from Starna Cells or from VWR. Be sure you're purchasing a type QS quartz cuvette. Ordering a cuvette with a 1 mm pathlength is recommended for lower sample volume requirements.

Are there any restrictions on what I can put into the CD spec?

Any solutions which are at or below BL1 level are fine, though high pH will damage your quartz cuvette. A typical buffer used in CD experiments is 10 mM phosphate, although low concentrations of Tris or borate are also acceptable. Potassium fluoride is preferred to sodium chloride for increasing the ionic strength as the chloride has a strong UV absorbance at high concentrations.

Updated: 07/21/2023