

## CD/ORD-E and Fluorescence Acquisition Procedure

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**I. Introduction.** This document explains routine procedure for obtaining fluorescence concomitant with either CD or ORD-E. It is assumed that the user has been trained on *Circular Dichroism Operating Procedure*. Please refer to that document for more information.

The instrument allows only full spectrum excitation and emission bandwidth. That is, it does not allow for monochromatic excitation or emission wavelengths of the sample. The fluorescence detector is used to follow any change in fluorescence upon, say acquisition of temperature melt data.

The Peltier holder must be used with at least a 1-cm rectangular cell that transmits the proper wavelength. Other cell holders block the fluorescent light from reaching the detector at the rear of the instrument.

### II. Method.

- A. Set up your experiment as usual with the following exceptions.
  1. In Spectra Manager, select “Measurement” then “Parameters”. In the Data Mode tab the four channels should be set as follows:
    - \*Channel #1: CD or ORD-E.
    - \*Channel #2: HT.
    - \*Channel #3: [blank].
    - \*Channel #4: Fluorescence.
  2. Set the gain under “Control” then “Accessory” to about 600 V.
  3. If desired, insert a filter just before the detector to block scattered light.
  4. Set the wavelength to the fluorescent peak.
  5. Set the gain so that less than 2 V is read on the meter to avoid clipping.
- B. Acquire and process your data as usual.