Agilent Stand-Alone Fluorescence Detector
Routine Fluorescence Analysis without HPLC Pump

This document describes the use of a stand-alone fluorescence detector for routine analysis without the use of the HPLC pump, TCC or column.

1) Remove the standard flow cell and install the standalone cell located in the fluorescence module

    i)   Unscrew the two front screws

    ii) Remove the standard flow cell, leave all tubing connected

    iii) Install the standalone cell and tighten the two screws

    iv) Connect the waste tubing to the port that says "Out"

2) Turn on the FLD and DAD (or VWD).

3) Startup Chemstation and open the 'Instrument Online'

4) From the <u>Method and Run Control</u> Window

    i) Go to View > Method and Run Control

5) Turn on detector 'Instrument > FLD > Control'

6) Allow thirty minutes for lamp to warm up

7) Setup the FLD parameters

8) Go to Instrument : Set Up FLD Signals

    a) Click on 'Full'.

    b) Click on 'Special Set points button'

    c) Under 'Fluorescence Scan Range' box
        (a) Set the emission range
        (b) Set the emission range

9) Load sample using the syringe provided

10) Fill the sample via the 'In' valve
    i)   Inject till sample is flowing through the "Out' valve

    ii)   Do not remove syringe

11) Run sample (Instrument > More FLD > Take Fluorescence Scan)

12) From the Data Analysis Window

    i)   Go to View > Data Analysis

13) Load signal

14) View isoabsorbance plot (Spectra > Isoabsorbance Plot)

    i)   Click Exit button when finished.

15) View 3D Plot (Spectra > 3D Plot).

    i)   Click Close button when finished.

16) Remove syringe and flush out cell:
    i.   Initially with the sample solvent
  ii.   Finally, with methanol

17) Flush air through the cell to remove any solvent.

18) Remove standalone cell and replace with standard flow cell

    i)   Unscrew the two front screws

    ii)   Remove the standalone cell

    iii)   Install the standard cell and tighten the two screws

    iv)   Ensure that all the tubing is correctly installed and tightly fitted

19) Turn off FLD and quit Chemstation