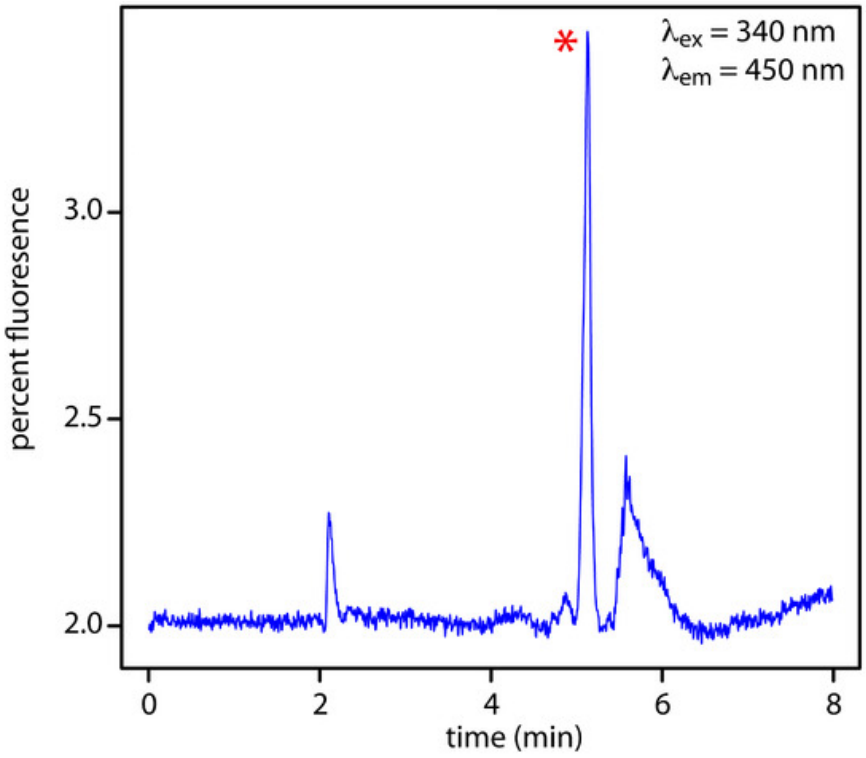
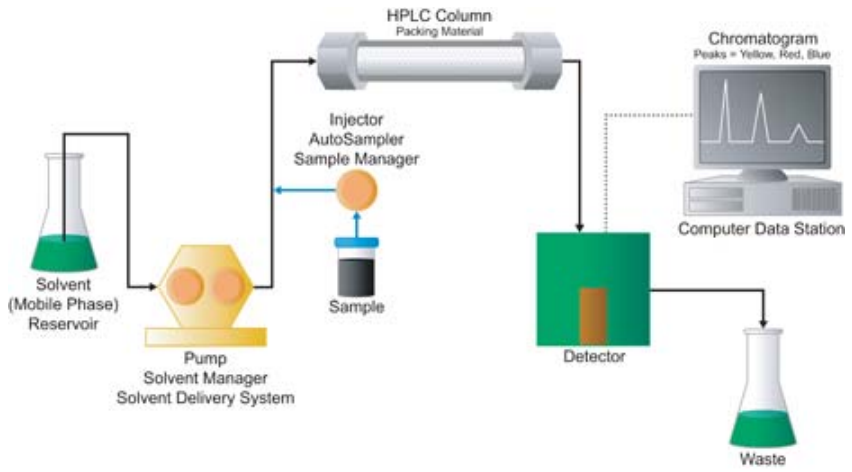
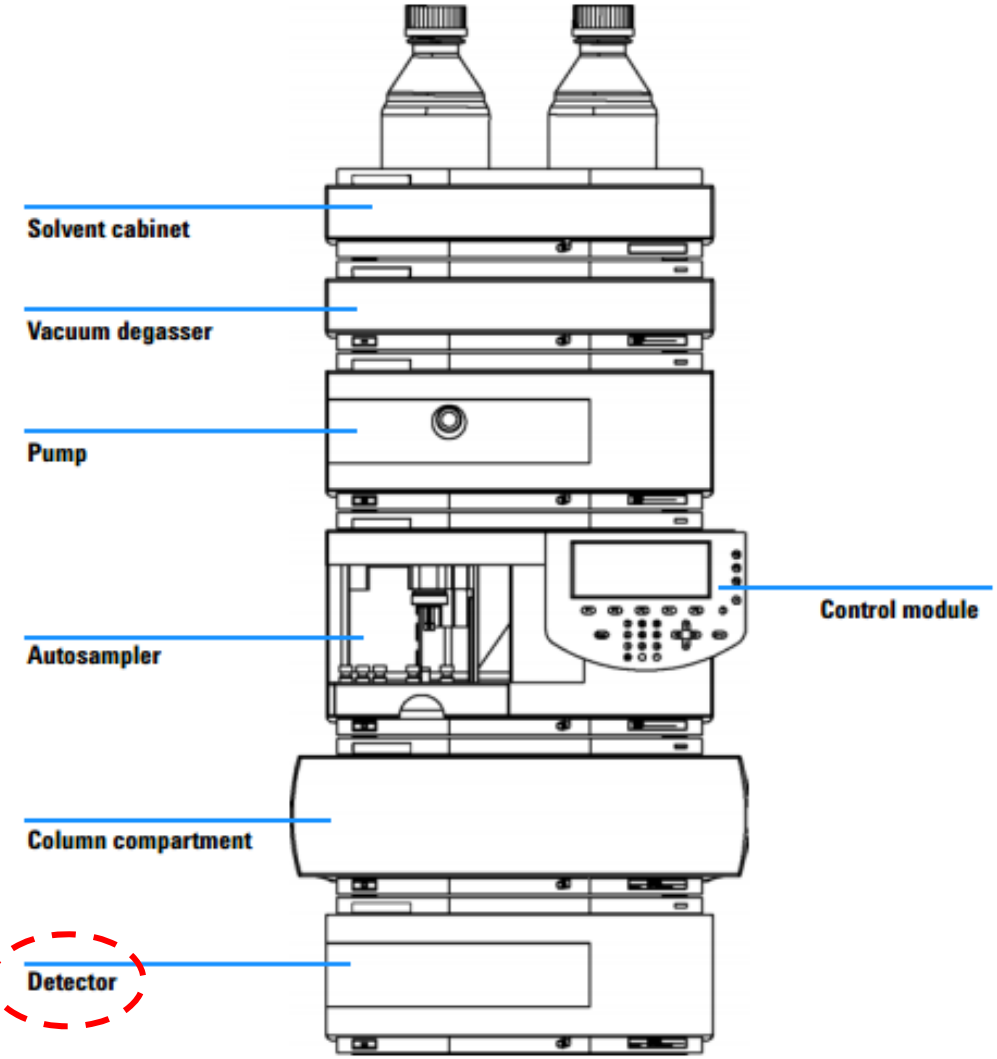
Fluorescence Detector (FLD)



High performance liquid chromatography (HPLC)





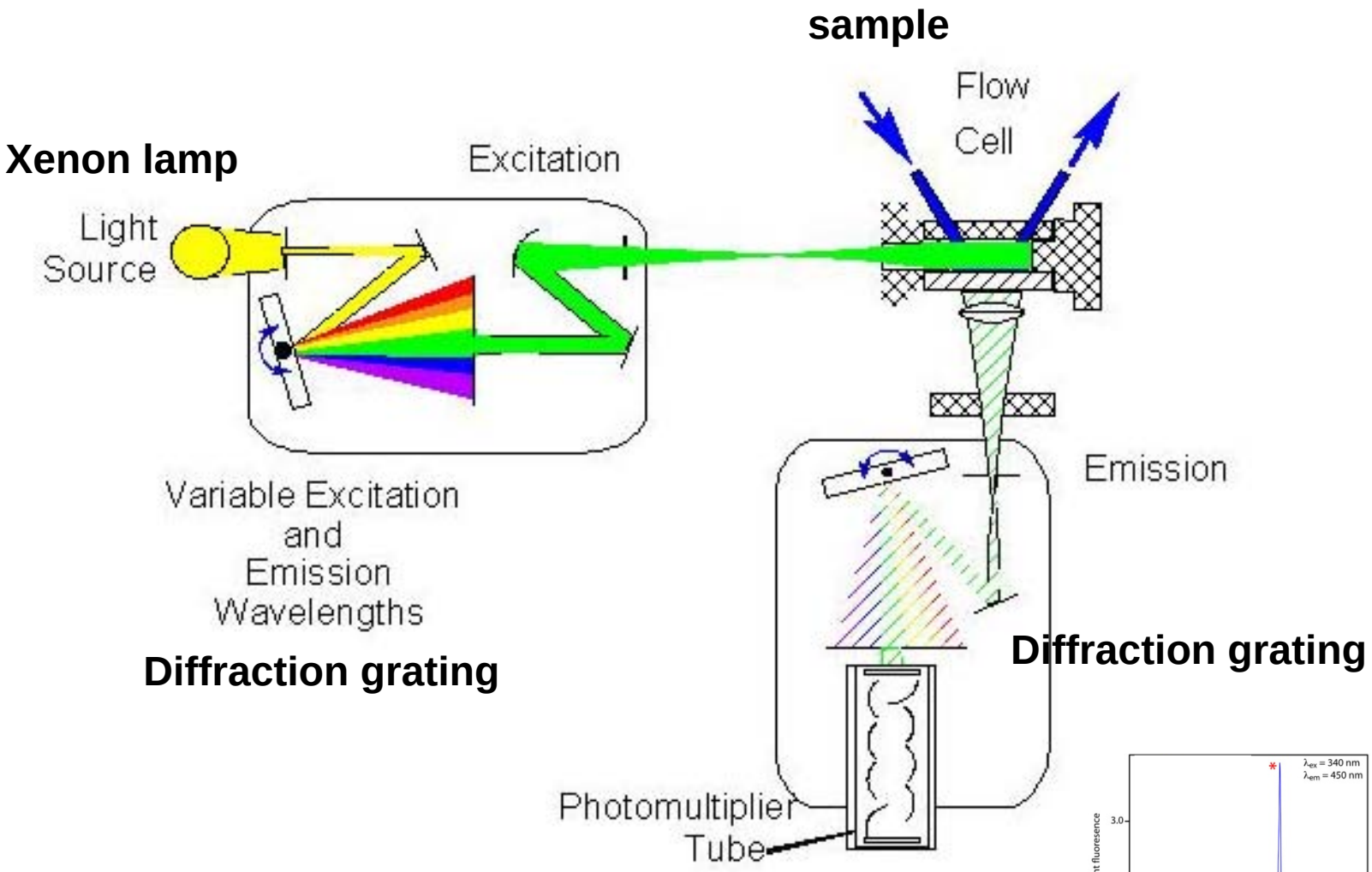
Monitor HPLC separations:

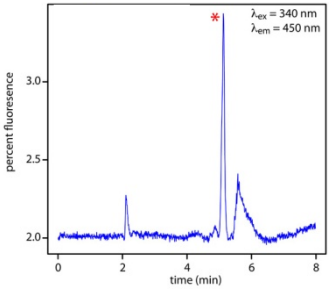
-Variable wavelength detector (VWD)

-Diode array detector (DAD)

-Fluorescence detector (FLD)

Principle of FLD





Sample: substances absorb light at one wavelength, and then emit light called fluorescence at another wavelength

Advantages of FLD

- High selectivity (not detecting impurities)
- High sensitivity
- Reliability

"suitable for analysis the trace level components"
(in food, urine, blood, etc.)

Application of FLD

- Tocols (vitamin E and its derivatives)
- Vitamin B2 and B6
- γ-aminobutyric acid (GABA)
- Food additives
- Polycyclic aromatic hydrocarbons
- Mycotoxin: Aflatoxins
- Amino acids (derivatization)