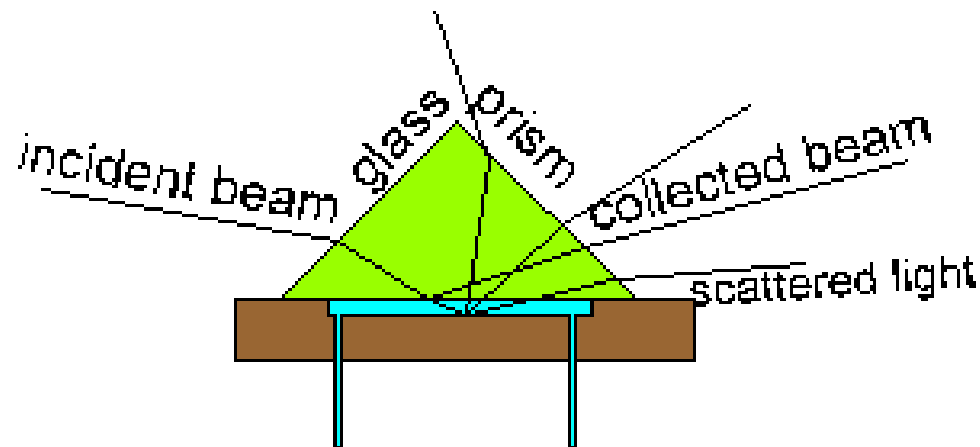


Detectors in liquid chromatography

Refractive	Refractive index
Spectrophotometric	Absorption - UV, VIS, IR
Fluorescence	UV (Ex, Em)
ELSD	Light scattering
Corona CAD	Charge
Electrochemical	Conductivity, Red-Ox
Mass	Ionisation

Refractive Index Detector (RID)



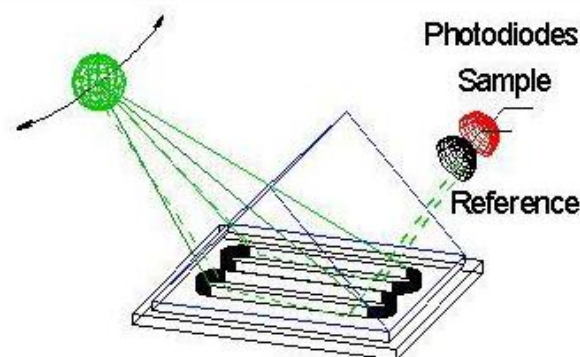
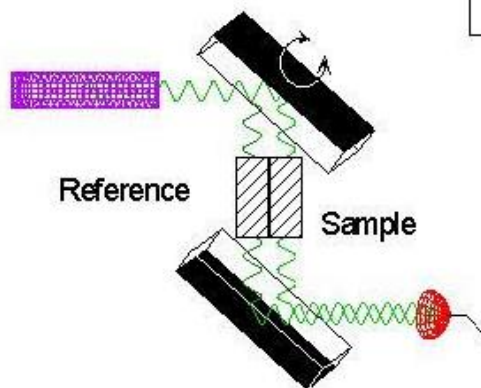
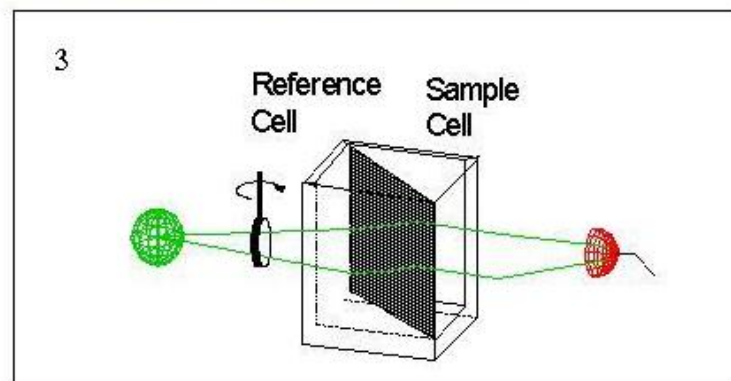
Universal

Less sensitive

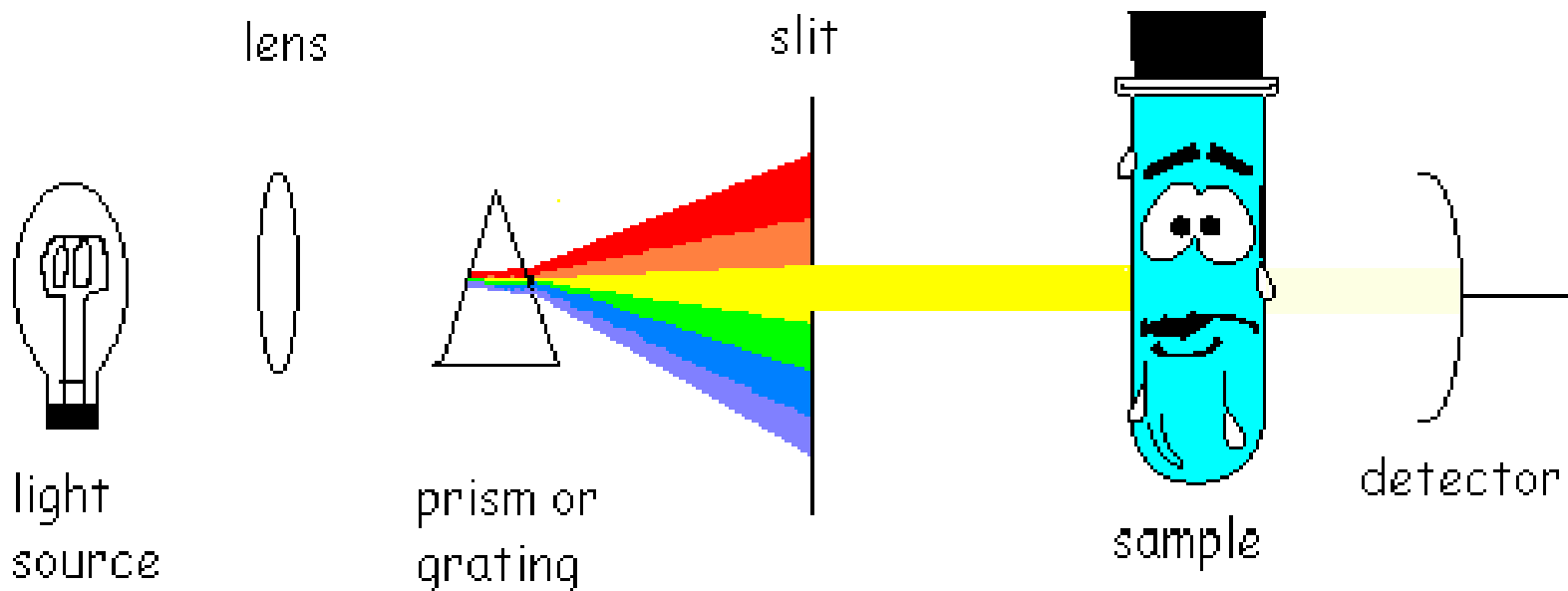
Less stable

Isocratic elution

- Beam Deflection
- Fresnel Prism
- Laser Interferometer



Spectrophotometer – conventional (UV/VIS)



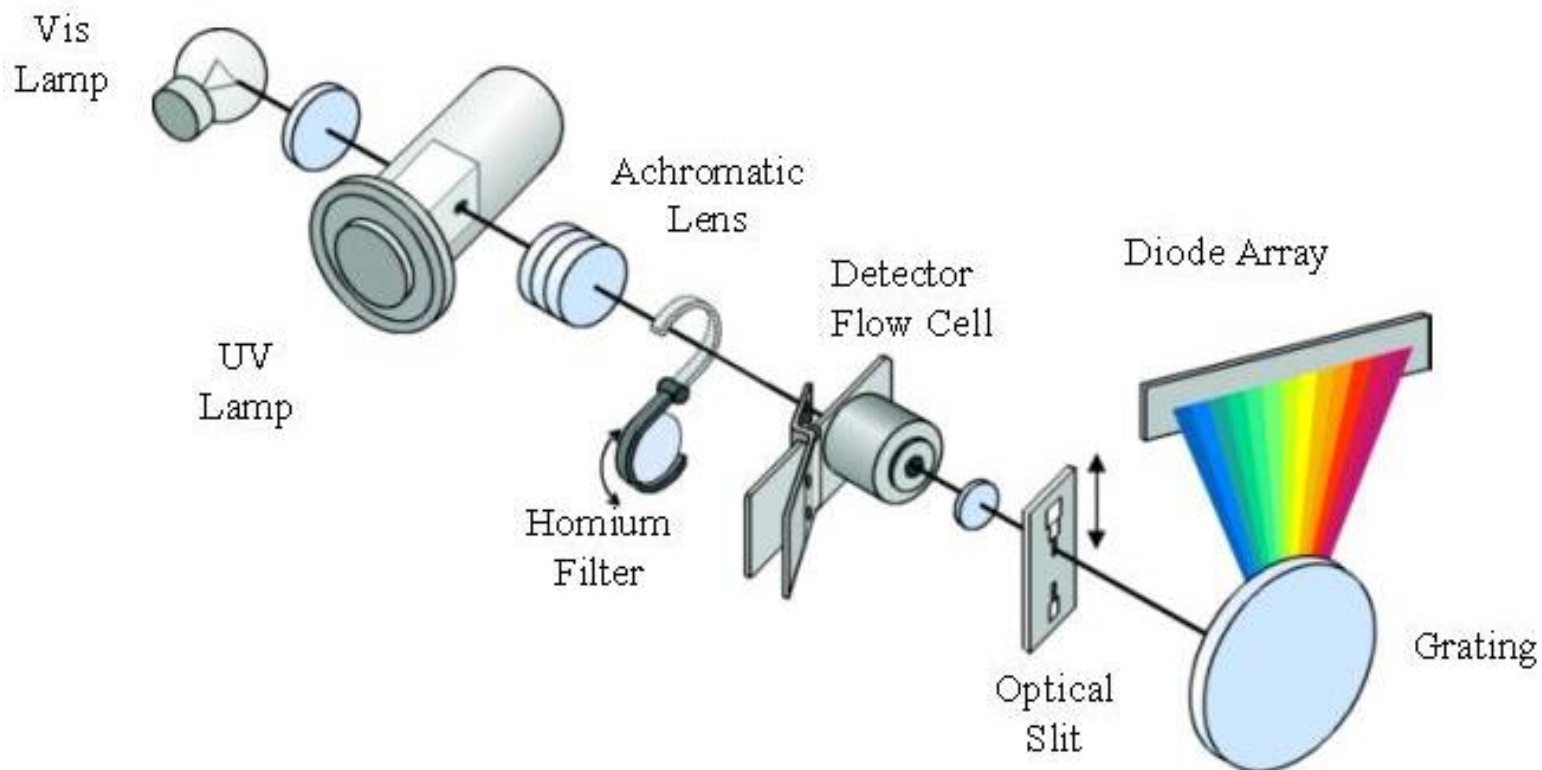
Very widespread application – not universal detection

Very sensitive X less selective

UV - characteristic spectra for certain groups

VIS - characteristic absorption maxima

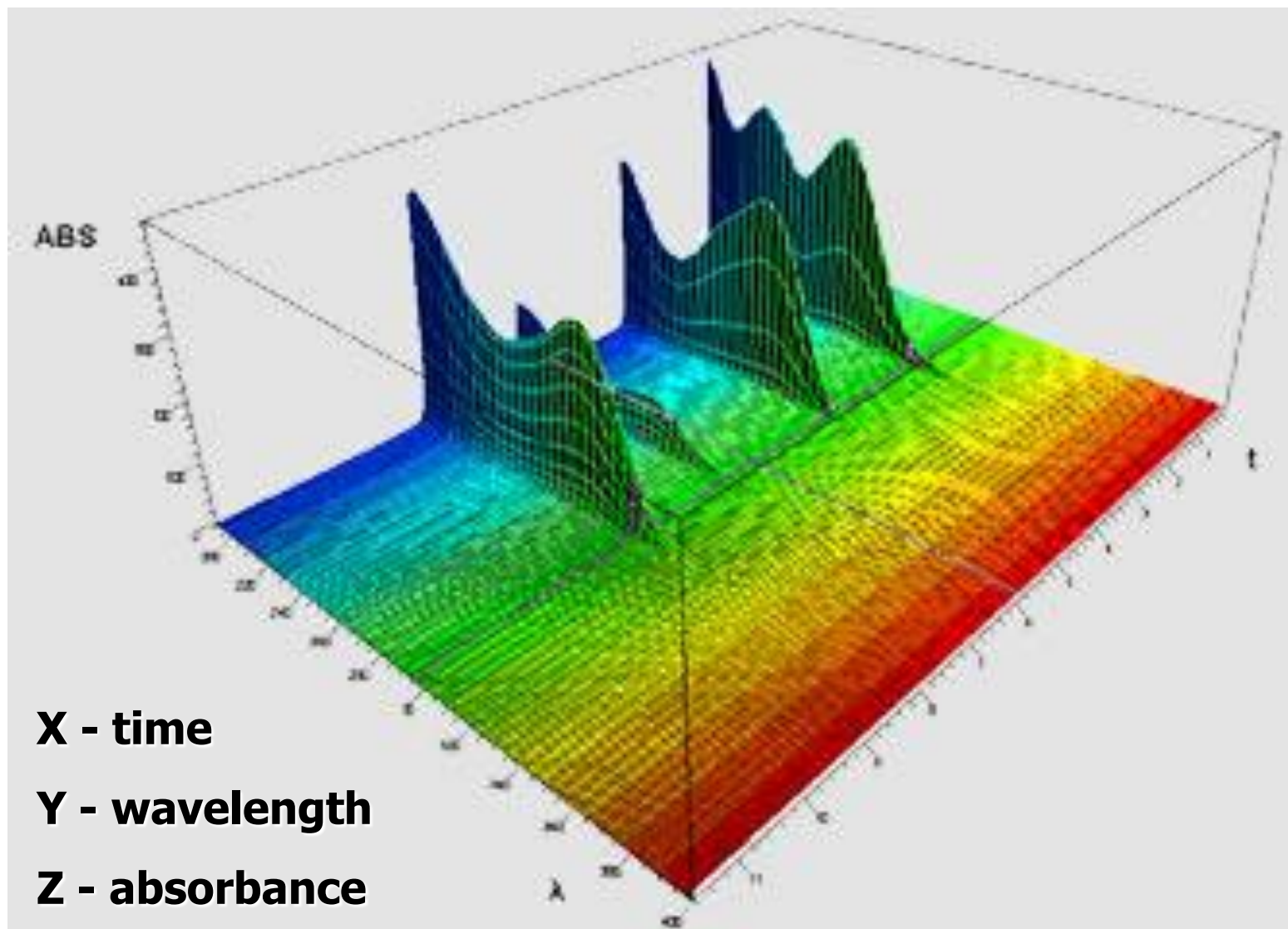
(Photo)Diode Array Detector - (P)DAD



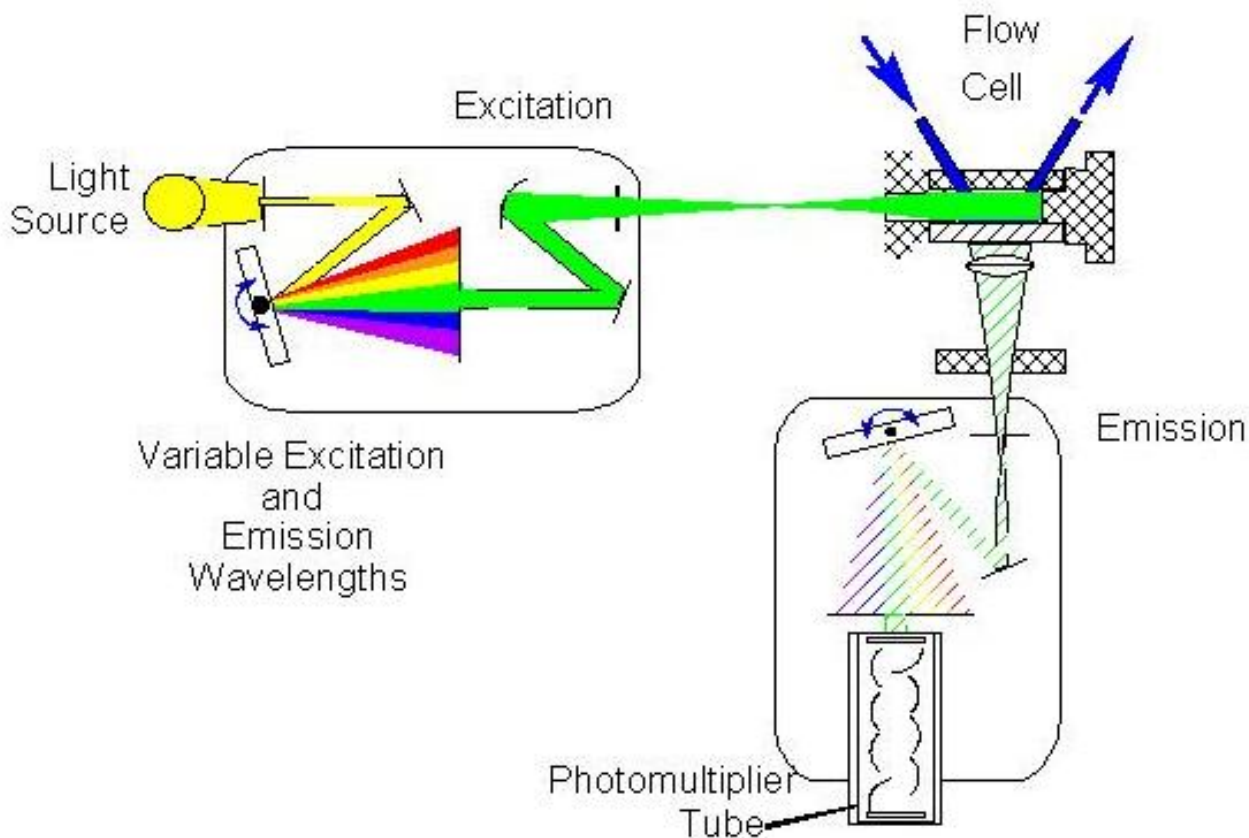
Spectral measurement - fully on-line \Rightarrow 3D record

In practice - parallel record for selected λ

Three-dimensional record from DAD: 3D-Plot

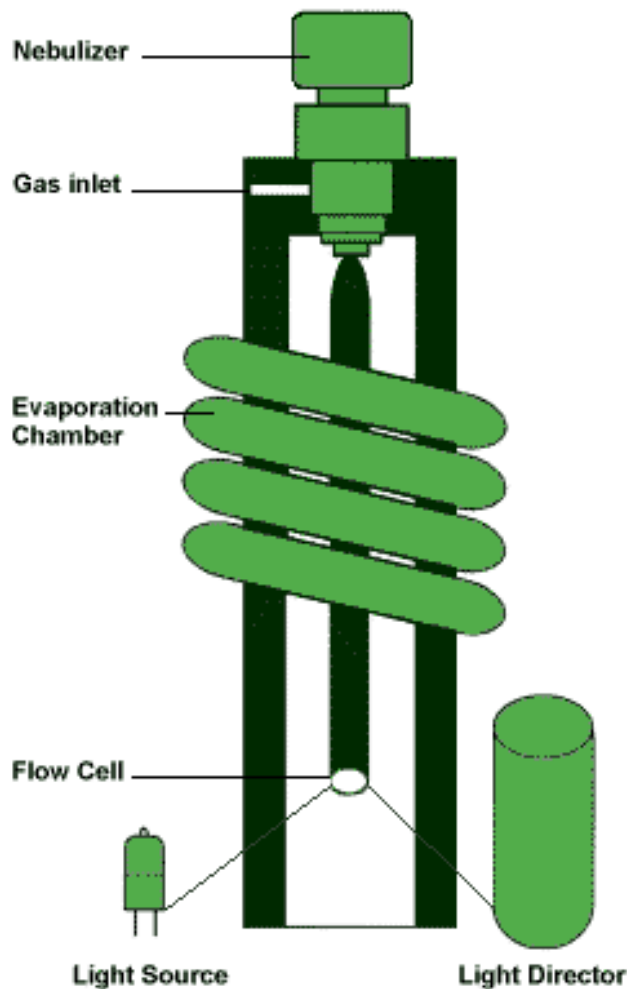


Fluorescence detector (FLD) - *alter. fluorimeter*



Very sensitive and selective
Characteristic combination of excitation and emission wavelengths

Evaporative Light Scattering Detector (ELSD)

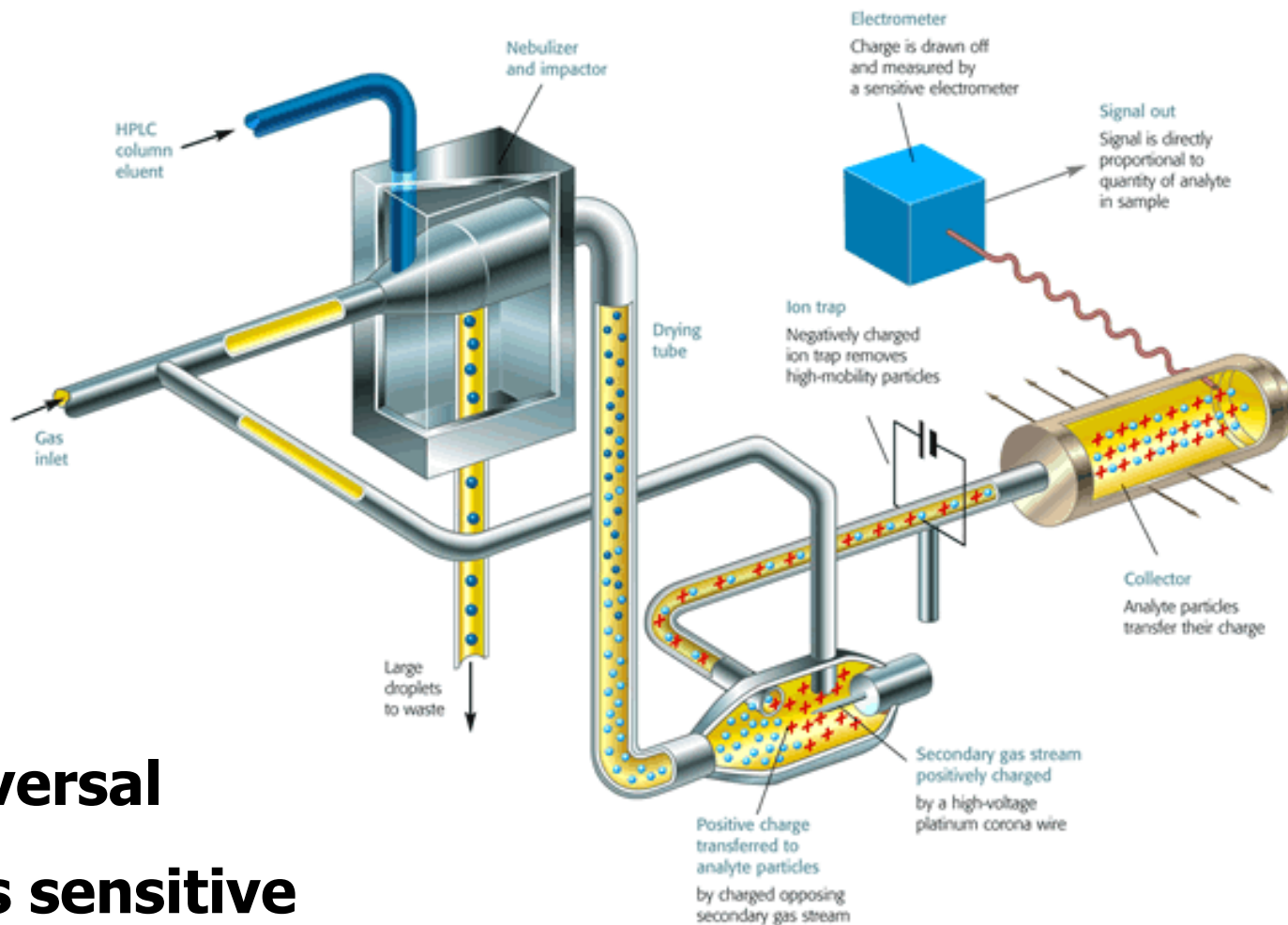


Universal

Less sensitive

**Limited sensitivity
for low M_w (< 100)**

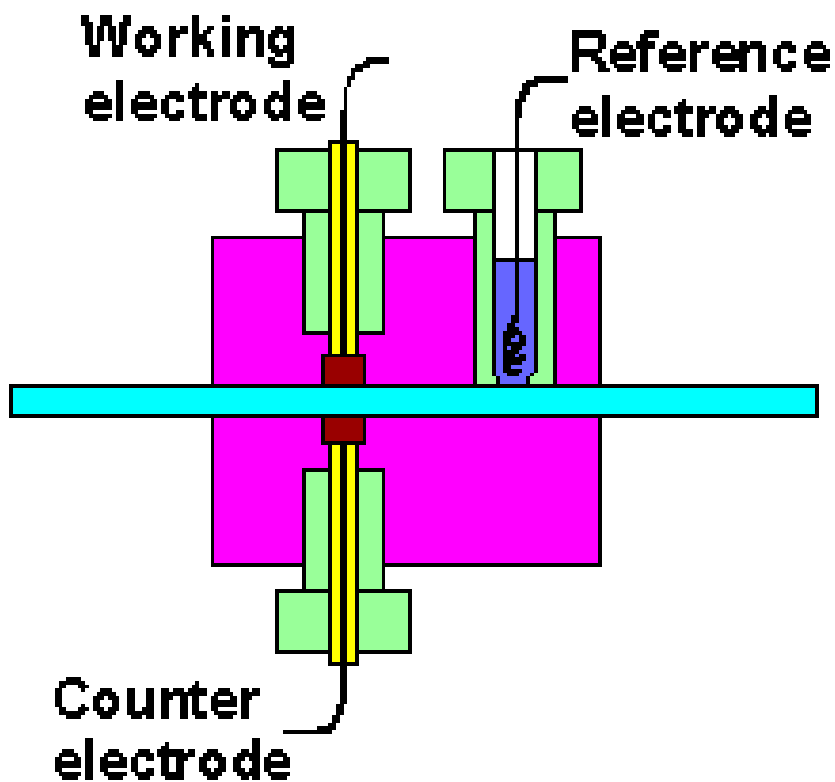
Corona Charged Aerosol Detector (Corona CAD)



Universal

Less sensitive

Electrochemical detector



Selective

Sensitive

**Suitable for Red-Ox
active compounds**