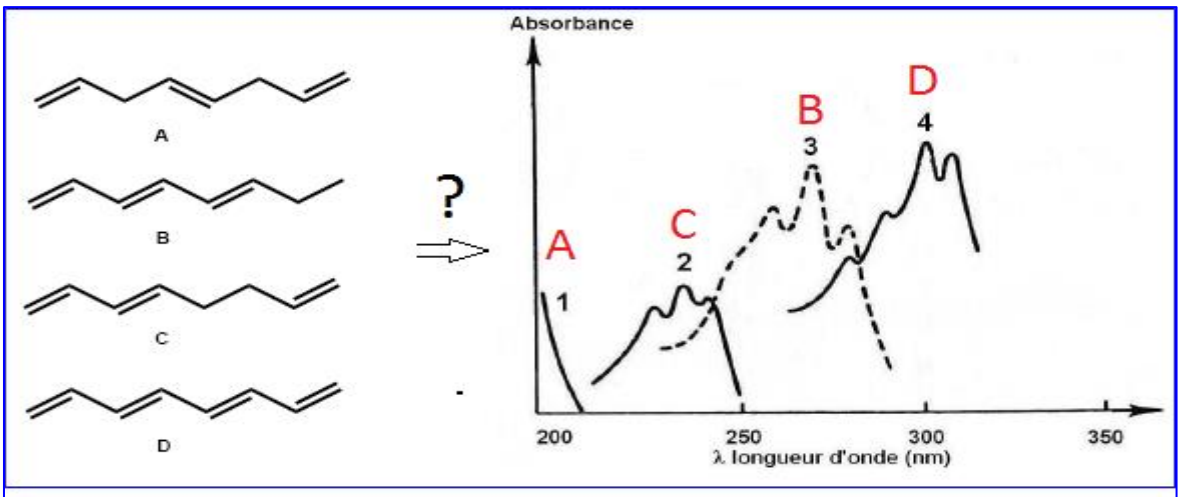
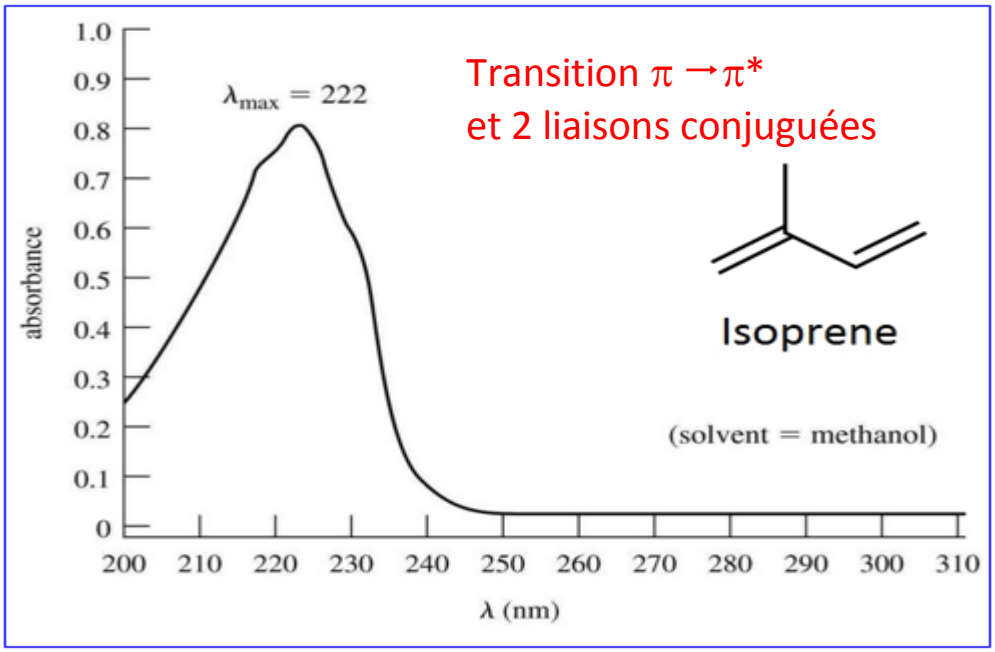
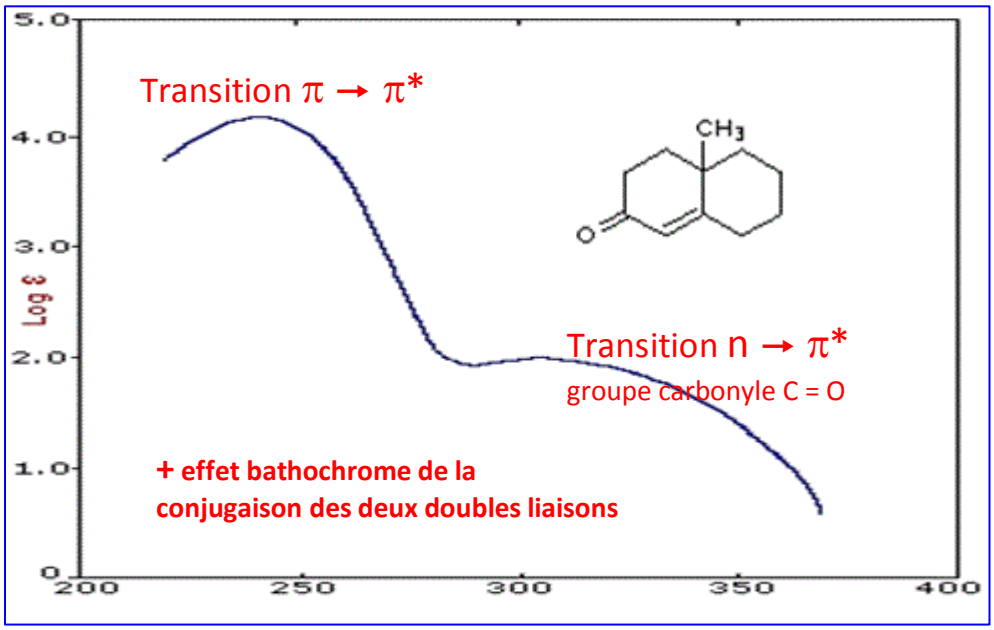
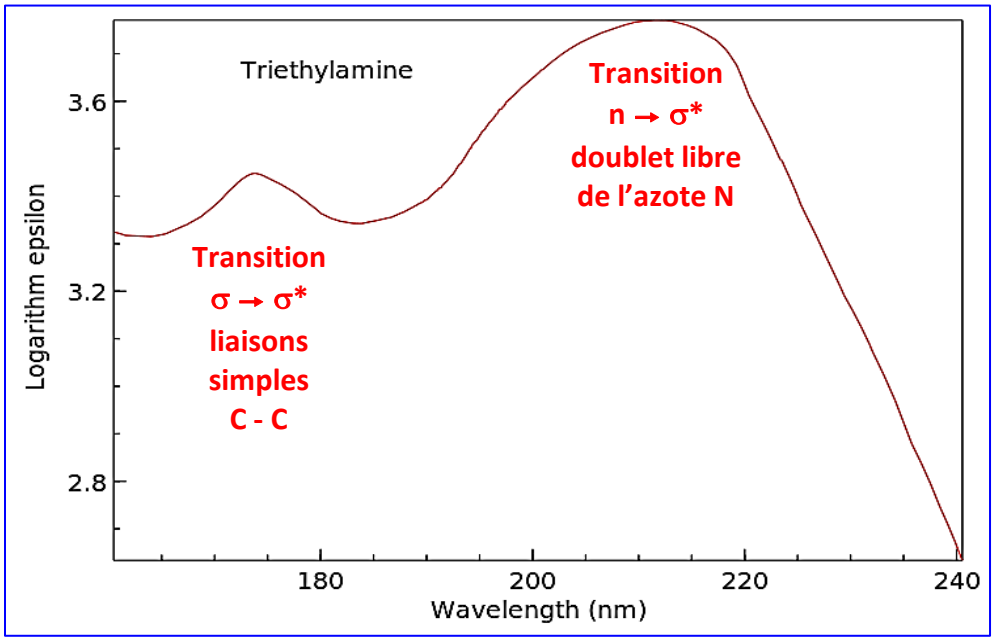
Exemples pour explorer la spectroscopie UV-Visible

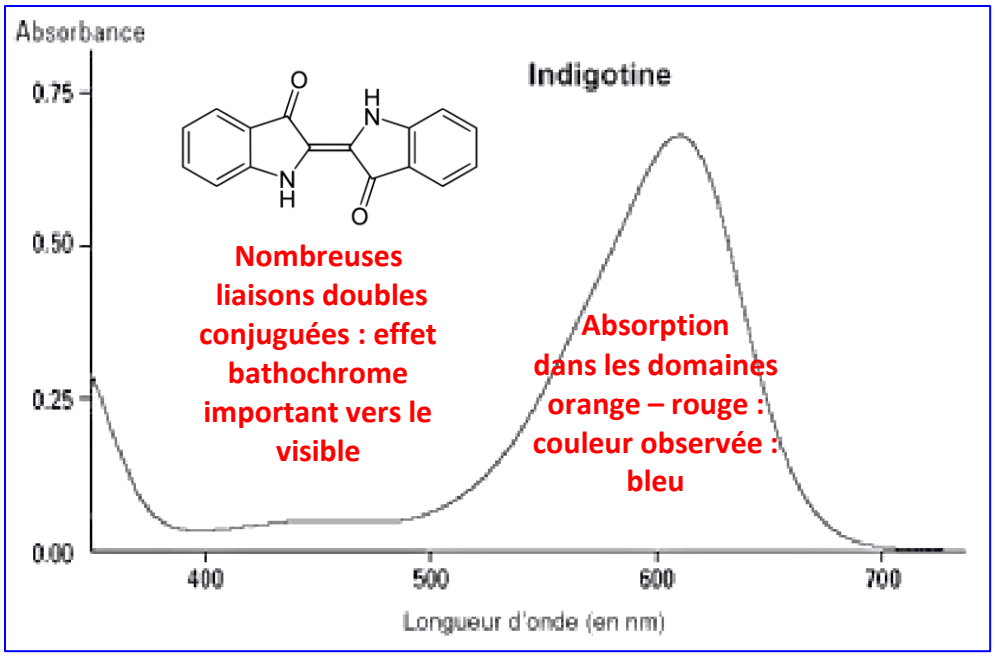


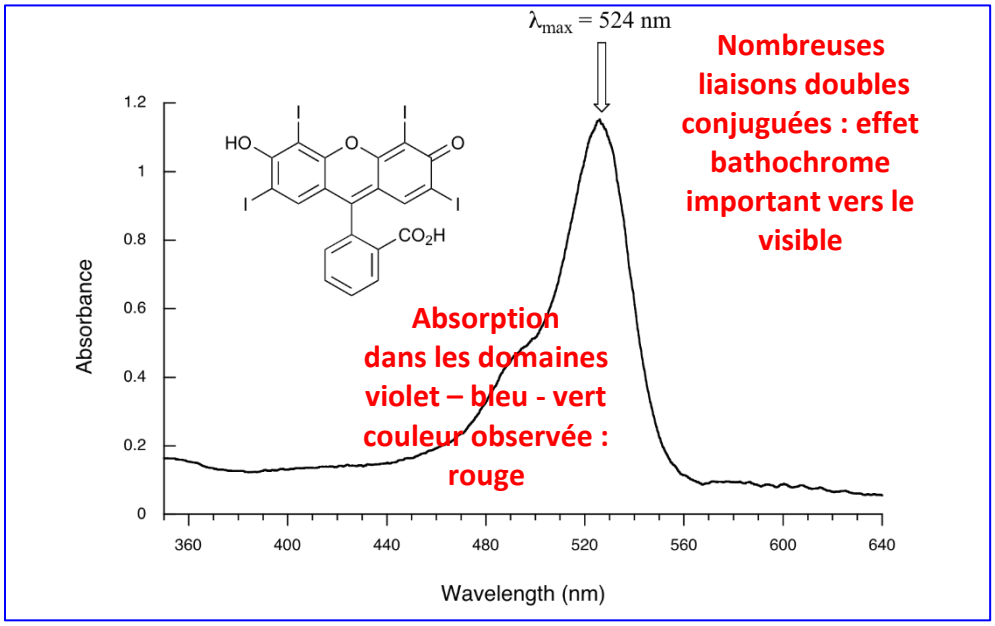
Règle de Fieser Kuhn :
effet bathochrome du nombre de liaisons doubles conjuguées






Triethylamine
Logarithm epsilon
3.6
3.2
2.8
180
200
220
240
Wavelength (nm)
Transition
n → σ*
doublet libre
de l'azote N
Transition
σ → σ*
liaisons
simples
C - C


Absorbance
0.75
0.50
0.25
0.00
400
500
600
700
Longueur d'onde (en nm)
Indigotine
Nombreuses
liaisons doubles
conjuguées : effet
bathochrome
important vers le
visible
Absorption
dans les domaines
orange – rouge :
couleur observée :
bleu


λmax = 524 nm
Absorbance
1.2
1
0.8
0.6
0.4
0.2
0
360
400
440
480
520
560
600
640
Wavelength (nm)
Nombreuses
liaisons doubles
conjuguées : effet
bathochrome
important vers le
visible
Absorption
dans les domaines
violet – bleu - vert
couleur observée :
rouge