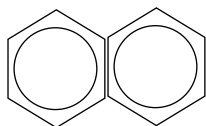
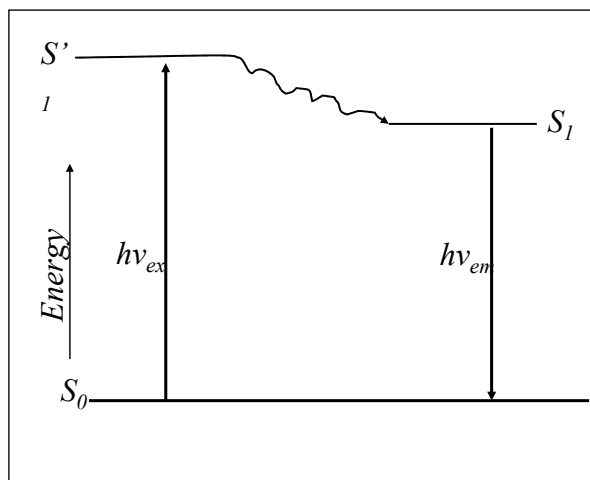


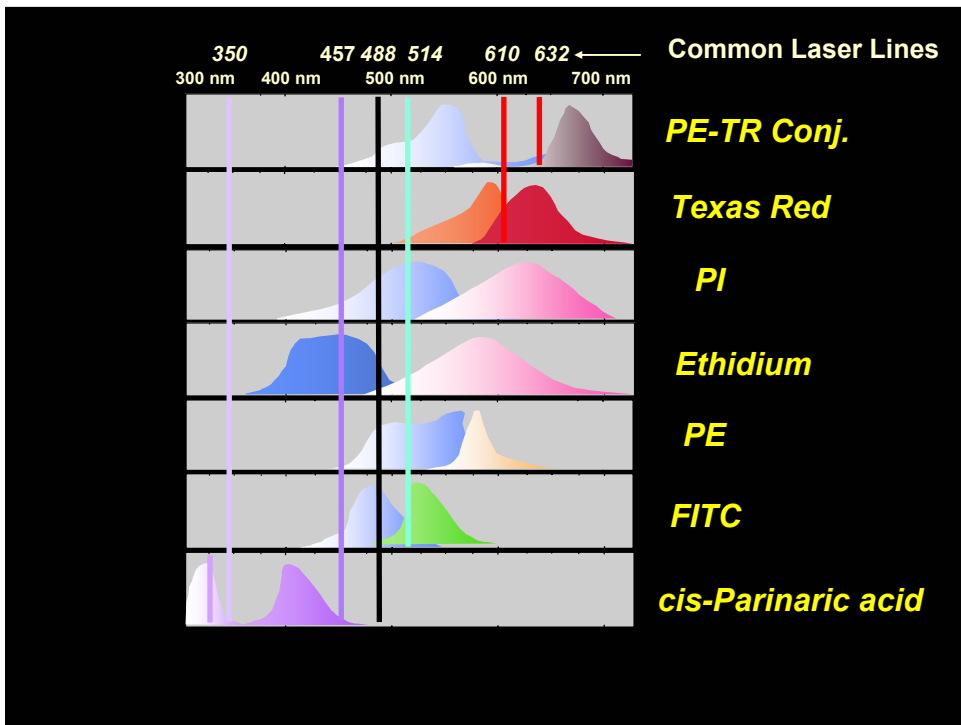
# Fluorescence

- **Chromophores** are components of molecules which absorb light
- They are generally **aromatic rings**



## Simplified Jablonski Diagram





## Excitation - Emission Peaks

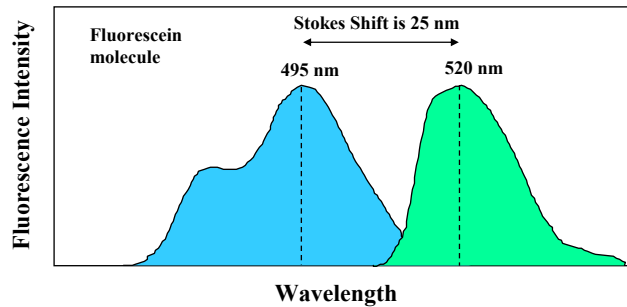
Fluorophore	EX <sub>peak</sub>	EM <sub>peak</sub>	% Max Excitation at		
			488	568	647 nm
FITC	496	518	87	0	0
Bodipy	503	511	58	1	1
Tetra-M-Rho	554	576	10	61	0
L-Rhodamine	572	590	5	92	0
Texas Red	592	610	3	45	1
CY5	649	666	1	11	98

*Note: You will not be able to see CY5 fluorescence under the regular fluorescent microscope because the wavelength is too high.*

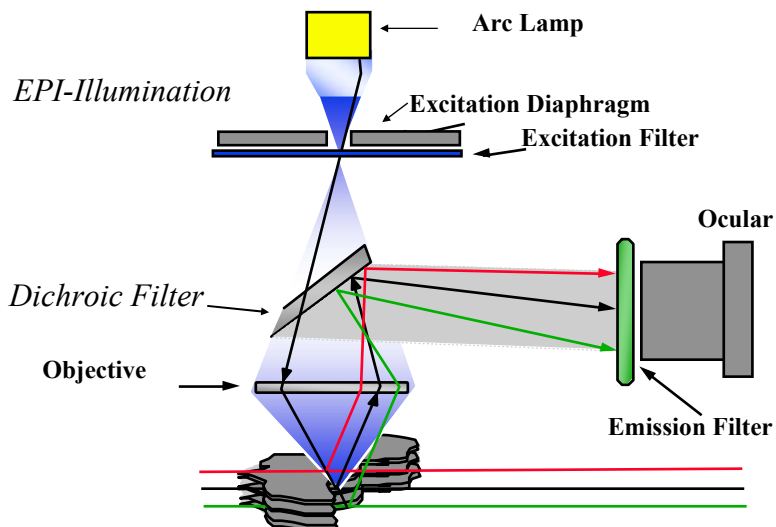
# Fluorescence

## Stokes Shift

- is the energy difference between the lowest energy peak of absorbance and the highest energy of emission



## Fluorescent Microscope



# Fluorescence Microscope with Color Video (CCD) 35 mm Camera

