CONCEPT: IR SPECTROSCOPY- GENERAL FEATURES

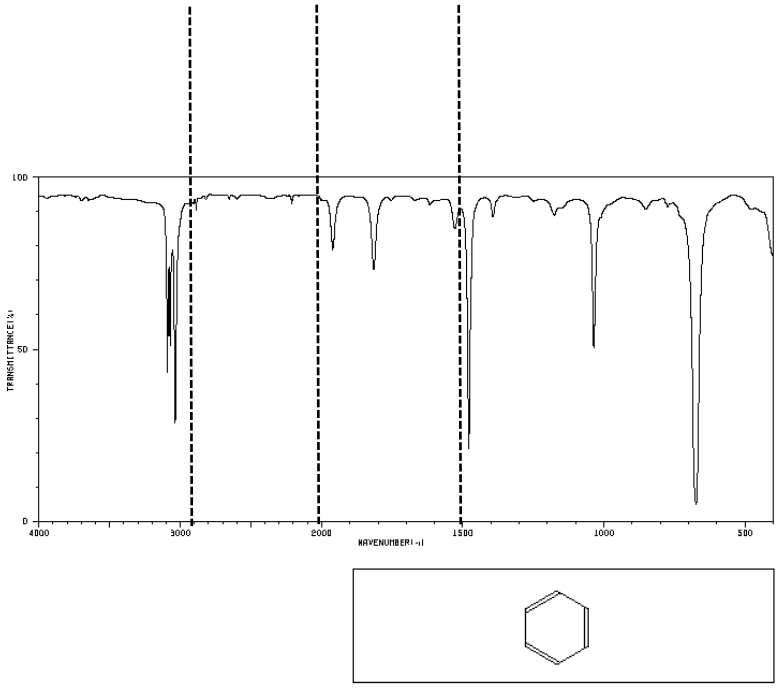
● IR Spectroscopy is a chemical analytical method that uses differing frequencies of infrared light to detect predictable types of chemical bonds in molecules.

□ The frequencies will cause certain bonds to _____

□ Stretching, Twisting, Wagging, Scissoring, etc.

□ If the molecule is symmetrical, e.g. N_2, the band is not observed in the IR spectrum.

Major regions of absorption



Common IR Ranges

3200 – 3600	-OH	Strong, Broad
3300	-NH	Peaks = H's
SP3 = 2900 – 3000 SP2 = 3000 – 3150 SP = 3150 - 3300	-CH	Choppy
2200-2300	C≡C C≡N	Medium, Sharp
1700	C=O	Very Strong, Sharp
1650	C=C	Medium, Sharp