

Scattering of Light.

Molecules of a medium after absorbing incoming light radiations, emits them in all direction. This phenomenon is called Scattering.

- (1) According to scientist Rayleigh: Intensity of scattered light $\propto \frac{1}{\lambda^4}$
- (2) Some phenomenon based on scattering: (i) Sky looks blue due to scattering.
(ii) At the time of sunrise or sunset it looks reddish. (iii) Danger signals are made from red.
- (3) Elastic scattering: When the wavelength of radiation remains unchanged, the scattering is called elastic.
- (4) Inelastic scattering (Raman's effect): Under specific condition, light can also suffer inelastic scattering from molecules in which its wavelength changes.