

The Tyndall effect is observed only when the following conditions are satisfied

(A) the diameter of the dispersed particle is much smaller than the wavelength of the light used (B) the diameter of the dispersed particles is not much smaller than the wavelength of the light used

(C) the refractive indices of the dispersed phase and dispersion medium are almost similar in magnitude

(D) the refractive indices of the dispersed phase and the dispersion medium differ greatly in magnitude.

(a) (A) and (C)

(b) (B) and (C)

(c) (A) and (D)

(d) (B) and (D)

Solution:

The process in which the particles in a colloid scatter the beams of light that are directed at them is called Tyndall effect.

Hence option (d) is the answer.