

- The particles of suspension can be separated from solvent by the process of filtration.
- The particles of suspension settle down, when the suspension is kept undisturbed. The process of settling of suspended particles under the action of gravity is called sedimentation. Thus, we can say that suspensions are unstable.
- A suspension is heterogeneous in nature.
- An excessive amount of scattering takes place in suspensions, because of bigger size of particles. Therefore, path of light is not visible.

Colloidal Solutions or Colloids:

A neither heterogeneous solution in which the particle size is in between 10^{-7} cm to 10^{-5} cm, such that the solute particles neither dissolve nor settle down in a solvent is called colloidal solution.

Dispersed phase and dispersing medium:

In a colloidal solution, relatively large suspended particles are called dispersed phase and the solvent in which the colloidal particles are suspended is called continuous phase or dispersing medium.

Characteristics of Colloidal Solutions

- The size of a colloidal particle is in between 10^{-7} cm and 10^{-5} cm.
- The particles of a colloidal solution are visible under powerful microscope.
- The particles of a colloidal solution do not settle down with the passage of time. Therefore, colloidal solutions are quite stable.
- The particles of a colloidal solution cannot be recovered by crystallization or evaporation. However, they can be separated by the process of centrifugation.
- The particles of a colloidal solution can easily pass through filter paper and hence cannot be separated by filtration.
- The particles of a colloidal solution scatter light, i.e., when strong beam of light is passed through the colloidal solution, the path of beam becomes visible.
- Colloidal solutions are not transparent, but translucent in nature.
- The colloidal solutions are heterogeneous in nature.

Tyndall effect:

When strong beam of light is passed through a true solution taken in a beaker placed in a dark room, the path of light through the solution is dark. But if the light is passed through a colloidal solution under conditions as above, the path of light through the colloidal solution becomes visible.