

Glossary

1. **Cell fragments:** A cell piece broken off or cut off of something else.
2. **Heat labile:** Easily changed or destroyed by heat; unstable.
3. **Broth:** A liquid containing nutrients for culturing microorganisms: inoculated the broth with bacteria; The water in which meat, fish, or vegetables have been boiled; stock; A thin, clear soup based on stock, to which rice, barley, meat, or vegetables may be added.
4. **Decantation:** Decantation is a process for the separation of mixtures, by removing a layer of liquid, generally one from which a precipitate has settled. The purpose may be either to produce a clean decant, or to remove undesired liquid from the precipitate (or other layers).
5. **Adsorption:** Adsorption is the adhesion of atoms, ions, or molecules from a gas, liquid, or dissolved solid to a surface.
6. **Derivatization:** The conversion of a chemical compound into a derivative (as for identification).
7. **Crystallization:** Crystallization is the (natural or artificial) process where a solid forms where the atoms or molecules are highly organized in a structure known as a crystal. Some of the ways which crystals form are through precipitating from a solution, melt or more rarely deposited directly from a gas.
8. **Fraction:** Proper fractions are those fractions where the numerator is less than the denominator. An improper fraction is a fraction where the numerator is greater than the denominator.
9. **Vacuum:** Vacuum is space void of matter. An approximation to such vacuum is a region with a gaseous pressure much less than atmospheric pressure.
10. **Slurries:** A thick mixture of water and another substance (such as mud or lime).
11. **Diatomaceous earth:** Diatomaceous earth is a naturally occurring, soft, siliceous sedimentary rock that is easily crumbled into a fine white to off-white powder. It has a particle size ranging from less than 3 micrometres to more than 1 millimetre, but typically 10 to 200 micrometres. Depending on the granularity, this powder can have an abrasive feel, similar to pumice powder, and has a low density as a result of its high porosity.

- 12. Polyelectrolytes:** Polyelectrolytes are polymers whose repeating units bear an electrolyte group. Polycations and polyanions are polyelectrolytes. These groups dissociate in aqueous solutions (water), making the polymers charged.
- 13. Surfactants:** Surfactants are compounds that lower the surface tension (or interfacial tension) between two liquids or between a liquid and a solid. Surfactants may act as detergents, wetting agents, emulsifiers, foaming agents, and dispersants.
- 14. Fractionation:** Fractionation is a separation process in which a certain quantity of a mixture (gas, solid, liquid, enzymes, suspension, or isotope) is divided during a phase transition, into a number of smaller quantities (fractions) in which the composition varies according to a gradient.
- 15. Permeabilization:** The process of making something, such as a membrane or cell wall, permeable - often through the use of surfactants.