Glossary:

- 1. Fermentation: A process in which an agent causes an organic substance to break down into simpler substances; especially, the anaerobic breakdown of sugar into alcohol.
- **2. Downstream processing:** Refers to the recovery and purification of biosynthetic products from fermentation broth.
- **3. Pilot scale:** A pilot scale is a small industrial system which is operated to generate information about the behavior of the system for use in design of larger facilities.
- **4. Agitation:** The act of shaking/agitating something; causing it to move around (usually vigorously).
- **5. Aseptic conditions:** It is the condition where no microbial or any other contamination may occur. Normally this can be achieved by following aseptic techniques.
- **6. Foam:** A collection of minute bubbles formed on the surface of a liquid by agitation, fermentation, etc.
- **7. Respiration:** The sum total of the physical and chemical processes in an organism by which oxygen is conveyed to tissues and cells, and the oxidation products, carbon dioxide and water, are given off.
- **8. Bioreactors:** An apparatus, such as a large fermentation chamber, for growing organisms such as bacteria or yeast under controlled conditions.
- **9. Inoculum:** The microorganisms or other material used in an inoculation. Also called inoculant.
- **10. Biomass:** The amount of living matter in a given habitat, expressed either as the weight of organisms per unit area or as the volume of organisms per unit volume of habitat.
- **11. Sterilization:** Sterilization is a process that eliminates or kills all forms of life and other biological agents, including transmissible agents present in a specified region, such as a surface, a volume of fluid, medication, or in a compound such as biological culture media.
- **12. Precursors:** A chemical that is transformed into another compound, as in the course of a chemical reaction, and therefore precedes that compound in the synthetic pathway: Cholesterol is a precursor of testosterone.
- **13. Inducers:** To cause or stimulate the start of an activity, as an enzyme induces a metabolic activity.

- **14. Elicitors:** Elicitors are compounds that when introduced into a living organism signal the activation or synthesis of another compound. An example of such a molecule is jasmonic acid, which stimulates the biosynthesis of delta-viniferin in grapevine cell cultures. Another example is chitosan which is used in agriculture as a natural biocontrol agent..
- **15. Food supplements**: Food or dietary supplement is intended to provide nutrients that may otherwise not be consumed in sufficient quantities. Supplements as generally understood include vitamins, minerals, fiber, fatty acids, or amino acids, among other substances.