What is claimed is:

1. A settling device comprising:

an upper conical portion with at least one port;

a cylindrical portion;

a lower conical portion with at least one port;

a stack of cones located within the settling device, each cone of the stack of cones including a small opening and a large opening, the small opening oriented towards one of the upper conical portion and the lower conical opening, the stack of cones generally centered around a longitudinal axis of the settling device; and

a diffuser positioned within the setting device, the diffuser including a stem interconnected to a port of the at least one port of the lower conical portion and a ring extending from the stem.

2. The settling device of claim 1, wherein at least one cone of the stack of cones is composed of one of metal, plastic, and glass.

3. The settling device of claim 1, wherein the upper housing further comprises a first flange configured to engage a second flange of the lower housing.

4. The settling device of claim 1, wherein a surface of a cone of the first stack of cones is at an angle of between approximately 25 degrees to about 85 degrees relative to the longitudinal axis.

5. The settling device of claim 1, wherein the first and second conical portions are concave inwardly towards the longitudinal axis.

6. The settling device of claim 1, wherein a longitudinal cross-section of a body of a cone forms a line with an arcuate shape.

7. The settling device of claim 1, wherein the first conical portion is concave inwardly towards the longitudinal axis and the second conical portion is concave outwardly away from the longitudinal axis.

8. The settling device of claim 7, further comprising a second stack of cones located within the settling device, each cone of the second stack of cones including a small opening oriented away from the first conical portion and a large opening oriented towards the first conical portion.

9. The settling device of claim 8, wherein the cones of the second stack of cones have bodies that are concave outwardly away from the longitudinal axis.

10. The settling device of claim 1, further comprising a sensor to measure a condition within the settling device.

11. The settling device of claim 10, wherein the sensor comprises a fluorescent probe; and wherein one of:

at least a portion of the second conical portion proximate to the sensor is transparent or translucent; and

the second conical portion is transparent or translucent.

12. The settling device of claim 10, wherein the sensor is operable to measure at least one of pH, dissolved oxygen (DO), Glucose, temperature, and dissolved CO_2 (pCO_2).

13. A method of settling particles in a suspension, comprising:

(a) introducing a liquid suspension of particles into a settling device which includes:

an upper housing with a first conical portion, a first cylindrical portion, and at least one port;

a lower housing interconnectable to the upper housing and including a second conical portion, a second cylindrical portion, and at least one port;

a stack of cones located within the settling device, each cone of the stack of cones including a small opening oriented towards the first conical portion and having bodies that are concave inwardly toward a longitudinal axis of the settling device; and

a diffuser positioned within the setting device, the diffuser including a stem interconnected to a port of the at least one port of the lower conical portion and a ring extending from the stem;

(b) collecting a clarified liquid from the at least one port of the upper housing; and

(c) collecting a concentrated liquid suspension from the at least one port of the lower housing.

14. The method of claim 13, wherein the liquid suspension comprises at least one of a recombinant cell suspension, an alcoholic fermentation, a suspension of solid catalyst particles, a municipal waste water, industrial waste water, mammalian cells, bacterial cells, yeast cells, plant cells, algae cells, plant cells, mammalian and/or murine hybridoma cells, stem cells, CAR-T

cells, red blood precursor and mature cells, cardiomyocytes or other attachment prone cells growing attached on microcarrier beads, yeast in beer, and eukaryotic cells.

15. The method of claim 13, wherein the liquid suspension comprises at least one of:

(a) recombinant microbial cells selected from at least one of *Pichia pastoris, Saccharomyces cerevisiae, Kluyveromyces lactis, Aspergillus niger, Escherichia coli, Bacillus subtilis*, and other microbial cells; and

(b) non-cellular particles such as one or more of microcarrier beads for attached stem cell growth, an affinity ligand coated microspheric bead or resin, and surface activated microspherical beads.

16. The method of claim 13, wherein introducing a liquid suspension comprises directing the liquid suspension from a plastic disposable bioreactor bag into the settling device.

17. The method of claim 13, wherein the clarified liquid collected comprises at least one of biological molecules, organic or inorganic compounds, chemical reactants, and chemical reaction products.

18. The method of claim 13, wherein the clarified liquid collected comprises at least one of hydrocarbons, polypeptides, proteins, alcohols, fatty acids, hormones, carbohydrates, antibodies, glycoproteins, terpenes, isoprenoids, polyprenoids, fragrance and flavor compounds, and beer.

19. The method of claim 13, wherein the clarified liquid collected comprises at least one of biodiesel, insulin or its analogs, brazzein, antibodies, growth factors, colony stimulating factors, and erythropoietin (EPO).

20. The method of claim 13, further comprising introducing a fluid to a fluid jacket associated with at least one of the upper housing and the lower housing.

21. The method of claim 13, further comprising collecting data from a sensor positioned within the settling device, the sensor operable to measure at least one of pH, DO, Glucose, temperature, and pCO_2.

22. The method of claim 21, further comprising using data received from the sensor to adjust one or more of pH, temperature, dissolved oxygen concentration, dissolved carbon dioxide, and nutrient concentrations within the settling device.

23. The method of claim 13, further comprising positioning a second stack of cones within the settling device, the cones of the second stack of cones having bodies that are concave outwardly away from the longitudinal axis of the settling device.

24. The settling device of claim 1, wherein at least one of the cones is provided in contact with the diffuser and the stack of cones is supported by the diffuser.