WHAT IS CLAIMED IS:

1. A method for optimizing continuous chromatography in a system of continuous production of a biologic product, comprising (i) taking an optical density (OD) measurement of an eluate from a chromatography column; (ii) applying a mathematical formula to the OD measurement, wherein the mathematical formula is **Equation 1:**

$$Titer = \frac{k_{col}}{2\varepsilon_m V_l}\left(\sum_{i=0}^{n} Q_i D_i + \sum_{i=0}^{n} Q_{i+1} D_{i+1}\right)$$

and (iii) adjusting the continuous load volume of the chromatography column to achieve the optimization.

2. The method of claim 1, wherein the biologic product is a protein.

3. The method of claim 1, wherein the biologic product is a monoclonal antibody.

4. A method for optimizing continuous chromatography in a system of continuous production of a biologic product, comprising (i) taking an optical density (OD) measurement of an eluate from a chromatography column; (ii) applying a mathematical formula to the OD measurement, wherein the mathematical formula is **Equation 2:**

$$m = \frac{n\sum x_i y_i - (\sum x_i)(\sum y_i)}{n\sum {x_i}^2 - (\sum x_i)^2}$$

$$b = \frac{\sum y_i - m\sum x_i}{n}$$

; and (iii) adjusting the continuous load of the chromatography column to achieve the optimization.

5. The method of claim 4, wherein the biologic product is a protein.

6. The method of claim 4, wherein the biologic product is a monoclonal antibody.

7. The method of any one of claims 1-6, wherein the method does not utilize high performance liquid chromatography.

8. The method of any one of claims 1-7, wherein the optimization comprises maintaining load density to remain within a predetermined, target load density or target load density range.

9. The method of claim 8, wherein the predetermined, target load density is less than about 100 g/L.

10. The method of claim 8, wherein the predetermined, target load density is less than about 65 g/L.

11. The method of claim 8, wherein the system permits processing up to 6 g/L/day of the biologic product.

12. A method of manufacturing a biologic product of interest comprising the steps of:

(I) cultivating a eukaryotic cell expressing the biologic product of interest in cell culture;

(II) harvesting the biologic product of interest from the cell culture in the form of a fluid feed comprising biologic product of interest and one or more impurities or buffer components;

(III) capturing or purifying the biologic product of interest, wherein said capturing or purifying comprises continuous chromatography of the fluid feed comprising biologic product of interest and one or more impurities or buffer components; and

(IV) optionally formulating the biologic product of interest into a pharmaceutically acceptable formulation suitable for administration; and

wherein the method further comprises:

(i) taking an optical density (OD) measurement of an eluate from a chromatography column; (ii) applying a mathematical formula to the OD measurement, wherein the mathematical formula is **Equation 1:**

$$Titer = \frac{k_{col}}{2\varepsilon_m V_l}\left(\sum_{i=0}^{n} Q_i D_i + \sum_{i=0}^{n} Q_{i+1} D_{i+1}\right)$$

; and (iii) adjusting the continuous load of the chromatography column to achieve the optimization.

13. The method of claim 12, wherein the biologic product of interest is a recombinant protein.

14. The method of claim 12 or claim 13, wherein the step of cultivating a eukaryotic cell expressing the biologic product of interest in cell culture occurs in a fed-batch cell culture.

15. The method of claim 12 or claim 13, wherein the step of cultivating a eukaryotic cell expressing the biologic product of interest in cell culture occurs in a continuous cell culture.

16. A method of manufacturing a biologic product of interest comprising the steps of:

(I) cultivating a eukaryotic cell expressing the biologic product of interest in cell culture;

(II) harvesting the biologic product of interest from the cell culture in the form of a fluid feed comprising biologic product of interest and one or more impurities or buffer components;

(III) capturing or purifying the biologic product of interest, wherein said capturing or purifying comprises continuous chromatography of the fluid feed comprising biologic product of interest and one or more impurities or buffer components; and

(IV) optionally formulating the biologic product of interest into a pharmaceutically acceptable formulation suitable for administration; and

wherein the method further comprises:

(i) taking an optical density (OD) measurement of an eluate from a chromatography column; (ii) applying a mathematical formula to the OD measurement, wherein the mathematical formula is **Equation 2:**

$$m = \frac{n\sum x_i y_i - (\sum x_i)(\sum y_i)}{n\sum {x_i}^2 - (\sum x_i)^2}$$

$$b = \frac{\sum y_i - m \sum x_i}{n}$$

; and (iii) adjusting the continuous load of the chromatography column to achieve the optimization.

17. The method of claim 16, wherein the biologic product of interest is a recombinant protein.

18. The method of claim 16 or claim 17, wherein the step of cultivating a eukaryotic cell expressing the biologic product of interest in cell culture occurs in a fed-batch cell culture.

19. The method of claim 16 or claim 17, wherein the step of cultivating a eukaryotic cell expressing the biologic product of interest in cell culture occurs in a continuous cell culture.

20. The method of any one of claims 1-19, wherein said method is computer implemented.