

GLOSSARY OF TERMS

- 1** AC : Activated Carbon
- 2** Abs : Absorbance
- 3** ABS : Activated Sugarcane Bagasse Powder
- 4** BET : Brauner Emmet Teller
- 5** FAO : Food and Agricultural Organization
- 6** FT-IR : Fourier Transform Infrared
- 7** GAC : Granular Activated Carbon
- 8** ICUMSA : International Commission for Uniform Methods of Sugars Analysis
- 9** IUPAC : International Union of Pure and Applied Chemistry
- 10** H₂SO₄ : Sulphuric Acid
- 11** MW : Molecular Weight
- 12** PAC : Powdered Activated Carbon
- 13** SEM : Scanning Electron Microscopy
- 14** UV-VIS : Ultraviolet-Visible
- 15** WHO : World Health Organization
- 16** ΔG : Gibbs free energy
- 17** T : Temperature
- 18** m : Molal concentration
- 19** M : Molarity; g L⁻¹
- 20** H : Plank`s constant
- 21** F : Feed flow rate with Co metal concentration
- 22** V : CSTR volume
- 23** V : Metal concentration in permeate
- 24** X : Removal kinetic

- 25 R : $X \, dq/dt$
- 26 Q : Amount of metal sorbent at equilibrium (mg/g)
- 27 C_e : Residual metal concentration equilibrium (mg/l)
- 28 q_m : Amount of maximum adsorption
- 29 B : Langmuir isotherm constant
- 30 K : Sorption coefficient
- 31 $1/n$: Constant
- 32 Q : Metal uptake (mg metal /100 mg biosorbent)
- 33 C_i : Initial metal concentration (mg/l)
- 34 m_b : Quantity of biosorbent (mg)
- 35 V : Suspension volume (ml)
- 36 Q : Metal uptake
- 37 C_i : Initial metal concentration
- 38 C_f : Final metal concentration
- 39 C_o : (mgL^{-1}) is the initial concentration of strontium
- 40 C_t : (mgL^{-1}) is concentration of the strontium in solution at the present culture time
- 41 W : Amount of biomass
- 42 V : Volume of metal solution
- 43 m : Mass of dry biosorbent
- 44 C_o : initial metal concentration (mg/L)
- 45 C_e : Equilibrium metal concentration(mg/L)