

CM2200: Equations and Constants

$$W = W_i \left(\frac{10}{\sqrt{P}} - \frac{10}{\sqrt{F}} \right)$$

$$v = \frac{gd^2(\rho_s - \rho_l)}{18\mu}$$

$$EF_D = (8/D)^{0.2}$$

$$F = C + T$$

$$fF = cC + tT$$

$$R_e = \frac{\rho dv}{\mu}$$

$$y = 100 \left(\frac{x}{k} \right)^\alpha$$

$$g = 980 \text{ cm/sec}^2$$

Viscosity of water at 20°C = 0.010 poise

Specific gravity of water = 1.0

Poise = g/cm·s

$$\frac{W_{slurry}}{\rho_{slurry}} = \frac{W_{solid}}{\rho_{solid}} + \frac{W_{liquid}}{\rho_{liquid}}$$

$$\rho_{slurry} = \frac{W_{solid} + W_{liquid}}{V_{solid} + V_{liquid}}$$

$$\Delta G = \Delta H - T\Delta S$$