CHAPTER V

CONCLUSIONS

1. The effective partition coefficient, K, in the form of $\ln[(1/K)-1]$ has a linear relationship with the operating conditions, written in the form of $u/N_r^{0.2}$, as illustrated in Eq. (4.1).

2. The limiting partition coefficient, K_0, of a solute can be obtained from Eq.(4.1) based on the concentration polarization model for every true solution and colloidal solution.

3. For the ionic solution, K_0 was linearly proportional to the initial concentration of the solution. The K_0/C_0 ratio has a linear relationship with the hydration number, which can be ordered as follows: Li^+, Na^+, K^+, and Cs^+.

4. For the non-ionic solution, K_0 was also linearly proportional to the initial concentration. The type of solute, however, did not affect the K0 of this type of solution.

5. The K_0 of the colloidal solution was found that to be not affected by the size of the colloidal molecule and the initial concentration of the solution.

6. The equilibrium lines of all types of solutions could be obtained when K_0 were known.