Study notes for lecture 8, Gibbs Free energy and Chemical reactions, Chapter 9

The following parts are of special/central importance. (2012-02-07)

1. As you read chapter 9 note similarities between G and F both are at minimum at equilibrium. Note also the difference in boundary conditions imposed on the system if you use G and F.

2. definition of Gibbs free energy, eq 9.1. Minimum of G defines equilibrium.

3. eq 9.5, and 9.7, 9.8, and 9.9

4. relation between G and μ eq 9.13

5. Reaction equilibrium. In a chemical reaction there is an equilibrium between the diferent items of the reaction. Ideal to use $dG = 0$.

6. eq 9.30

7. law of mass action (massverkans lag) eq 9.35

8. example H_2O on page 269–270