

LECTURE 17 BOND ENERGIES / BOND ENTHALPIES

I. Bond Enthalpy

- A. Average bond enthalpies
- B. Enthalpy of chemical reactions
- C. Endothermic vs. Exothermic
- D. Heat of Formation ΔH°_f
- E. State function
- F. Hess's Law

II. Thermodynamics and Spontaneous Change

- A. Gibbs free energy ΔG°
- B. Entropy ΔS° for Reactions
 - 1. 3rd Law of Thermodynamics
 - 2. Internal degrees of freedom of reactants