## CH301 Random Musings, November 20, 2008--A Brief Musings as we prepare for Quiz 6

- 1. I wasn't pleased with the quiz 5 performance, but not surprised. Thermodynamics has a way of seeming like you get it, and then it falls apart. The only solution is consistent practice rather than last minute cramming.
- 2. Toward that goal, I am preparing three worksheets to help you get ready for quiz 6. They will be posted late this evening. The topics are:
  - Worksheet 13 a: Problems on Statistical Thermodynamics from Lecture 22
  - Worksheet 13b: Problems on Internal Energy from Lecture 23
  - Worksheet 13c: Problems on Thermal Entropy and the Second Law from Lecture 24
- 3. I don't want to rush the material you are expected to learn for quiz 6 so I am changing the question types to cover just the material on worksheets 13 a-c. The revised question types for quiz 6 are:
  - Statistical thermodynamics theory
  - Statistical thermodynamics internal energy calculation (E = 0.5kT)
  - Statistical thermodynamics positional entropy calculation (S = k ln W)
  - Internal Energy theory
  - Internal energy calculation ( $\Delta U = q + w$ )
  - Ranking system entropies
  - Calculation of  $\Delta S$  from heat transfer ( $\Delta S = q/T$ )
  - Calculation involving the second law equation ( $\Delta S_{univ} = \Delta S_{svs} + \Delta S_{surr} > 0$ )
- 4. On Tuesday next week we will:
  - take quiz 6
  - eat pie and ice cream
  - take a close look at how to determine your grade and what it takes to get the grade you want on exam 3 or the final
  - explodes hydrogen balloon turkeys