

Ch 4

18, 20, 38, 43

Additional problems

1. Prove that  $\left(\frac{\partial U}{\partial V}\right)_S = -P$

2. Uranium metal can react in hydrogen fluoride gas at 300°C to produce uranium (VI) fluoride and hydrogen gas. Calculate  $\Delta G$  for this process, assuming that the change in enthalpy is independent of temperature.