

# Lecture 14 Solution Energetics Cont

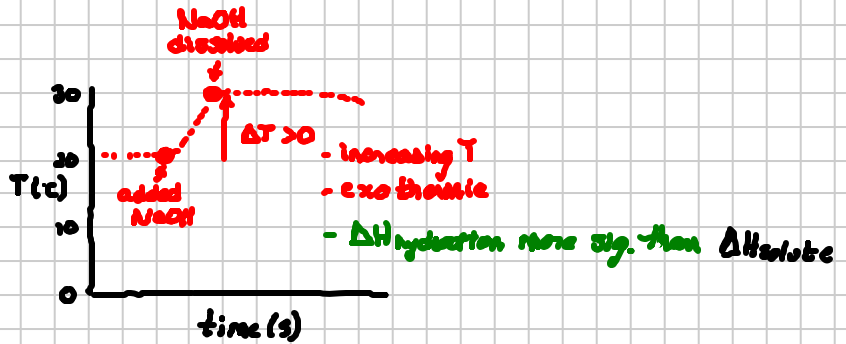
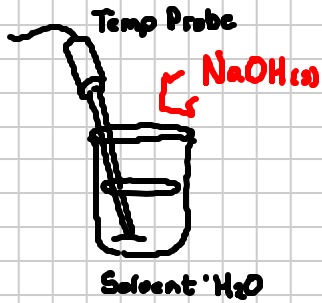
Note Title

15/11/2011

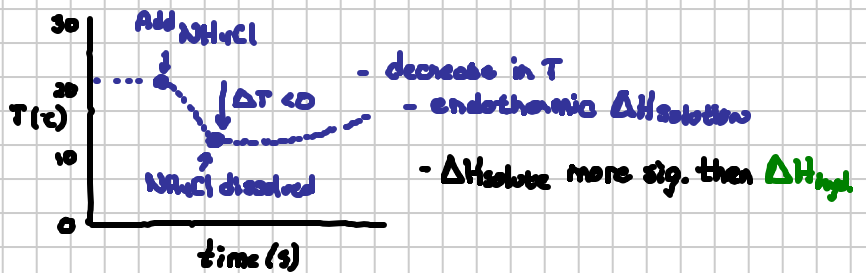
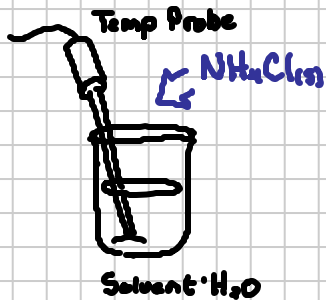
$$\Delta H_{\text{solution}} = \underbrace{\Delta H_{\text{solute}}}_{\text{1) endothermic}} + \underbrace{\Delta H_{\text{solvent}}}_{\text{2) endothermic}} + \underbrace{\Delta H_{\text{mixing}}}_{\text{3) exothermic}} \leftarrow \text{H}_2\text{O Significant}$$

Solvent: H<sub>2</sub>O

$$\Delta H_{\text{solution}} = \underbrace{\Delta H_{\text{solute}}}_{\text{endothermic (+)}} + \underbrace{\Delta H_{\text{hydration}}}_{\text{exothermic (-)}}$$



$$|\Delta H_{\text{solute}}| < |\Delta H_{\text{hydration}}|$$



$$\overset{\text{endo}}{|\Delta H_{\text{solute}}|} > \overset{\text{exo.}}{|\Delta H_{\text{hydration}}|}$$