Professor: Thé Turma ITA

REVISÃO 8



RESUMO

$$\left[\Delta \mathbf{G}^0 = \Delta \mathbf{H}^0 - \mathbf{T} \Delta \mathbf{S}^0 \quad \left(\mathbf{T} = 298 \,\mathbf{K}\right)\right]$$

$$\Delta \mathbf{G} = \Delta \mathbf{H}^0 - \mathbf{T} \Delta \mathbf{S}^0 \quad (\mathbf{Qualquer} \ \mathbf{T})$$

$$\Delta \mathbf{G} = \Delta \mathbf{G}^0 + \mathbf{RT} \ln \mathbf{Q} \left(\mathbf{Q} = \mathbf{Q}_{\mathbf{P}} \right)$$

$$0 = \Delta \mathbf{G}^0 + \mathbf{RT} \ln \mathbf{K} \left(\mathbf{K} = \mathbf{K_p} \right)$$

$$\Delta \textbf{G}^0 = - \, \textbf{RT} \, \textbf{In} \textbf{K}$$

$$-\mathbf{R}\mathbf{T} \ln \mathbf{K} = \Delta \mathbf{H}^0 - \mathbf{T} \Delta \mathbf{S}$$

$$InK = \frac{-\Delta H^0}{R} \left(\frac{1}{T}\right) + \frac{\Delta S^0}{R}$$

$$\ln \frac{\mathbf{K}_2}{\mathbf{K}_1} = \frac{-\Delta \mathbf{H}^0}{\mathbf{R}} \left(\frac{1}{\mathbf{T}_2} - \frac{1}{\mathbf{T}_1} \right)$$

$$\ln \mathbf{P_V} = \frac{-\Delta \mathbf{H_V^0}}{\mathbf{R}} \left(\frac{1}{\mathbf{T}}\right) + \frac{\Delta \mathbf{S}^0}{\mathbf{R}}$$

$$\left(P_{V}(1) = X(1) . P_{V}^{0}(1)\right)$$

$$\left[\frac{\Delta P}{P} = K_T \cdot W\right]$$

$$\mathbf{K}_{\mathsf{T}} = \frac{\mathsf{M}\left(\mathsf{solvente}\right)}{1000} \mathbf{K}_{\mathsf{T}}\left(\mathsf{H}_{2}\mathsf{O}\right) = \frac{18\,\mathsf{g}\,\mathsf{/mol}}{1000} = 0,018\,\mathsf{kg}\,\mathsf{/mol}$$