

משוואת נרנסט

$$\rightarrow \Delta G = \Delta G^\circ + RT \ln Q$$

$$\rightarrow \Delta G = -n_e F E$$

$$\rightarrow \Delta G^\circ = -n_e F E^\circ$$

$$-n_e F E = -n_e F E^\circ + RT \ln Q$$

$$E = E^\circ - \frac{RT}{n_e F} \ln Q$$

$$R = 8.31447 \frac{J}{K \cdot mol}$$

$$F = 9.65 \cdot 10^4 \frac{C}{mol}$$

$$T = 298.15 K$$

$$\frac{RT}{F} = 0.0257 V$$

$$\ln(x) = (\log_{10}(x)) \cdot 2.3$$

$$E = E^\circ - \frac{0.0257 V}{n_e} \cdot \ln(Q)$$

$$E = E^\circ - \frac{0.059 V}{n_e} \cdot \log(Q)$$