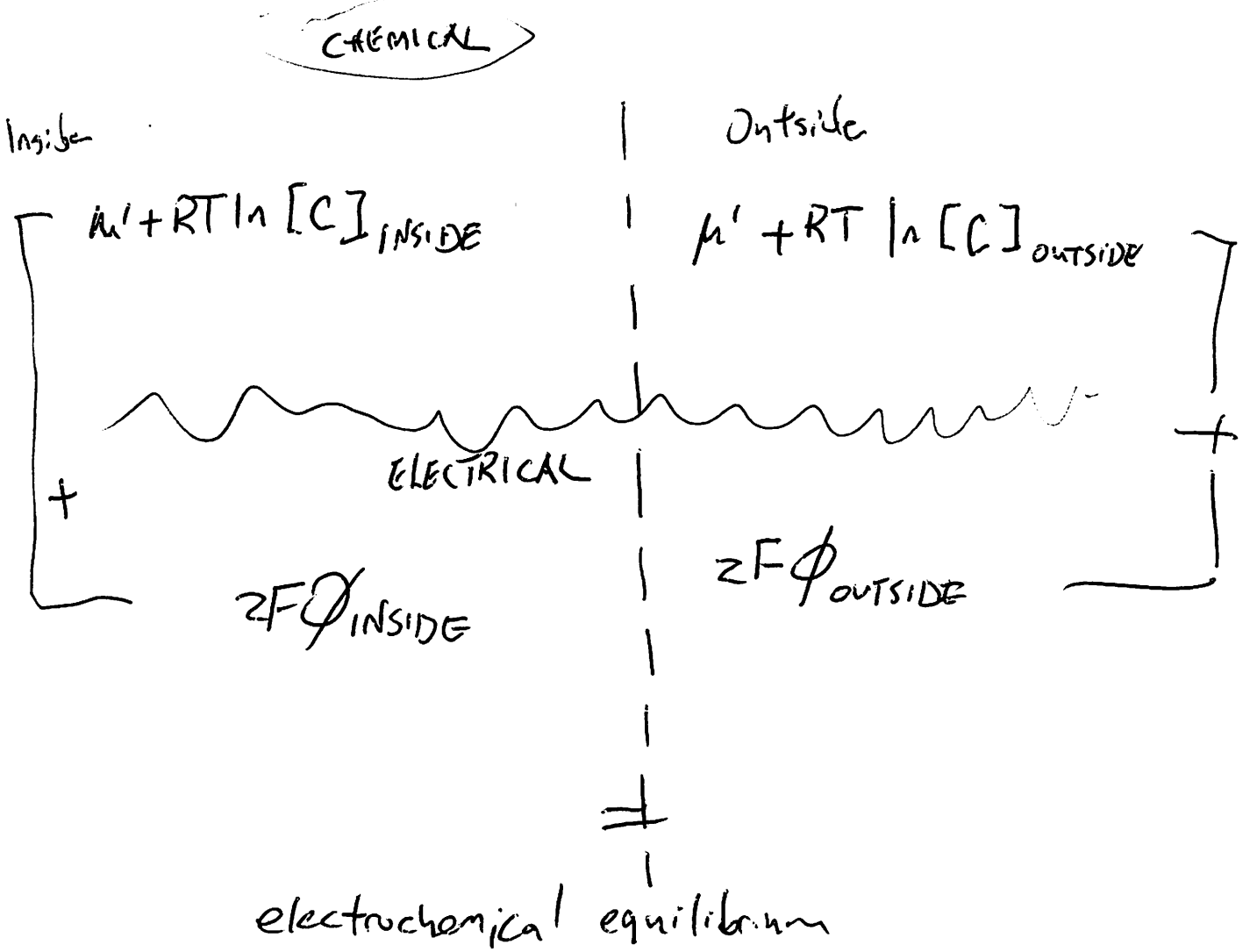

electrochemical equilibrium

$$\mu' + RT \ln [C]_I + zF\phi_I = \mu' + RT \ln [C]_o + zF\phi_o$$

$$zF(\phi_I - \phi_o) = RT(\ln [C]_o - \ln [C]_I)$$

$$= RT \ln \frac{[C]_o}{[C]_I}$$

$$V_m = \frac{RT}{zF} \frac{\ln [C]_o}{\ln [C]_i} = E_c$$ ← Nernst Potential

$$V_m = \frac{RT}{zF} \ln \frac{[C]_o}{[C]_I} = E_C$$

Nernst Potential