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real potential of a species in a phase

Defined for species B in phase β as

$$\alpha_{\mathrm{B}}^{\beta} = \mu_{\mathrm{B}}^{\beta} - z_{\mathrm{B}} F \psi^{\beta}$$

where μ_{B}^{β} is the electrochemical potential of species B in phase β, z_{B} is the charge number of species B, F is the Faraday constant, and ψ^{β} is the outer electric potential of phase β. Since ψ^{β} is zero when the charge on the phase β is zero, the real potential may be regarded as the value of the electrochemical potential of the uncharged phase.

Source:
PAC, 1974, *37*, 499 *(Electrochemical nomenclature)* on page 506

