

energy of activation (of an electrode reaction)

This is defined by the equation:

$$U^\ddagger = -RT \left(\frac{\partial \ln I_0}{\partial T^{-1}} \right)_{p, c_j \dots}$$

where I_0 is the *exchange current*.

At any *overpotential* η it is defined by the equation:

$$U^\ddagger(\eta) = -R \left(\frac{\partial \ln |I|}{\partial T^{-1}} \right)_{p, \eta, c_j \dots}$$

where I is the current passing from the electrode into the electrolyte.

1974, 37, 516