Nernst Equation $$\Delta\varphi = \varphi_i - \varphi_o = \frac{RT}{zF}\ln\frac{c_o}{c_i}$$ (Equilibrium potential)

Goldman-Hodgkin-Katz equation $$\Delta\varphi = \frac{RT}{F}\ln\frac{P_K \cdot [K^+]_o + P_{Na} \cdot [Na^+]_o + P_{Cl} \cdot [Cl^-]_i}{P_K \cdot [K^+]_i + P_{Na} \cdot [Na^+]_i + P_{Cl} \cdot [Cl^-]_o}$$ (Membrane potential)

Type of cells	The values of the concentrations of different ions inside (***i***) and outside (***o***) cells, ***mmol***			Temperature	Equilibrium potential Δφ for different ions, ***mV***			Membrane potential Δφ, ***mV***	
	$K_o^+ (K_i^+)$	$Na_o^+ (Na_i^+)$	$Cl_o^- (Cl_i^-)$	***t***, °C	K^+	Na^+	Cl^-	Rest potential	Action potential
Gigantic squid's axon	10 (360)	425 (69)	496 (157)	27					
Frog's muscle fiber	1 (48)	7 (1)	64 (1)	25					
Cat's motor neuron	5,5 (150)	150 (15)	125 (9)	38					