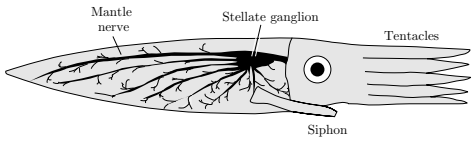


Figure 1.28

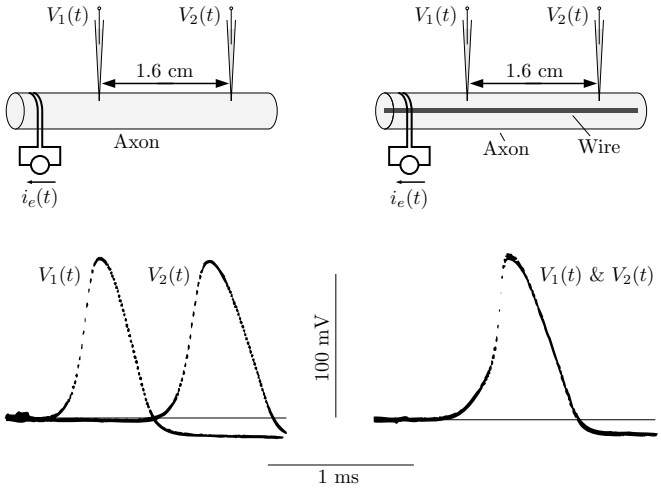


Figure 2.15

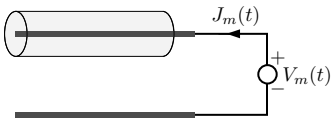


Figure 4.10

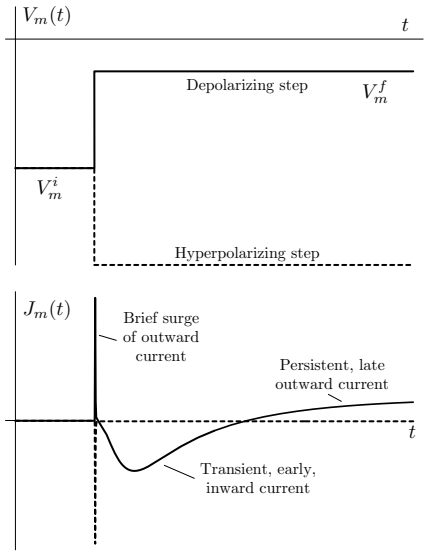


Figure 4.12

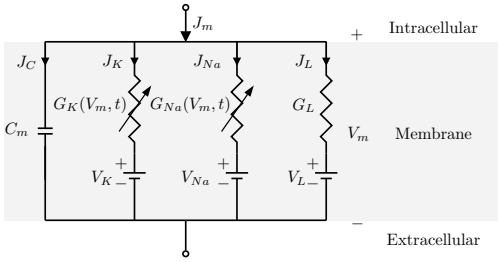


Figure 4.6

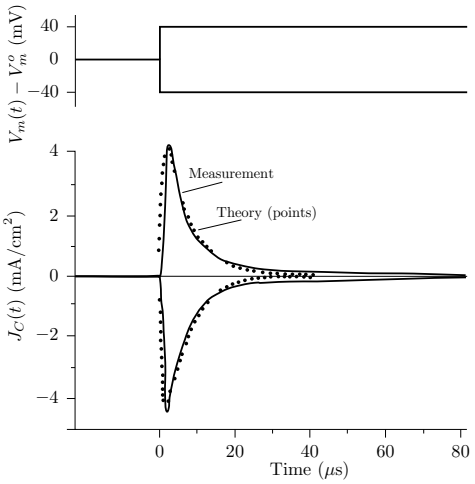


Figure 4.13

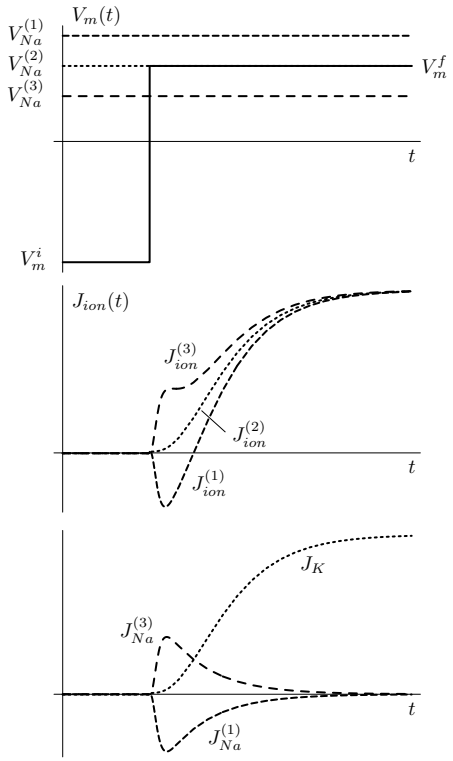


Figure 4.17

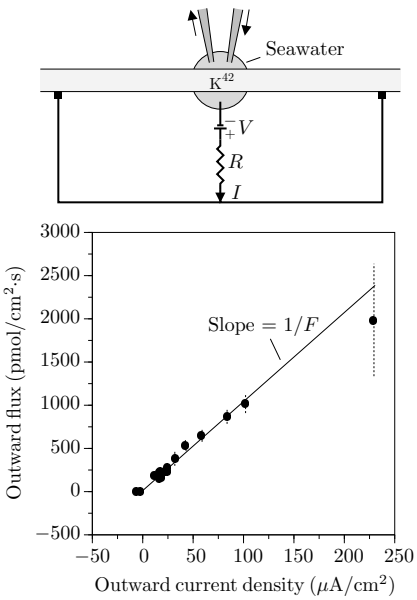
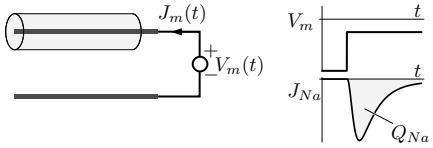


Figure 4.18



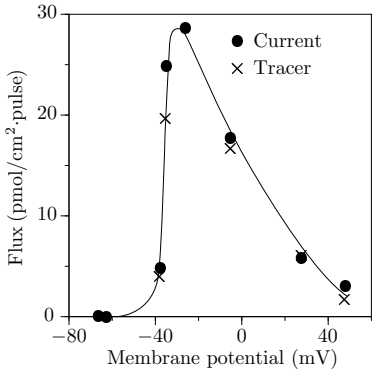


Figure 4.19

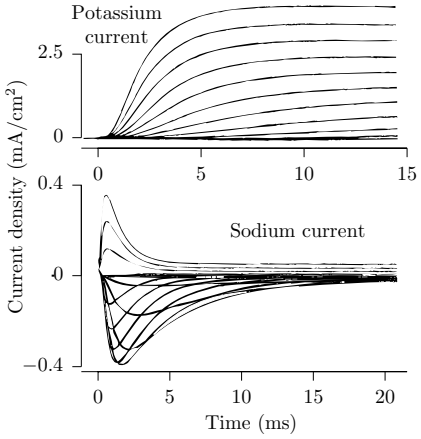


Figure 4.20

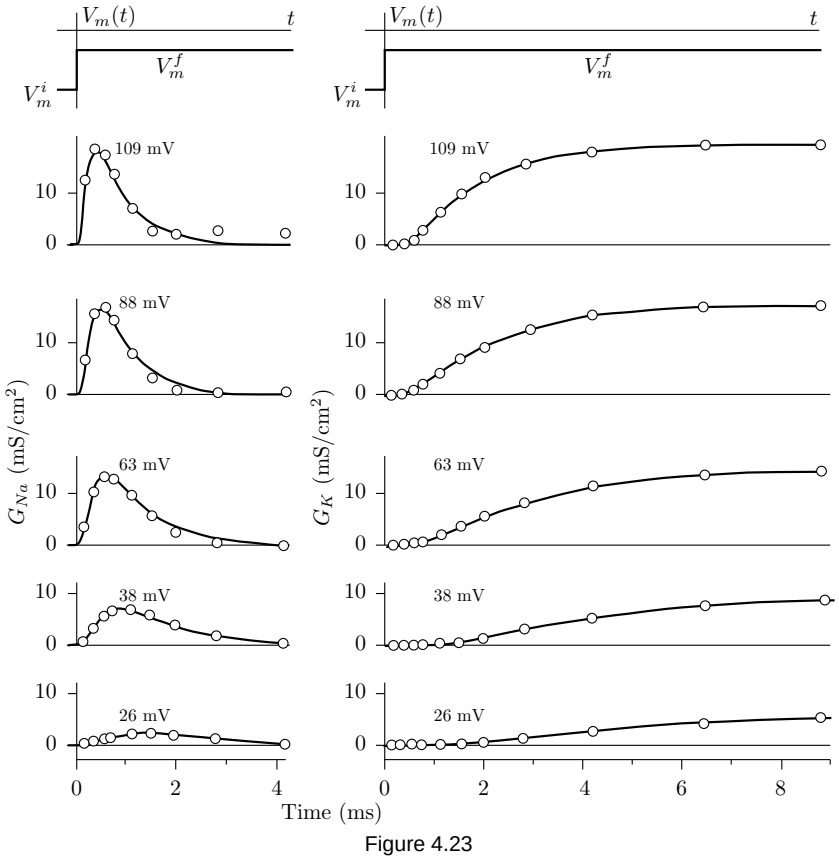
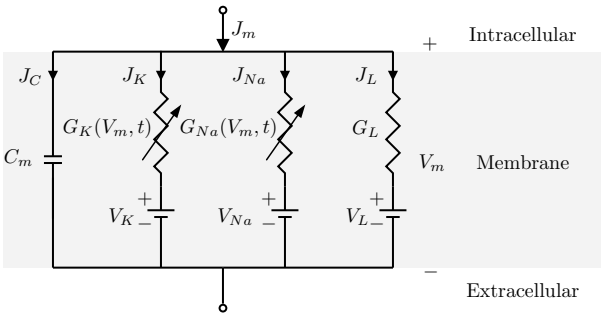


Figure 4.23

Hodgkin Huxley model



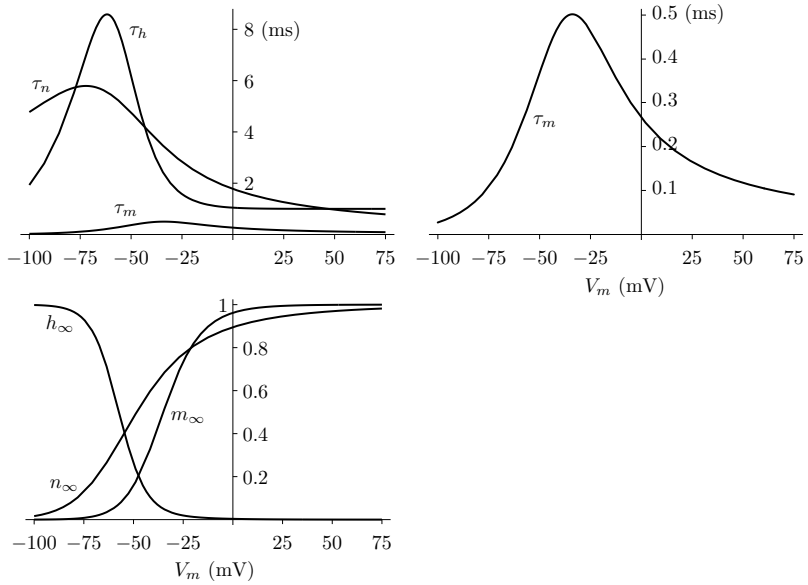
$$G_K(V_m,t) = \overline{G}_K n^4(V_m,t)$$

$$G_{Na}(V_m,t) = \overline{G}_{Na} m^3(V_m,t) h(V_m,t)$$

$$n(V_m,t) + \tau_n(V_m)\frac{dn(V_m,t)}{dt} = n_\infty(V_m)$$

$$m(V_m,t) + \tau_m(V_m)\frac{dm(V_m,t)}{dt} = m_\infty(V_m)$$

$$h(V_m,t) + \tau_h(V_m)\frac{dh(V_m,t)}{dt} = h_\infty(V_m)$$



$\overline{G}_{Na} = 120$, $\overline{G}_K = 36$, and $G_L = 0.3$ mS/cm^2; $C_m = 1$ μF/cm^2; $c^o_{Na} = 491$, $c^i_{Na} = 50$, $c^o_K = 20.11$, $c^i_K = 400$ mmol/L; $V_L = -49$ mV; temperature is 6.3°C.