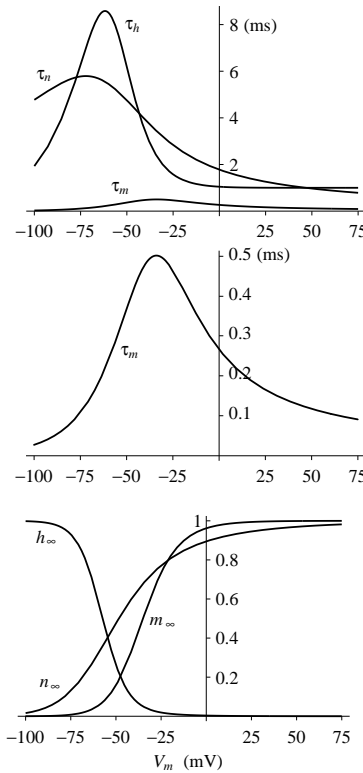
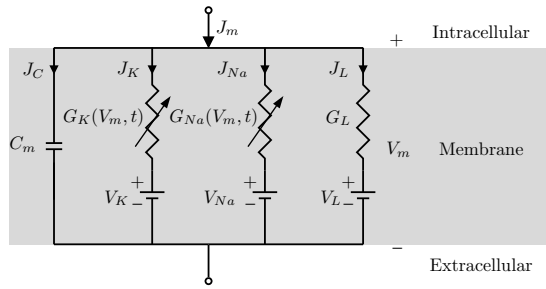


Hodgkin Huxley model



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

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

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

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

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

$\bar{G}_{Na} = 120, \bar{G}_K = 36, \text{ and } G_L = 0.3 \text{ mS/cm}^2;$   
 $c_{Na}^o = 491, c_{Na}^i = 50, c_K^o = 20.11, c_K^i = 400 \text{ mmol/L};$   
 $C_m = 1 \mu\text{F/cm}^2; V_L = -49 \text{ mV}; \text{ temperature is } 6.3^\circ\text{C}.$

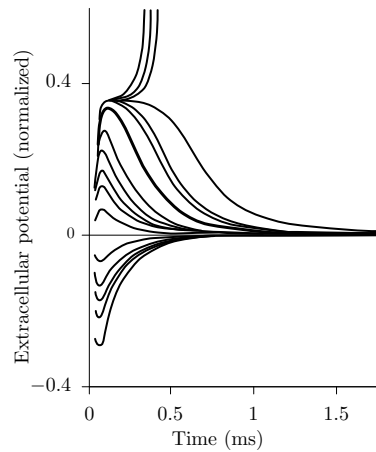


Figure 4.40

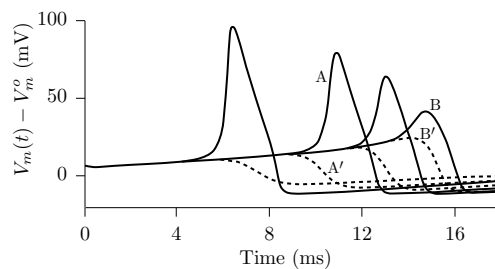


Figure 4.41

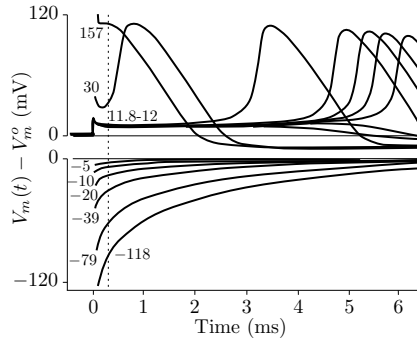


Figure 4.42

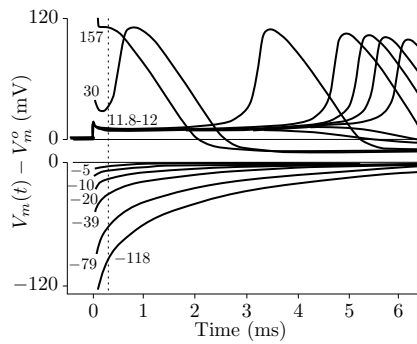
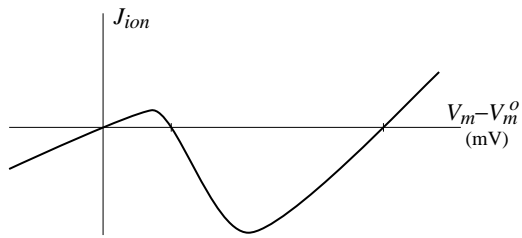
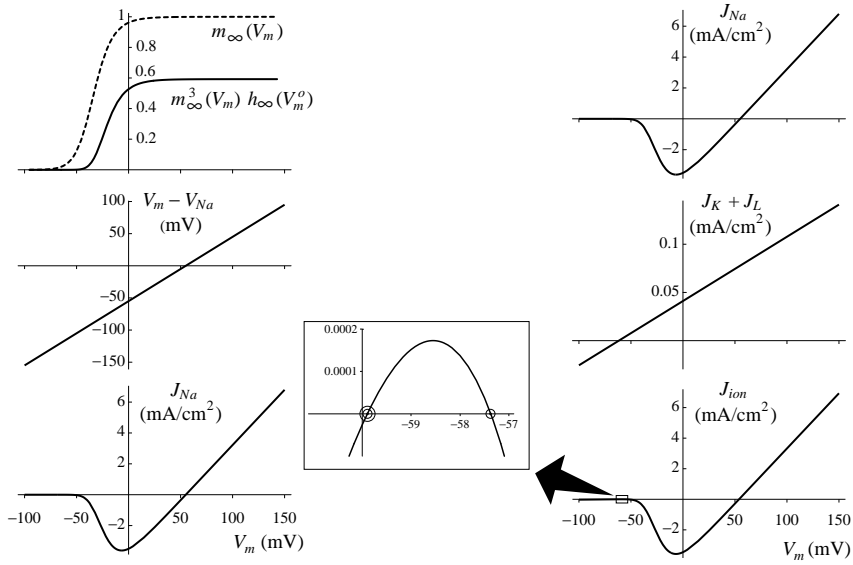


Figure 4.42

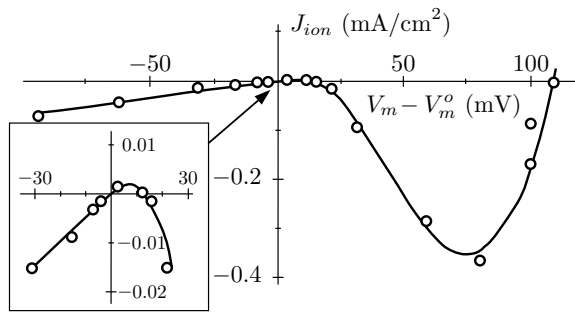


Figure 4.43

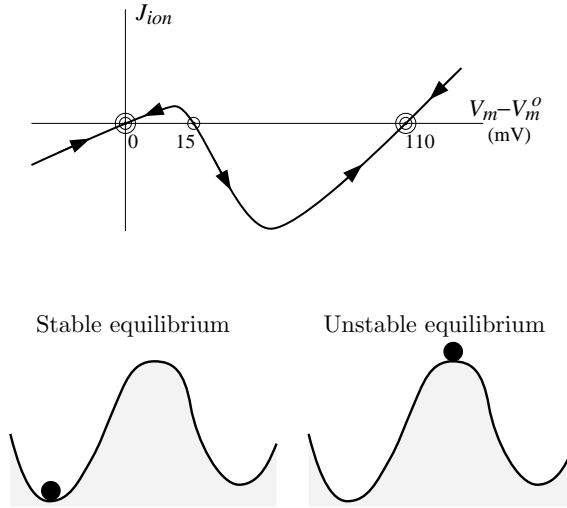


Figure 4.45

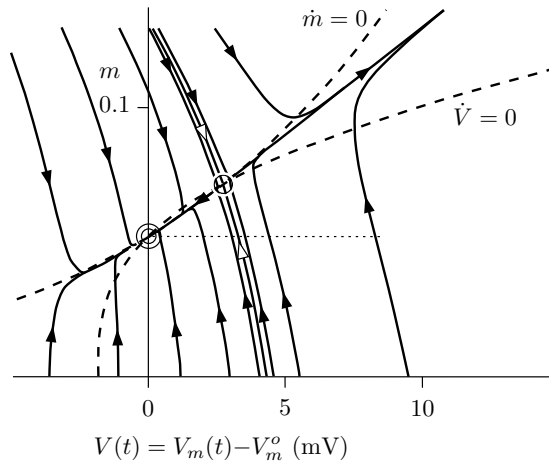
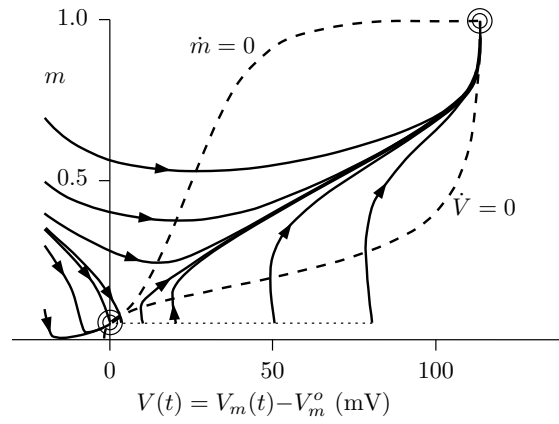


Figure 4.49

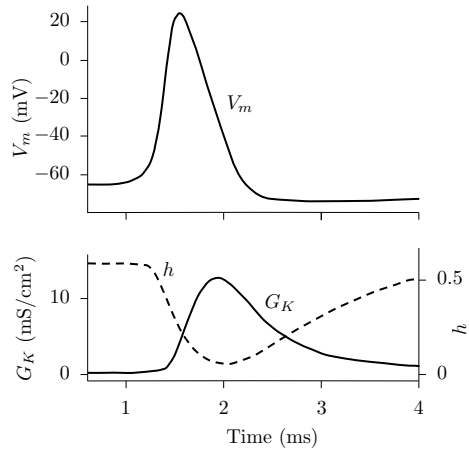


Figure 4.52

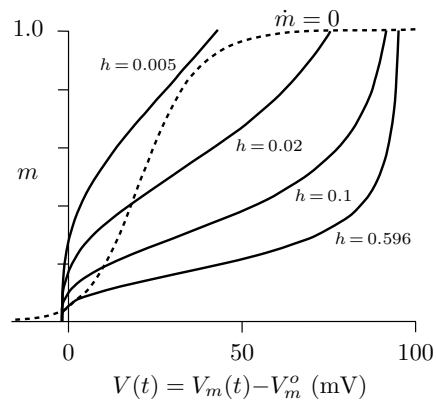


Figure 4.53