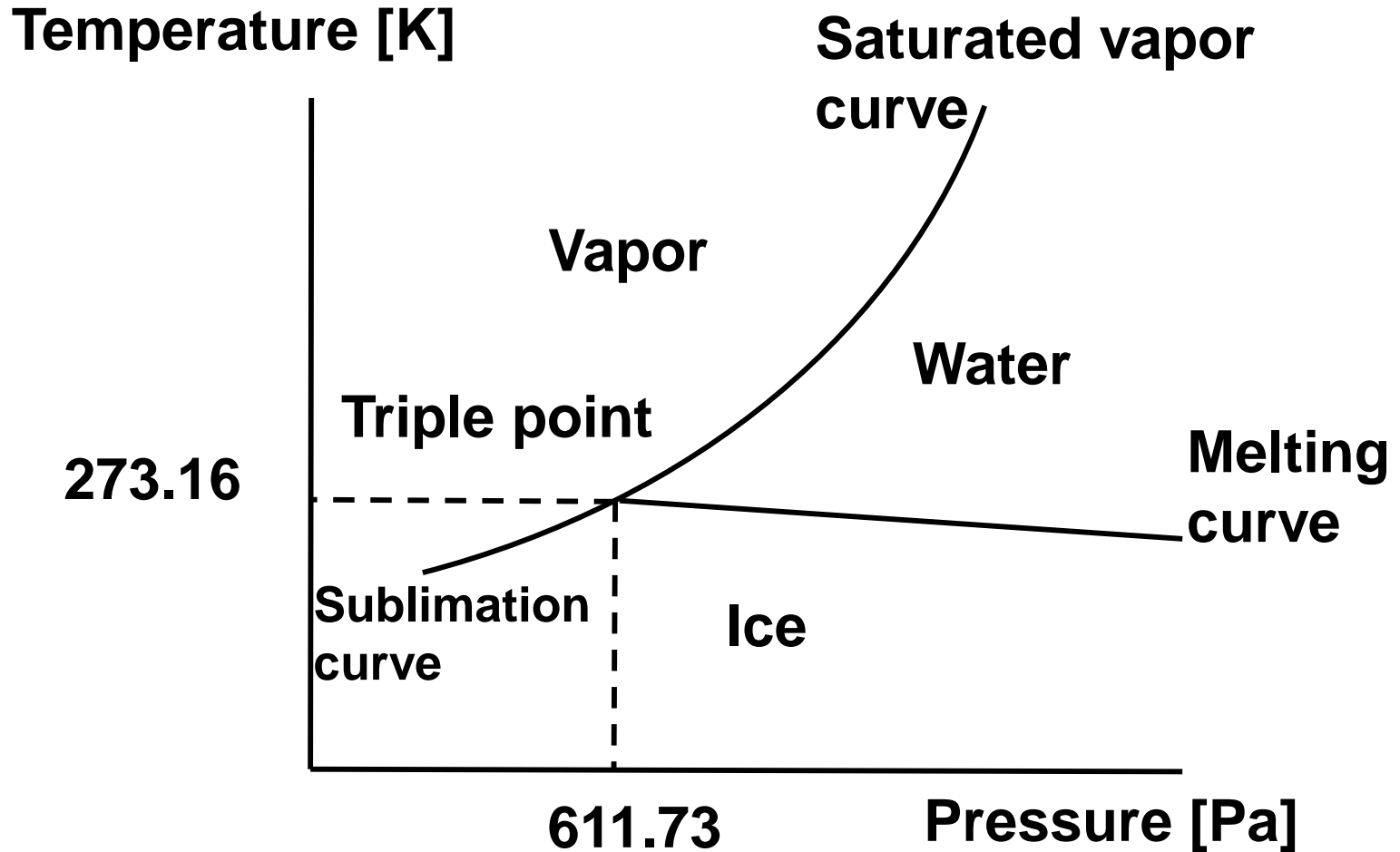


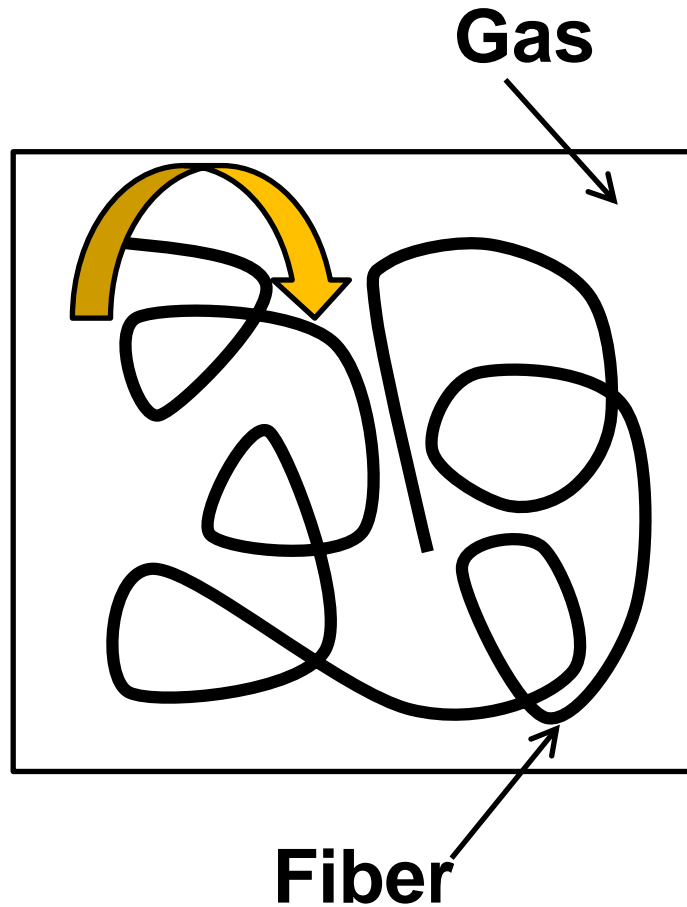
Fig. 5.1: Triple point of water



(Le Chatelier's principle)

Fig. 5.2: Insulation material

(a) Convection



(b) Conduction

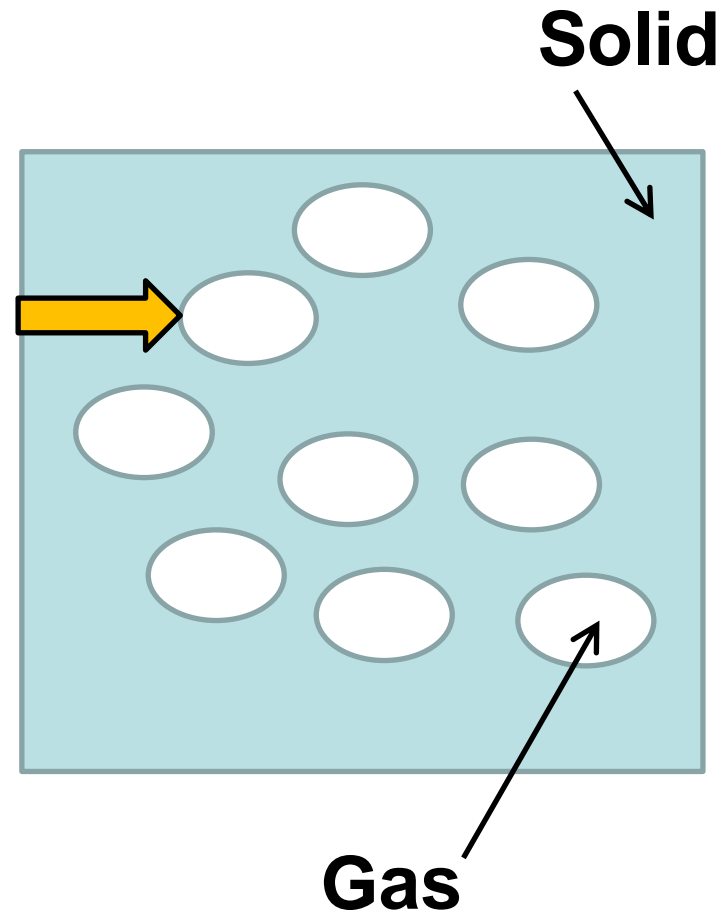


Fig. 5.3: Adiabatic compression and expansion

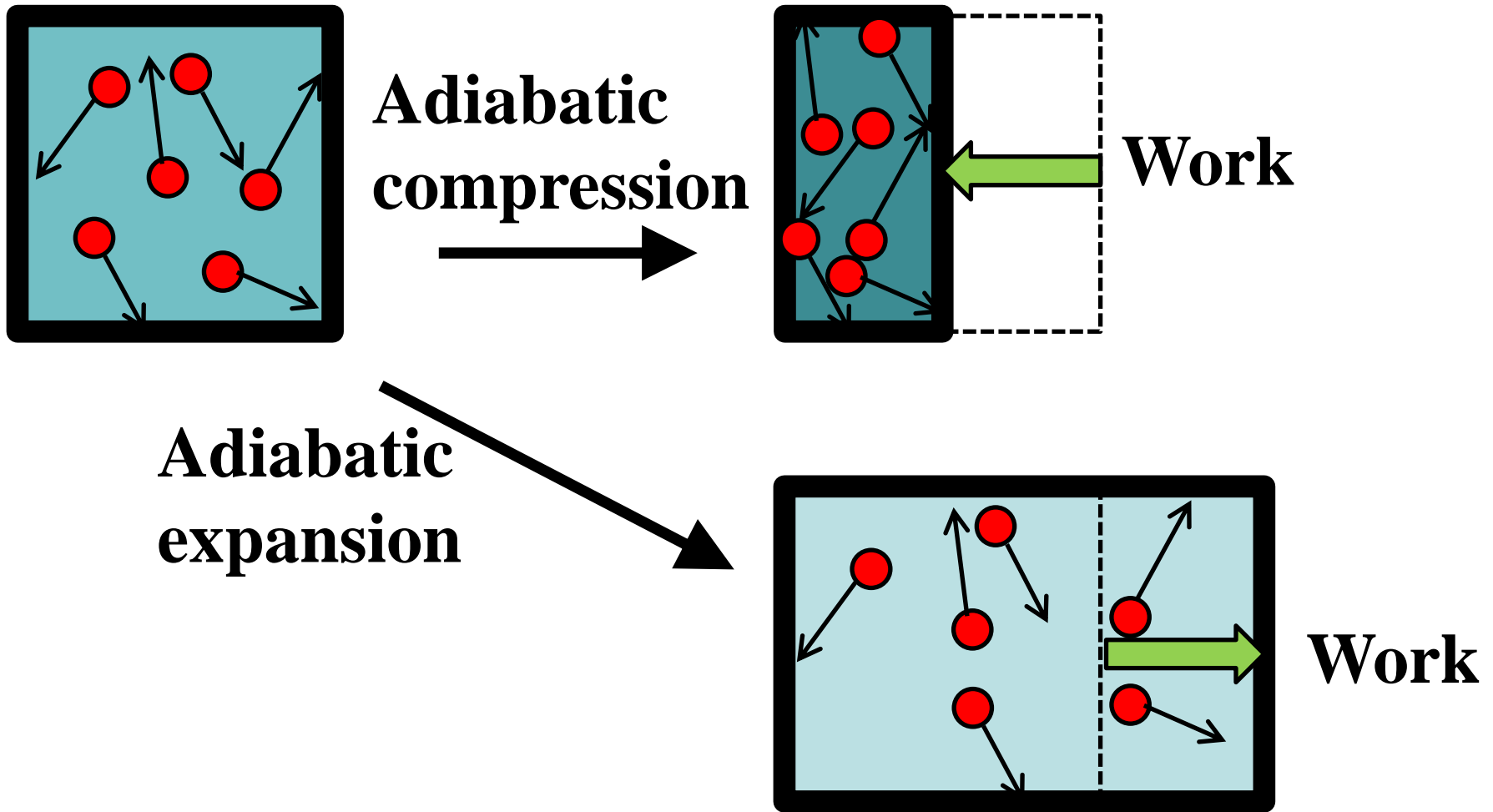


Fig. 5.4: Heat exchanger

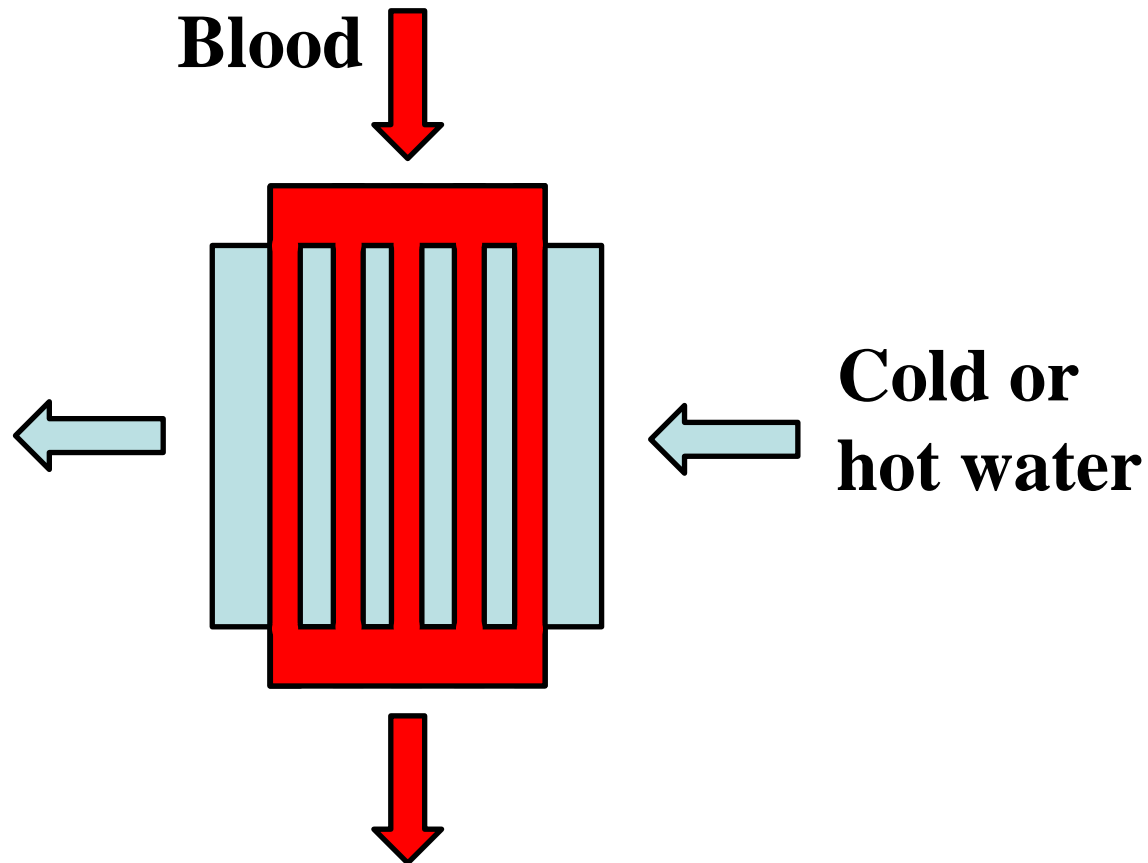


Fig. 5.5: Thermography

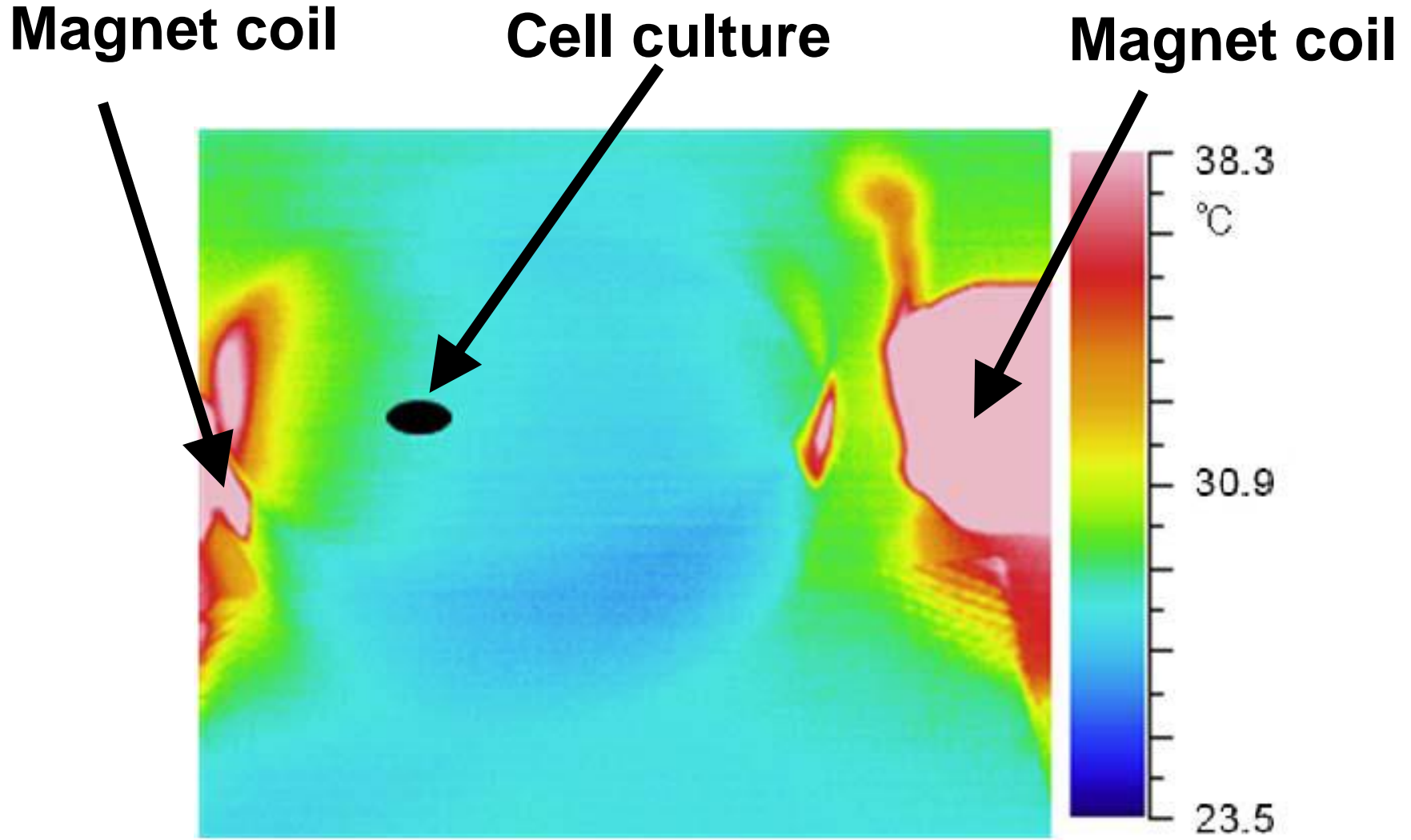
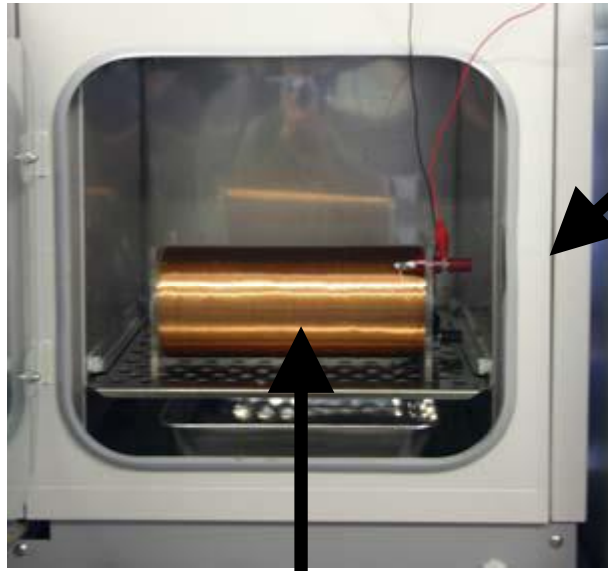
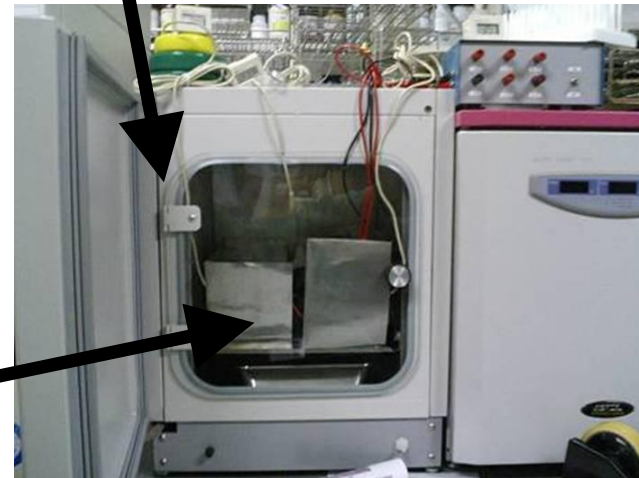


Fig. 5.6: Cell culture in magnetic field



Coil

CO₂ Incubator



Magnetic shield

Fig. 5.7: Membrane destruction during freeze

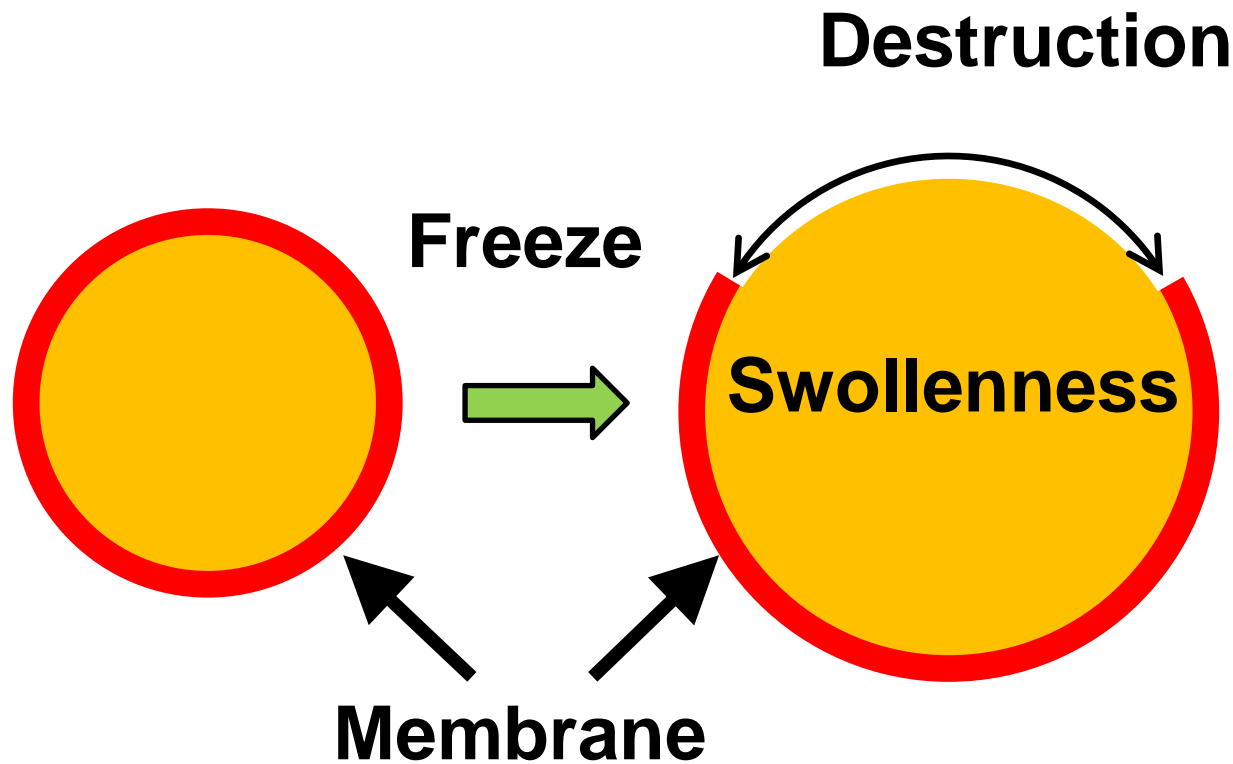
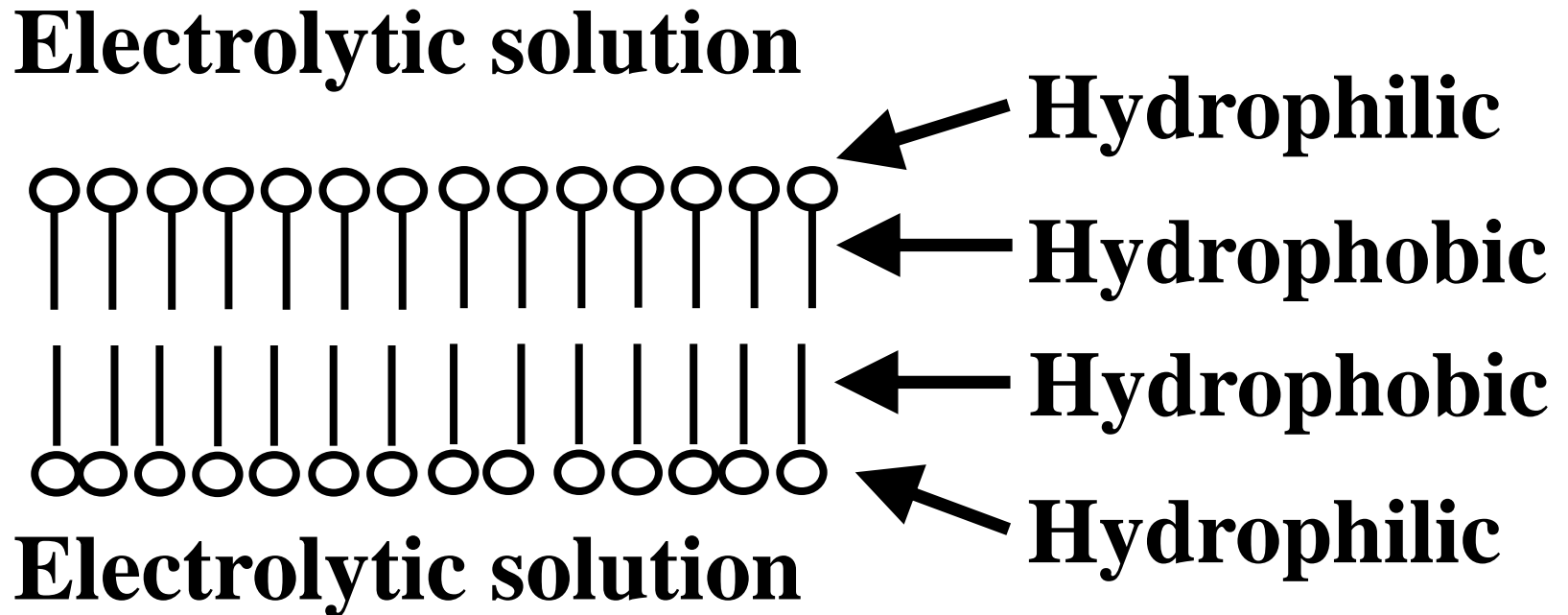


Fig. 5.8: Lipid bi-layer



(liquid crystal)

Fig. 5.9: Flow measurement with catheter

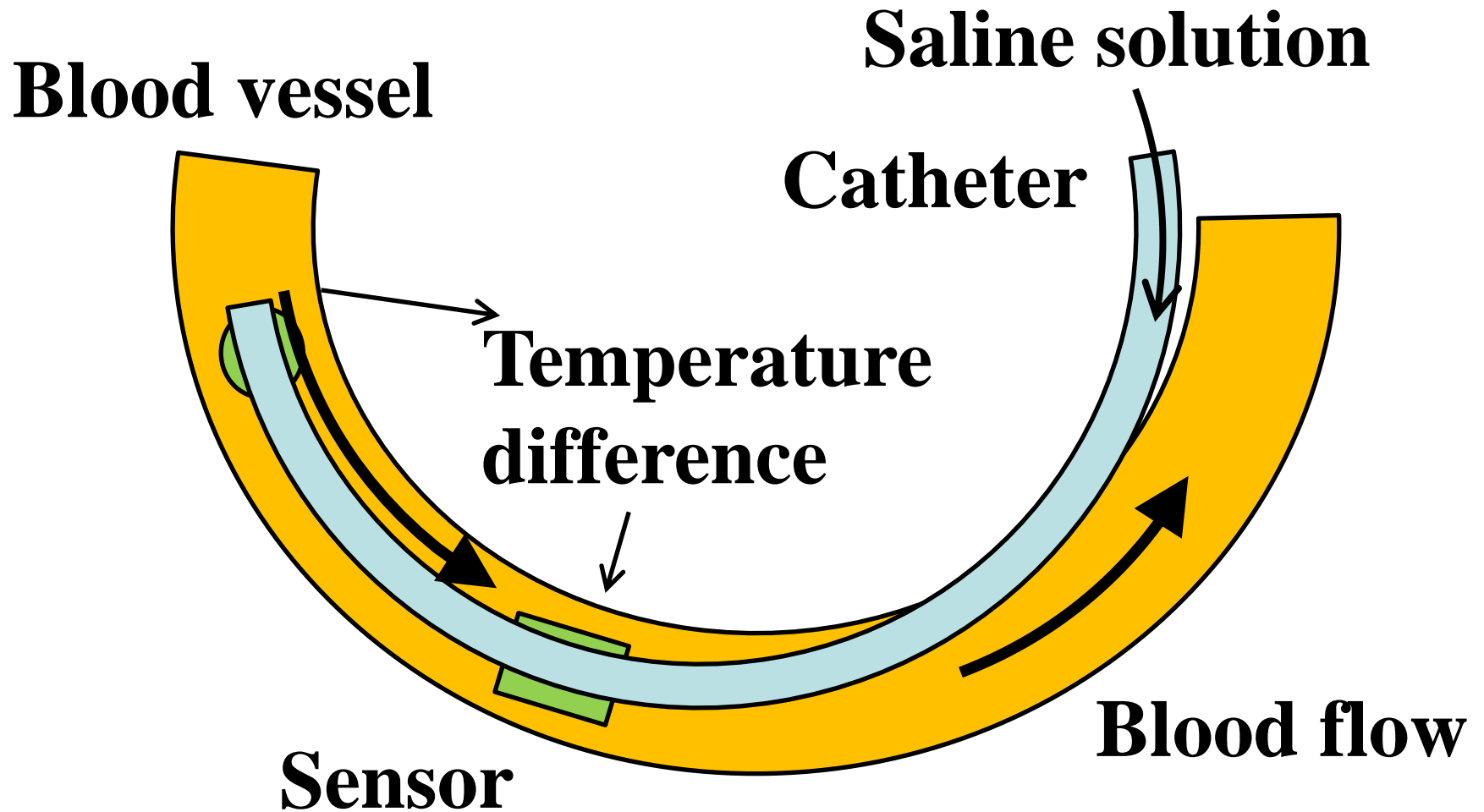
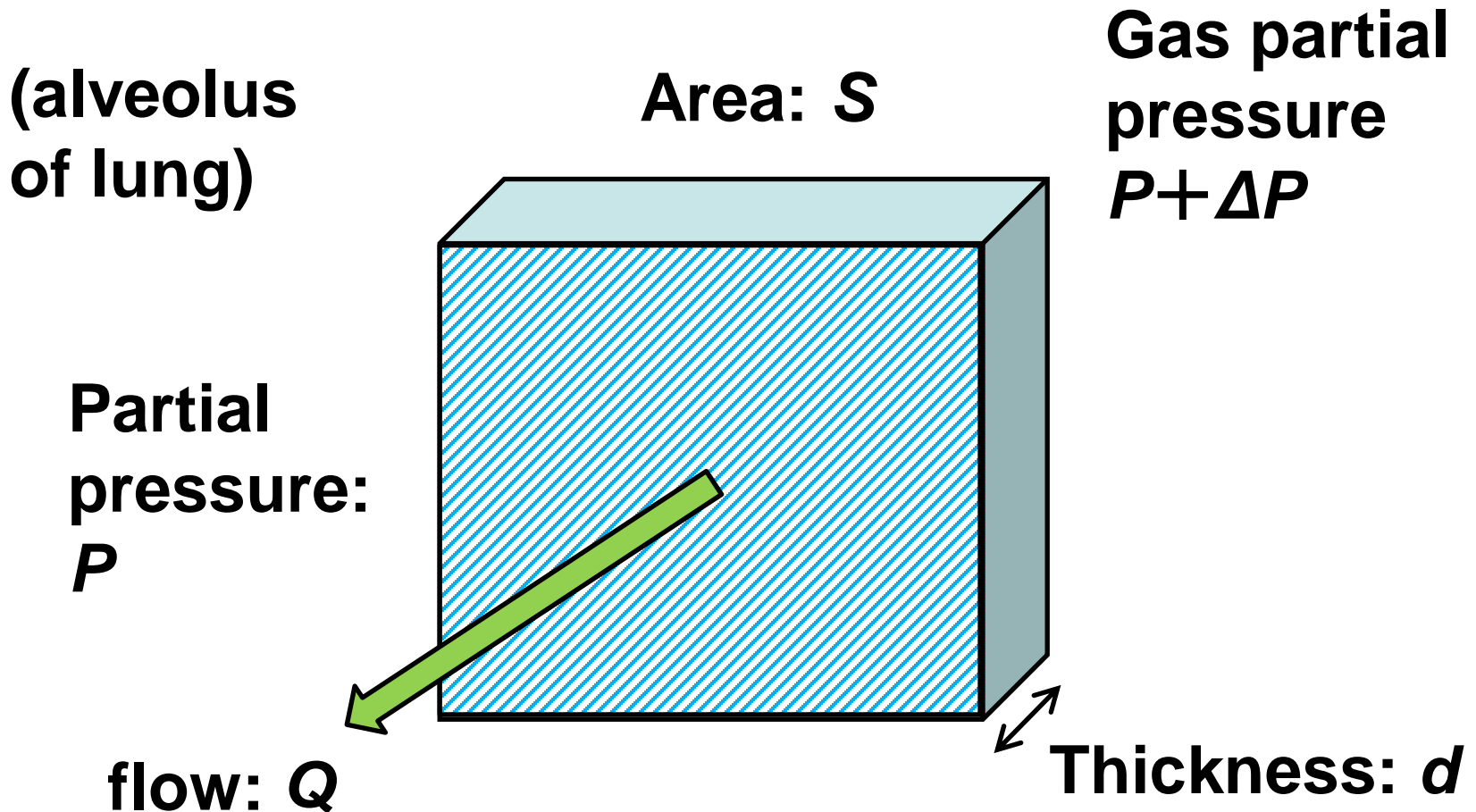


Fig. 5.10: Transport through membrane



$$Q \propto S \Delta P / d \quad (5.7)$$

Fig. 5.11: Acceleration of permeability

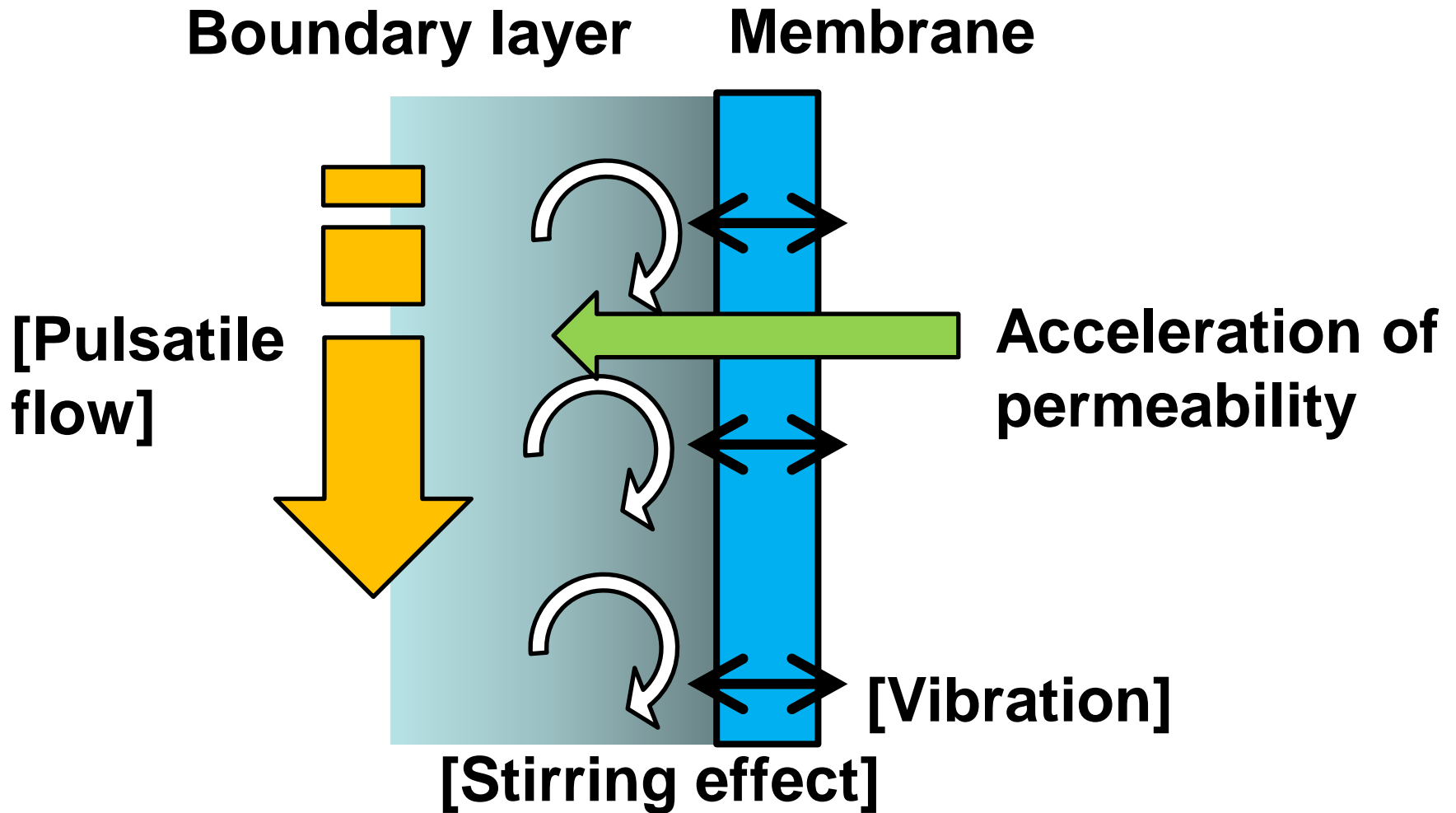


Fig. 5.12: Vibrating membrane oxygenator

Valve

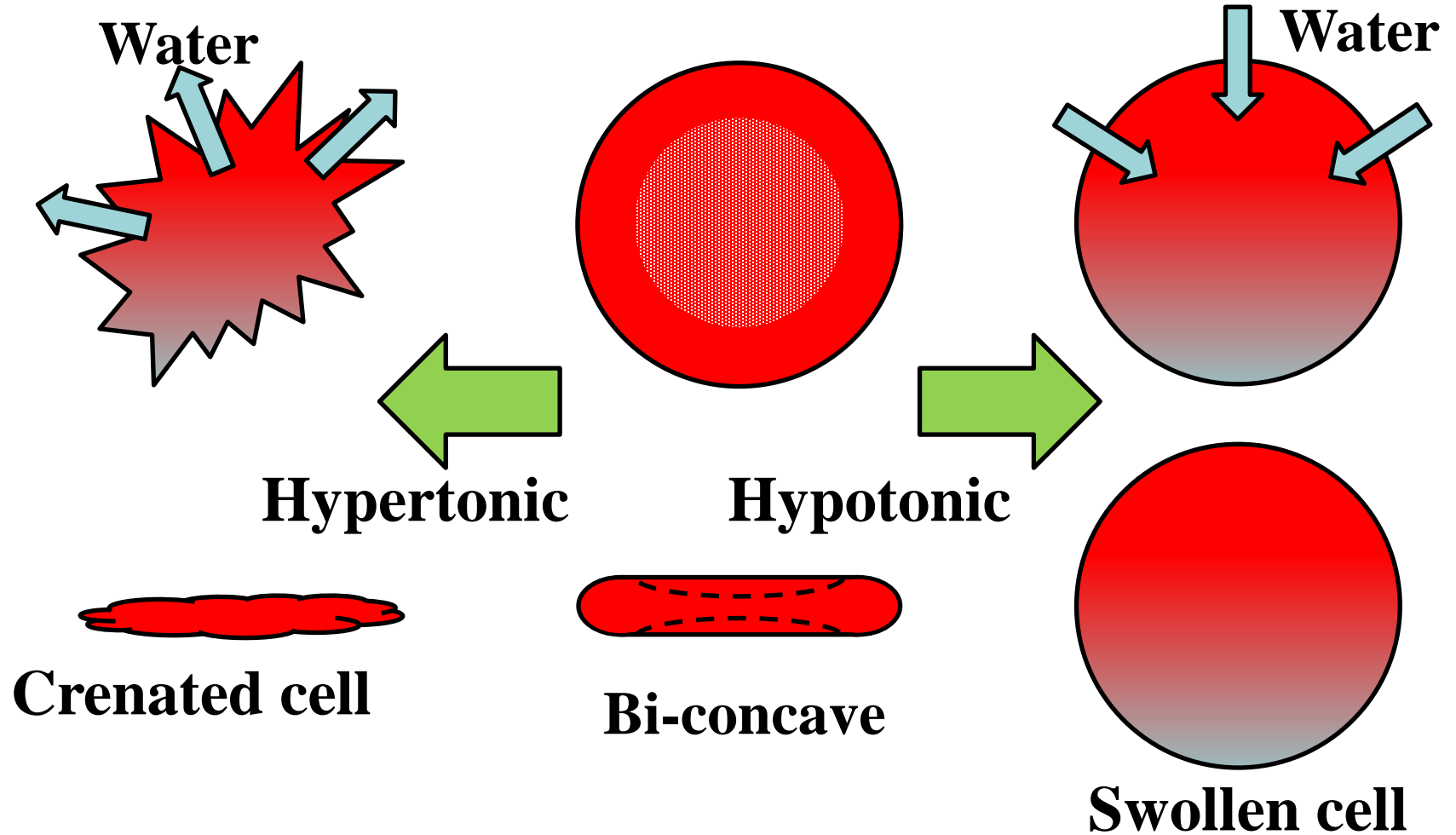
Silicone
tube



Valve

10 cm

Fig. 5.13: Erythrocyte deformation with osmotic pressure



Oncotic pressure, colloid osmotic pressure

Fig. 5.14: Erythrocyte osmotic fragility test

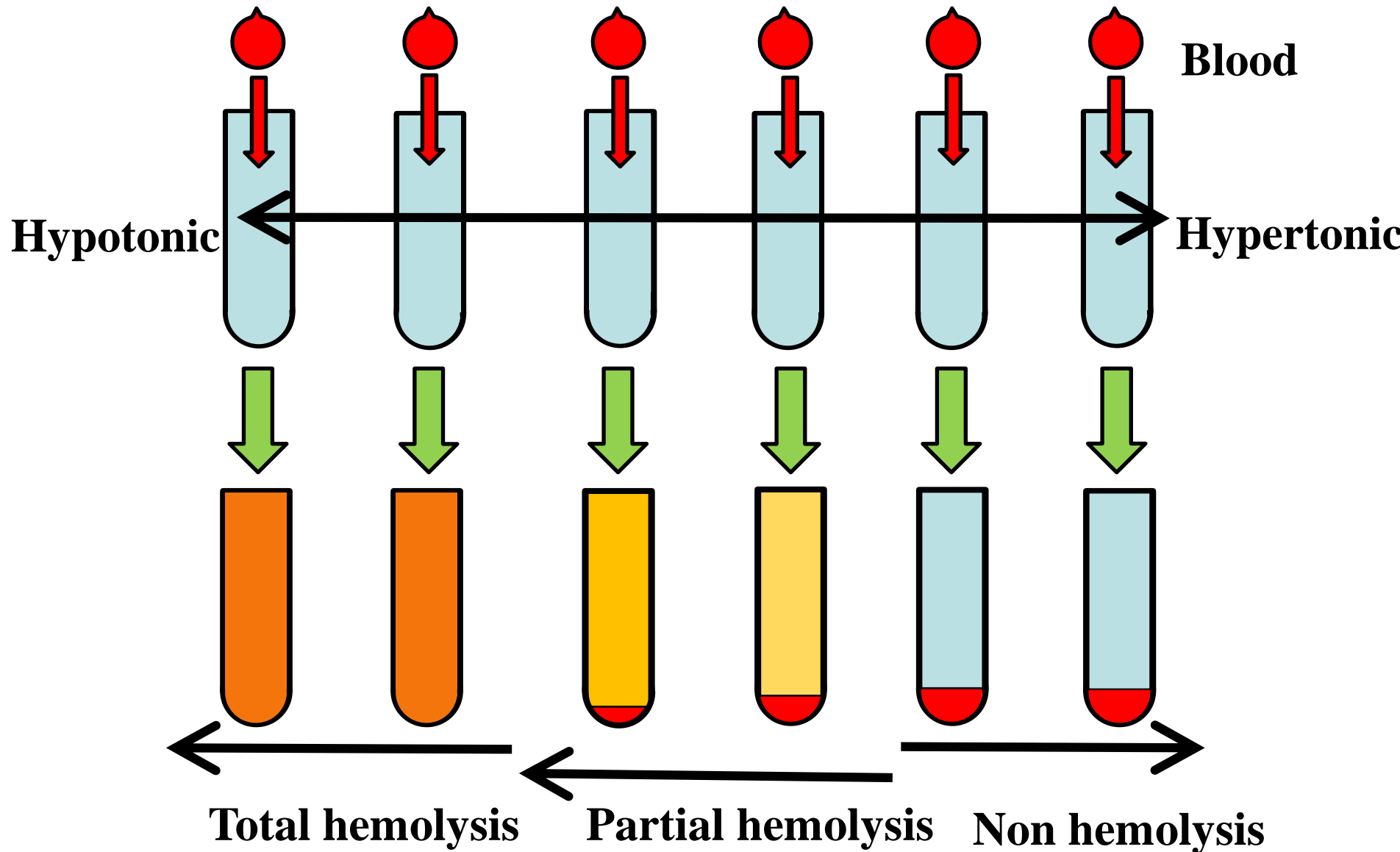


Fig. 5.15: Membrane potential

