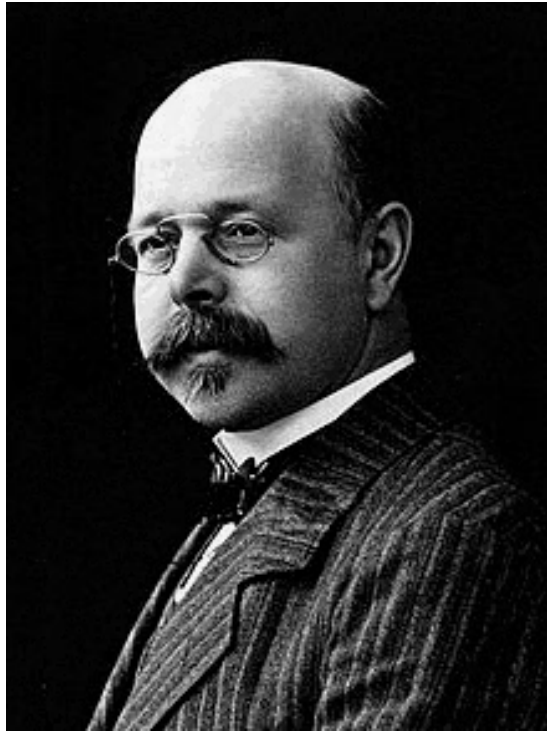


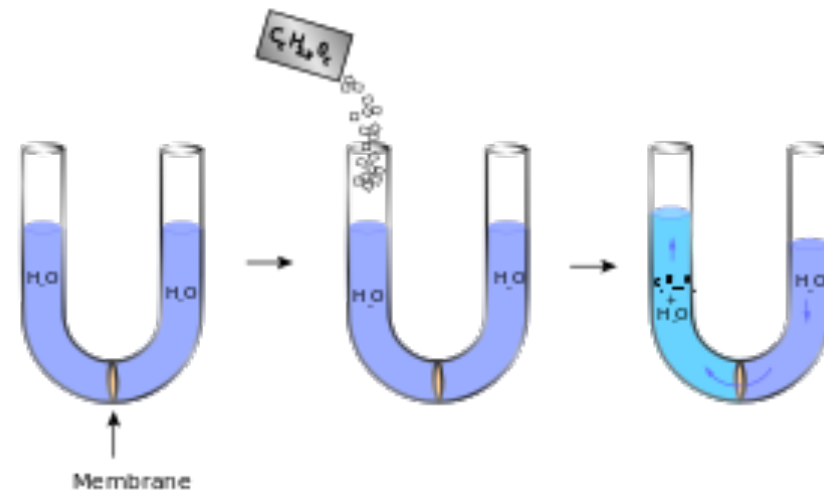
Walther Hermann Nernst 1864-1941



Incandescent lamp with Ceramic filament
Lamgmuir's student: tungsten filament

Chain reactions

Osmotic pressure



$$E = \frac{RT}{zF} \ln \frac{[\text{ion outside cell}]}{[\text{ion inside cell}]} = 2.3026 \frac{RT}{zF} \log_{10} \frac{[\text{ion outside cell}]}{[\text{ion inside cell}]}$$