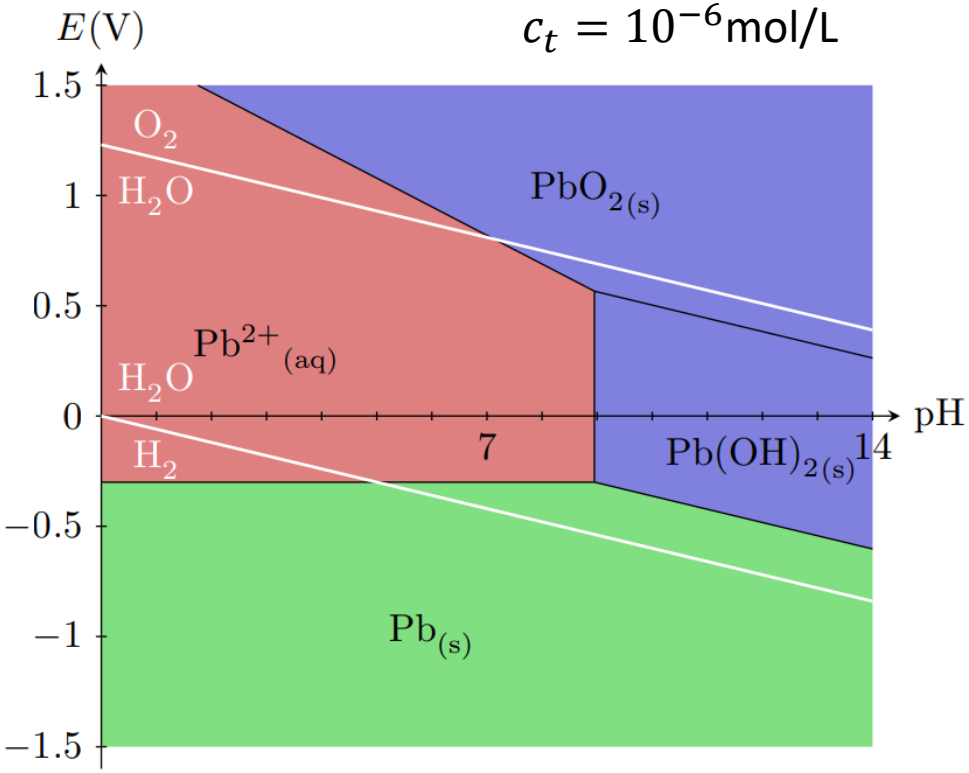
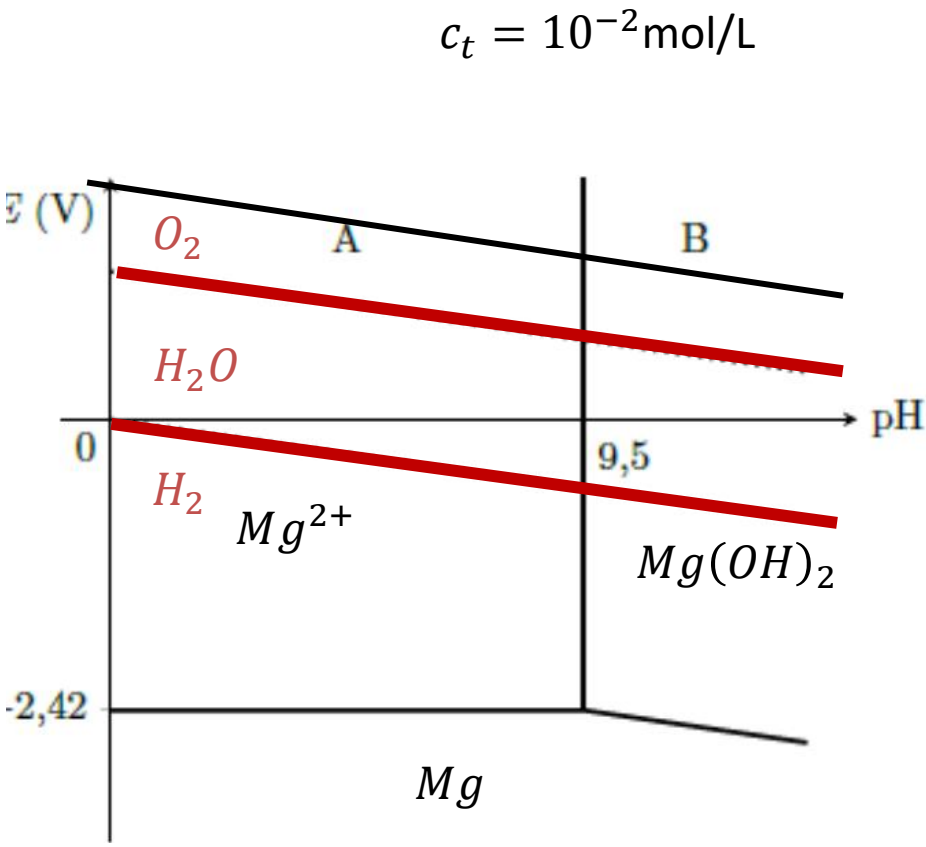
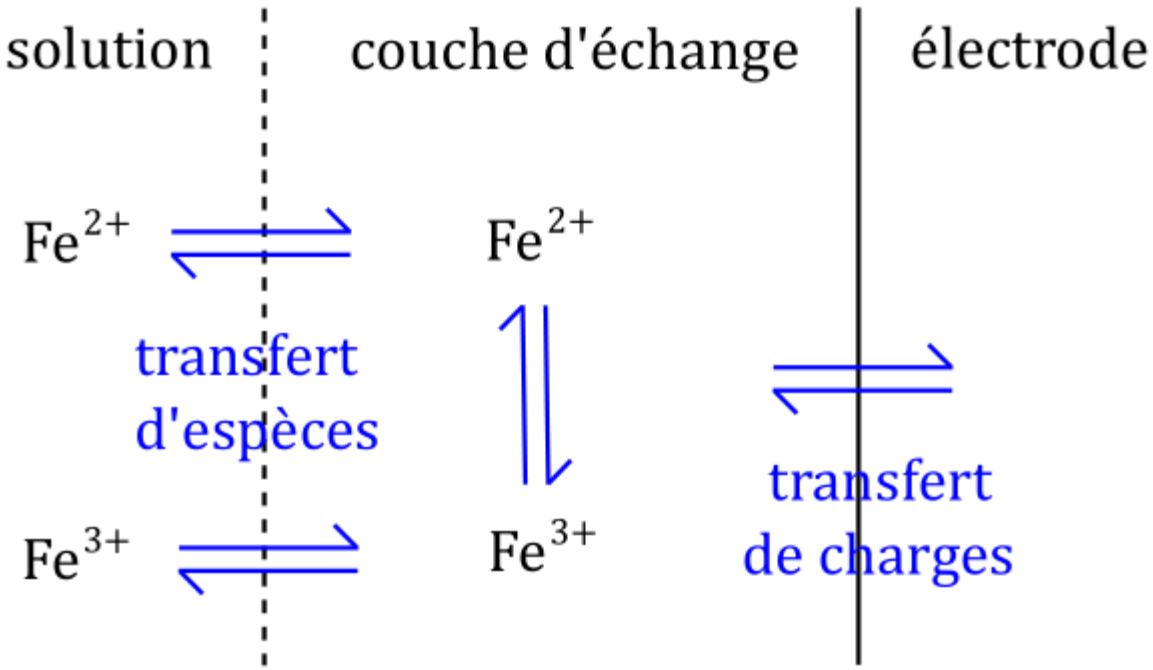
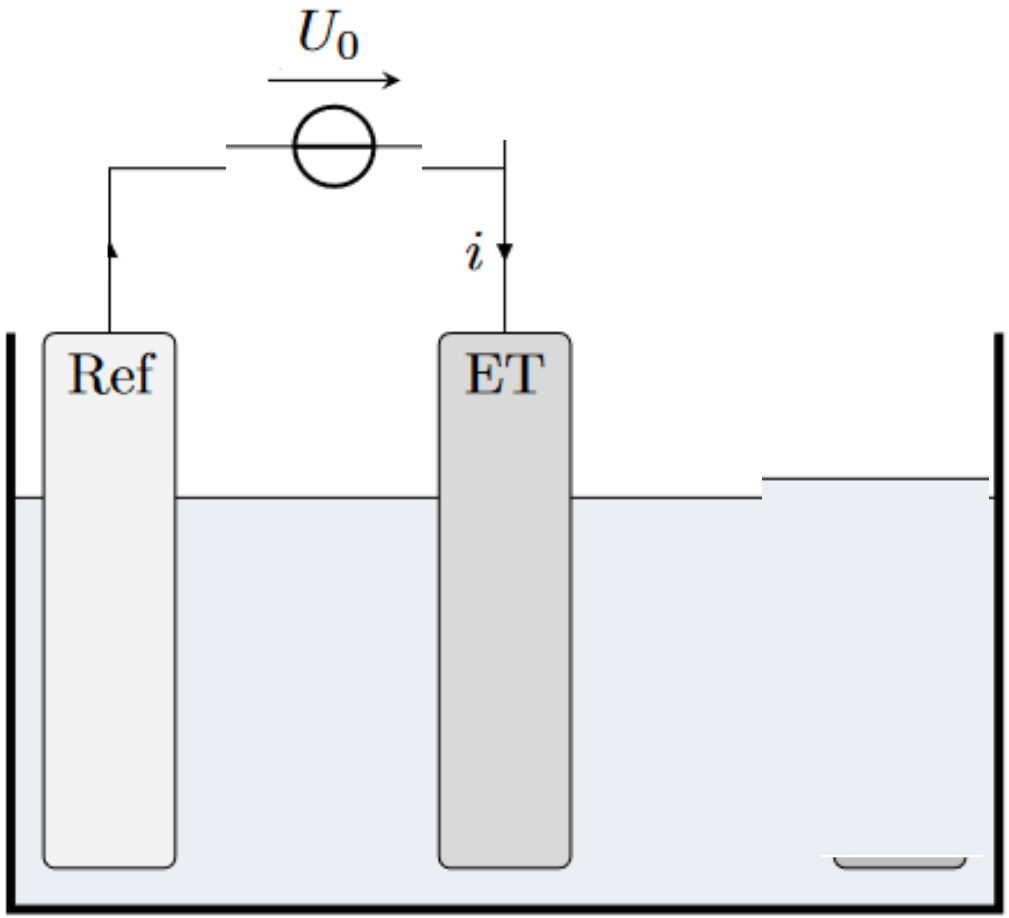




Source : C. Cabart


solution
couche d'échange
électrode
Fe^{2+}
Fe^{2+}
transfert
d'espèces
Fe^{3+}
Fe^{3+}
transfert
de charges

Montage à deux électrodes



Source : E. Thibierge

Montage à trois électrodes

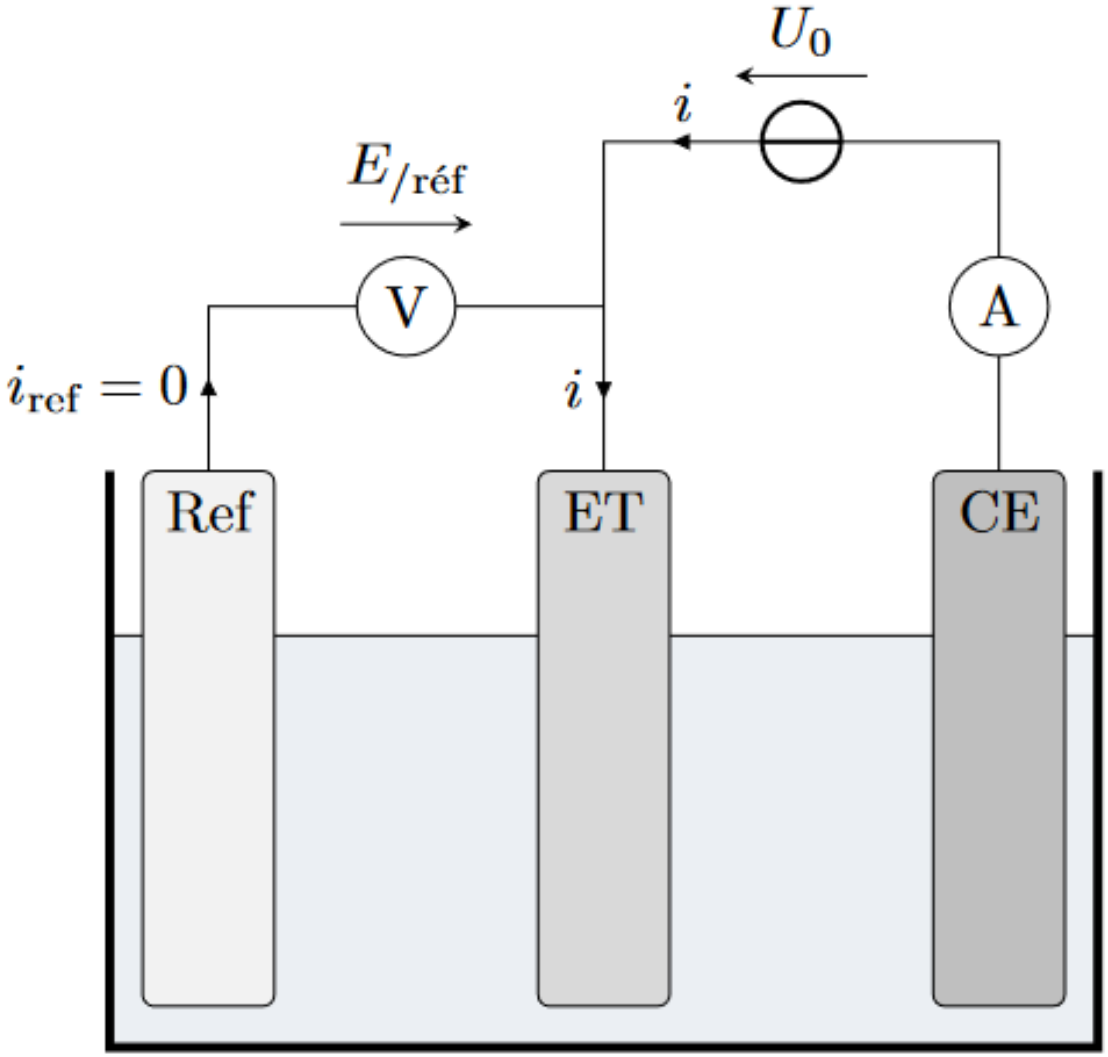
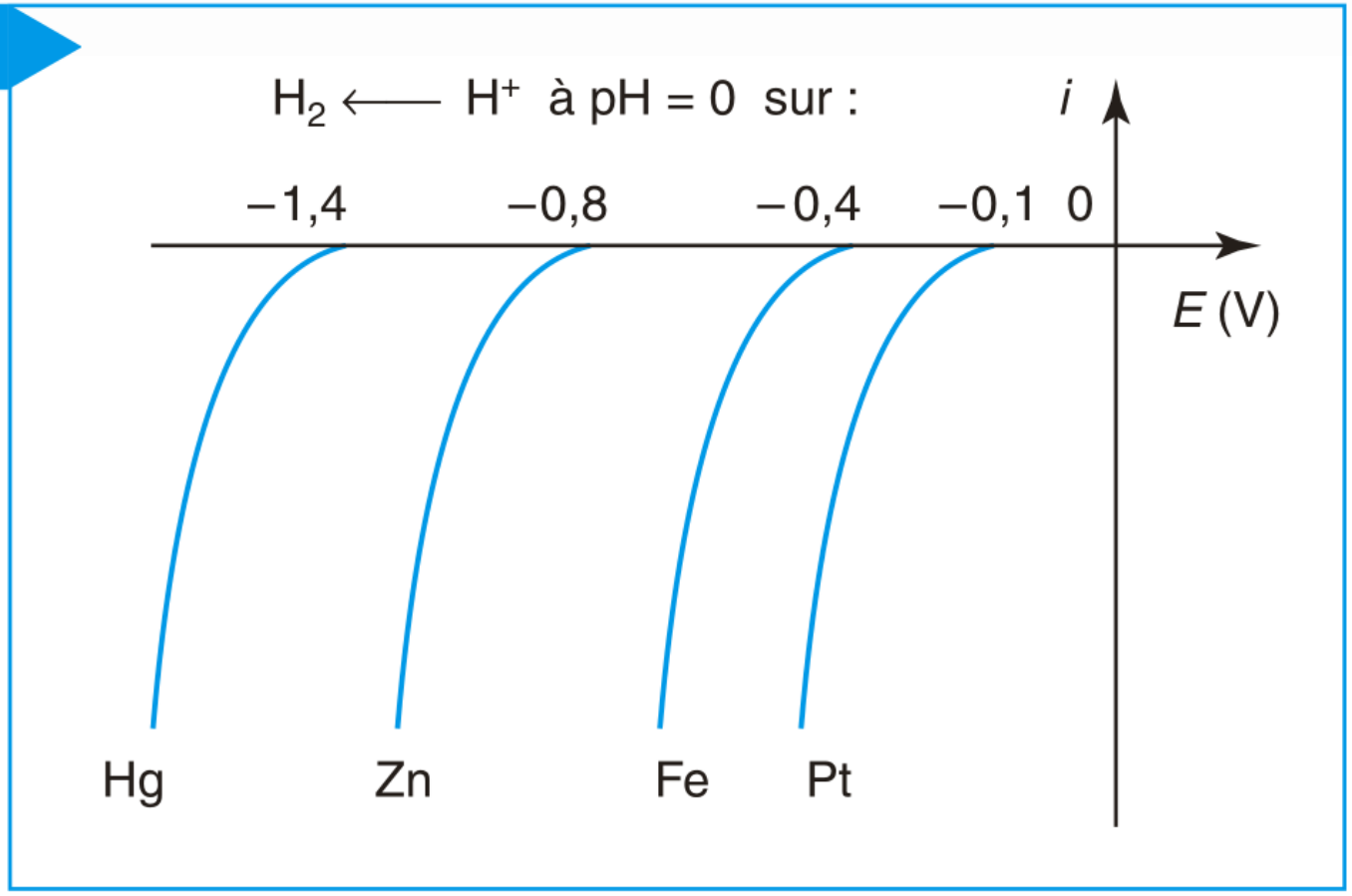


Figure 2 – Montage à trois électrodes.

Source : E. Thibierge

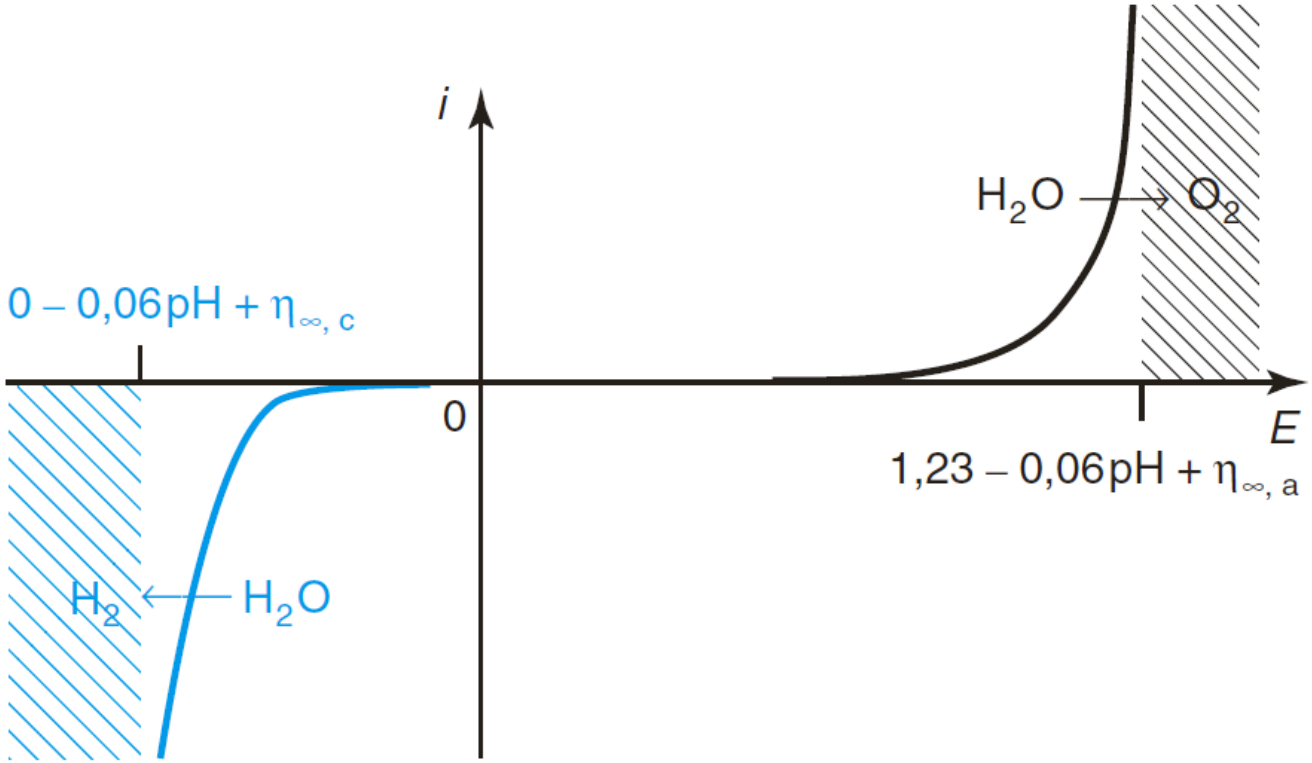
Surtensions

Fig. 2



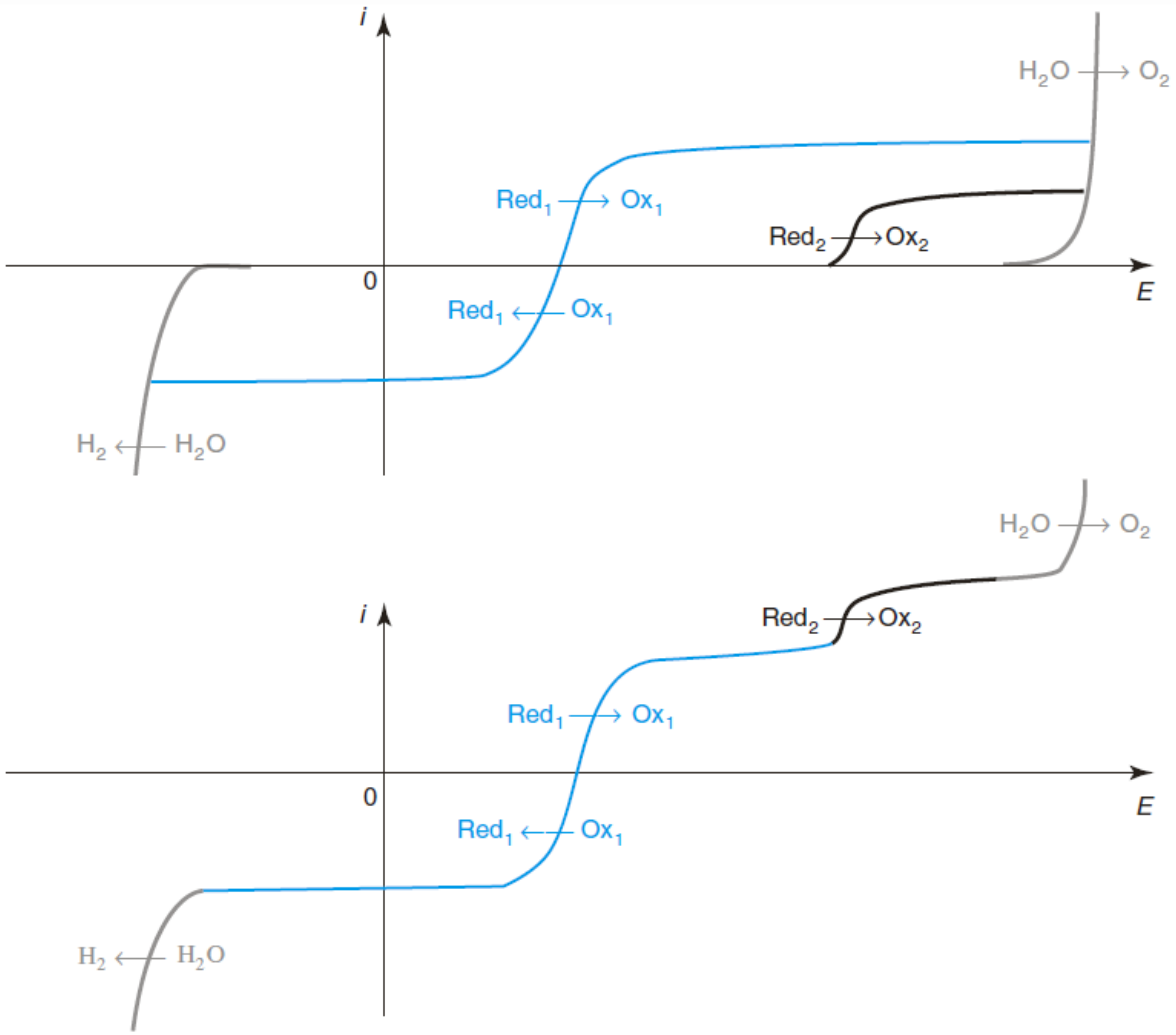
Nathan MP/PT

Mur du solvant

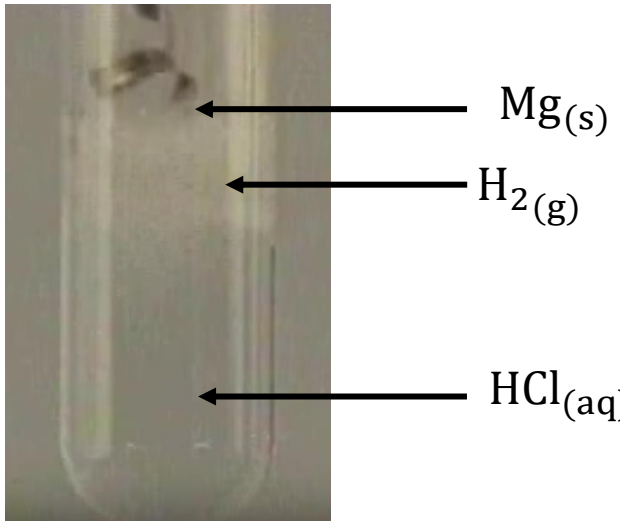


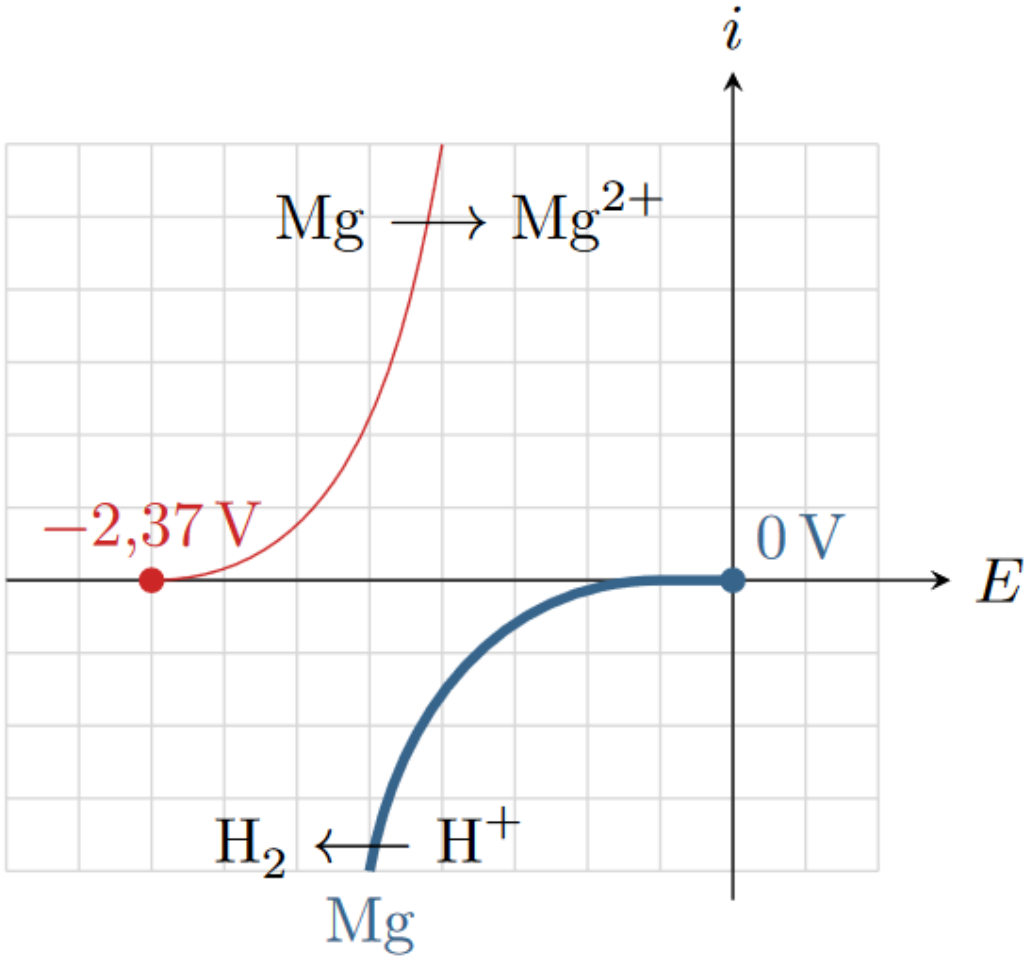
Nathan MP/PT

Additivité des courants

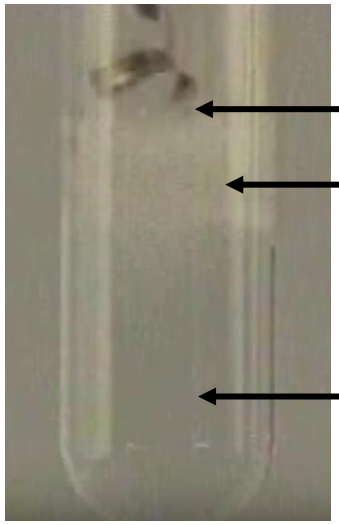


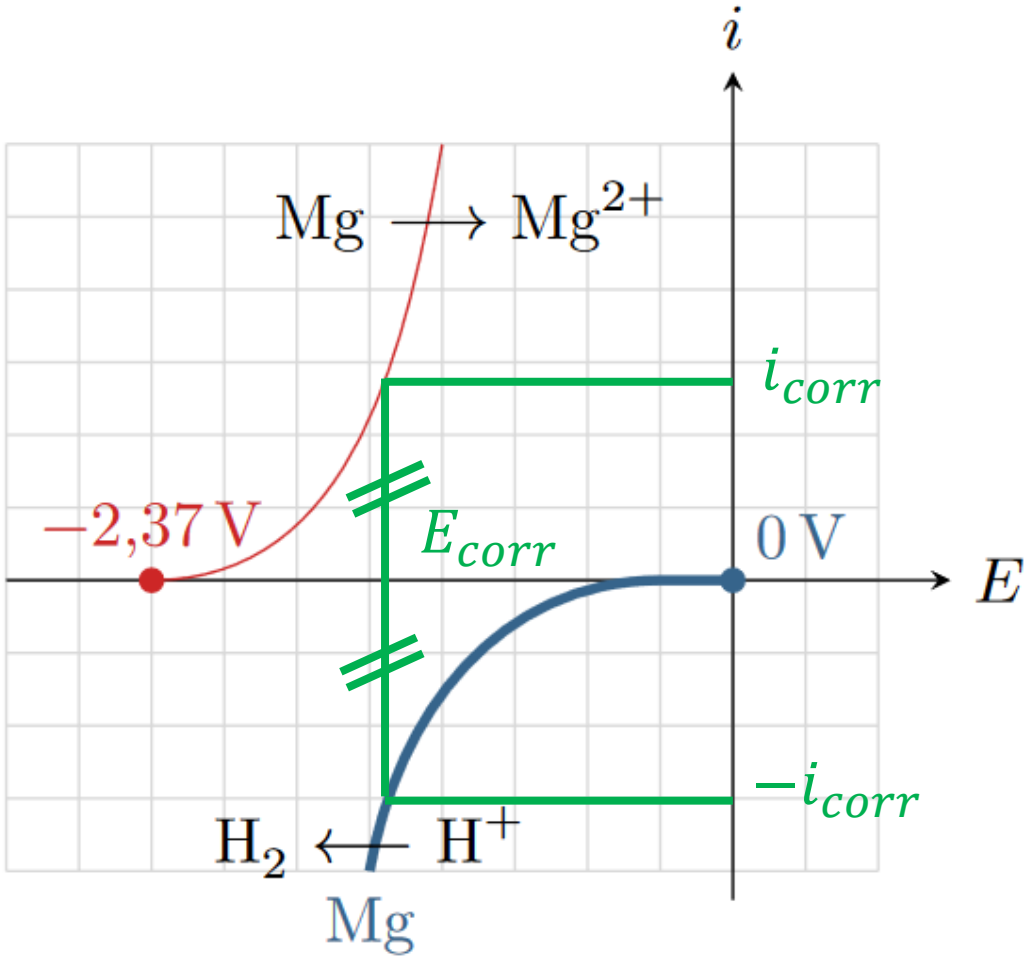
Nathan MP/PT





Source : E. Thibierge et https://www.youtube.com/watch?v=YlDlO7Aasm4





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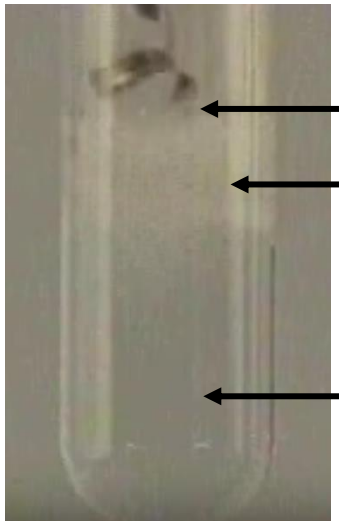
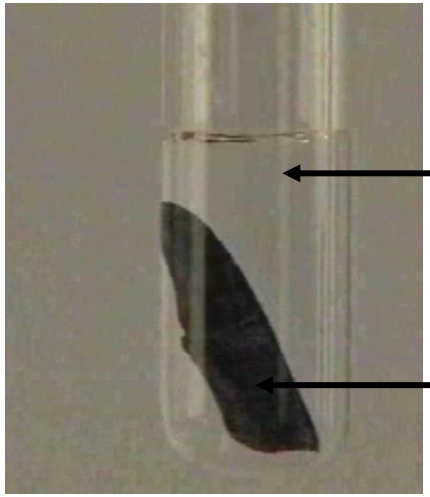
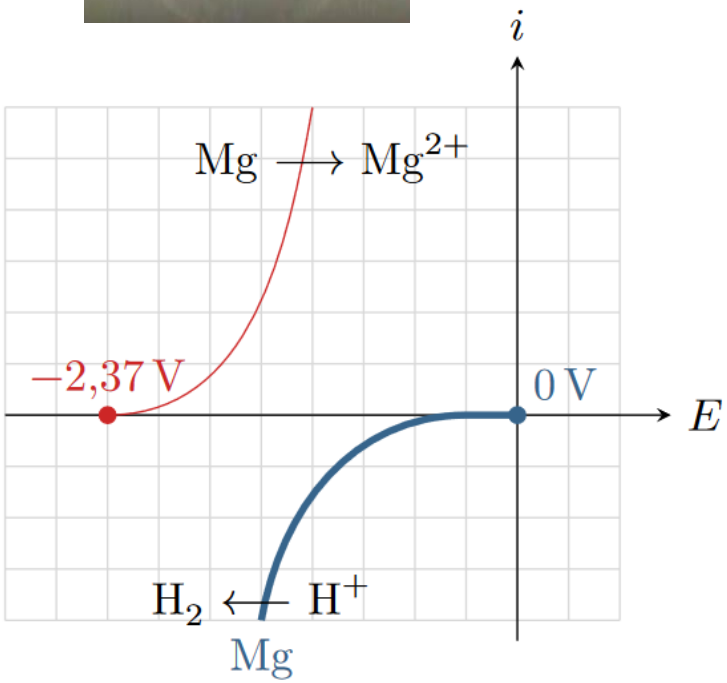
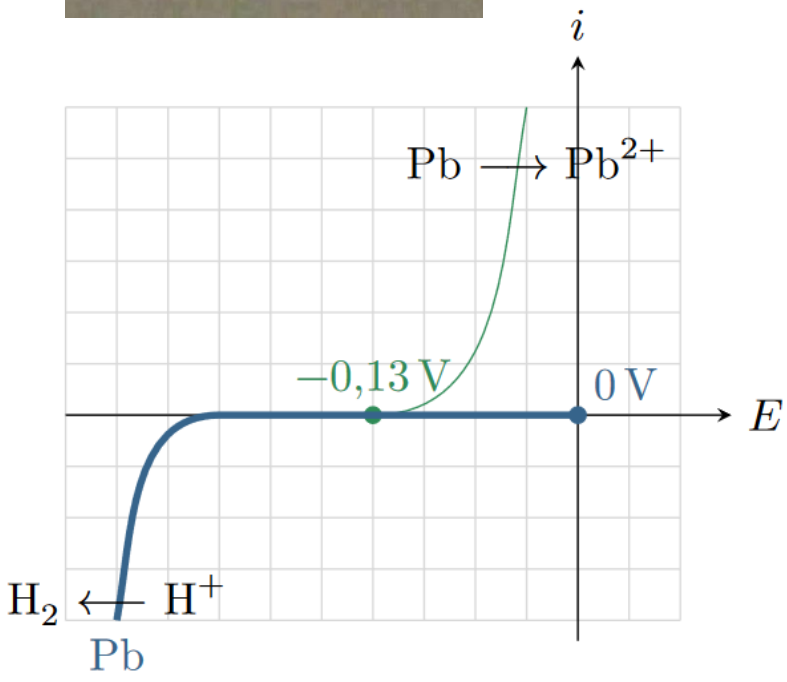




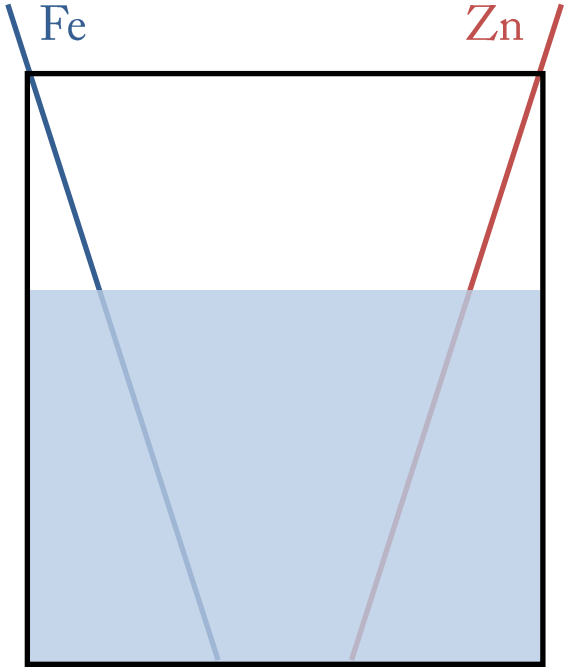




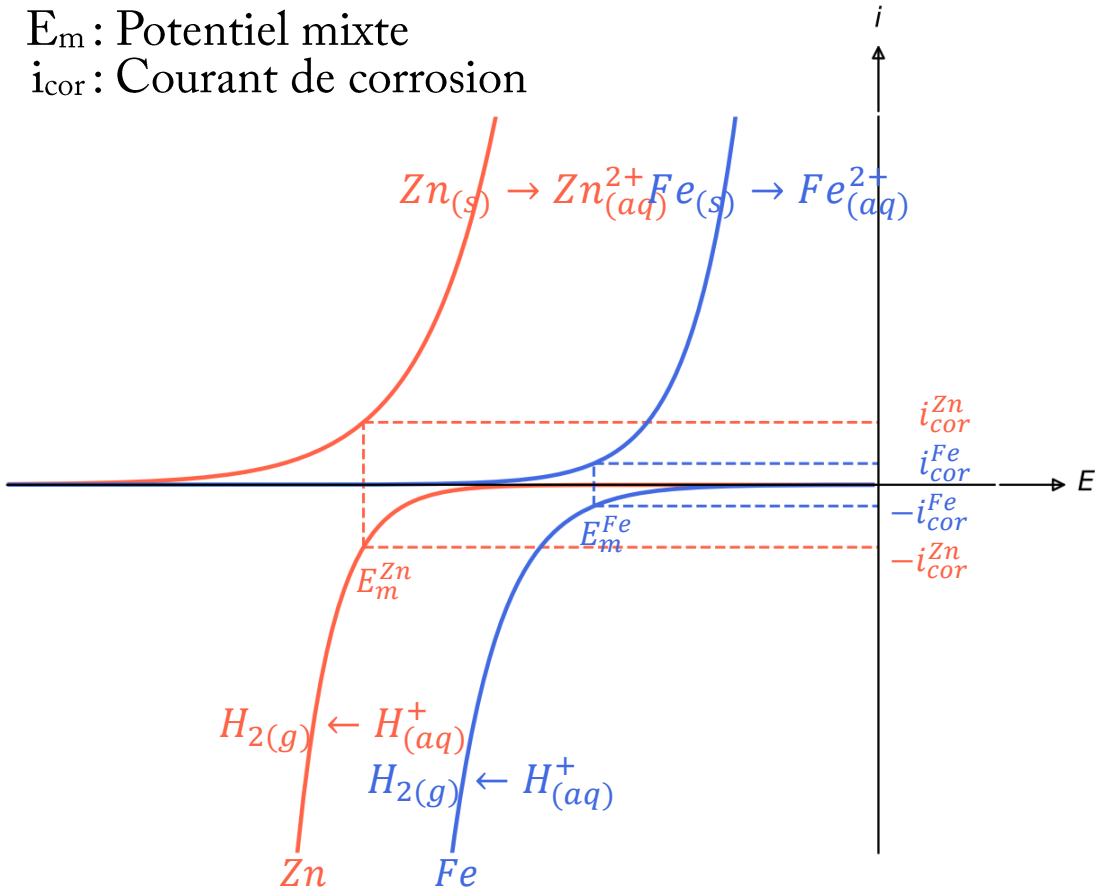
Blocage cinétique

Source : E. Thibierge et https://www.youtube.com/watch?v=YlDlO7Aasm4

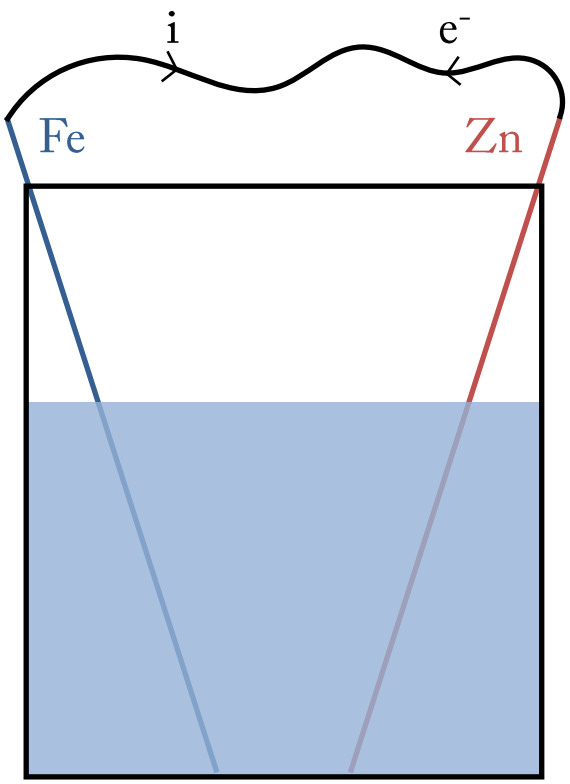
Les métaux sont séparés



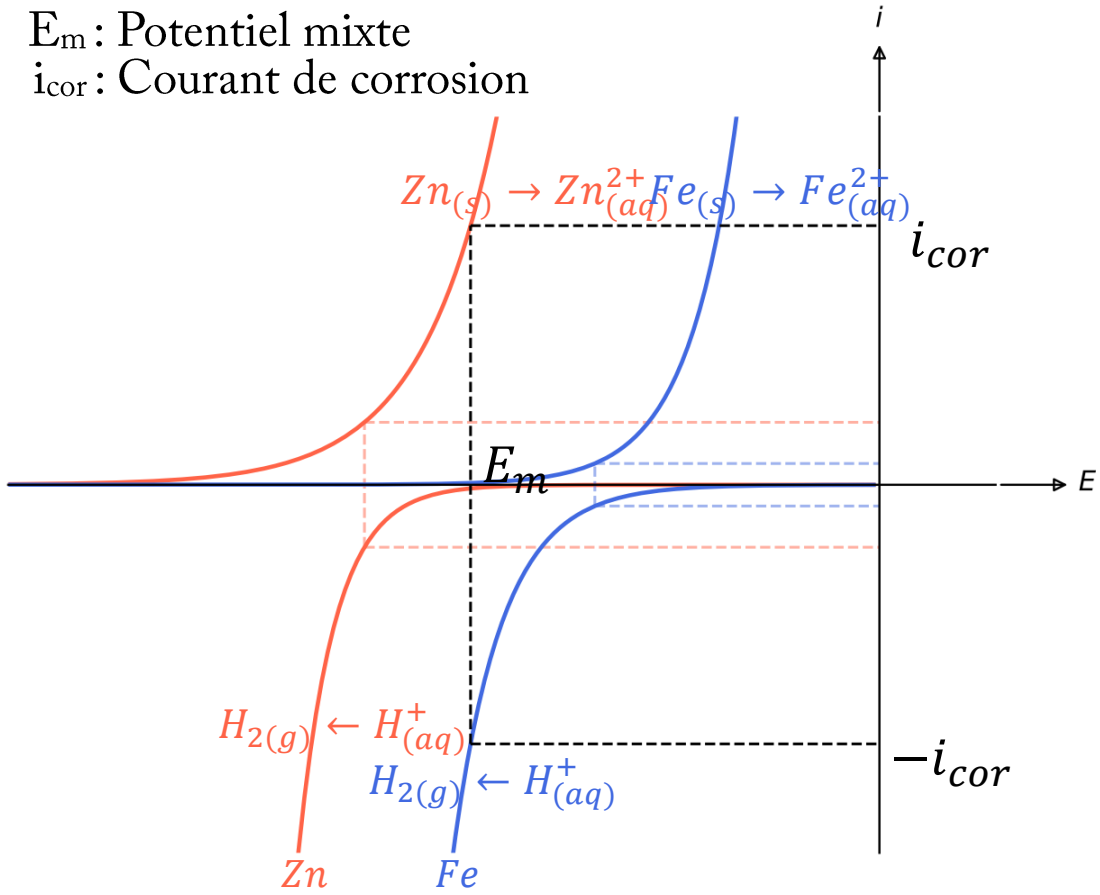
E_m : Potentiel mixte
i_{cor} : Courant de corrosion



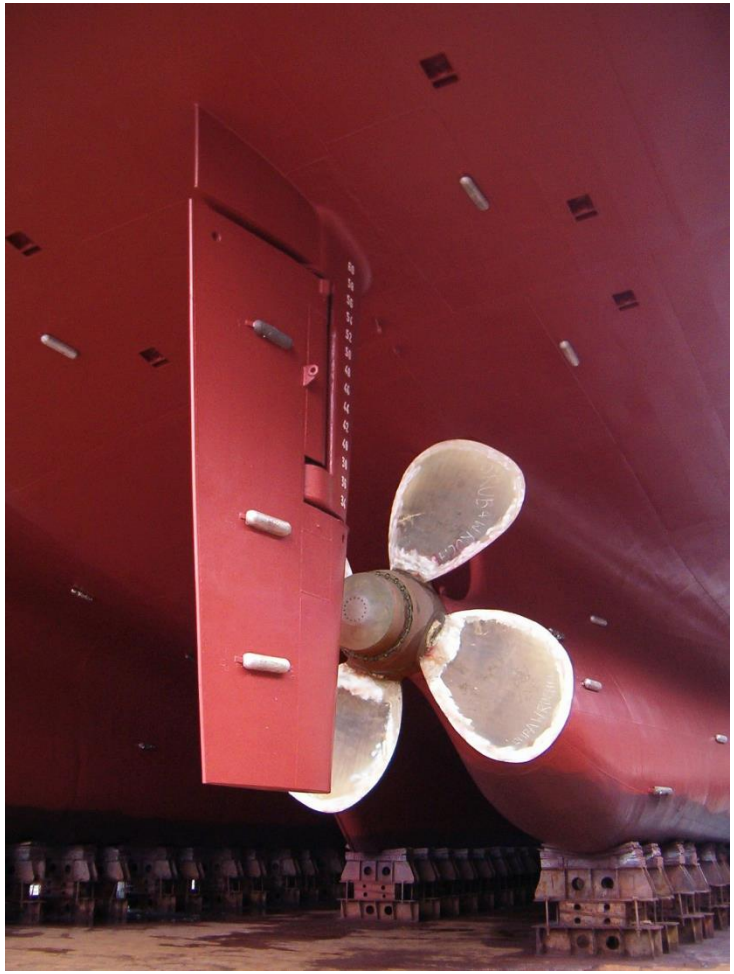
Les métaux sont reliés électriquement



E_m : Potentiel mixte
i_{cor} : Courant de corrosion



Anode sacrificielle de zinc sur un bateau



Source : h2o bateau

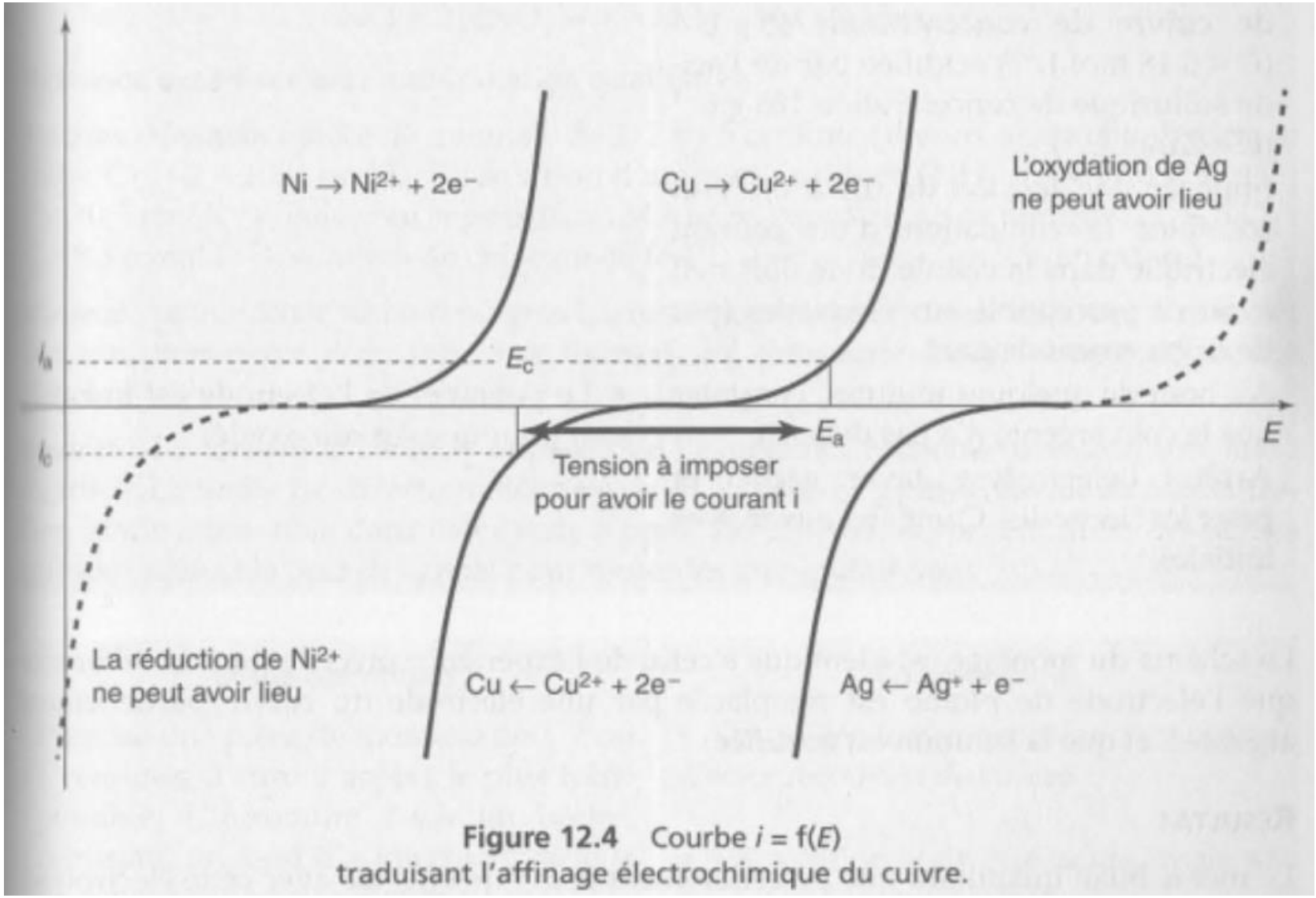
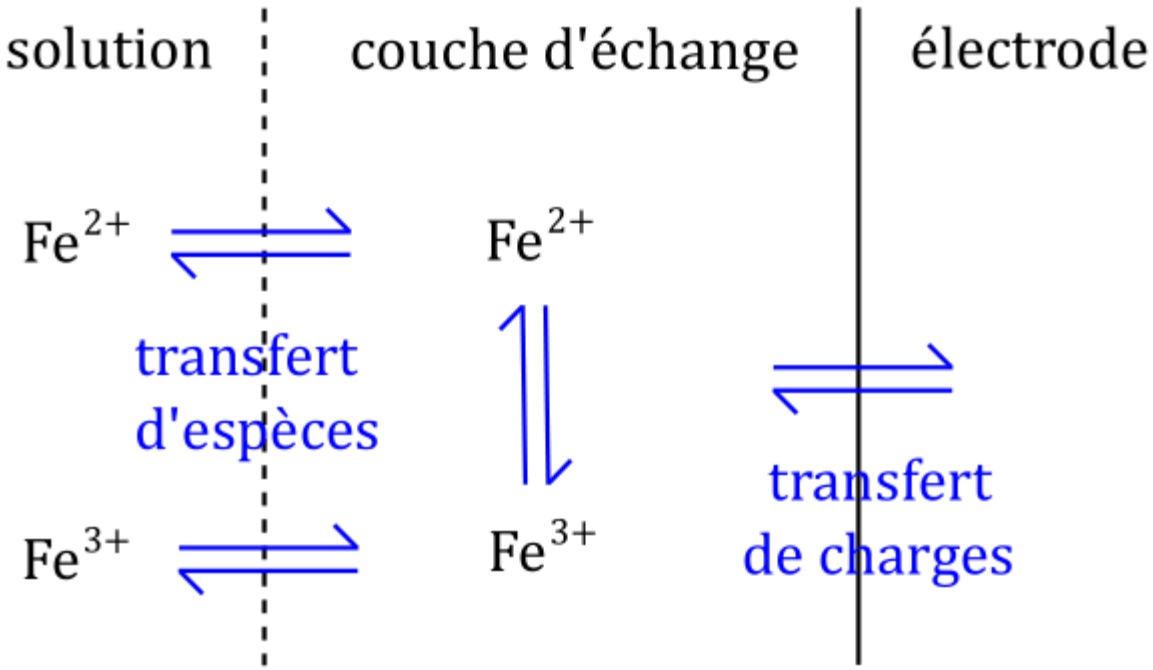
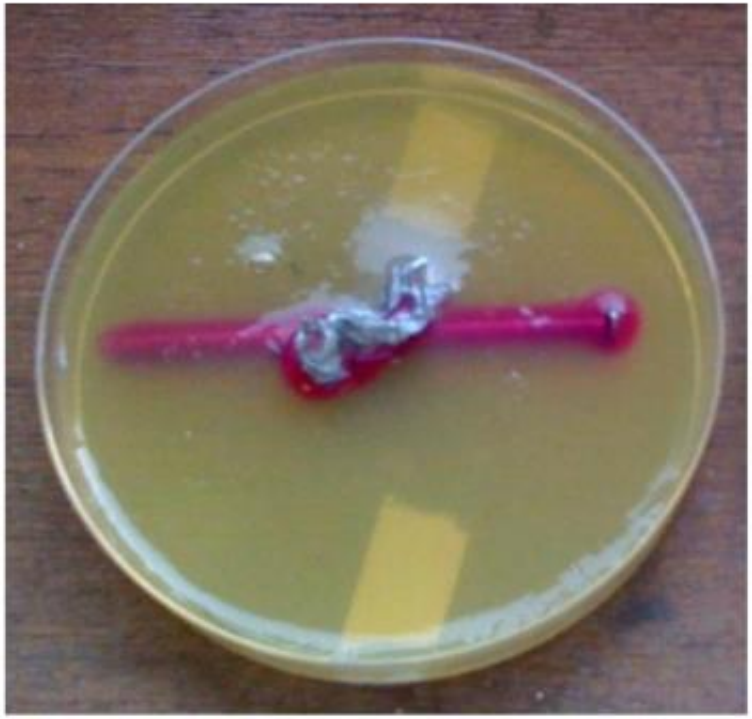


Figure 12.4 Courbe $i = f(E)$ traduisant l'affinage électrochimique du cuivre.

Source: Le Maréchal


solution
couche d'échange
électrode
Fe^{2+}
Fe^{2+}
transfert
d'espèces
Fe^{3+}
Fe^{3+}
transfert
de charges

Fer seul : oxydation du fer (couleur bleue)



Protection du fer avec du zinc

Source : http://gwenaelm.free.fr/Physique/Physchim/capes/Doc/Julien_Durero/C25%20-%20Courbes%20intensite%20potentiel.pdf

c = 0.01 mol/L, égalité des concentrations aux frontières

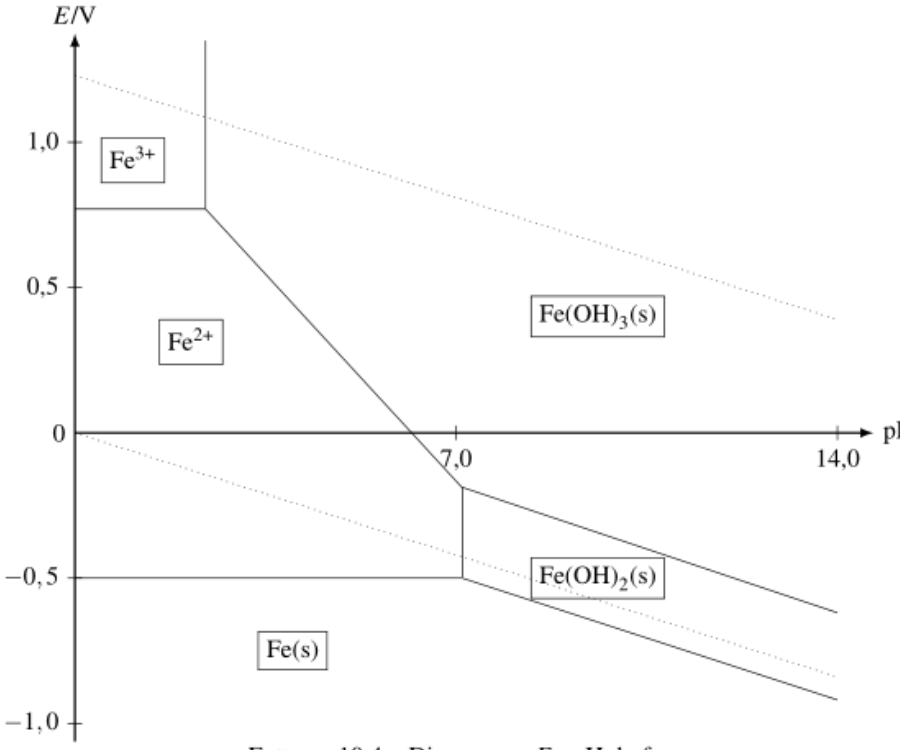


FIGURE 10.4 – Diagramme $E-$pH du fer

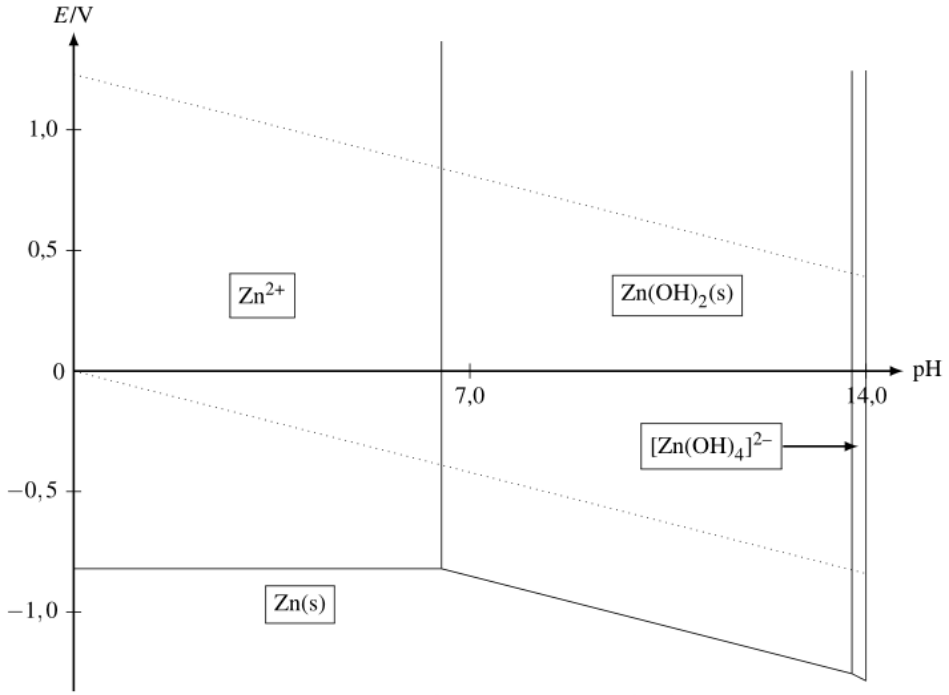


FIGURE 10.7 – Diagramme $E-$pH du zinc

Fosset, MPSI Chimie