

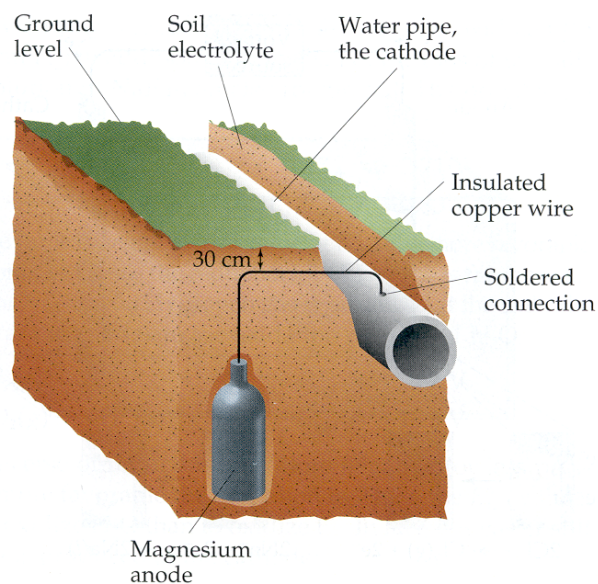
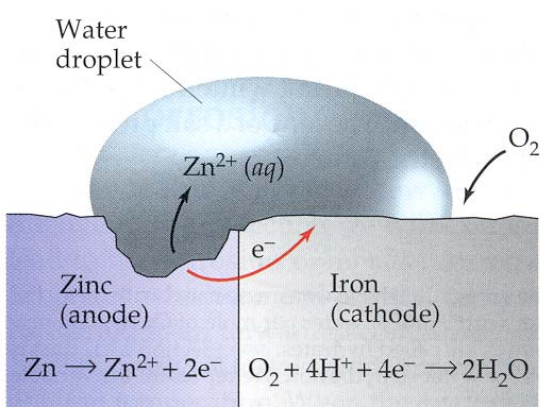
# Metals and their Compounds

## Lecture 9.4

### Corrosion of metals (20.8 BLB)

How to prevent corrosion ?

- Stop chemical agents from getting to metal surfaces. Painting surfaces (Forth bridge) is most practical way.
- Use a more active metal as a "sacrificial metal". Galvanising iron (coating with zinc) is one example. Highly active metals like magnesium also used as "sacrificial metals"



- Sometimes nature provides protection. Aluminium is the best example here. Normally it is coated with a very thin layer of aluminium oxide  $Al_2O_3$ . Remove the layer and metal corrodes very rapidly