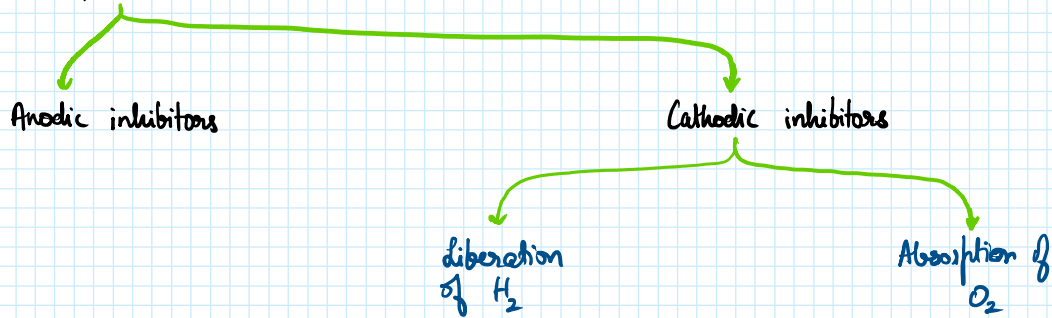


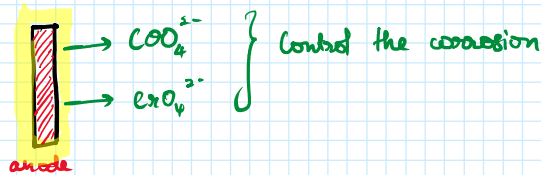
7. Corrosion Control (contd.)

20 October 2023 08:04

USING INHIBITORS



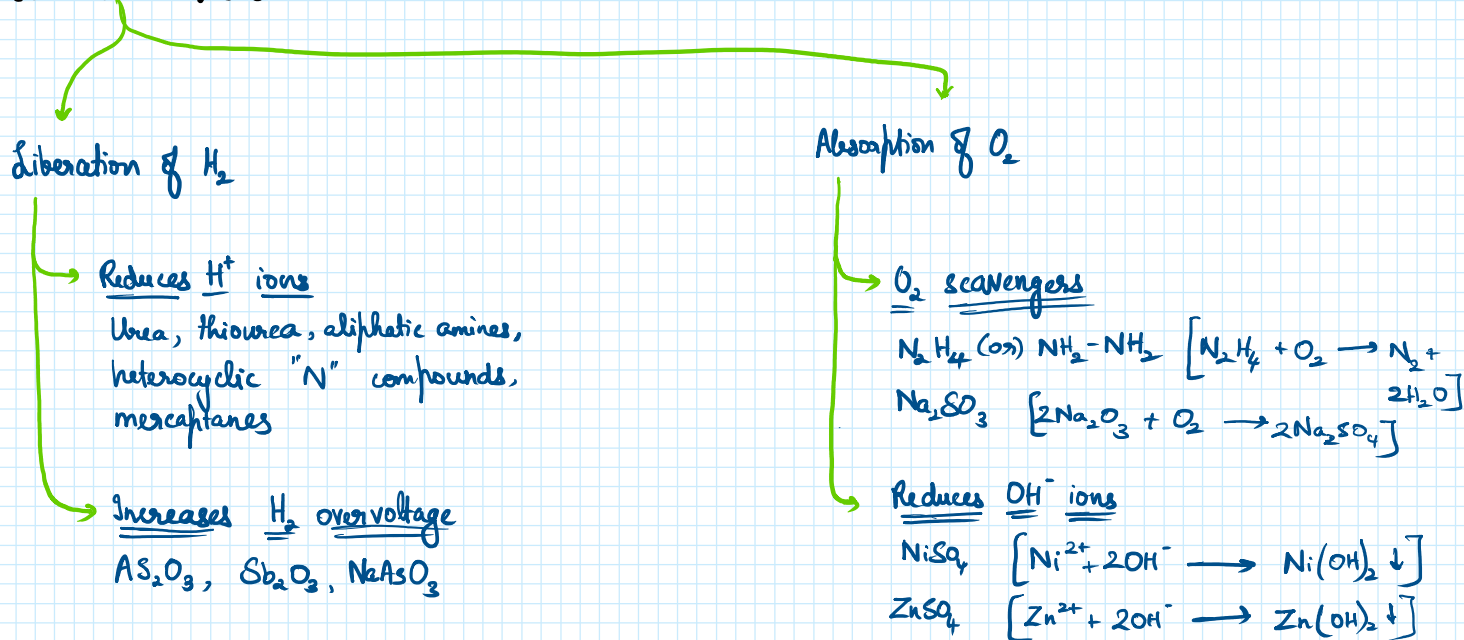
Anodic inhibitors



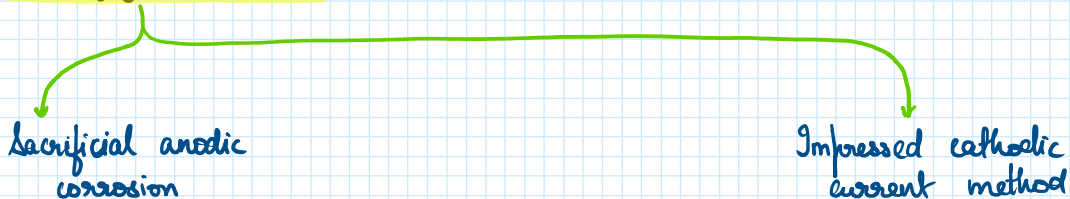
Disadvantages:

- Some inhibitors are toxic
- Not eco-friendly
- Pitting corrosion takes place

Cathodic inhibitors



CATHODIC PROTECTION

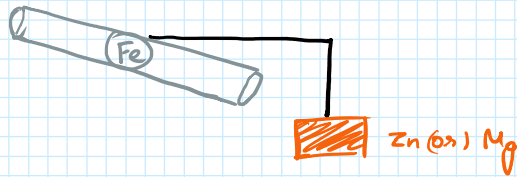


Sacrificial anodic corrosion

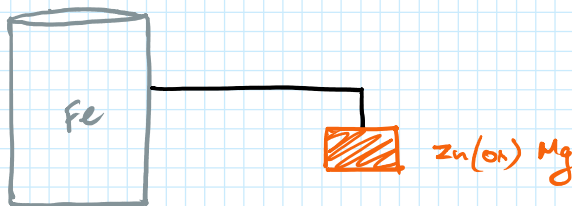
Anode: Zn (or) Mg

Cathode: Pipeline, oil tank, boat

Ex-1: Pipeline connected with sacrificial anode (Zn or Mg)



Ex-2: Oil tank connected with sacrificial anode (Zn or Mg)



Advantages:

- Simple method
- Low installation cost
- Does not require current

Disadvantages:

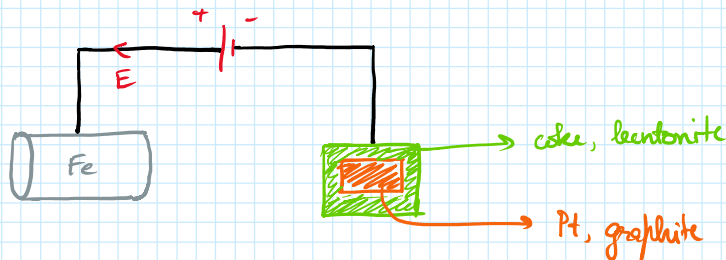
- Frequently changing anode material

Impressed cathodic current method

Anode: Inert anode - Pt, graphite $\xrightarrow{\text{coated with}}$ coke, bentonite

Cathode: Pipeline

Current required



Advantages

Disadvantages