

Answer on the question #48075, Chemistry, Other

Question:

when water pour on a metal surface(steel) it will be corroded.

what is the chemistry behind it.

which is anode ,cathod,and electrolyte???

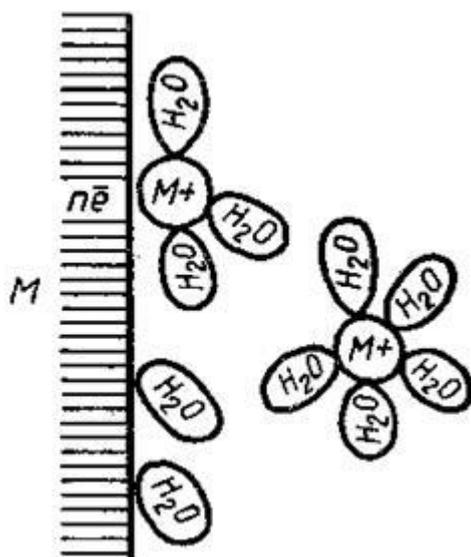
when steel exposed to atmosphere it also corrode??

what is anode,cathod,electrolyte??

can you explain it simply??

Answer:

When metal surface is inserted in water, some Fe^{2+} ions move to the contiguous layer in the solution, creating the excess negative charge on the metal surface:



This way the double charge layer is formed. In the presence of oxygen in water metal corrodes. Oxygen takes excess electrons and leads to form iron oxide:



So there is no simply emphasized cathode and anode. In the atmosphere wet film on the metal is formed, again allowing the iron-oxygen interaction.