**EMF (Electromotive Force) or Cell potential**

* A galvanic cell is made of two half cells. Potential is moving from high electrode potential to lower electrode potential.

*It is the amount of potential difference set up between the two half cells.*

* Cell represenatation

Zn/ Zn2+**//** Cu2+/ Cu​

* Cell reaction

Zn⟶ Zn2+ +2e− (OXIDATION)

Cu2+ +2e−⟶Cu​ (REDUCTION)

Zn+Cu2+ ⟶ Zn2+ + Cu​

E0cell= standard reduction potential of a cell at standard conditions

1atm pressure and 298k temp. or 25 degree

Zero degree=273k temp

* E0cell = standard reduction potential of cathode (Cu)- standard oxidation potential of anode(Zn)

E0cell= =0.34 -(- 0.76 V)

E0cell =1.1 V

Gibbs energy and E0cell



