

**Electromagnetic induction** is the production of electromotive force otherwise known as voltage across an electrical conductor where the magnetic field changes. For the discovery of induction, Micheal Faraday was awarded this credit in 1831. Here, Faraday's law of induction was described by Maxwell in mathematical terms. Take for example any conductor and place it in a specific position. Here the process of electromagnetic induction will let the conductor vary keeping the magnetic field stationary.

### **Principle of Electromagnetic Induction**

Principle of Electromagnetic Induction states that the emf induced in a loop due by a changing magnetic flux is equal to the rate of change of the magnetic flux threading the loop.

When it comes to the principle of electromagnetic induction, it will enable the transformers, motors, electric generators and other rechargeable items such as wireless communication devices or electric toothbrushes to adopt the principle. Apart from that, your rice cooker works by using induction. Now let's learn how induction cooktops are heated by using induced current.