

Electromagnetism is a branch of Physics, **deals** with the electromagnetic force that **occurs** between electrically charged particles. The electromagnetic force is one of the four fundamental forces and **exhibits** electromagnetic fields such as magnetic fields, electric fields, and light. It is the basic **reason** electrons bound to the nucleus and **responsible** for the **complete** structure of the nucleus.

Electromagnetic force is a **type** of physical interaction that occurs between electrically charged particles. It **acts** between charged particles and is the **combination** of all magnetic and electrical forces. The electromagnetic force can be attractive or repulsive.

Before the **invention** of electromagnetism, people or scientists used to think electricity and magnetism are two **different** topics. The **view** has changed after James Clerk Maxwell published *A Treatise on Electricity and Magnetism* in the year 1873. The publication **states** that the interactions of positive and negative charges are **mediated** by one force. This observation laid a **foundation** for Electromagnetism. Later many scientists like Michael Faraday, Oliver Heaviside, and Heinrich Hertz **contributed** their ideas in electromagnetism.

Work to do:

- 1- Give a title to the text;
- 2- Give synonyms of the the underlined words;
- 3- Give some applications of magnetism;
- 4- Give a few properties of the electromagnetic wave.