

# Chapter-6

## (Statically Induced E.M.F)

Lecture-2

# Type of **STATICALLY INDUCED EMF**:

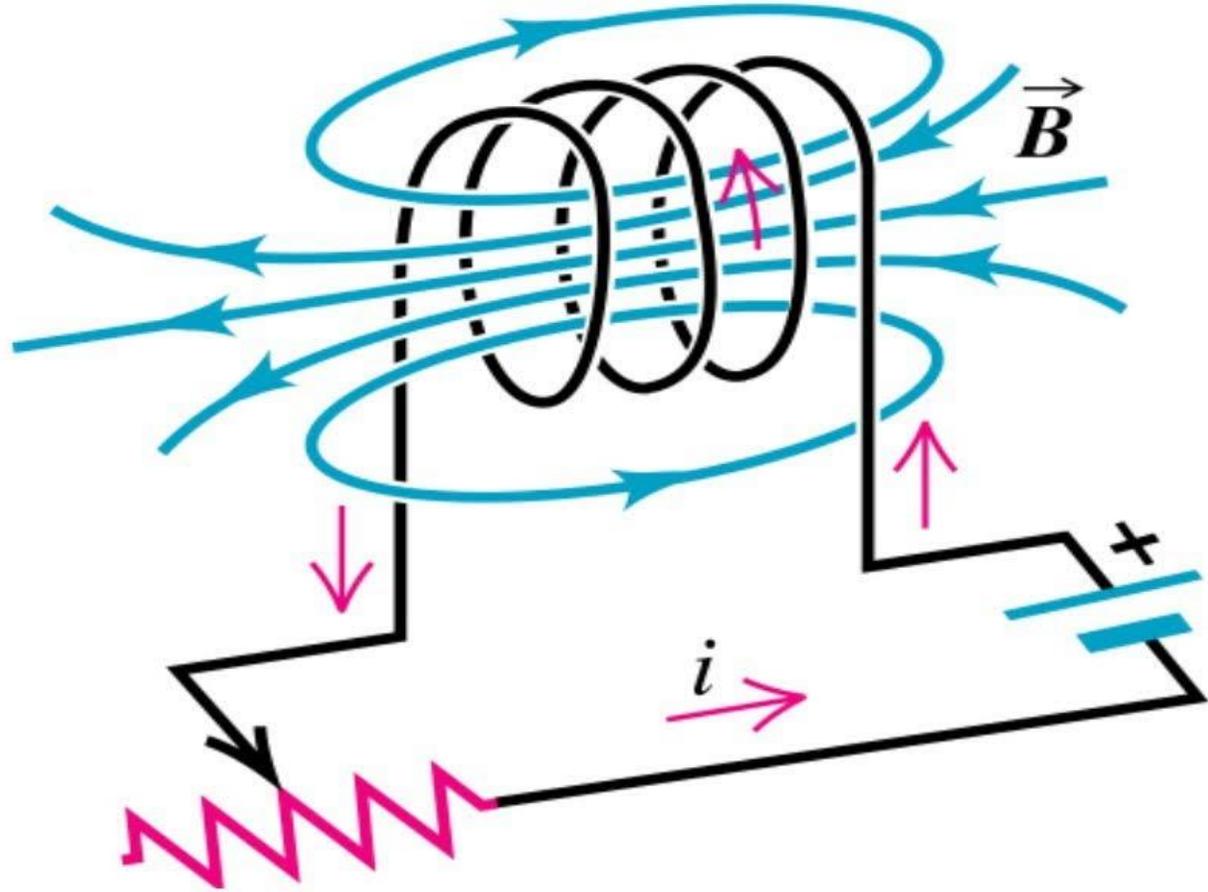
- There are two type of **STATICALLY INDUCED EMF**,

1. Self-Induced EMF.

2. Mutual-Induced EMF.

# Self-Induced EMF:

- In an electrical circuit, when the emf is induced in the same circuit in which the current is changing this effect is called Self-induction, (  $L$  ) but it is sometimes commonly called back-emf as its polarity is in the opposite direction to the applied voltage.



**SELF**

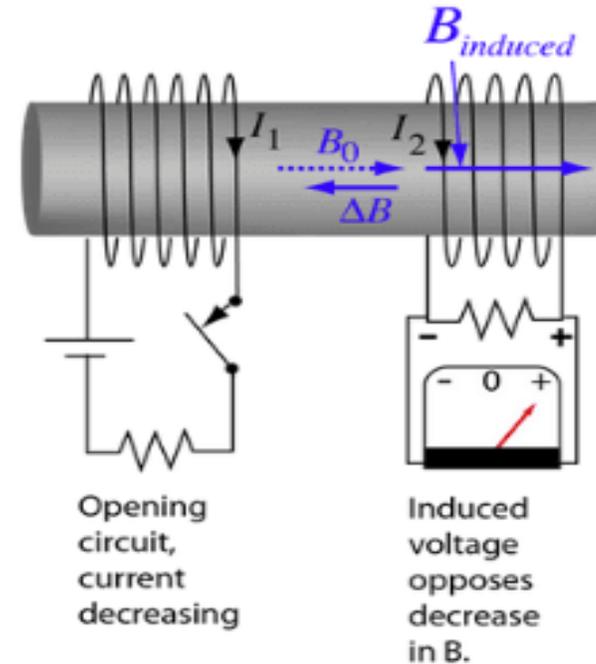
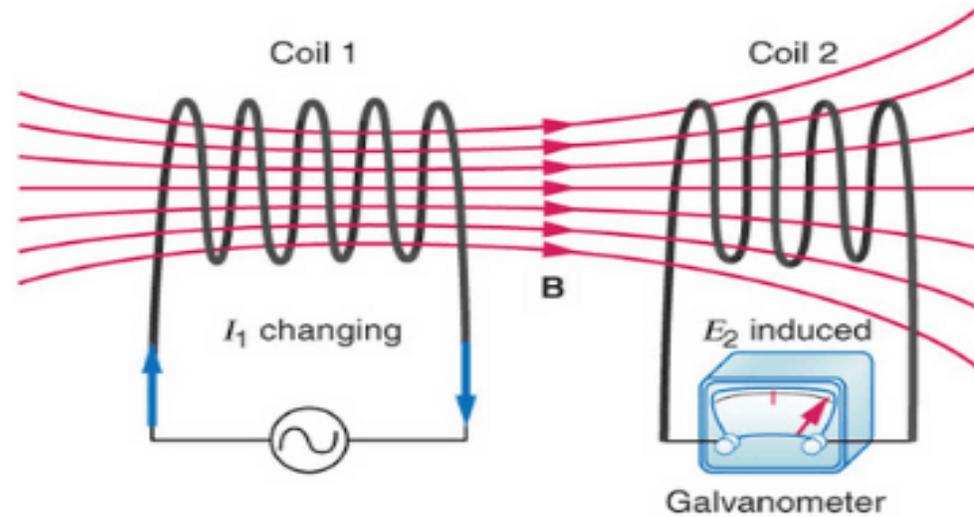
**INDUCED**

**EMF**

# Mutually Induced EMF:

- Definition:
- The emf induced in a coil due to the change of flux produced by another neighbouring coil linking to it, is called Mutually Induced emf.

# What is Mutual Induction?



Electrical 4 U