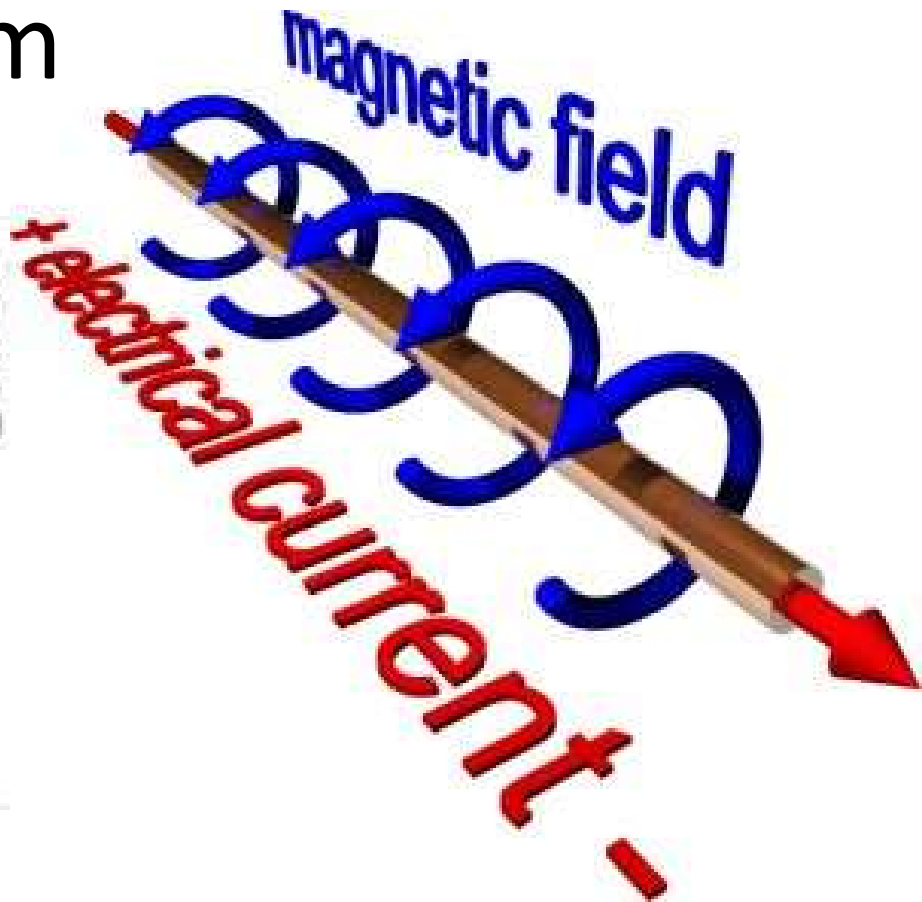
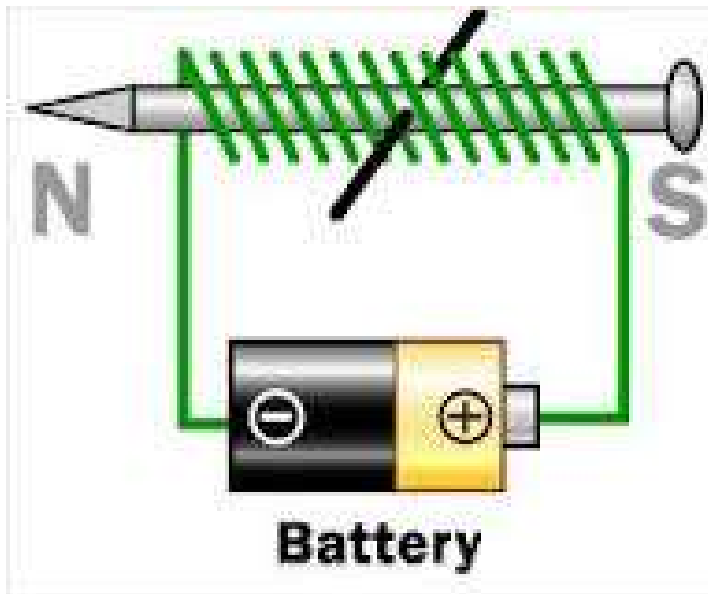


Electromagnetism

Mr. Skirbst

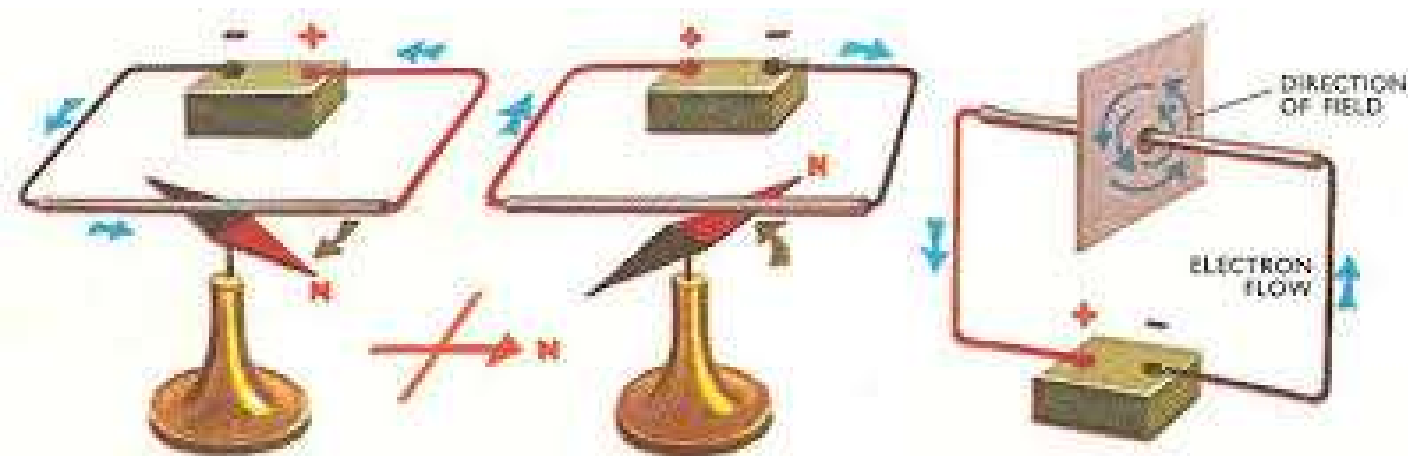
Electromagnetism

- Relationship between electricity and magnetism



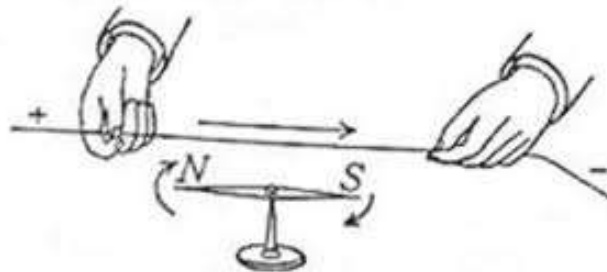
Electromagnetism

- Relationship between electricity and magnetism
- Discovered by Hans Oersted (1820)



Electromagnetism

- Relationship between electricity and magnetism
- Discovered by Hans Oersted (1820)
- Electric current passing through wire produces a magnetic field



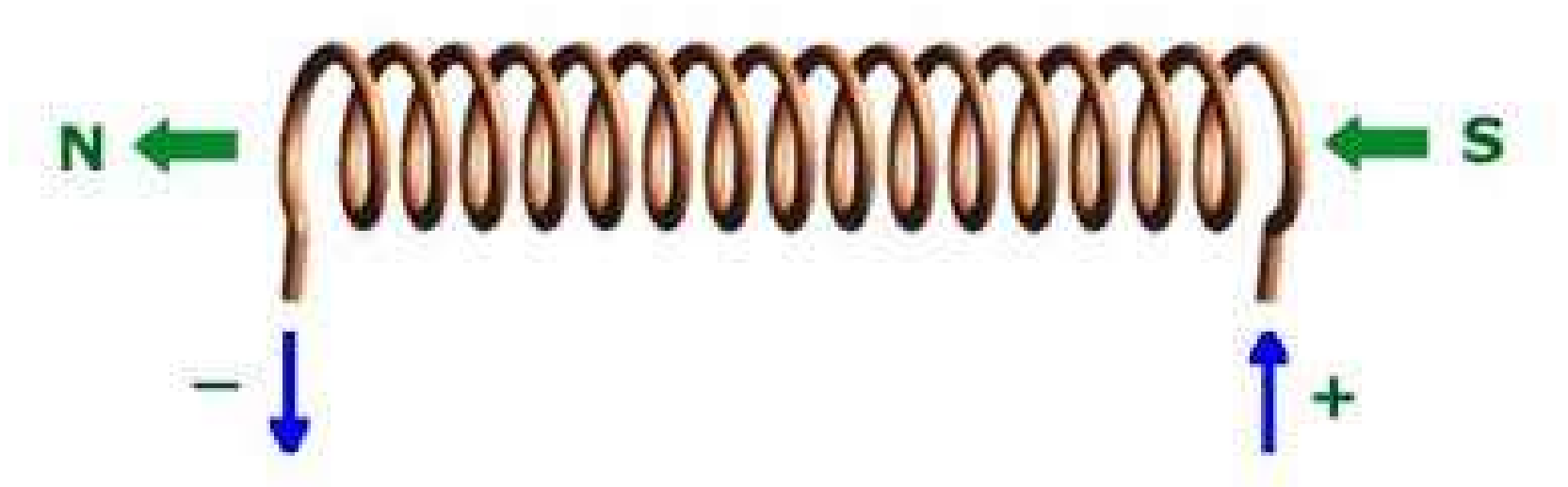
Electromagnet

- A solenoid with a magnetic material inside



Solenoid

- Long coil of wire with many loops (acts like a magnet when electricity passes through it)



Electric Motor

- Device that converts electrical energy into mechanical energy



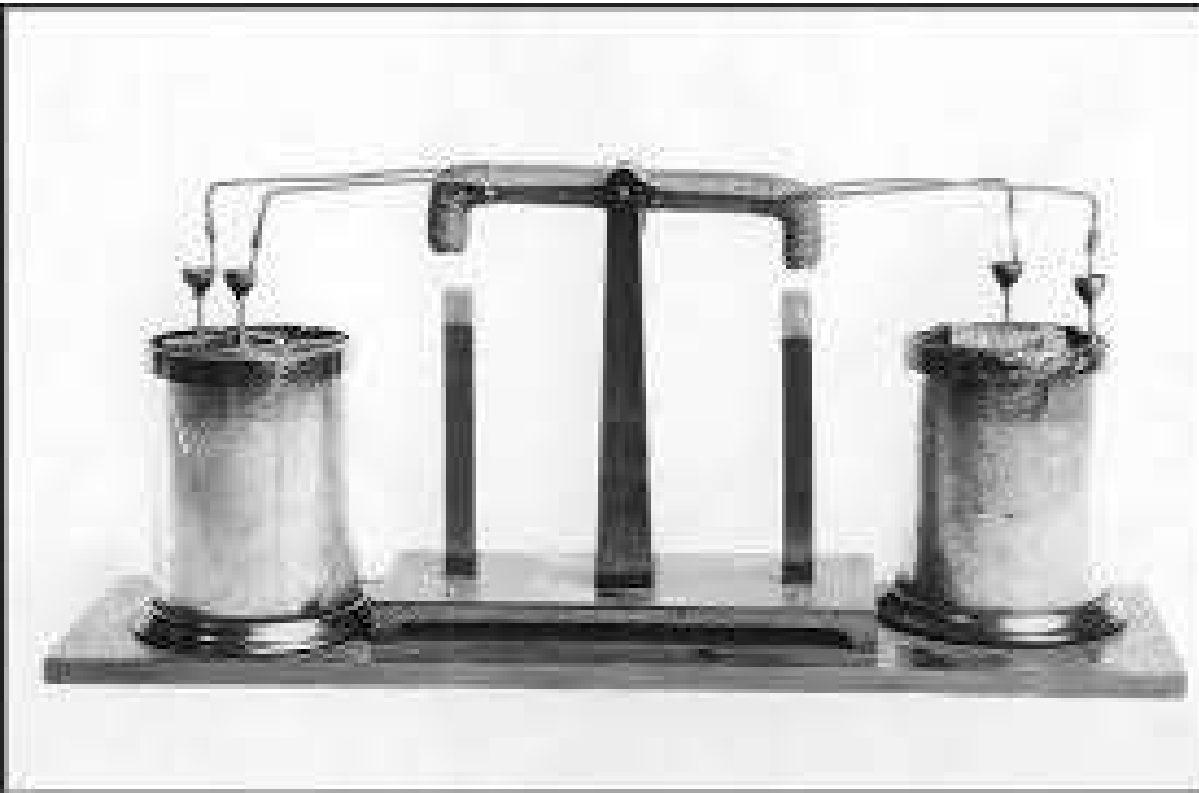
Galvanometer

- Instrument used to detect small currents



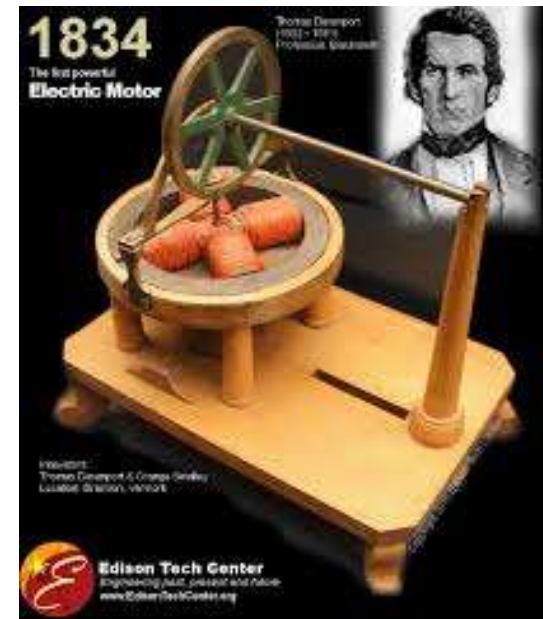
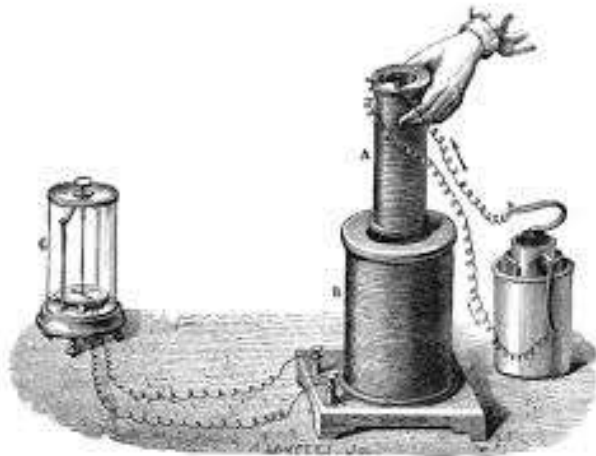
Electromagnetic Induction

- [Michael Faraday](#) & Joseph Henry
(1831)



Electromagnetic Induction

- Michael Faraday & Joseph Henry (1831)
- Producing an electric current by changing a magnetic field



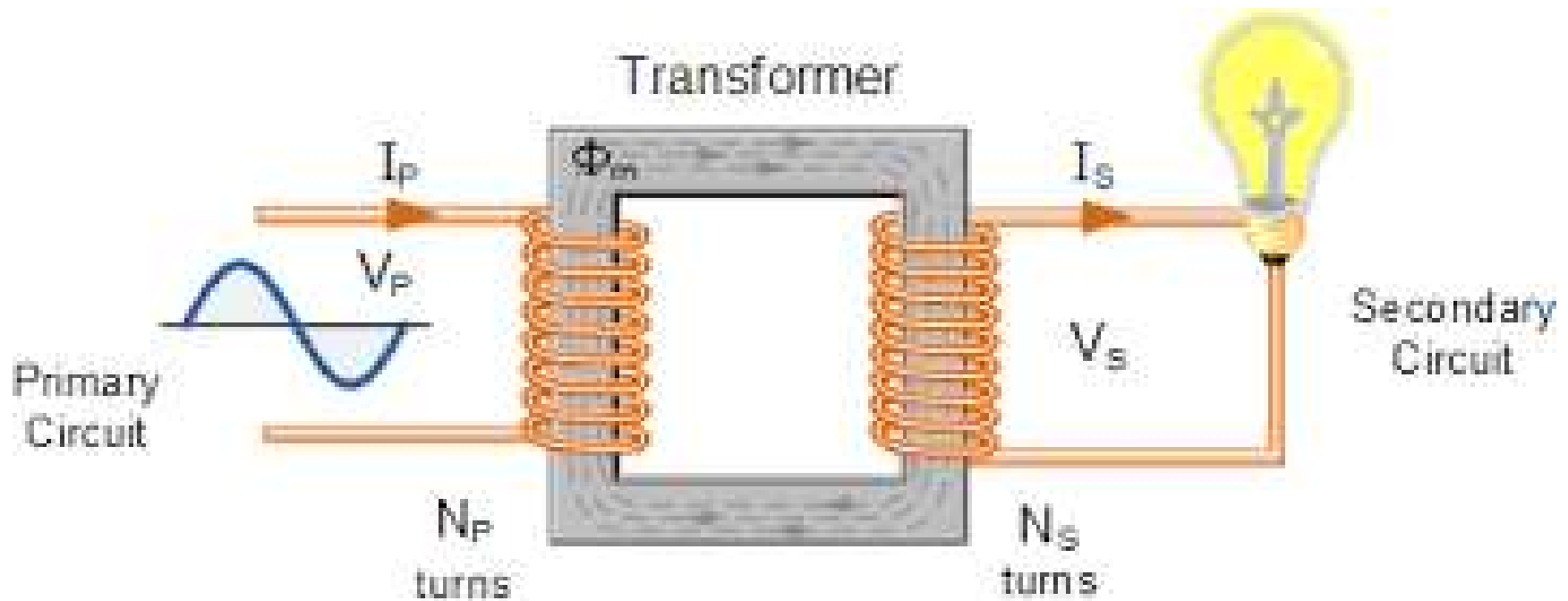
Generator

- A device that converts mechanical energy into electrical energy



Transformer

- A device that increases / decreases the voltage of alternating current



Transformer

- A device that increases / decreases the voltage of alternating current
- Step-up vs. Step-down

