

**AN ELECTRIC GENERATOR**

# The First Electric Generator

In 1831, Michael Faraday, an English scientist, discovered that a flow of electric charges could be generated by moving an electrical conductor, such as copper wire, in a magnetic field. Faraday built the first electromagnetic generator, called the Faraday disk, using a copper disc which rotated between a horseshoe magnet, to produce a small DC voltage.



This first design, however, was inefficient. To improve this design, it was discovered that arranging an array of magnets around the copper disc helped maintain a steady flow of electricity. Another major discovery was that adding turns of wire in a coil could produce more electricity. In fact, the amount of electricity produced is proportional to the number of turns. For this reason, the number of wire windings became a basic feature of all subsequent generator designs.

