

CHAPTER OVERVIEW

17: Electrochemical Cells

When an electrical current flows through matter, permanent chemical changes often occur. In some cases electrical energy supplied from an outside source can cause a chemical reaction to take place. Such a process is called **electrolysis**, and the system to which electricity is supplied is called an **electrolytic cell**. It is also possible to produce a flow of electricity as a result of a spontaneous chemical reaction. A chemical system which can cause a current to flow in this way is called a **galvanic cell** or a **voltaic cell**. Since an electrical current is a flow of electrons or other charged particles, it should come as no surprise that both electrolytic and galvanic cells involve **redox reactions**.

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