What is the difference between Daniell Gravity Cell and Electrochemical Cell?

## Answer

The redox reaction in a Daniell Gravity Cell is a spontaneous reaction. For this reason, Daniell Gravity Cell is commonly used as batteries. The energy is harnessed by situating the oxidation and reduction reactions in separate containers, joined by an apparatus that allows electrons to flow. A Daniell Gravity Cell is shown below.



Daniell Gravity Cell

The redox reaction in an Electrochemical Cell is nonspontaneous. Electrical energy is required to induce the electrolysis reaction. An example of an Electrochemical Cell is shown below, in which molten NaCl is electrolyzed to form liquid sodium and chlorine gas. The sodium ions migrate toward the cathode, where they are reduced to sodium metal. Similarly, chloride ions migrate to the anode and are oxidized to form chlorine gas.



**Electrochemical Cell**