

Introduction for Module 9 – Electrochemistry

Textbook: [Open Stax Chemistry 2e](#)

Suggested Reading: Chapter 17.2 - 17.4

Learning Objectives:

- Describe the function of a galvanic cell and its components
- Use cell notation to symbolize the composition and construction of galvanic cells
- Describe and relate the definitions of electrode and cell potentials
- Calculate cell potentials and predict redox spontaneity using standard electrode potentials

Captions and Attributions:

- 1) A copper wire reacts in silver solution, showing a redox reaction. [Figure 17.2 A copper wire and an aqueous solution of silver nitrate](#) by [Open Stax](#) is [licensed under CCBY 4.0](#).
- 2) A galvanic (aka. spontaneous) electrochemical cell separates a redox reaction and allows for the flow of electrons that can be used to do work. [Figure 17.3 A galvanic cell based on the spontaneous reaction](#) by [Open Stax](#) is [licensed under CCBY 4.0](#).
- 3) The voltage, or desire (potential) for electrons to flow through the cell can be measured with a voltmeter and can also be calculated using a table of standard reduction potentials. [Figure 17.6 A cell permitting experimental measurement](#) by [Open Stax](#) is [licensed under CCBY 4.0](#).



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