

CHAPTER OVERVIEW

14: Chemical Equilibrium

An General Chemistry Libretexts Textmap organized around the textbook

Principles of Modern Chemistry

by Oxtoby, Gillis, and Campion

I II III IV V VI VII VIII IX X XI XII XIII XIV XV XVI
XVII XVIII XIX XX XXI XXII XXIII • **Homework Exercises**

[Template:HideTOC](#)

Chemical equilibrium is the state in which both reactants and products are present in concentrations which have no further tendency to change with time. This results when the forward reaction proceeds at the same rate as the reverse reaction. Thus, no net changes in the concentrations of the reactant(s) and product(s) are observed. This is known as dynamic equilibrium.

[14.1: The Nature of Chemical Equilibrium](#)

[14.2: The Empirical Law of Mass Action](#)

[14.3: Thermodynamic Description of the Equilibrium State](#)

[14.4: The Law of Mass Action for Related and Simultaneous Equilibria](#)

[14.5: Equilibrium Calculations for Gas-Phase and Heterogenous Reactions](#)

[14.6: Reaction Directions \(Empirical Explanation\)](#)

[14.7: Reaction Directions \(Thermodynamic Explanation\)](#)

[14.8: Distribution of a Single Species between Immiscible Phases - Extraction and Separation](#)

[14.E: Chemical Equilibria \(Exercises\)](#)

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