

CHAPTER OVERVIEW

18: Chemical Kinetics

Chemical kinetics is concerned with the rates of chemical reactions, that is, whether reactions proceed quickly or slowly. As we have already mentioned, some spontaneous reactions are extremely slow. Chemical kinetics is concerned with the rates of chemical reactions, the dependence of those rates on temperature, concentration, and catalysts, and the microscopic mechanisms by which reactions occur.

Topic hierarchy

18.1: Prelude to Kinetics

18.2: The Rate of Reaction

18.3: The Rate Equation

18.4: Microscopic View of Chemical Reactions

18.5: Unimolecular Processes

18.6: Bimolecular Processes

18.7: Termolecular Processes

18.8: 18.7-Reaction Mechanisms

18.9: 18.8-Increasing the Rate of a Reaction

18.10: The Effect of Temperature

18.11: Catalysis

18.12: Heterogeneous Catalysis

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