

## 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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