

Outline of Part II

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II. Elucidating Reaction Mechanisms

A. Background

1. Reaction Mechanism
2. Thermodynamics vs. Kinetics
3. Energy Diagrams
4. Rate-Determining Step
5. Kinetic Control vs. Thermodynamic Control
6. Hammond Postulate
7. Curtin-Hammett Principle
8. Principle of Microscopic Reversibility

B. Rate Data

1. Rate Law
2. Activation Parameters
3. Kinetic Isotope Effects
4. Solvent Effects

C. Product Studies

1. Isotopic Labeling
2. Stereochemistry

D. Studies of Intermediates

1. Detection
2. Trapping
3. Isolation