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Solutions; 5.5 Effects of Solvent Cohesion Energy on Rates; 5.6 Solvation and Its Effects on Rates; 5.7 Effects of Ionic Strength; 5.8 Linear Free Energy Relationships; 5.9 The Compensation Effect; 5.10 Some Correlations of Rates with Solubility Parameter; References for Further Reading; Problems; Chapter 6: Enzyme Catalysis; 6.1 Enzyme Action; 6.2.2 Lineweaver-Burk and Eadie Analyses
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7.7.4 Two Reacting Solids Problems; Chapter 8: Nonisothermal Methods in Kinetics; 8.1 TGA and DSC Methods; 8.3 The Reich and Stivala Method; 8.4 A Method Based on Three (alpha,T) Data Pairs; 8.5 A Method Based on Four (alpha,T) Data Pairs; 8.6 A Differential Method; 8.7 A Comprehensive Nonisothermal Kinetic Method; 8.8 The General Rate Law and a Comprehensive Method; References for Further Reading; Problems; Chapter 9: Additional Applications of Kinetics; 9.1 Radioactive Decay; 9.1.1 Independent Isotopes; 9.1.2 Parent-Daughter Cases; 9.3 A Further Look at Solvent Properties and Rates
References for Further Reading

Sommario/riassunto

James House's revised Principles of Chemical Kinetics provides a clear and logical description of chemical kinetics in a manner unlike any other book of its kind. Clearly written with detailed derivations, the text allows students to move rapidly from theoretical concepts of rates of reaction to concrete applications. Unlike other texts, House presents a balanced treatment of kinetic reactions in gas, solution, and solid states. The entire text has been revised and includes many new sections and an additional chapter on applications of kinetics. The topics covered include quantitative