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via Simple Carbenium Ion Intermediates: Neighboring Group Participation; 2.8 Preparatively Useful SN2 Reactions: Alkylations; References; Chapter 3. Additions to the Olefinic C=C Double Bond; 3.1 The Concept of cis and trans Addition; 3.2 Vocabulary of Stereochemistry and Stereoselective Synthesis I; 3.3 Additions That Take Place Diastereoselectivity as cis Additions
3.4 Enantioselective cis Additions to C=C Double Bonds3.5 Additions That Take Place Diastereoselectively as trans Additions (Additions via Onium Intermediates); 3.6 Additions That Take Place or Can Take Place without Stereocontrol Depending on the Mechanism; References; Chapter 4. ß-Eliminations; 4.1 Concepts of Elimination Reactions; 4.2 b-Eliminations of H/Het via Cyclic Transition States; 4.3 b-Eliminations of H/Het via Acyclic Transition States: The Mechanistic Alternatives; 4.4 E2 Eliminations of H/Het and the E2/SN2 Competition
4.5 E1 Elimination of H/Het from Rtert-X and the E1/SN1 Competition4.6 E1cb Eliminations; 4.7 ß-Eliminations of Het1/Het2; References; Chapter 5. Substitution Reactions on Aromatic Compounds; 5.1 Electrophilic Aromatic Substitutions via Wheland Complexes (""Ar-SE Reactions""); 5.2 Ar-SE Reactions via Wheland Complexes: Individual Reactions; 5.3 Electrophilic Substitution Reactions on Metallated Aromatic Compounds; 5.4 Nucleophilic Substitution Reactions in Aryldiazonium Salts; 5.5 Nucleophilic Substitution Reactions via Meisenheimer Complexes
5.6 Nucleophilic Aromatic Substitution via Arynes, cine Substitution

Sommario/riassunto

A best-selling mechanistic organic chemistry text in Germany, this text's translation into English fills a long-existing need for a modern, thorough and accessible treatment of reaction mechanisms for students of organic chemistry at the advanced undergraduate and graduate level. Knowledge of reaction mechanisms is essential to all applied areas of organic chemistry; this text fulfills that need by presenting the right material at the right level.