1. Record Nr. UNINA9910820073903321 Autore Smith Michael <1946 October 17-> Titolo Organic synthesis / / Michael B. Smith [Boston], : Academic Press, an imprint of Elsevier, [2011] Pubbl/distr/stampa **ISBN** 1-280-58131-X 9786613611093 0-12-415884-6 Edizione [3rd ed.] Descrizione fisica 1 online resource (1536 p.) Disciplina 547/.2 Soggetti Organic compounds - Synthesis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto Front Cover: Organic Synthesis: Copyright Page: About the Author: Table of Contents; Preface to the 3rd edition; Preface to the 1st edition. Why I wrote this book!; Common Abbreviations; Chapter 1: Retrosynthesis, Stereochemistry, and Conformations; 1.1. Introduction; 1.2. The Disconnection Protocol; 1.3. Bond Proximity and Implications for Chemical Reactions; 1.4. Stereochemistry; 1.5. Conformations; 1.6. Conclusion: Homework: Chapter 2: Acids, Bases and Functional Group Exchange Reactions; 2.1. Introduction; 2.2. Brønsted-Lowry Acids and Bases: 2.3. Lewis Acids 4.6. Borane, Aluminum Hydride, and Derivatives 4.7. Stereoselectivity in Reductions: 4.8. Catalytic Hydrogenation: 4.9. Dissolving Metal Reductions; 4.10. Nonmetallic Reducing Agents; 4.11. Conclusion; Homework; Chapter 5: Hydroboration; 5.1. Introduction; 5.2. Preparation of Alkyl and Alkenyl Boranes; 5.3. Synthetic Transformations; 5.4. Formation of Oxygen-Containing Functional Groups; 5.5. Amines and Sulfides via Hydroboration; 5.6. Conclusion; Homework; Chapter 6: Stereocontrol and Ring Formation; 6.1. Introduction; 6.2. Stereocontrol in Acyclic Systems 8.5. OrganoLithium Reagents (C-Li) Sommario/riassunto A reactions oriented course is a staple of most graduate organic

programs, and synthesis is taught either as a part of that course or as a special topic. Ideally, the incoming student is an organic major, who

has a good working knowledge of basic reactions, stereochemistry and conformational principles. In fact, however, many (often most) of the students in a first year graduate level organic course have deficiencies in their undergraduate work, are not organic majors and are not synthetically inclined. To save students much time catching up this text provides a reliable and readily