Record Nr. UNINA9910144298203321 Autore Vorbruggen Helmut **Titolo** Silicon-mediated transformations of functional groups [[electronic resource] /] / Helmut Vorbruggen Weinheim,: Wiley-VCH, c2004 Pubbl/distr/stampa **ISBN** 1-280-52080-9 9786610520800 3-527-60377-8 3-527-60592-4 Descrizione fisica 1 online resource (378 p.) Disciplina 547.2 Soggetti Functional groups Silicon Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references and indexes. Nota di bibliografia Nota di contenuto Silicon-mediated Transformations of Functional Groups; Contents; Preface: 1 Introduction: 2 Techniques for Preparative Silvlations-Desilylations; 3 Preparation and Properties of Silyloxy Leaving Groups; 4 Reactions of Free and Derivatized Carboxylic Acids and Carbon Dioxide: 5 Reactions of Aldehydes and Ketones: 6 Reactions of Alcohols, Esters, Silyl Ethers, Epoxides, and Haloalkanes; 7 Reactions of N-O Systems: 8 Reactions of S-O and Se-O Systems: 9 Cyclizations and Ring Enlargements; 10 Base-catalyzed, Acid-catalyzed and Thermal Eliminations of Trimethylsilanol. Peterson Reactions 11 Formation of Carbon-Phosphorus Double Bonds12 Reductions and Oxidations: 13 Dehydration-Halogenation-Activation and Silvlation of Inorganic and Organic Salts and Metallorganic Compounds; 14 Formation of Organic and Inorganic Polymers: Appendix: Subject Index: Author Index In the first work to comprehensively cover this all-important topic, the Sommario/riassunto recognized expert Helmut Vorbr?ggen provides both organic and bioorganic chemists with much new and valuable information for

preparative synthesis. Although every organic chemist may be familiar

with different aspects of silylation for the protection of functional groups, this book covers the concept of protection while simultaneously silylating-activating various functional groups, such as amides and ureas. This novel methodology opens thus numerous synthetic pathwayswhile effecting the elimination of water in it