Record Nr. UNINA9910787844803321 Autore Bryliakov Konstantin Titolo Environmentally sustainable catalytic asymmetric oxidations // Konstantin Bryliakov Pubbl/distr/stampa Boca Raton:,: Taylor & Francis,, [2015] ©2015 **ISBN** 0-429-16826-8 1-4665-8857-8 Descrizione fisica 1 online resource (160 p.) Disciplina 547.23 547/.23 Oxidation Soggetti Green chemistry Chemistry, Organic Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali A CRC title. Includes bibliographical references at the end of each chapters. Nota di bibliografia Nota di contenuto Front Cover; Contents; Preface; Author; List of Abbreviations; Chapter 1: Introduction; Chapter 2: Transition Metal-Catalyzed Asymmetric Epoxidations: Chapter 3: Transition Metal-Catalyzed Asymmetric Sulfoxidations: Chapter 4: Miscellaneous Transition Metal-Catalyzed Asymmetric Oxidations; Chapter 5: Organocatalytic Asymmetric Oxidations; Chapter 6: Fe- and Mn-Based Synthetic Models of Non-Heme Ovgenases: Stereospecific C-H Oxidations; Chapter 7: Active Species and Mechanisms of Non-Heme Fe- and Mn-Catalyzed Oxidations; Chapter 8: Industrial Perspective; Back Cover Catalysis plays a vital role in chemical, petroleum, agriculture, polymer, Sommario/riassunto electronics, pharmaceutical, and other industries. Over 90 percent of chemicals originate from catalytic processes. Toughening economic and environmental constraints have proven to be a challenge for meeting the demand of novel efficient and sustainable regio- and stereoselective catalyst systems. Environmentally Sustainable Catalytic Asymmetric Oxidations provides a comprehensive overview of existing ecologically friendly catalyst systems for various asymmetric oxidation

processes. Topics include: A survey of existing tr