1. Record Nr. UNINA9910830440403321 Autore **Oestreich Martin** Titolo The Mizoroki-Heck reaction [[electronic resource] /] / edited by Martin Oestreich Pubbl/distr/stampa Chichester, U.K., : Wiley, 2009 **ISBN** 1-282-02242-3 9786612022425 0-470-71607-X 0-470-71606-1 Descrizione fisica 1 online resource (609 p.) Altri autori (Persone) OestreichMartin 547.2 Disciplina 547/.2 Soggetti Heck reaction Palladium catalysts 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 index. Nota di contenuto The Mizoroki-Heck Reaction: Contents: Foreword: Preface: Contributors: 1 Mechanisms of the Mizoroki-Heck Reaction: 1.1 Introduction: 1.2 Mechanism of the Mizoroki-Heck Reaction when the Catalytic Precursor is Pd(OAc)2 in the Absence of Ligand; 1.3 Mechanism of the Mizoroki-Heck Reaction when the Catalytic Precursor is Pd(OAc)2 Associated with Monophosphine Ligands; 1.3.1 Pd(0) Formation from Pd(OAc)2 in the Presence of a Monophosphine Ligand; 1.3.2 Oxidative Addition; 1.3.2.1 Oxidative Addition of Aryl Iodides; 1.3.2.2 Oxidative Addition of Aryl Triflates 1.3.3 Complexation/Insertion of the Alkene1.3.4 Multiple Role of the Base; 1.3.5 Catalytic Cycle; 1.3.5.1 Factors Controlling the Efficiency of a Catalytic Reaction; 1.4 Mechanism of the Mizoroki-Heck Reaction when the Catalytic Precursor is Pd(OAc)2 Associated with Bisphosphine Ligands; 1.4.1 Pd(0) Formation from Precursor; 1.4.2 Oxidative Addition: 1.4.3 Complexation/Insertion of the Alkene Regioselectivity:

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Sommario/riassunto

Exploring the importance of Richard F. Heck's carbon coupling reaction, this book highlights the subject of the 2010 Nobel Prize in Chemistry for palladium-catalyzed cross couplings in organic synthesis, and includes a foreword from Nobel Prize winner Richard F. Heck. The Mizoroki-Heck reaction is a palladium-catalyzed carbon-carbon bond forming process which is widely used in organic and organometallic synthesis. It has seen increasing use in the past decade as chemists look for strategies enabling the controlled construction of complex carbon skeletons. The Mizoroki-Heck Reaction is