Record Nr. UNINA9910970276603321 Rhodium catalyzed hydroformylation / / edited by Piet W.N.M. van **Titolo** Leeuwen and Carmen Claver Pubbl/distr/stampa Dordrecht [Netherlands];; Boston,: Kluwer Academic Publishers, c2000 **ISBN** 9786610205394 1-59124-840-X 9780306469472 1-280-20539-3 Descrizione fisica 1 online resource (xii, 284 pages): illustrations Collana Catalysis by metal complexes;; v. 22 LeeuwenP. W. N. M. van (Piet W. N. M.) Altri autori (Persone) ClaverCarmen Disciplina 547/.1393 Soggetti Hydroformylation Rhodium catalysts Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Introduction to hydroformylation / Piet W.N.M. van Leeuwen --Hydroformylation with unmodified rhodium catalysts / Raffaello Lazzaroni, Roberta Settambolo and Aldo Caiazzo -- Rhodium phosphite catalysts / Paul C.J. Kamer, Joost N.H. Reek, and Piet W.N.M. van Leeuwen -- Phosphines as ligands / Piet W.N.M. van Leeuwen, Charles P. Casey, and Gregory T. Whiteker -- Asymmetric hydroformylation / Carmen Claver and Piet W.N.M. van Leeuwen --Hydroformylation in organic synthesis / Sergio Castillon and Elena Fernandez -- Aqueous biphasic hydroformylation / Jurgen Herwig and Richard Fischer -- Process aspects of rhodium-catalyzed hydroformylation / Peter Arnoldy -- Catalyst preparation and decomposition / Piet W.N.M. van Leeuwen -- Novel developments in hydroformylation / Joost N.H. Reek, Paul C.J. Kamer, and Piet W.N.M. van Leeuwen. Sommario/riassunto In the last decade there have been numerous advances in the area of rhodium-catalyzed hydroformylation, such as highly selective catalysts of industrial importance, new insights into mechanisms of the reaction,

very selective asymmetric catalysts, in situ characterization and application to organic synthesis. The views on hydroformylation which still prevail in the current textbooks have become obsolete in several respects. Therefore, it was felt timely to collect these advances in a book. The book contains a series of chapters discussing several rhodium systems arranged according to ligand type, including asymmetric ligands, a chapter on applications in organic chemistry, a chapter on modern processes and separations, and a chapter on catalyst preparation and laboratory techniques. This book concentrates on highlights, rather than a concise review mentioning all articles in just one line. The book aims at an audience of advanced students, experts in the field, and scientists from related fields. The didactic approach also makes it useful as a guide for an advanced course.