Palladium Reagents and Catalysts: New Perspectives for the 21st Century

Description

While this important reaction class is among the most important and most widely used in organic chemistry, this is the first book to summarize the many different olefination methods, including:

* Wittig reaction
* Peterson reaction
* Julia olefination
* Utilizing the Tebbe and related reagents
* Low-valent chromium, zinc or titanium mediated olefination
* McMurphy coupling

plus the related reactions in each case. It thus collates in one ready reference the current level of knowledge as well as new developments in this constantly evolving field -- information which until now has been dispersed throughout the literature.

Editorial Review

In no other area of chemistry have so many advancements been made over recent years as in the field of palladium catalysis. Jiro Tsuji has kept abreast of these changes, and brings his careful scrutiny to bear on the developments over the past five years since the appearance of the first edition of his book, "Palladium Reagents and Catalysts". This period has seen the development of a multitude of new catalysts, which afford masterful control over the chemistry of a given reactant. Several of the new methods make it possible to carry out transformations on substrates for which no palladium-catalyzed chemistry was possible five years ago.

This book covers an extensive array of reactions types, ranging from oxidation, through C-C bond coupling, to amination. It is amazing that a single book of such scope could actually be written, but Tsuji has accomplished this feat! He has achieved just the right balance in comparing the various catalysts and methods for selected transformations, and is able to provide the reader with a vantage point from which this knowledge can profitably be used in method development.

"Palladium Reagents and Catalysts" is a very interesting book, penned by one of the most respected authors to have earned themselves a place in the field of palladium catalysis. In this work, Jiro Tsuji has combined introductory chapters, historical summaries and extensive literature surveys of current methodology to produce a comprehensive volume that has turned out extremely well.

This new monograph is to be recommended for anyone with an interest in palladium-catalyzed reactions.

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