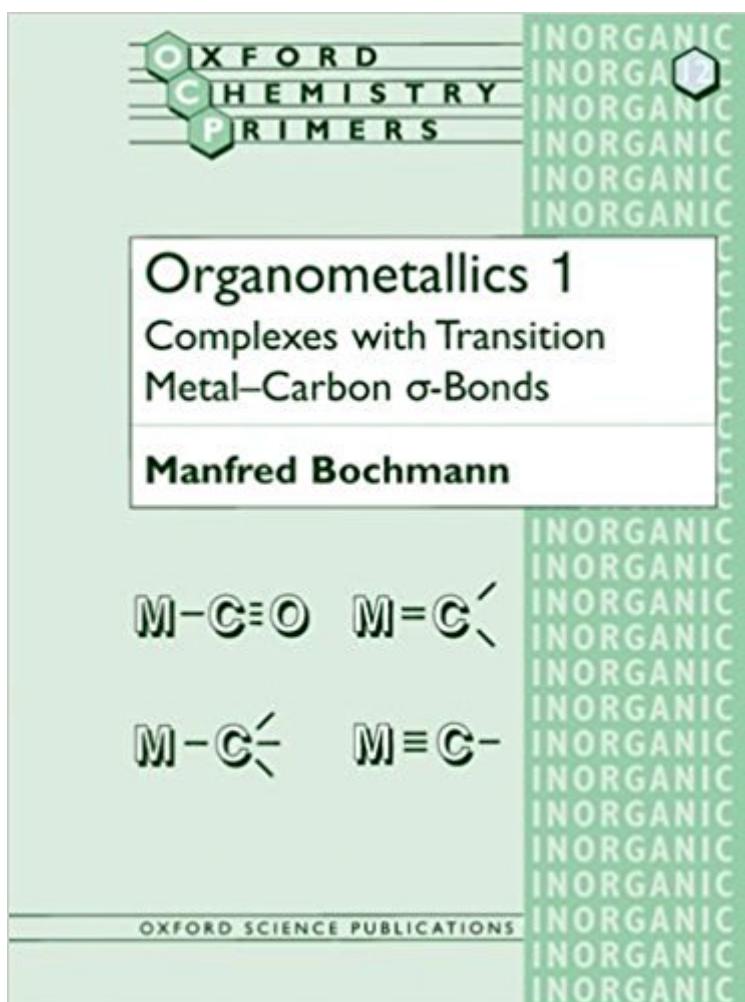


The book was found

# Organometallics 1: Complexes With Transition Metal–Carbon $\sigma$ -bonds (Oxford Chemistry Primers) (Vol 1)



## Synopsis

The field of organometallic chemistry has seen explosive growth over the last forty years. On a fundamental level, new structural and bonding concepts have been discovered, while applications range from catalysis to new synthetic methods. This succinct text outlines the main classes of transition metal organometallic complexes and introduces the reader to the chemistry of compounds with metal-carbon bonds: metal carbonyls, metal alkyls, and metal alkylidenes and alkylidynes. The synthetic methods leading to each class of compounds are illustrated with pertinent examples, followed by the discussion of characteristic structures and reactivity patterns. The book stresses general principles and relates the material to specific applications such as catalytic processes. This book is ideal for supplying a quick overview of the discipline to students of chemistry.

## Book Information

Series: Oxford Chemistry Primers (Book 12)

Paperback: 96 pages

Publisher: Oxford University Press; 1 edition (April 28, 1994)

Language: English

ISBN-10: 0198557507

ISBN-13: 978-0198557500

Product Dimensions: 9.8 x 0.3 x 7.4 inches

Shipping Weight: 7 ounces (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 stars 1 customer review

Best Sellers Rank: #940,789 in Books (See Top 100 in Books) #15 in Books > Science & Math > Chemistry > Organic > Organometallic Compounds #193 in Books > Science & Math > Chemistry > Inorganic #2458 in Books > Textbooks > Humanities > Linguistics

## Customer Reviews

'a solid, basic course for transition metal organic chemistry ... The book should be an 'aperitif' for every new student and stimulate more intensive study of the subject matter' *Nachrichten aus Chemie Tecknik und laboratorium*, Vol. 42, No. 12 (Dec. 1994) 'The treatment is straightforward, easy to read, but not patronising. It should be a useful resource for many undergraduate courses.' *Journal of Organometallic Chemistry* 492 (1995) 'These two little volumes fulfil a need that has not yet been met by other books. Students, at least in the UK, often no longer have the funds to buy as many text books as one might desire, and these books appear to achieve comprehensiveness and cheapness at the same time. They are to be welcomed.' *Journal of Organometallic Chemistry* 492 (1995) 'Ces

deux ouvrages s'adressent aux etudiants de deuxieme et troisieme cycles ainsi qu'aux chimistes recherchant un cours condense de chimie organometallique.'La Recherche, No. 271, Decembre 1994`Few contemporary books in introductory organometallic chemistry offer so much for such a trivial financial outlay ... it is written in an exceptionally lucid style with excellent diagrams and reaction schemes, and should be especially attractive to undergraduate students at the very lowprice. I strongly recommend the book as a suitable first text for students in this area of chemistry.'A.M. Arthurs, Chemistry in Britain, January

This series of short texts provides accessible accounts of a range of essential topics in chemistry. Written with the needs of the student in mind, the Oxford Chemistry Primers offer just the right level of detail for undergraduate study, and will be invaluable as a source of material commonly presented in lecture courses yet not adequately covered in existing texts. All the basic principles and facts in a particular area are presented in a clear and straightforward style, to produce concise yet comprehensive accounts of topics covered in both core and specialist courses. The interaction of transition metals with unsaturated organic molecules has led to fundamental insights in the nature of the chemical bond which, in turn, have provided the basis of important present-day applications such as transition metal mediated synthesis or homogeneous and heterogeneous catalysis. This slim volume outlines the chemistry and discusses the bonding in some of the most important classes of organometallic compounds: the complexes of transition metals with ( $\pi$ )-ligands such as alkenes, alkynes, arenes, and cyclopentadienyl and allyl ligands. The material covered follows on from Organometallics 1 which covers the chemistry of complexes with metal-carbon ( $\sigma$ )-bonds. Synthetic and reactivity aspects of each class of compounds are illustrated with pertinent examples from the recent chemical literature. Highlighted excursions relate the fundamental chemistry to current synthetic or catalytic applications.

An excellent reference book for an organometallic class. Despite it's somehow short, it's a good source of information about this topic.

[Download to continue reading...](#)

Organometallics 1: Complexes with Transition Metal-Carbon  $\sigma$ -bonds (Oxford Chemistry Primers)  
(Vol 1) Metal-Ligand Multiple Bonds: The Chemistry of Transition Metal Complexes Containing Oxo, Nitrido, Imido, Alkylidene, or Alkyldyne Ligands Transition Metal Complexes as Drugs and Chemotherapeutic Agents (Catalysis by Metal Complexes) The Mechanisms of Reactions at Transition Metal Sites (Oxford Chemistry Primers) Rodd's Chemistry of Carbon Compounds, Part D:

Membered Heterocyclic Compounds With More Than 2 Heteroatoms in the Ring (Rodd's Chemistry of Carbon Compounds 2nd Edition) Carbon Dioxide and Organometallics (Topics in Organometallic Chemistry) Molecular Orbitals of Transition Metal Complexes Metal Complexes in Aqueous Solutions (Modern Inorganic Chemistry) Foundations of Organic Chemistry (Oxford Chemistry Primers) NMR Spectroscopy in Inorganic Chemistry (Oxford Chemistry Primers) Supramolecular Chemistry (Oxford Chemistry Primers) d-Block Chemistry (Oxford Chemistry Primers) Biocoordination Chemistry (Oxford Chemistry Primers) Coordination Chemistry of Macrocyclic Compounds (Oxford Chemistry Primers) Applied Organometallic Chemistry and Catalysis (Oxford Chemistry Primers) Radical Chemistry: The Fundamentals (Oxford Chemistry Primers) Protecting Group Chemistry (Oxford Chemistry Primers) 21st Century Guide to Carbon Sequestration - Capture and Storage to Fight Global Warming and Control Greenhouse Gases, Carbon Dioxide, Coal Power, Technology Roadmap and Program Plan Returning Carbon to Nature: Coal, Carbon Capture, and Storage The Chemistry of Macrocyclic Ligand Complexes (Cambridge Texts in Chemistry and Biochemistry)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)