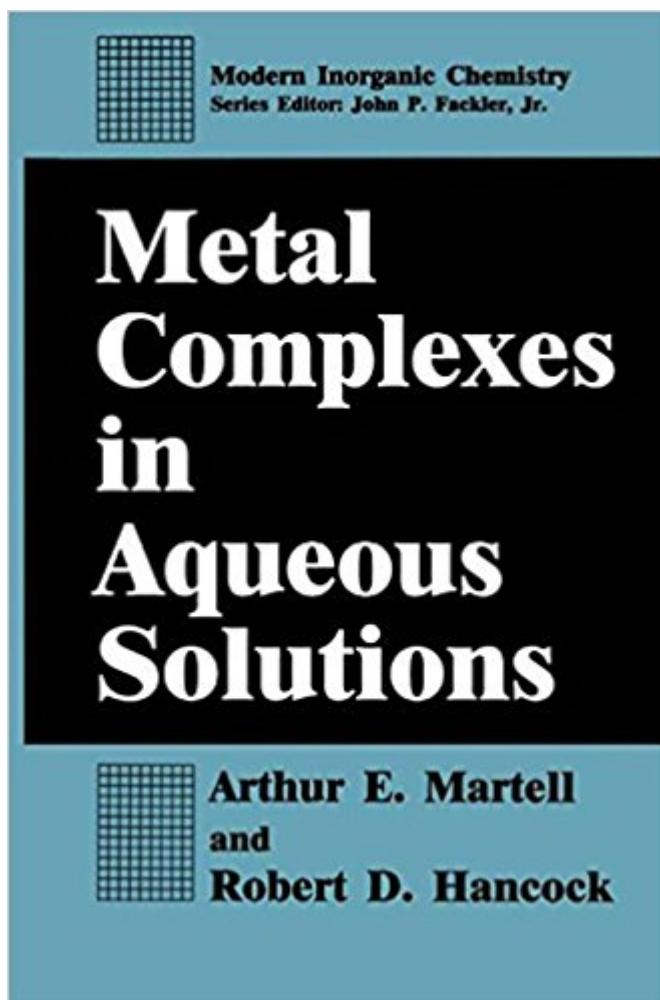


The book was found

Metal Complexes In Aqueous Solutions (Modern Inorganic Chemistry)



Synopsis

Stability constants are fundamental to understanding the behavior of metal ions in aqueous solution. Such understanding is important in a wide variety of areas, such as metal ions in biology, biomedical applications, metal ions in the environment, extraction metallurgy, food chemistry, and metal ions in many industrial processes. In spite of this importance, it appears that many inorganic chemists have lost an appreciation for the importance of stability constants, and the thermodynamic aspects of complex formation, with attention focused over the last thirty years on newer areas, such as organometallic chemistry. This book is an attempt to show the richness of chemistry that can be revealed by stability constants, when measured as part of an overall strategy aimed at understanding the complexing properties of a particular ligand or metal ion. Thus, for example, there are numerous crystal structures of the Li⁺ ion with crown ethers. What do these indicate to us about the chemistry of Li⁺ with crown ethers? In fact, most of these crystal structures are in a sense misleading, in that the Li⁺ ion forms no complexes, or at best very weak complexes, with familiar crown ethers such as 12-crown-4, in any known solvent. Thus, without the stability constants, our understanding of the chemistry of a metal ion with any particular ligand must be regarded as incomplete. In this book we attempt to show how stability constants can reveal factors in ligand design which could not readily be deduced from any other physical technique.

Book Information

Series: Modern Inorganic Chemistry

Hardcover: 254 pages

Publisher: Springer; 1996 edition (March 31, 1996)

Language: English

ISBN-10: 0306452480

ISBN-13: 978-0306452482

Product Dimensions: 6.1 x 0.7 x 9.2 inches

Shipping Weight: 9.9 ounces (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #3,895,543 in Books (See Top 100 in Books) #70 in Books > Science & Math > Chemistry > Organic > Organometallic Compounds #768 in Books > Science & Math > Chemistry > Inorganic #1066 in Books > Science & Math > Chemistry > Physical & Theoretical > Physical Chemistry

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

Metal Complexes in Aqueous Solutions (Modern Inorganic Chemistry) Transition Metal Complexes as Drugs and Chemotherapeutic Agents (Catalysis by Metal Complexes) Metal-Ligand Multiple Bonds: The Chemistry of Transition Metal Complexes Containing Oxo, Nitrido, Imido, Alkylidene, or Alkylidyne Ligands Organometallics 1: Complexes with Transition Metal-Carbon *s-bonds (Oxford Chemistry Primers) (Vol 1) Reaction Mechanisms of Inorganic and Organometallic Systems (Topics in Inorganic Chemistry) Inorganic and Organometallic Polymers (Special Topics in Inorganic Chemistry) The Chemistry of Macrocyclic Ligand Complexes (Cambridge Texts in Chemistry and Biochemistry) Metalloporphyrins Catalyzed Oxidations (Catalysis by Metal Complexes) Molecular Orbitals of Transition Metal Complexes Heavy Metal Rhythm Guitar: The Essential Guide to Heavy Metal Rock Guitar (Learn Heavy Metal Guitar) (Volume 1) Qualitative Analysis and the Properties of the Ions in Aqueous Solutions (Saunders Golden Series) Atlas of Electrochemical Equilibria in Aqueous Solutions An Introduction to Aqueous Electrolyte Solutions Solutions Manual to accompany Shriver & Atkins' Inorganic Chemistry Solutions Manual Inorganic Chemistry 3e Inorganic Chemistry Solutions Manual Standard Potentials in Aqueous Solution (Monographs in Electroanalytical Chemistry and Electrochemistr) NMR Spectroscopy in Inorganic Chemistry (Oxford Chemistry Primers) The Chemistry of Artificial Lighting Devices, Volume 17: Lamps, Phosphors and Cathode Ray Tubes (Studies in Inorganic Chemistry) Introduction to Coordination Chemistry (Inorganic Chemistry: A Textbook Series)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)