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Nota di contenuto	Supramolecular Organornetallic Chemistry; Table of Contents; 1 Basic Concepts and Principles; 1.1 Definitions; 1.1.1 Supramolecular chemistry; 1.1.2 Molecular recognition and host-guest interactions; 1.1.3 Self-assembly and self-organization; 1.2 Intermolecular Bond Types in Organometallic Supramolecular Systems; 1.2.1 Dative bonding (electron-pair donor-acceptor bonding or Lewis acid-base interactions); 1.2.2 The secondary bond concept; 1.2.3 Hydrogen-bond interactions; 1.2.4 Ionic interactions; 1.2.5 -Bonding interactions; 2 Molecular Recognition and Host-Guest Interactions 2.1 Organometallic Receptors and their Host-Guest Complexes2.1.1 Organomercury macrocyclic receptors; 2.1.2 Organocopper and organosilver potential receptors; 2.1.3 Organocyclosiloxane receptors; 2.1.4 Organotin macrocyclic receptors; 2.1.5 Ferrocene-containing coronands and cryptands; 2.1.5.1 Ferrocene polyoxa coronands; 2.1.5.2 Ferrocene polyaza-dxa coronands and cryptands; 2.1.5.3 Ferrocene polyaza coronands and cryptands; 2.1.5.4 Ferrocene polyoxa-thia coronands; 2.1.5.5 Ferrocene polythia coronands; 2.1.5.6

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2.2.2.3 Organometallics in the thiourea lattice host3 Supramolecular Self-Assembly by Dative Bonding (Electron-Pair Donor-Acceptor or Lewis Acid-Base Interactions); 3.1 Group 12 Metals - Zinc, Cadmium, Mercury; 3.1.1 Self-assembly of organozinc compounds; 3.1.1.1 Organozinc halides; 3.1.1.2 Organozinc-oxygen compounds; 3.1.1.3 Organozinc-sulfur compounds; 3.1.1.4 Organozinc-selenium compounds; 3.1.1.5 Organozinc-nitrogen compounds; 3.1.2 Self-assembly of organocadmium compounds; 3.1.3 Self-assembly of organomercury compounds; 3.2 Group 13 Metals - Aluminum, Gallium, Indium, Thallium
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3.2.2.6 Organogallium-phosphorus, -arsenic and -antimony compounds

Sommario/riassunto

Supramolecular chemistry has become not only a major field of chemistry, but is also a vivid interface between chemistry, biology, physics, and materials science. Although still a relatively young field, termini such as molecular recognition, host-guest chemistry, or self-assembly are now common knowledge even for chemistry students, and research has already been honored with a Nobel Prize.This first book on supramolecular organometallic chemistry combines two areas in chemistry that are experiencing the fastest developments. It provides a comprehensive review of various organometa