

## SOME INFORMATION SOURCES FOR ORGANOMETALLICS

This list is *not* exhaustive, but is intended as an overview of titles offering comprehensive coverage of organometallic compounds and synthesis.

*Other works may contain the information you need.*

Reference Tool	Size/Scope	Arrangement of Compounds	Information Provided	Indexes, Special Features
(1) Comprehensive Organometallic Chemistry QD411 C73 1982 Physical Sciences REF	<ul style="list-style-type: none"> <li>• 9 volumes, vol.9 is index</li> <li>• Current methods involving organometallic chemistry and compounds.</li> </ul>	<ul style="list-style-type: none"> <li>• Grouped by central metal, then by compound class.</li> </ul>	<ul style="list-style-type: none"> <li>• General discussions of methodology and compound classes, with literature references to published examples and review articles.</li> </ul>	<ul style="list-style-type: none"> <li>• Formula, author, structure, and review article indexes. Some indexes include additional literature references not presented in the text.</li> </ul>
(2) Dictionary of Organometallic Compounds, 1984 (Annual Supplements) QD411 D55 Physical Sciences REF	<ul style="list-style-type: none"> <li>• 3 vols. in main work (5th supplement includes 1988 references).</li> </ul>	<ul style="list-style-type: none"> <li>• Alphabetically by metallic element symbol; metal section entries arranged in order of increasing Hill System molecular formula (Hill, <i>J. Am. Chem. Soc.</i> 1900, 22(8), 478-494).</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical and physical properties; structure; CA Registry Number; hazards toxicity; sources(s) and use; selective references to article on synthesis, spectra</li> <li>• "Updated Entries" in Supplements <i>replace earlier versions of the same entry</i></li> </ul>	<ul style="list-style-type: none"> <li>• Formula index</li> <li>• CA Registry Number index</li> <li>• Name index</li> <li>• Cumulative Structure index to Suppl. 1-5 published in 1990</li> </ul>
(3) Comprehensive Coordination Chemistry QD474 C73 Physical Sciences REF	<ul style="list-style-type: none"> <li>• 7 volumes; vol. 7 is index</li> <li>• Metal-ligand species "where the # of metal-carbon bonds is [less than] half the coordination number of the metal."</li> </ul>	<ul style="list-style-type: none"> <li>• Divided, by volume, into ligands, main group/early transition elements, middle transition elements, late transition elements, and applications.</li> <li>• Metals arranged by Periodic Table group, then by atomic number.</li> </ul>	<ul style="list-style-type: none"> <li>• General discussions of "the synthesis, reactions, properties, and applications of coordination compounds," with literature references to published examples and review articles.</li> </ul>	<ul style="list-style-type: none"> <li>• Subject, formula indexes in each volume.</li> <li>• Index volume [7] includes Index of Review Articles and Specialist Texts (1945-1986).</li> </ul>
(4) The Chemistry of the Metal-Carbon Bond QD411 C51 Physical Sciences STACKS	<ul style="list-style-type: none"> <li>• 5 volumes (1990) that "...cover the chemistry of the metal-carbon bond as a whole, [with] emphasis on the carbon end."</li> </ul>	<ul style="list-style-type: none"> <li>• Broadly grouped within a review context; see titles and prefaces of volumes.</li> </ul>	<ul style="list-style-type: none"> <li>• Each volume deals with several topics in the theory, structure, preparation, characterization, analysis, and uses of organometallic compounds. Reviews of methodologies, procedures, classes; literature references.</li> </ul>	<ul style="list-style-type: none"> <li>• Author, subject indexes</li> <li>• Part of the "Chemistry of Functional Groups" series (Wiley-Interscience).</li> </ul>
(5) Organometallic Syntheses QD410 O686 Physical Sciences STACKS	<ul style="list-style-type: none"> <li>• 4 volumes (1990)</li> <li>• "Detailed and tested procedures for the preparation of specific organometallic compounds."</li> </ul>	<ul style="list-style-type: none"> <li>• By ligand and metal types.</li> </ul>	<ul style="list-style-type: none"> <li>• Detailed synthetic procedures for organometallic compounds; literature references; product properties; precautions. Vol.1+2 contain general experimental procedures as well, e.g. "Crystallization," "Storage and Transfer."</li> </ul>	<ul style="list-style-type: none"> <li>• Vary with coverage of volume; compound, ligand, metal, author indexes.</li> </ul>

<p>(6) Advances in Organometallic Chemistry, 1964-QD411 A24 Physical Sciences STACKS</p>	<ul style="list-style-type: none"> <li>• 37 volumes (1995)</li> <li>“...include reviews of recent developments in all of organometallic chemistry.</li> </ul>	<ul style="list-style-type: none"> <li>• Broadly grouped within a review context: See indeces.</li> </ul>	<ul style="list-style-type: none"> <li>• Each volume deals with a few topics in organometallics. Starting with volume 6, brief introductory chapters of personal/historical nature included.</li> </ul>	<ul style="list-style-type: none"> <li>• Each volume is indexed-varies.</li> <li>• Cumulative subject indeces in volumes 5, 10, 37. From volume 7 on, each has cumulative list of contributors.</li> </ul>
<p>(7) Handbook of Organometallic Compounds QD411 K21 Physical Sciences REF</p>	<ul style="list-style-type: none"> <li>• 1 volume.</li> </ul>	<ul style="list-style-type: none"> <li>• Tables are arranged by element [within periodic groups]. Compounds arranged by empirical formula.</li> </ul>	<ul style="list-style-type: none"> <li>• Physical properties. Section on preparation of organometallic compounds.</li> </ul>	<ul style="list-style-type: none"> <li>• Each element section has bibliography of references cited in the tables.</li> </ul>
<p>(8) Comprehensive Supramolecular Chemistry QD411C731996 Physical Sciences REF</p>	<ul style="list-style-type: none"> <li>• 11 volumes, vol. 11 is an index</li> <li>• Covers the interdisciplinary field of supermolecular chemistry including many metallic complexes</li> </ul>	<ul style="list-style-type: none"> <li>• Broadly grouped within a review context;</li> <li>• Each volume is titled</li> <li>• See titles and tables of contents</li> </ul>	<ul style="list-style-type: none"> <li>• Each volume deals with several to many topics in the history, theory, structure, preparation, analysis, and uses of supermolecules</li> </ul>	<ul style="list-style-type: none"> <li>• Author, subject indexes in each volume</li> <li>• Index volume [11] is well organized and thorough</li> <li>• Extensive bibliographies</li> <li>• Clear extensive graphics [for example:article on complexes of fullerenes in volume 1]</li> </ul>

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