

---

## Author Index Volumes 1–17

*The volume numbers are printed in italics*

- Abdel-Magid AF, see Mehrmann SJ (2004) *6*: 153–180
- Akiyama K, see Mikami M (2005) *14*: 279–322
- Allardyce CS, Dyson PJ (2006) Medicinal Properties of Organometallic Compounds. *17*: 177–210
- Alper H, see Grushin VV (1999) *3*: 193–225
- Anwander R (1999) Principles in Organolanthanide Chemistry. *2*: 1–62
- Arends IWCE, Kodama T, Sheldon RA (2004) Oxidations Using Ruthenium Catalysts. *11*: 277–320
- Armentrout PB (1999) Gas-Phase Organometallic Chemistry. *4*: 1–45
- Barluenga J, Rodríguez F, Fañanás FJ, Flórez J (2004) Cycloaddition Reaction of Group 6 Fischer Carbene Complexes. *13*: 59–121
- Basset J-M, see Candy J-P (2005) *16*: 151–210
- Beak P, Johnson TA, Kim DD, Lim SH (2003) Enantioselective Synthesis by Lithiation Adjacent to Nitrogen and Electrophile Incorporation. *5*: 139–176
- Bertus P, see Szymoniak J (2005) *10*: 107–132
- Bien J, Lane GC, Oberholzer MR (2004) Removal of Metals from Process Streams: Methodologies and Applications. *6*: 263–284
- Blechert S, Connon SJ (2004) Recent Advances in Alkene Metathesis. *11*: 93–124
- Bonino F, see Bordiga S (2005) *16*: 37–68
- Bordiga S, Damin A, Bonino F, Lamberti C (2005) Single Site Catalyst for Partial Oxidation Reaction: TS-1 Case Study. *16*: 37–68
- Böttcher A, see Schmalz HG (2004) *7*: 157–180
- Braga D (1999) Static and Dynamic Structures of Organometallic Molecules and Crystals. *4*: 47–68
- Breuzard JAJ, Christ-Tommasino ML, Lemaire M (2005) Chiral Ureas and Thiroureas in Asymmetric Catalysis. *15*: 231–270
- Brüggemann M, see Hoppe D (2003) *5*: 61–138
- Bruneau C (2004) Ruthenium Vinylidenes and Allenylidenes in Catalysis. *11*: 125–153
- Brutchev RL, see Furdala KL (2005) *16*: 69–115
- Butler PA, Kräutler B (2006) Biological Organometallic Chemistry of B<sub>12</sub>. *17*: 1–55
- Candy J-P, Copéret C, Basset J-M (2005) Analogy between Surface and Molecular Organometallic Chemistry. *16*: 151–210
- Catellani M (2005) Novel Methods of Aromatic Functionalization Using Palladium and Norbornene as a Unique Catalytic System. *14*: 21–54
- Chatani N (2004) Selective Carbonylations with Ruthenium Catalysts. *11*: 173–195
- Chatani N, see Kakiuchi F (2004) *11*: 45–79

- Chaudret B (2005) Synthesis and Surface Reactivity of Organometallic Nanoparticles. *16*: 233–259
- Chlenov A, see Semmelhack MF (2004) *7*: 21–42
- Chlenov A, see Semmelhack MF (2004) *7*: 43–70
- Chinkov M, Marek I (2005) Stereoselective Synthesis of Dienyl Zirconocene Complexes. *10*: 133–166
- Christ-Tommasino ML, see Breuzard JAJ (2005) *15*: 231–270
- Chuzel O, Riant O (2005) Sparteine as a Chiral Ligand for Asymmetric Catalysis. *15*: 59–92
- Clayden J (2003) Enantioselective Synthesis by Lithiation to Generate Planar or Axial Chirality. *5*: 251–286
- Connon SJ, see Blechert S (2004) *11*: 93–124
- Copéret C, see Candy J-P (2005) *16*: 151–210
- Cummings SA, Tunge JA, Norton JR (2005) Synthesis and Reactivity of Zirconaaziridines. *10*: 1–39
- Damin A, see Bordiga S (2005) *16*: 37–68
- Damin A, see Zecchina A (2005) *16*: 1–35
- Delaude L, see Noels A (2004) *11*: 155–171
- Dedieu A (1999) Theoretical Treatment of Organometallic Reaction Mechanisms and Catalysis. *4*: 69–107
- Delmonte AJ, Dowdy ED, Watson DJ (2004) Development of Transition Metal-Mediated Cyclopropanation Reaction. *6*: 97–122
- Demonceau A, see Noels A (2004) *11*: 155–171
- Derien S, see Dixneuf PH (2004) *11*: 1–44
- Deubel D, Loschen C, Frenking G (2005) Organometallacycles as Intermediates in Oxygen-Transfer Reactions. Reality or Fiction? *12*: 109–144
- Dixneuf PH, Derien S, Monnier F (2004) Ruthenium-Catalyzed C–C Bond Formation. *11*: 1–44
- Dötz KH, Minatti A (2004) Chromium-Templated Benzannulation Reactions. *13*: 123–156
- Dowdy EC, see Molander G (1999) *2*: 119–154
- Dowdy ED, see Delmonte AJ (2004) *6*: 97–122
- Doyle MP (2004) Metal Carbene Reactions from Dirhodium(II) Catalysts. *13*: 203–222
- Drudis-Solé G, Ujaque G, Maseras F, Lledós A (2005) Enantioselectivity in the Dihydroxylation of Alkenes by Osmium Complexes. *12*: 79–107
- Dyson PJ, see Allardyce CS (2006) *17*: 177–210
- Eisen MS, see Lisovskii A (2005) *10*: 63–105
- Fañanás FJ, see Barluenga (2004) *13*: 59–121
- Flórez J, see Barluenga (2004) *13*: 59–121
- Fontecave M, Hamelin O, Ménage S (2005) Chiral-at-Metal Complexes as Asymmetric Catalysts. *15*: 271–288
- Fontecilla-Camps JC, see Volbeda A (2006) *17*: 57–82
- Fraile JM, García JI, Mayoral JA (2005) Non-covalent Immobilization of Catalysts Based on Chiral Diazaligands. *15*: 149–190
- Frenking G, see Deubel D (2005) *12*: 109–144
- Freund H-J, see Risse T (2005) *16*: 117–149
- Fu GC, see Netherton M (2005) *14*: 85–108

- Fujdala KL, Brutchey RL, Tilley TD (2005) Tailored Oxide Materials via Thermolytic Molecular Precursor (TMP) Methods. *16*: 69–115
- Fürstner A (1998) Ruthenium-Catalyzed Metathesis Reactions in Organic Synthesis. *1*: 37–72
- García JI, see Fraile JM (2005) *15*: 149–190
- Gates BC (2005) Oxide- and Zeolite-supported “Molecular” Metal Clusters: Synthesis, Structure, Bonding, and Catalytic Properties. *16*: 211–231
- Gibson SE (née Thomas), Keen SP (1998) Cross-Metathesis. *1*: 155–181
- Gisdakis P, see Rösch N (1999) *4*: 109–163
- Görling A, see Rösch N (1999) *4*: 109–163
- Goldfuss B (2003) Enantioselective Addition of Organolithiums to C=O Groups and Ethers. *5*: 12–36
- Gossage RA, van Koten G (1999) A General Survey and Recent Advances in the Activation of Unreactive Bonds by Metal Complexes. *3*: 1–8
- Gotov B, see Schmalz HG (2004) *7*: 157–180
- Gras E, see Hodgson DM (2003) *5*: 217–250
- Grepioni F, see Braga D (1999) *4*: 47–68
- Gröger H, see Shibasaki M (1999) *2*: 199–232
- Gröppo E, see Zecchina A (2005) *16*: 1–35
- Grushin VV, Alper H (1999) Activation of Otherwise Unreactive C–Cl Bonds. *3*: 193–225
- Guitian E, Perez D, Pena D (2005) Palladium-Catalyzed Cycloaddition Reactions of Arynes. *14*: 109–146
- Hamelin O, see Fontecave M (2005) *15*: 271–288
- Harman D (2004) Dearomatization of Arenes by Dihapto-Coordination. *7*: 95–128
- Hatano M, see Mikami M (2005) *14*: 279–322
- He Y, see Nicolaou KC (1998) *1*: 73–104
- Hegedus LS (2004) Photo-Induced Reactions of Metal Carbenes in organic Synthesis. *13*: 157–201
- Hermanns J, see Schmidt B (2004) *13*: 223–267
- Hidai M, Mizobe Y (1999) Activation of the N–N Triple Bond in Molecular Nitrogen: Toward its Chemical Transformation into Organo-Nitrogen Compounds. *3*: 227–241
- Hirao T, see Moriuchi T (2006) *17*: 143–175
- Hodgson DM, Stent MAH (2003) Overview of Organolithium-Ligand Combinations and Lithium Amides for Enantioselective Processes. *5*: 1–20
- Hodgson DM, Tomooka K, Gras E (2003) Enantioselective Synthesis by Lithiation Adjacent to Oxygen and Subsequent Rearrangement. *5*: 217–250
- Hoppe D, Marr F, Brüggemann M (2003) Enantioselective Synthesis by Lithiation Adjacent to Oxygen and Electrophile Incorporation. *5*: 61–138
- Hou Z, Wakatsuki Y (1999) Reactions of Ketones with Low-Valent Lanthanides: Isolation and Reactivity of Lanthanide Ketyl and Ketone Dianion Complexes. *2*: 233–253
- Hoveyda AH (1998) Catalytic Ring-Closing Metathesis and the Development of Enantioselective Processes. *1*: 105–132
- Huang M, see Wu GG (2004) *6*: 1–36
- Hughes DL (2004) Applications of Organotitanium Reagents. *6*: 37–62
- Iguchi M, Yamada K, Tomioka K (2003) Enantioselective Conjugate Addition and 1,2-Addition to C=N of Organolithium Reagents. *5*: 37–60
- Ito Y, see Murakami M (1999) *3*: 97–130

- Ito Y, see Suginome M (1999) 3: 131–159
- Itoh K, Yamamoto Y (2004) Ruthenium Catalyzed Synthesis of Heterocyclic Compounds. 11: 249–276
- Jacobsen EN, see Larrow JF (2004) 6: 123–152
- Johnson TA, see Break P (2003) 5: 139–176
- Jones WD (1999) Activation of C–H Bonds: Stoichiometric Reactions. 3: 9–46
- Kagan H, Namy JL (1999) Influence of Solvents or Additives on the Organic Chemistry Mediated by Diiodosamarium. 2: 155–198
- Kakiuchi F, Murai S (1999) Activation of C–H Bonds: Catalytic Reactions. 3: 47–79
- Kakiuchi F, Chatani N (2004) Activation of C–H Inert Bonds. 11: 45–79
- Kanno K, see Takahashi T (2005) 8: 217–236
- Keen SP, see Gibson SE (née Thomas) (1998) 1: 155–181
- Kendall C, see Wipf P (2005) 8: 1–25
- Kiessling LL, Strong LE (1998) Bioactive Polymers. 1: 199–231
- Kim DD, see Beak P (2003) 5: 139–176
- King AO, Yasuda N (2004) Palladium-Catalyzed Cross-Coupling Reactions in the Synthesis of Pharmaceuticals. 6: 205–246
- King NP, see Nicolaou KC, He Y (1998) 1: 73–104
- Kobayashi S (1999) Lanthanide Triflate-Catalyzed Carbon–Carbon Bond-Forming Reactions in Organic Synthesis. 2: 63–118
- Kobayashi S (1999) Polymer-Supported Rare Earth Catalysts Used in Organic Synthesis. 2: 285–305
- Kodama T, see Arends IWCE (2004) 11: 277–320
- Kondratenkov M, see Rigby J (2004) 7: 181–204
- Koten G van, see Gossage RA (1999) 3: 1–8
- Kotora M (2005) Metallocene-Catalyzed Selective Reactions. 8: 57–137
- Kräutler B, see Butler PA (2006) 17: 1–55
- Kumobayashi H, see Sumi K (2004) 6: 63–96
- Kündig EP (2004) Introduction. 7: 1–2
- Kündig EP (2004) Synthesis of Transition Metal  $\eta^6$ -Arene Complexes. 7: 3–20
- Kündig EP, Pape A (2004) Dearomatization via  $\eta^6$  Complexes. 7: 71–94
- Lamberti C, see Bordiga S (2005) 16: 37–68
- Lane GC, see Bien J (2004) 6: 263–284
- Larock R (2005) Palladium-Catalyzed Annulation of Alkynes. 14: 147–182
- Larrow JF, Jacobsen EN (2004) Asymmetric Processes Catalyzed by Chiral (Salen)Metal Complexes 6: 123–152
- Lemaire M, see Breuzard JAJ (2005) 15: 231–270
- Li CJ, Wang M (2004) Ruthenium Catalyzed Organic Synthesis in Aqueous Media. 11: 321–336
- Li Z, see Xi Z (2005) 8: 27–56
- Lim SH, see Beak P (2003) 5: 139–176
- Lin Y-S, Yamamoto A (1999) Activation of C–O Bonds: Stoichiometric and Catalytic Reactions. 3: 161–192
- Lisovskii A, Eisen MS (2005) Octahedral Zirconium Complexes as Polymerization Catalysts. 10: 63–105
- Lledós A, see Drudis-Solé G (2005) 12: 79–107
- Loschen C, see Deubel D (2005) 12: 109–144

- Ma S (2005) Pd-catalyzed Two or Three-component Cyclization of Functionalized Allenes. *14*: 183–210
- Mangeny P, see Roland S (2005) *15*: 191–229
- Marciniec B, Pretraszuk C (2004) Synthesis of Silicon Derivatives with Ruthenium Catalysts. *11*: 197–248
- Marek I, see Chinkov M (2005) *10*: 133–166
- Marr F, see Hoppe D (2003) *5*: 61–138
- Maryanoff CA, see Mehrmann SJ (2004) *6*: 153–180
- Maseras F (1999) Hybrid Quantum Mechanics/Molecular Mechanics Methods in Transition Metal Chemistry. *4*: 165–191
- Maseras F, see Drudis-Solé G (2005) *12*: 79–107
- Le Maux P, see Simonneaux G (2006) *17*: 83–122
- Mayoral JA, see Fraile JM (2005) *15*: 149–190
- Medaer BP, see Mehrmann SJ (2004) *6*: 153–180
- Mehrmann SJ, Abdel-Magid AF, Maryanoff CA, Medaer BP (2004) Non-Salen Metal-Catalyzed Asymmetric Dihydroxylation and Asymmetric Aminohydroxylation of Alkenes. Practical Applications and Recent Advances. *6*: 153–180
- De Meijere, see Wu YT (2004) *13*: 21–58
- Ménage S, see Fontecave M (2005) *15*: 271–288
- Michalak A, Ziegler T (2005) Late Transition Metal as Homo- and Co-Polymerization Catalysts. *12*: 145–186
- Mikami M, Hatano M, Akiyama K (2005) Active Pd(II) Complexes as Either Lewis Acid Catalysts or Transition Metal Catalysts. *14*: 279–322
- Minatti A, Dötz KH (2004) Chromium-Templated Benzannulation Reactions. *13*: 123–156
- Miura M, Satoh T (2005) Catalytic Processes Involving  $\beta$ -Carbon Elimination. *14*: 1–20
- Miura M, Satoh T (2005) Arylation Reactions via C–H Bond Cleavage. *14*: 55–84
- Mizobe Y, see Hidai M (1999) *3*: 227–241
- Molander G, Dowdy EC (1999) Lanthanide- and Group 3 Metallocene Catalysis in Small Molecule Synthesis. *2*: 119–154
- Monnier F, see Dixneuf (2004) *11*: 1–44
- Mori M (1998) Enyne Metathesis. *1*: 133–154
- Mori M (2005) Synthesis and Reactivity of Zirconium-Silene Complexes. *10*: 41–62
- Moriuchi T, Hirao T (2006) Ferrocene–Peptide Bioconjugates. *17*: 143–175
- Morokuma K, see Musaev G (2005) *12*: 1–30
- Mulzer J, Öhler E (2004) Olefin Metathesis in Natural Product Syntheses. *13*: 269–366
- Muñiz K (2004) Planar Chiral Arene Chromium (0) Complexes as Ligands for Asymmetric Catalysis. *7*: 205–223
- Murai S, see Kakiuchi F (1999) *3*: 47–79
- Murakami M, Ito Y (1999) Cleavage of Carbon–Carbon Single Bonds by Transition Metals. *3*: 97–130
- Musaev G, Morokuma K (2005) Transition Metal Catalyzed  $\sigma$ -Bond Activation and Formation Reactions. *12*: 1–30
- Nakamura I, see Yamamoto Y (2005) *14*: 211–240
- Nakamura S, see Toru T (2003) *5*: 177–216
- Namy JL, see Kagan H (1999) *2*: 155–198
- Negishi E, Tan Z (2005) Diastereoselective, Enantioselective, and Regioselective Carboalumination Reactions Catalyzed by Zirconocene Derivatives. *8*: 139–176
- Netherton M, Fu GC (2005) Palladium-catalyzed Cross-Coupling Reactions of Unactivated Alkyl Electrophiles with Organometallic Compounds. *14*: 85–108

- Nicolaou KC, King NP, He Y (1998) Ring-Closing Metathesis in the Synthesis of Epothilones and Polyether Natural Products. *1*: 73–104
- Nishiyama H (2004) Cyclopropanation with Ruthenium Catalysts. *11*: 81–92
- Noels A, Demonceau A, Delaude L (2004) Ruthenium Promoted Catalysed Radical Processes toward Fine Chemistry. *11*: 155–171
- Nolan SP, Viciu MS (2005) The Use of N-Heterocyclic Carbenes as Ligands in Palladium Mediated Catalysis. *14*: 241–278
- Normant JF (2003) Enantioselective Carbolithiations. *5*: 287–310
- Norton JR, see Cummings SA (2005) *10*: 1–39
- Oberholzer MR, see Bien J (2004) *6*: 263–284
- Öhler E, see Mulzer J (2004) *13*: 269–366
- Pape A, see Kündig EP (2004) *7*: 71–94
- Pawlow JH, see Tindall D, Wagener KB (1998) *1*: 183–198
- Pena D, see Guitian E (2005) *14*: 109–146
- Perez D, see Guitian E (2005) *14*: 109–146
- Prashad M (2004) Palladium-Catalyzed Heck Arylations in the Synthesis of Active Pharmaceutical Ingredients. *6*: 181–204
- Prestipino C, see Zecchina A (2005) *16*: 1–35
- Pretraszuk C, see Marciniec B (2004) *11*: 197–248
- Riant O, see Chuzel O (2005) *15*: 59–92
- Richmond TG (1999) Metal Reagents for Activation and Functionalization of Carbon–Fluorine Bonds. *3*: 243–269
- Rigby J, Kondratenkov M (2004) Arene Complexes as Catalysts. *7*: 181–204
- Risse T, Freund H-J (2005) Spectroscopic Characterization of Organometallic Centers on Insulator Single Crystal Surfaces: From Metal Carbonyls to Ziegler–Natta Catalysts. *16*: 117–149
- Rodríguez F, see Barluenga (2004) *13*: 59–121
- Roland S, Mangeney P (2005) Chiral Diaminocarbene Complexes, Synthesis and Application in Asymmetric Catalysis. *15*: 191–229
- Rösch N (1999) A Critical Assessment of Density Functional Theory with Regard to Applications in Organometallic Chemistry. *4*: 109–163
- Roucoux A (2005) Stabilized Noble Metal Nanoparticles: An Unavoidable Family of Catalysts for Arene Derivative Hydrogenation. *16*: 261–279
- Sakaki S (2005) Theoretical Studies of C–H s-Bond Activation and Related by Transition-Metal Complexes. *12*: 31–78
- Satoh T, see Miura M (2005) *14*: 1–20
- Satoh T, see Miura M (2005) *14*: 55–84
- Savaio D (2005) Progress in the Asymmetric Synthesis of 1,2-Diamines from Azomethine Compounds. *15*: 1–58
- Schmalz HG, Gotov B, Böttcher A (2004) Natural Product Synthesis. *7*: 157–180
- Schmidt B, Hermanns J (2004) Olefin Metathesis Directed to Organic Synthesis: Principles and Applications. *13*: 223–267
- Schrock RR (1998) Olefin Metathesis by Well-Defined Complexes of Molybdenum and Tungsten. *1*: 1–36

- Schulz E (2005) Use of *N,N*-Coordinating Ligands in Catalytic Asymmetric C–C Bond Formations: Example of Cyclopropanation, Diels–Alder Reaction, Nucleophilic Allylic Substitution. *15*: 93–148
- Semmelhack MF, Chlenov A (2004) (Arene)Cr(Co)<sub>3</sub> Complexes: Arene Lithiation/Reaction with Electrophiles. *7*: 21–42
- Semmelhack MF, Chlenov A (2004) (Arene)Cr(Co)<sub>3</sub> Complexes: Aromatic Nucleophilic Substitution. *7*: 43–70
- Sen A (1999) Catalytic Activation of Methane and Ethane by Metal Compounds. *3*: 81–95
- Severin K (2006) Organometallic Receptors for Biologically Interesting Molecules. *17*: 123–142
- Sheldon RA, see Arends IWCE (2004) *11*: 277–320
- Shibasaki M, Gröger H (1999) Chiral Heterobimetallic Lanthanoid Complexes: Highly Efficient Multifunctional Catalysts for the Asymmetric Formation of C–C, C–O and C–P Bonds. *2*: 199–232
- Simonneaux G, Le Maux P (2006) Carbene Complexes of Heme Proteins and Iron Porphyrin Models. *17*: 83–122
- Staemmler V (2005) The Cluster Approach for the Adsorption of Small Molecules on Oxide Surfaces. *12*: 219–256
- Stent MAH, see Hodgson DM (2003) *5*: 1–20
- Strassner T (2004) Electronic Structure and Reactivity of Metal Carbenes. *13*: 1–20
- Strong LE, see Kiessling LL (1998) *1*: 199–231
- Suginome M, Ito Y (1999) Activation of Si–Si Bonds by Transition-Metal Complexes. *3*: 131–159
- Sumi K, Kumobayashi H (2004) Rhodium/Ruthenium Applications. *6*: 63–96
- Suzuki N (2005) Stereospecific Olefin Polymerization Catalyzed by Metallocene Complexes. *8*: 177–215
- Szymoniak J, Bertus P (2005) Zirconocene Complexes as New Reagents for the Synthesis of Cyclopropanes. *10*: 107–132
- Takahashi T, Kanno K (2005) Carbon–Carbon Bond Cleavage Reaction Using Metallocenes. *8*: 217–236
- Tan Z, see Negishi E (2005) *8*: 139–176
- Tilley TD, see Furdal KL (2005) *16*: 69–115
- Tindall D, Pawlow JH, Wagener KB (1998) Recent Advances in ADMET Chemistry. *1*: 183–198
- Tobisch S (2005) Co-Oligomerization of 1,3-Butadiene and Ethylene Promoted by Zerovalent ‘Bare’ Nickel Complexes. *12*: 187–218
- Tomioka K, see Iguchi M (2003) *5*: 37–60
- Tomooka K, see Hodgson DM (2003) *5*: 217–250
- Toru T, Nakamura S (2003) Enantioselective Synthesis by Lithiation Adjacent to Sulfur, Selenium or Phosphorus, or without an Adjacent Activating Heteroatom. *5*: 177–216
- Tunge JA, see Cummings SA (2005) *10*: 1–39
- Uemura M (2004) (Arene)Cr(Co)<sub>3</sub> Complexes: Cyclization, Cycloaddition and Cross Coupling Reactions. *7*: 129–156
- Ujaque G, see Drudis-Solé G (2005) *12*: 79–107
- Viciu MS, see Nolan SP (2005) *14*: 241–278
- Volbeda A, Fontecilla-Camps JC (2006) Catalytic Nickel–Iron–Sulfur Clusters: From Minerals to Enzymes. *17*: 57–82

- Wagener KB, see Tindall D, Pawlow JH (1998) *1*: 183–198
- Wakatsuki Y, see Hou Z (1999) *2*: 233–253
- Wang M, see Li CJ (2004) *11*: 321–336
- Watson DJ, see Delmonte AJ (2004) *6*: 97–122
- Wipf P, Kendall C (2005) Hydrozirconation and Its Applications. *8*: 1–25
- Wu GG, Huang M (2004) Organolithium in Asymmetric Process. *6*: 1–36
- Wu YT, de Meijere A (2004) Versatile Chemistry Arising from Unsaturated Metal Carbenes. *13*: 21–58
- Xi Z, Li Z (2005) Construction of Carbocycles via Zirconacycles and Titanacycles. *8*: 27–56
- Yamada K, see Iguchi M (2003) *5*: 37–60
- Yamamoto A, see Lin Y-S (1999) *3*: 161–192
- Yamamoto Y, see Itoh K (2004) *11*: 249–276
- Yamamoto Y, Nakamura I (2005) Nucleophilic Attack by Palladium Species. *14*: 211–240
- Yasuda H (1999) Organo Rare Earth Metal Catalysis for the Living Polymerizations of Polar and Nonpolar Monomers. *2*: 255–283
- Yasuda N, see King AO (2004) *6*: 205–246
- Zecchina A, Groppo E, Damin A, Prestipino C (2005) Anatomy of Catalytic Centers in Phillips Ethylene Polymerization Catalyst. *16*: 1–35
- Ziegler T, see Michalak A (2005) *12*: 145–186



---

## Subject Index

- Acetogens 57  
Acetyl CoA synthase 57, 68  
Adenosine 5'-monophosphate 124  
Albumin 179  
Alkoxy- $\alpha$ -diazo- $\beta$ -ketoesters 111  
Alkylcobalt(III) 189, 192  
Alkylthiolates 101  
Alkyltin(IV) 189  
Alzheimer's disease 130  
Amino acids 123  
– –, molecular recognition 127  
Amino mutases, B<sub>12</sub>-dependent 41  
2-Aminobenzoic acid 127  
Aminosidine 184  
Amphotericin B 184  
Anti-HIV drugs, protease-targeting 186  
Antimalarials 184  
Antimonials 184  
Antimony compounds, leishmaniasis 178  
Antimony-*N,N*-piperazinedithiocarbamate 201  
Antipernicious anemia factor 3  
Arsenic 182  
Arsephenamine, syphilis 178  
Auranofin 201, 202  
Aurocyanide 201  
Azaspirane 202
- B<sub>12</sub>, electrochemistry 13  
– –, structure/reactivity 4  
– –, toxicology 44  
Benzimidazole 200  
1,3-Benzodioxole derivatives 88  
Bis-1,1'-disubstituted-ferrocenyl  
carbohydrazone 195  
Bis(oxazolonyl)pyridine (pybox) series 105  
*Brugia pahangi* 185  
*N-t*-Butyl- $\alpha$ -phenyl nitron 91
- CaMg<sub>6</sub>FeSi<sub>12</sub>O<sub>24</sub> (diopside) 61  
Carbene transfer 110  
Carbenes ligands, heme proteins 85  
– –, iron porphyrins 92  
– –, ruthenium/osmium porphyrins 103  
Carbethoxycarbenes 113  
Carbon monoxide 197  
– –, dehydrogenase 57, 62  
Carbon tetrachloride 86  
Cisplatin 178  
*Carboxydotherrmus hydrogenoformans* 63  
Carboxydrotrophic bacteria 58  
Cardiolite 203  
Cephalosporine 183  
CFCl<sub>3</sub> 88  
CH<sub>3</sub>SH 59  
Chemosensors 123  
Chlorocarbenes 94  
Chloroguanide 184  
Chloroquine 180  
Cisplatin 178  
Co-57-cyanocobalamin 202  
Co(cyclam)(H<sub>2</sub>O)(Me) 189, 199  
Cobalt 1  
Cobalt-carbon bond 84  
Cobalt-corrinoids 1  
Cobamides, kinetic redox properties 17  
– –, thermodynamic redox properties 14  
CODH, catalytic cycle 74  
– /ACS 58, 68  
Coenzyme B<sub>12</sub> 1, 4, 84  
– –, dependent enzymes 31  
CoFeSP 62  
Conocarpan 114  
Corrinoids 26  
Cyanocob(III)alamin 3  
Cyano-8-epicobalamin 5

- Cycloaddition transformation, tandem 115
- Cyclopentadienyl (Cp) 145
- Cyclopropanation 110
- Cysteine thiolates 64
- Cytochrome P450 85
- Daunorubicin 186
- DDT (2,2-bis(*p*-chlorophenyl)-1,1,1-trichloroethane) 94
- Dehalogenases, reductive, B<sub>12</sub>-dependent 43
- Dehalogenation, polyhalogenated compounds 86
- 2'-Deoxyadenosine 124
- Desulfomicrobium baculatum* 64
- Desulfovibrio* spp 63
- Dialkyl ruthenium(IV) porphyrin 104
- Dicobalthexacarbonylalkyne agent 199
- Diethyl maleate/fumarate 110
- Dihydroxypyridine ligands 129
- Diisopropyl diazomethylphosphonate 114
- Diol dehydratases 39
- Diphenyl-dithiocarbamate 186
- Dipyridine dichloroplatinum 178
- Dithiocarbamate 186
- DNA, platinated 179
- Epindolidione 145
- Ethanolamine ammonia lyase 39
- Ethyl diazoacetate 114
- 9-Ethylhypoxanthin 124
- Ferratricarbaboranes 193
- Ferrocene-peptide bioconjugates 143
- Ferrocenyl gold 190
- Ferrocenyl oestrogen mimic 190
- Ferrocenyl-cephalosporin 183
- Ferrocenyl-chloroquine 183
- Ferrocenyl-penicillin 183
- Ferrocenylalanine 145
- FeS 58
- Fluoride ions, selective recognition/sensing 133
- Folate synthesis 200
- Glutamate mutase 36
- Glutathione S-transferase 186
- Glycine ethyl esters 114
- Gold [1,3-(dimesitylmethylimidazolium)] chloride 194
- Greigite 61
- Halothane 87
- Helminth parasites 185
- Heme proteins, bioorganometallic catalysis 116
- Hemoglobin 91
- Histidine 135
- HIV, protease 189
- , protease inhibitors 89
- , protease-targeting 186
- , reverse transcriptase inhibitor 112
- Host-guest chemistry, trinuclear/metallamacrocyclic hosts 124
- Hydrogen bonding 143
- Hydrogenase 57
- , H<sub>2</sub>-sensing 64
- Indicator displacement assays, organometallic complex 135
- Indomethacin 202
- Iridium 124, 185
- Iridium-COD-pentamidine 183
- Iron porphyrin 83
- Iron(II) tetraarylporphyrins 96
- Iron-sulfur 61
- Isocyanides 101
- Leishmaniasis 184
- , antimony compounds 178
- Lipid peroxidation 86
- Lithium 123
- , selective recognition/sensing 129
- Malaria 180
- Mefloquine 189
- Metal carbonyl anticancer/diagnosis compounds 199
- Metal cyanides 198
- Metal sulfides 60
- Metal tricarbonyl-cyclopentadienyl 199
- Metallacrown complexes 129
- Metallamacrocycles 123
- Metalloporphyrins 84, 92
- , carbene transfer 110
- Methanogens 63

- Methanosarcina thermophila* 62, 69  
Methionine 135  
Methionine synthase 29  
Methyl group transfer 1  
Methyl transferases, B<sub>12</sub>-dependent 27  
9-Methyladenine 124  
Methylenedioxyphenyl HIV protease inhibitors 89  
Methyl-group transfer, B<sub>12</sub>-cofactors 30  
Methylmalonyl-CoA mutase 34  
MgFeSiO<sub>3</sub> (orthopyroxene) 61  
Mn<sub>2</sub>(CO)<sub>10</sub> 197  
*Molinema dessetae* 185  
Monooxygenase systems 86  
*Moorella thermoacetica* 62  
Multidrug resistance 186  
Mutases 34  
Myoglobin 91, 116
- NAMI-A 191  
1-Naphthoic acid 128  
Nedaplatin 178  
Ni(III)-peroxide 69  
Nickel superoxide dismutase 69  
NiFe hydride 73  
[NiFe]-hydrogenase, catalytic cycle 72  
NiFeS enzymes 57  
Nifurtimox 200  
Niridazole 200  
Norpseudovitamin B<sub>12</sub> 5  
Nucleoside kinases 195
- Organo-gold 201  
Organo-gold(III) 189  
Organometallic benzimidazole 185  
Organometallic electrochemical synthesis 19  
Organo-osmium 185  
Organo-palladium 180  
Origin of life, Geochemical theory 57  
Osmium 108  
Osmium *meso*-tetra-*p*-tolyl-porphyrin carbene 108  
Osmium ylide 108  
Oxaliplatin 178
- Palladium 180  
Penicillin 183, 187  
Pentacarbonylrhenate 96  
Pentamidine 184, 185
- Peptides 123  
–, histidine-/methionine-containing, chemosensor 135  
–, molecular recognition 127  
Peroxidases 116  
Phenobarbital 202  
Phenytoin 202  
Pincer silver(I)-carbene 196  
*Plasmodium falciparum* 180  
Platin 178  
Platinum(IV) complex 179  
Polio, type 1 188  
Polyhalogenated compounds, dehalogenation 86  
Pseudovitamin B<sub>12</sub> 5  
Pyrimethamine 184  
Pyrite 61
- Radical reactions 1  
– –, B<sub>12</sub> coenzymes 42  
*Ralstonia eutropha* 64  
RAPTA 193, 201  
Receptors 123  
Redox-switching 143  
Reverse transcriptase 189  
Rhodium 124  
Rhodium chloroquine 183  
Rhodium-cycloocta-1,5-diene 200  
Rhodium-2-hydroxybenzothiazole 201  
Ribonucleotide reductase, B<sub>12</sub>-dependent 41  
Ru(arene)Cl<sub>2</sub>(pta) 192  
[Ru(CO)<sub>3</sub>Cl<sub>2</sub>]<sub>2</sub> 197  
Ruthenium 103, 124  
Ruthenium-aminobenzothiazole 185  
Ruthenium(II)-arene 191  
Ruthenium myoglobin/hemoglobin 116  
Ruthenium tripodal phosphine 194
- Satraplatin 178  
Selenium 182  
Selenocarbonyl 95  
Serpentine 61  
Sigmatropic rearrangements 114  
Silver nitrate 196  
Silylcarbene ferroporphyrin 96  
Sodium nitroprusside 197  
Spirobifluorenylporphyrins 112  
Spirogermanium 189, 201  
Sulfamethoxydiazine 186

- Sulfonamides 184  
Syphilis, arsephenamine 178
- Tandem carbonyl ylide formation 115  
Technecium-isonitrile 202  
Tetrafluorenylporphyrins 112  
Tetrapyrroles 1  
Thimerosal (sodium ethylmercurithiosalicylate) 180  
Thiocarbonyl complexes 95  
Titanocene dichloride 190  
(TPP)Fe(CCl<sub>2</sub>) 94  
Transferrin 179, 190  
Transplatin 179  
Tricarbonyl  $\eta^5$ -cyclopentadienyl manganese 202  
Trichloromethyl trimethylsilane 96  
Trifluoro diazoethane 87
- Trinuclear, metallamacrocyclic hosts 124  
Triphenylphosphinegold(I)-chloroquine 180  
*Trypanosoma cruzi* 185  
Tryptophan 127
- Vanadocene 188  
Vanadocene dithiocarbamate 195  
Verapamil 186  
11-Vertex ferratricarbaborane 193  
Vinylidene carbene 94  
*N*-Vinylprotoporphyrin 90  
Vitamin B<sub>12</sub> 4
- WHI-07 188
- Ylides 108, 114