

JOURNAL OF ORGANOMETALLIC CHEMISTRY, VOL. 334 (1987)**SUBJECT INDEX****Aluminium**

Ziegler-type systems, activation of C-C bonds in alkanes and cycloalkanes by (M.E. Vol'pin, I.S. Akhrem, S.V. Reznichenko, V.V. Grushin), (334) 109

Bismuth

Tris(perfluoroorgano)bismuth compounds, $\text{Bi}(\text{R}_t)_3$ ($\text{R}_t = \text{CF}_3, \text{C}_2\text{F}_5, \text{n-C}_3\text{F}_7, \text{n-C}_4\text{H}_9, \text{n-C}_6\text{F}_{13}, \text{n-C}_8\text{F}_{17}, \text{C}_6\text{F}_5$) (D. Naumann, W. Tyrra), (334) 323

Cadmium

Bis[2-((dimethylamino)methyl)phenyl]cadmium(II), crystal and molecular structure of (O.F.Z. Khan, D.M. Frigo, P. O'Brien, A. Howes, M.B. Hursthouse), (334) C27

Chromium

Carbenechromium complexes, solvent, chelation and concentration effects on benzannulation reaction with acetylenes of (K.S. Chan, G.A. Peterson, T.A. Brandvold, K.L. Faron, C.A. Challener, C. Hyldahl, W.D. Wulff), (334) 9
Carbenemetal chelates, stable reactive intermediates in cycloaddition reactions (K.H. Dötz, M. Popall, G. Müller), (334) 57

Cobalt

$\text{Cp}(\text{CO})\text{CoPt}(\text{PPh}_3)_2(\mu\text{-CH}_2)$ and $\text{Cp}_2\text{Co}_2\text{Pt}-(\text{PPh}_3)_2(\mu\text{-CO})_2$, synthesis from reaction of $\text{Pt}(\text{PPh}_3)_2(\text{C}_2\text{H}_4)$ with $[\text{CpCo}(\text{CO})_2](\mu\text{-CH}_2)$, synthesis of (P.D. Macklin, C.A. Mirkin, N. Viswanathan, G.D. Williams, G.L. Geoffroy, A.L. Rheingold), (334) 117
Cyclooctaselenadiazole, synthesis, decomposition pathway, and reaction with $(\eta^5\text{-C}_5\text{H}_5)\text{Co}(\text{L})_2$ ($\text{L} = \text{C}_2\text{H}_4, \text{PPh}_3$); crystal and molecular

structures of $[(\eta^5\text{-C}_5\text{H}_5)\text{Co}]_2(\mu_2\text{-}\eta^3, \eta^2\text{-C}_8\text{H}_6\text{Se})$ (J. Knebel, C.P. Moley, G. Wilke, C. Krüger, J.M. Wallis), (334) C39

Octacarbonyldicobalt-mediated and -catalysed carbonylation of diaryl diselenides and ditellurides to seleno and telluro esters (H. Takahashi, K. Ohe, S. Uemura, N. Sugita), (334) C43

Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient catalysts for fluoride synthesis via carbonylation of organaic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205

Copper

From 2-thienylcopper couplings to trimethylsilyl-promoted organocopper additions (E.-L. Lindstedt, M. Nilsson, T. Olsson), (334) 255

Germanium

Bis(-t-butyl- trimethylsilyl-, trimethylgermyl-, trimethylstannylyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359

Hafnium

Group 4 metallocene-substituted ylides, synthesis and reactions with ketones of (G. Erker, P. Czisch, R. Mynott), (334) 91

Indium

Trimethylsilyl-substituted cyclopentadienylindium(I) compounds, synthesis and properties of (P. Jutzi, W. Leffers, G. Müller), (334) C24

Iridium

Fischer-Tropsch reaction, models for formation of oxygenates in (I.M. Saez, P.M. Maitlis), (334) C14

Iron

- Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359
- t*-Butylphosphphaacetylene, ring formation with π -areneiron complexes of (M. Driess, D. Hu, H. Pritzkow, H. Schäufele, U. Zenneck, M. Regitz, W. Rösch), (334) C35
- Dichloro[*N,N*-dimethyl-1-[1',2-bis(diphenylphosphino)ferrocenyl]ethylamine]palladium(II), crystal structure of (Tamio Hayashi, M. Kumada, T. Higuchi, K. Hirotsu), (334) 195
- Ferrocenylpentacarbonylmanganese, $Mn(CO)_5Fe$, synthesis and reactivity of (M. Herberhold, H. Kriesel), (334) 347
- Fischer-Tropsch reaction, models for formation of oxygenates in (I.M. Saez, P.M. Maitlis), (334) C14

Lead

- Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359

Lithium

- Carbenechromium complexes, solvent, chelation and concentration effects on benzannulation reaction with acetylenes of (K.S. Chan, G.A. Peterson, W.D. Wulff), (334) 9
- Dilithioacetylene formation instead of 1,2-dilithioethane in the reaction of ethylene with lithium, an amendment (A. Maercker, B. Grebe), (334) C21
- Palladium-catalysed or -promoted reductive C-C coupling, effects of phosphines and carbon ligands on (E.-I. Negishi, Tamotsu Takahashi, K. Akiyoshi), (334) 181
- Trimethylsilyl-substituted cyclopentadienylindium(I) compounds, synthesis and properties (P. Jutzi, W. Leffers, G. Müller), (334) C24

Manganese

Ferrocenylpentacarbonylmanganese, $Mn(CO)_5Fe$, synthesis and reactivity of (M. Herberhold, H. Kriesel), (334) 347

Metallocenes

- Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359
- t*-Butylphosphphaacetylene, ring formation with π -areneiron complexes of (M. Driess, D. Hu, H. Pritzkow, H. Schäufele, U. Zenneck, M. Regitz, W. Rösch), (334) C35
- Dichloro[*N,N*-dimethyl-1-[1',2-bis(diphenylphosphino)ferrocenyl]ethylamine]palladium(II), crystal structure of (Tamio Hayashi, M. Kumada, T. Higuchi, K. Hirotsu), (334) 195
- Ferrocenylpentacarbonylmanganese, $Mn(CO)_5Fe$, synthesis and reactivity of (M. Herberhold, H. Kriesel), (334) 347
- Group 4 metallocene-substituted ylides, synthesis and reactions with ketones of (G. Erker, P. Czisch), (334) 91

Molybdenum

Carbenemetal chelates, stable reactive intermediates in cycloaddition reactions (K.H. Dötz, M. Popall, G. Müller), (334) 57

Reduced metal oxides, molecular model for reductive cleavage of CO to carbide and oxide on (M.H. Chisholm), (334) 77

Nickel

- Acetonitrile/trialkylphosphane/nickel(0), selective oligomerisation of hexyne(-3) under catalysis of; structure of a nickel(0) complex with side-on bonded acetonitrile (D. Walther, H. Schönberg, E. Dinjus, J. Sieler), (334) 377
- Nickel polymerisation catalysts, reactions with CO of (U. Klabunde, T.H. Tulip, D.C. Roe, S.D. Ittel), (334) 141

Palladium

- Dichloro[*N,N*-dimethyl-1-[1',2-bis(diphenylphosphino)ferrocenyl]ethylamine]palladium(II), crystal structure of (Tamio Hayashi, M. Kumada, T. Higuchi, K. Hirotsu), (334) 195
- Oxidative addition of O-H bond to metal centre;

- synthesis and crystal structure of *trans*-(PhO)(H)Pd(PCy₃)₂·PhOH (D. Braga, P. Sabatino, C. Di Bugno, P. Leoni, M. Pasquali), (334) C46
- Palladium-catalysed furan-annelation reaction of 2-alkynyl carbonates or 2-(1-alkynyl)oxiranes, with β -keto esters (I. Minami, M. Yuhara, H. Watanabe, J. Tsuji), (334) 225
- Palladium-catalysed or -promoted reductive C–C coupling, effects of phosphines and carbon ligands on (E.-I. Negishi, Tamotsa Takahashi, K. Akiyoshi), (334) 181
- Palladium-catalysed stoichiometric hydroxidation of conjugated dienes (J.-E. Nyström, B. Söderberg, B. Åkermark, J.E. Bäckvall), (334) 169
- Palladium(II) catalyst for oxygenation of terminal olefins with molecular oxygen (T. Hosokawa, Tsukasa Takahashi, T. Ohta, S.-I. Murahashi), (334) C5
- Palladium complexes with *N,N'*-di- β -tolyl-formamidine, -triazene or -formamidine ligands; insertion of CNC₆H₄Me-*p*, CS₂ or CO₂ into a Pd–N bond (R. Usón, J. Forniés, P. Espinet, E. Lalinde), (334) 399
- Palladium(II) oxidizing potential, heterocyclic synthesis by use of (*Review*) (Y. Tamar, Z. Yoshida), (334) 213
- trans*-Pd(COPh)(CONMe₂)(PMe₃)₂, model intermediate in catalytic double carbonylation of aryl halides with amines to give α -keto amides, preparation and reductive elimination behaviour of (F. Ozawa, L. Huang, A. Yamamoto), (334) C9
- Perhalophenylpalladium(II) complexes containing keto-stabilised phosphorus ylides of the type Ph₂P(CH₂)_nPPh₂CHC(O)R (R. Usón, J. Forniés, R. Navarro, A.M. Ortega), (334) 389
- Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient catalysts for fluoride synthesis via carbonylation of organic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205
- ## Phosphorus
- Acetonitrile/triethylphosphane/nickel(0), selective cooligomerisation of hexyne(-3) under catalysis of; structure of a nickel(0) complex with side-on bonded acetonitrile (D. Walther, H. Schönberg, E. Dinjus, J. Sieler), (334) 377
- t-Butylphosphphaacetylene, ring formation with π -areneiron complexes of (M. Driess, D. Hu, H. Pritzkow, H. Schäufele, U. Zenneck, M. Regitz, W. Rösch), (334) C35
- Carbonyltungsten binuclear compounds bridged by hydride and bidentate phosphine ligands, synthesis of (J.T. Lin, Y.M. Shiao), (334) C31
- Cp(CO)₂Pt(PPh₃)₂(μ -CH₂) and Cp₂Co₂Pt-(PPh₃)₂(μ -CO)₂, synthesis from reaction of Pt(PPh₃)₂(C₂H₄) with [CpCo(CO)]₂(μ -CH₂), synthesis of (P.D. Macklin, C.A. Mirkin, N. Viswanathan, G.D. Williams, G.L. Geoffroy, A.L. Rheingold), (334) 117
- Dichloro[*N,N*-dimethyl-1-[1',2'-bis(diphenylphosphine)ferrocenyl]ethylamine]palladium(II), crystal structure of (Tamio Hayashi, M. Kumada, T. Higuchi, K. Hirotsu), (334) 195
- Ferrocenylpentacarbonylmanganese, Mn(CO)₅-Fc, synthesis and reactivity of (M. Herberhold, H. Kniesel), (334) 347
- Optically active monodentate phosphines prepared from α -pinanes and D-mannit under enantioselective catalysis (H. Brunner, H. Leyerer), (334) 369
- Palladium-catalysed or -promoted reductive C–C coupling, effects of phosphines and carbon ligands on (E.-I. Negishi, Tamotsa Takahashi, K. Akiyoshi), (334) 181
- Perhalophenylpalladium(II) complexes containing keto-stabilised phosphorus ylides of the type Ph₂P(CH₂)_nPPh₂CHC(O)R (R. Usón, J. Forniés, R. Navarro, A.M. Ortega), (334) 389
- Titanated phosphonoacetates, reagents for stereococonvergent Knoevenagel condensations, structural study of (M.T. Reetz, M. von Itzstein), (334) 85
- Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient catalysts for fluoride synthesis via carbonylation of organic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205
- ## Platinum
- η^3 -Allyl-group 10 metal complexes as key intermediates, molecular basis of catalytic reactions with (*Review*) (H. Kurosawa), (334) 243
- Cp(CO)₂Pt(PPh₃)₂(μ -CH₂) and Cp₂Co₂Pt-(PPh₃)₂(μ -CO)₂, synthesis from reaction of Pt(PPh₃)₂(C₂H₄) with [CpCo(CO)]₂(μ -CH₂), synthesis of (P.D. Macklin, C.A. Mirkin, N. Viswanathan, G.D. Williams, G.L. Geoffroy, A.L. Rheingold), (334) 117
- Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient catalysts for fluoride synthesis via carbonylation of organic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205

Rhenium

Ziegler-type systems, activation of C-C bonds in alkanes and cycloalkanes by (M.E. Vol'pin, I.S. Akhrem, S.V. Reznichenko, V.V. Grushin), (334) 109

Rhodium

Carbonylrhodium-catalysed synthesis of α,β -unsaturated ethyl ketones by cross-hydrocarbonylation of acetylenes and ethylene with CO and H₂ (P. Hong, T. Mise, H. Yamazaki), (334) 129

Dicarboalkoxy(di- μ -methylene)bis(pentamethylcyclopentadienylrhodium), alkyl acrylates from a three-carbon coupling reaction of (I.M. Saez, D.G. Andrews, P.M. Maitlis), (334) C17
Fischer-Tropsch reaction, models for formation of oxygenates in (I.M. Saez, P.M. Maitlis), (334) C14

Optically active monodentate phosphines prepared from α -pinanes and D-mannit under enantioselective catalysis (H. Brunner, H. Leyerer), (334) 369

Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient catalysts for fluoride synthesis via carbonylation of organic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205

Ruthenium

(Cyclooctadiene)(cyclooctatriene)ruthenium and its derivatives, organic synthesis catalysed by (Review) (T.-A. Mitsudo, Y. Hori, Y. Watanabe), (334) 157

Selenium

Aminoiminomethanesulphinic acid (thiourea dioxide) used under phase transfer conditions for generating organochalcogenate anions; synthesis of sulphides, selenides and tellurides (J.V. Comasseto, E.S. Lang, J.T.B. Ferreira, F. Simonelli, V.R. Correia), (334) 329

Cyclooctaselenadiazole, synthesis, decomposition pathway, and reaction with ($\eta^5\text{-C}_5\text{H}_5$) $\text{Co}(\text{L})_2$ ($\text{L} = \text{C}_2\text{H}_4$, PPh_3): crystal and molecular structures of $[(\eta^5\text{-C}_5\text{H}_5)\text{Co}]_2(\mu_2\text{-}\eta^3\text{-}\eta^2\text{-C}_8\text{H}_6\text{Se})$ (J. Knebel, C.P. Morley, G. Wilke, C. Krüger, J.M. Wallis), (334) C39

Octacarbonyldicobalt-mediated and -catalysed

carbonylation of diaryl diselenides and ditellurides to seleno and telluro esters (H. Takahashi, K. Ohe, S. Uemura, N. Sugita), (334) C43

Silicon

Bis(t-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannylyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359

Chlorosiloxanes, mechanism of acidic catalysis of hydrolysis of (J. Brumme, U. Schein, A. Porzel, K. Röhlmann, H. Grosse-Ruyken), (334) 277

Optically active monodentate phosphines prepared from α -pinanes and D-mannit under enantioselective catalysis (H. Brunner, H. Leyerer), (334) 369

Trimethylsilyl-substituted cyclopentadienylindium(I) compounds, synthesis and properties (P. Jutzi, W. Leffers, G. Müller), (334) C24
m-Trimethylsilylansole, *ipso* effect of silicon during acylation of (B. Bennetau, M. Krempf, J. Dunoguès), (334) 263

Triphenylsilane from gas-phase diffraction, molecular structure of (B. Rozsonai, I. Hargittai), (334) 269

Sodium

Cyclopentadienylterbium(II) chlorides, $\text{C}_5\text{H}_5\text{-YbCl(L)}$, preparation and spectral characterisation of (S.J. Swamy, H. Schumann), (334) 1

Sulphur

Aminooiminomethanesulphinic acid (thiourea dioxide) used under phase transfer conditions for generating organochalcogenate anions; synthesis of sulphides, selenides and tellurides (J.V. Comasseto, E.S. Lang, J.T.B. Ferreira, F. Simonelli, V.R. Correia), (334) 329

From 2-thienylcopper couplings to trimethylsilyl-promoted organocupper additions (E.-L. Lindstedt, M. Nilsson, T. Olsson), (334) 255

Skew-trapezoid bipyramidal diorganotin/bis-chelates; crystal structure of dimethylbist(2-pyridinethiolato-*N*-oxide)tin(IV) (S.W. Ng, C. Wei, V.G. Kumar Das, T.C.W. Mak), (334) 295

Tellurium

Aminoiminomethanesulphinic acid (thiourea dioxide) used under phase transfer conditions for generating organochalcogenate anions; synthesis of sulphides, selenides and tellurides (J.V. Comasseto, E.S. Lang, J.T.B. Ferreira, F. Simonelli, V.R. Correia), (334) 329

Octacarbonyldicobalt-mediated and -catalysed carbonylation of diaryl diselenides and ditellurides to seleno and telluro esters (H. Takahashi, K. Ohe, S. Uemura, N. Sugita), (334) C43

Tin

Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359

Skew-trapezoid bipyramidal diorganotin/bischelates; crystal structure of dimethylbis(2-pyridinethiolato-*N*-oxide)tin(IV) (S.W. Ng, C. Wei, V.G. Kumar Das, T.C.W. Mak), (334) 295

Thienyltetraorganotin(IV) compounds, synthesis and spectral characterisation of (V.G. Kumar Das, L.K. Lo, S.J. Blunden), (334) 307

Tribenzyl(2-pyridinethiolato-*N*-oxide)tin(IV), a square pyramidal organotin(IV) compound, crystal structure of (S.W. Ng, C. Wei, V.G. Kumar Das, T.C.W. Mak), (334) 283

Titanium

Carbotitanation of unsaturated hydrocarbons and ketones with η^3 -allyl(di- η^5 -cyclopentadienyl)titanium(III), effects of Lewis acids and bases on (J.J. Eisch, M.P. Bolesławski), (334) C1

Tetrachloro(diethylphthalate)titanium(IV), crystal structure of (J. Utko, P. Sobota, T. Lis), (334) 341

Titanated phosphonoacetates, reagents for stereococonvergent Knoevenagel condensations, structural study of (M.T. Reetz, M. von Itzstein), (334) 85

Tungsten

Carbonyltungsten binuclear compounds bridged by hydride and bidentate phosphine ligands, synthesis of (J.T. Lin, Y.M. Shiao), (334) C31

Reduced metal oxides, molecular model for reductive cleavage of CO to carbide and oxide on (M.H. Chisholm), (334) 77

Ytterbium

Cyclopentadienyltytterbium(II) chlorides, $C_5H_5YbCl(L)$, preparation and spectral characterisation of (S.J. Swamy, H. Schumann), (334) 1

Zinc

Palladium-catalysed or -promoted reductive C-C coupling, effects of phosphines and carbon ligands on (E.-I. Negishi, Tamatso Takahashi, K. Akiyoshi), (334) 181

Zirconium

Group 4 metallocene-substituted ylides, synthesis and reactions with ketones of (G. Erker, P. Czisch, R. Mynott), (334) 91

Book reviews

Dictionary of organometallic compounds, Second supplement; edited by J.E. Macintyre (C. Eaborn), (334) C50

Gmelin handbook of inorganic chemistry, 8th edit., Boron compounds, 3rd Supplment, Vol. 2, Boron and oxygen; by G. Heller (J.D. Smith), (334) C51

Gmelin handbook of inorganic chemistry, 8th edit., Organogallium compounds Part 1; by J.-C. Maire, U. Krüerke, M. Mirbach, W. Petz and C. Siebert (J.D. Smith), (334) C51

Hypercarbon chemistry; by G.A. Olah, G.K.S. Prakash, R.E. Williams, L.D. Field and K. Wade (C. Eaborn), (334) C49