

JOURNAL OF ORGANOMETALLIC CHEMISTRY, VOL. 406 (1991)

SUBJECT INDEX

Aluminium

- Silazane derivatives of digallane(4) and diindane(4) with Ga–Ga and In–In bonds, respectively (M. Veith, F. Goffing, S. Becker, V. Huch), (406) 105
 Zirconocene dichloride/methylalumoxane systems, catalysts for olefin polymerization; IR and NMR studies of (L.A. Nekhaeva, G.N. Bondarenko, S.V. Rykov, A.I. Nekhaev, B.A. Krentsel, V.P. Mar'in, L.I. Vyshinskaya, I.M. Krapova, A.V. Polonskii, N.N. Korneev), (406) 139

Antimony

- Colourless $C_5H_5SbCl_2$, intra- and intermolecular antimony–Cp π -interactions in (W. Frank), (406) 331
 Ethyl-, propyl- and butyl-antimony, electrosynthesis of (Y. Mourad, Y. Mugnier, H.J. Breunig, M. Ateş), (406) 323

Arsenic

- Titanocene polyselenide complexes, reactions with methylidichloroarsane; synthesis and properties of $(CH_3C_5H_4)_2Ti(\mu_2-Se_2)_2AsCH_3$ and of $(CH_3As)_2Se_3$ (B. Holz, R. Steudel), (406) 133

Boron

- Bis(1,3-di-tert-butylcyclopentadienyl)cerium chloride and borohydride, crystal and molecular structures of; a bridging tetradeinate BH_4 -group with two μ_3 -hydrogens: $\mu:\eta^4\text{--}[(\mu_3\text{-}H)_2B(\mu_2\text{-}H)_2]$ (E.B. Lobkovsky, Yu.K. Gun'ko, B.M. Bulychev, V.K. Belsky, G.L. Soloveichik, M.Yu. Antipin), (406) 343
 Boron–nitrogen–carbon heterocycles, synthesis of; crystal structure of dimethyl-2,4-*o*-tolyl-3-methyl-8-dibora-2,4-diazaro-1,3-naphthalene (A. Thozet, S. Allaoud, T. Zaïr, A. Karim, B. Frange), (406) 269

Cerium

- Bis(1,3-di-tert-butylcyclopentadienyl)cerium chloride and borohydride, crystal and molecular structures of; a bridging tetradeinate BH_4 -group with two μ_3 -hydrogens: $\mu:\eta^4\text{--}[(\mu_3\text{-}H)_2B(\mu_2\text{-}H)_2]$ (E.B. Lobkovsky, Yu.K. Gun'ko, B.M. Bulychev, V.K. Belsky, G.L. Soloveichik, M.Yu. Antipin), (406) 343

Chromium

- Allyl[N,N-bis(pyrazol-1-ylmethyl)aminomethane]dicarbonylchromium(II)hexafluorophosphate, crystal structure of; symmetric orientation of the η^3 -allyl group with respect to the pyrazole-derived tridentate ligand (K.-B. Shiu, C.-J. Chang, Y. Wang, M.-C. Cheng), (406) 363
 (Arene)chromium complexes, regioselectivity of nucleophilic additions to; conformational effects of $Cr(CO)_3$ moieties and the nature of carbanions (M. Uemura, T. Minami, Y. Shinoda, H. Nishimura, M. Shiro, Y. Hayashi), (406) 371
 $(\eta^6\text{-Arene})$ tricarbonylchromium complexes, preparation of; catalysts for complexation of arenes with $Cr(CO)_6$ (M. Hudeček, Š. Toma), (406) 147
 Chiral arene-chromium-tricarbonyl complexes; 2-step synthesis of halostachin analogues (A. Solladié-Cavallo, M. Bencheqroun), (406) C15
 $[Cp_2Cr_2(\mu\text{-}SCMe_3)(\mu_3\text{-}S)_2]_2Fe^+\text{FeI}_4^-$ heterometallospirane cluster and $[Cp_2Cr_2(\mu\text{-}SCMe_3)(\mu_3\text{-}S)_2Fe]_2(\mu\text{-}Se)_2$ cluster with “kayak-paddle” framework; synthesis, magnetic properties and structures of (A.A. Pasynskii, I.L. Eremenko, E.E. Stomakhina, S.E. Nefedov, O.G. Ellert, A.I. Yanovsky, Yu.T. Struchkov), (406) 383

Cobalt

Bisalkynyltitanocene complexes as bidentate chelating ligands (H. Lang, L. Zsolnai), (406) C5

Gadolinium

Bis(t-butylcyclopentadienyl)lanthanoid chloride complexes, syntheses of; crystal structures of bis(t-butylcyclopentadienyl)chloro(bistetrahydrofuran)praseodymium and bis(t-butylcyclopentadienyl)chlorotetrahydrofuranytterbium (Q. Shen, M. Qi, J. Guan, Y. Lin), (406) 353

Germanium

2,3-Bis(bromomethyl)-1,4-dibromo-2-butene, reduction in the presence of organosilicon and organogermainium dihalides (P. Mazerolles, C. Laurent), (406) 119

Bis(dimethylgermyl)alkaneruthenium tetracarbonyls, reactions with unsaturated compounds (J. Barrau, N. Ben Hamida, J. Satgé), (406) 123

spiro-Germanium compounds, synthesis by 1,4-cycloaddition of cyclic diaminogermyles to 1,3-butadienes and hetero-1,3-butadienes (G. Billeb, K. Bootz, W.P. Neumann, G. Steinhoff), (406) 303

Iridium

Vinylidene complexes, nucleophilic behavior of (F. Delbecq), (406) 171

Iron

[Cp₂Cr₂(μ-SCMe₃)(μ₃-S)₂]₂Fe⁺FeI₄⁻ heterometallospirane cluster and [Cp₂Cr₂(μ-SCMe₃)(μ₃-S)₂Fe]₂(μ-Se)₂ cluster with “kayak-paddle” framework; synthesis, magnetic properties and structures of (A.A. Pasynskii, I.L. Eremenko, E.E. Stomakhina, S.E. Nefedov, O.G. Ellert, A.I. Yanovsky, Yu.T. Struchkov), (406) 383

Ferrocene-containing rifamycins, synthesis and characterisation of (D. Scutaru, I. Mazilu, L. Tătaru, M. Vâță, T. Lixandru), (406) 183

1,2,4,5-Tetrakis(diphenylphosphino)benzene complexes; synthesis and X-ray crystal structure of [{(CO)₃Fe}₂{μ-η²-η²-(Ph₂P)₂C₆H₂(PPh₂)₂}]} (G. Hogarth), (406) 391

Vinylidene complexes, nucleophilic behavior of (F. Delbecq), (406) 171

Lead

ortho-Palladated benzylamines and acetanilides, comparative study of the mechanism of alkenylation of (A.D. Ryabov, I.K. Sakodinskaya, A.K. Yatsimirsky), (406) 309

Lithium

Phenyllithium, metallation of substituted pyridine derivatives by (M. Mallet), (406) 49

Magnesium

Non-Grignard organomagnesium reagents obtained from 1,3-dienes, synthesis and transformations of (U.M. Dzhemilev, A.G. Ibragimov, G.A. Tolstikov), (406) 1

Organomagnesium reagents in the regioselective synthesis of 2-(1,1-dialkylprop-2-enyl)-4,5-dihydrothiazoles and oxazoles, precursors of α,α-disubstituted β-ethylenic carboxylic acids (J. Laduranty, F. Barbot, L. Miginiac), (406) 57

Ru^{II}-alkyl-butadiene complexes, formation from dihalogeno-Ru^{IV}-allyl precursors by the reaction with BrMg(CH₂)₄MgBr; decomposition pathway for ruthena(IV)cyclopentane intermediates (H. Nagashima, Y. Michino, K. Ara, T. Fukahori, K. Itoh), (406) 189

Manganese

Tricarbonyl-η⁵-2,4-pentadienylmanganese, [4 + 5]-cycloaddition of conjugated dienes to (C.G. Kreiter, K. Lehr), (406) 159

Vinylidene complexes, nucleophilic behavior of (F. Delbecq), (406) 171

Metallocenes

Bisalkynyltitanocene complexes as bidentate chelating ligands (H. Lang, L. Zsolnai), (406) C5

Ferrocene-containing rifamycins, synthesis and characterisation of (D. Scutaru, I. Mazilu, L. Tătaru, M. Vătă, T. Lixandru), (406) 183

Titanocene polyselenide complexes, reactions with methyldichloroarsane; synthesis and properties of $(\text{CH}_3\text{C}_5\text{H}_4)_2\text{Ti}(\mu_2\text{-Se}_2)_2\text{AsCH}_3$ and of $(\text{CH}_3\text{As})_2\text{Se}_3$ (B. Holz, R. Steudel), (406) 133

Zirconocene dichloride/methylalumoxane systems, catalysts for olefin polymerization; IR and NMR studies of (L.A. Nekhaeva, G.N. Bondarenko, S.V. Rykov, A.I. Nekhaev, B.A. Krentsel, V.P. Mar'in, L.I. Vyshinskaya, I.M. Khrapova, A.V. Polonskii, N.N. Korneev), (406) 139

Molybdenum

Dimolybdenum complexes containing oxo, imido, and sulphido moieties, electrochemistry of; a measure of their relative π -donor abilities (G. Hogarth, P.C. Konidaris, G.C. Saunders), (406) 153

Neodymium

Bis(*t*-butylcyclopentadienyl)lanthanoid chloride complexes, syntheses of; crystal structures of bis(*t*-butylcyclopentadienyl)chloro(bistetrahydrofuran)praseodymium and bis(*t*-butylcyclopentadienyl)-chlorotetrahydrofuranytterbium (Q. Shen, M. Qi, J. Guan, Y. Lin), (406) 353

Osmium

Triosmium and triruthenium clusters, reactions with the isomers methoxyallene and methyl propargyl ether; crystal structure of the methoxyallene cluster $[\text{Os}_3(\text{CO})_{11}(\mu, \eta^1, \eta^3\text{-CH}_2\text{CCHOMe})]$ (A.J. Arce, Y. De Sanctis, A.J. Deeming, K.I. Hardcastle, R. Lee), (406) 209

Triosmium clusters of the type $\text{Os}_3(\mu\text{-H})_2(\text{CO})_9\text{Ar}$ ($\text{Ar} = \text{C}_6\text{H}_4$, C_9H_6 , $\text{C}_4\text{H}_3\text{N}$, or $\text{C}_4\text{H}_2\text{NMe}$), reactions with phosphines and phosphites; X-ray crystal structure of $\text{Os}_3(\mu\text{-H})_2(\text{CO})_7[\text{P}(\text{OMe})_3]_2(\text{C}_4\text{H}_3\text{N})$ (H. Chen, B.F.G. Johnson, J. Lewis, P.R. Raithby), (406) 219

Palladium

Palladium-catalysed dimerisation of isoprene with carbon dioxide in the presence of organotin ethoxide and 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU) (H. Hoberg, M. Minato), (406) C25

Thiophene, oligomerisation in the presence of PdCl_4^{2-} (D.-L. Wang, W.-S. Hwang), (406) C29

Phosphorus

Ketenimine-rhodium complexes, preparation by [2 + 1]-cycloaddition of vinylidene-rhodium precursors; crystal and molecular structure of $\text{C}_5\text{H}_5\text{Rh}[\eta^2\text{-N,C-TosN=C=CHPh}](\text{P}^1\text{Pr}_3)$ (H. Werner, U. Brekau, M. Dziallas), (406) 237

1,2,4,5-Tetrakis(diphenylphosphino)benzene complexes; synthesis and X-ray crystal structure of $[(\text{CO})_3\text{Fe}]_2\{\mu\text{-}\eta^2\text{-}\eta^2\text{-}(\text{Ph}_2\text{P})_2\text{C}_6\text{H}_2(\text{PPh}_2)_2\}$ (G. Hogarth), (406) 391

Platinum

Platinum(II), binuclear methyl and phenyl derivatives of (M. Rashidi, Z. Fakhroian, R.J. Puddephatt), (406) 261

Platinum–silver cluster compound, $[\text{Pt}_3\text{Ag}(\text{O}_3\text{SCF}_3)(\mu\text{-CO})_3(\text{PCy}_3)_2(\text{dppp})]$ ($\text{Cy} = \text{C}_6\text{H}_{11}$, dppp = $\{(\text{C}_6\text{H}_5)_2\text{P}\}_2\text{C}_3\text{H}_6$), with a distorted tetrahedral geometry; synthesis and crystal structure of (A.D. Burrows, J.G. Jeffrey, J.C. Machell, D.M.P. Mingos), (406) 399

Praseodymium

Bis(*t*-butylcyclopentadienyl)lanthanoid chloride complexes, syntheses of; crystal structures of bis(*t*-butylcyclopentadienyl)chloro(bistetrahydrofuran)praseodymium and bis(*t*-butylcyclopentadienyl)-chlorotetrahydrofuranytterbium (Q. Shen, M. Qi, J. Guan, Y. Lin), (406) 353

Rhodium

Ketenimine-rhodium complexes, preparation by [2 + 1]-cycloaddition of vinylidene-rhodium precursors; crystal and molecular structure of $\text{C}_5\text{H}_5\text{Rh}[\eta^2\text{-N,C-TosN=C=CHPh}](\text{P}^1\text{Pr}_3)$ (H. Werner, U. Brekau, M. Dziallas), (406) 237

Vinylidene complexes, nucleophilic behavior of (F. Delbecq), (406) 171

Ruthenium

- Bis(dimethylgermyl)alkaneruthenium tetracarbonyls, reactions with unsaturated compounds (J. Barrau, N. Ben Hamida, J. Satgé), (406) 123
- Ru^{II} -alkyl-butadiene complexes, formation from dihalogeno- Ru^{IV} -allyl precursors by the reaction with $\text{BrMg}(\text{CH}_2)_4\text{MgBr}$; decomposition pathway for ruthena(IV)cyclopentane intermediates (H. Nagashima, Y. Michino, K. Ara, T. Fukahori, K. Itoh), (406) 189
- Transition metal hydride complexes as Lewis bases; preparation and crystal structure of (*RR,SS*)-{[(η^5 - C_5H_5) $\text{Ru}(\text{PPh}_3)_2(\text{CN}^+\text{Bu})_2(\mu\text{-H})]\text{PF}_6 \cdot \text{CH}_2\text{Cl}_2}$ (F.M. Conroy-Lewis, S.J. Simpson, L. Brammer, A.G. Orpen), (406) 197
- Triosmium and triruthenium clusters, reactions with the isomers methoxyallene and methyl propargyl ether; crystal structure of the methoxyallene cluster [$\text{Os}_3(\text{CO})_{11}(\mu_1,\eta^1,\eta^3\text{-CH}_2\text{CCHOMe})$] (A.J. Arce, Y. De Sanctis, A.J. Deeming, K.I. Hardcastle, R. Lee), (406) 209

Selenium

- Titanocene polyselenide complexes, reactions with methyldichloroarsane; synthesis and properties of $(\text{CH}_3\text{C}_5\text{H}_4)_2\text{Ti}(\mu_2\text{-Se}_2)_2\text{AsCH}_3$ and of $(\text{CH}_3\text{As})_2\text{Se}_3$ (B. Holz, R. Steudel), (406) 133

Silicon

- 1-Aza-2-silacyclopentane derivatives, synthesis of (M.G. Voronkov, S.V. Kirpichenko, A.T. Abrosimova, A.I. Albanov), (406) 87
- Bisalkynyltitanocene complexes as bidentate chelating ligands (H. Lang, L. Zsolnai), (406) C5
- 2,3-Bis(bromomethyl)-1,4-dibromo-2-butene, reduction in the presence of organosilicon and organogermainium dihalides (P. Mazerolles, C. Laurent), (406) 119
- spiro*-Germanium compounds, synthesis by 1,4-cycloaddition of cyclic diaminogermyles to 1,3-butadienes and hetero-1,3-butadienes (G. Billeb, K. Bootz, W.P. Neumann, G. Steinhoff), (406) 303
- Hexaethylsulfane and bis(triethylsilylalkyl)sulfides, photoelectron CTC-tetracyanoethylene spectra of (M. Yu. Maroshina, N.N. Vlasova, M.G. Voronkov), (406) 279
- Organosilicon compounds with a Si–N bond, thermochemical properties of (M.G. Voronkov, V.A. Klyuchnikov, L.I. Marenkova, T.F. Danilova, G.N. Shvets, S.I. Tsvetnitskaya, Yu.I. Khudobin), (406) 99
- Perorganyloligocyclosiloxanes, thermochemical properties of (M.G. Voronkov, V.A. Klyuchnikov, E.V. Mironenko, G.N. Shvets, T.F. Danilova, Yu.I. Khudobin), (406) 91
- Silazane derivatives of digallane(4) and diindane(4) with Ga–Ga and In–In bonds, respectively (M. Veith, F. Goffing, S. Becker, V. Huch), (406) 105
- Silicon–hydrogen bonds, nucleophilic activation of; silicon–nitrogen bond formation by (R.J.P. Corriu, D. Leclercq, P.H. Mutin, J.M. Planeix, A. Vioux), (406) C1
- Silylation products of acetohydroxamic acid, structure of (J. Schraml, H.-M. Boldhaus, F. Erdt, E.W. Krahé, C. Bliefert), (406) 299
- Trimethylsilylquinolines and their methiodides, synthesis and ^1H , ^{13}C , ^{14}N , ^{15}N , ^{29}Si NMR study of (E. Lukevics, E. Liepiņš, I. Segal, M. Fleisher), (406) 283

Silver

- Platinum–silver cluster compound, $[\text{Pt}_3\text{Ag}(\text{O}_3\text{SCF}_3)(\mu\text{-CO})_3(\text{PCy}_3)_2(\text{dppp})]$ ($\text{Cy} = \text{C}_6\text{H}_{11}$, dppp = $((\text{C}_6\text{H}_5)_2\text{P})_2\text{C}_3\text{H}_8$), with a distorted tetrahedral geometry; synthesis and crystal structure of (A.D. Burrows, J.G. Jeffrey, J.C. Machell, D.M.P. Mingos), (406) 399

Tin

- Colourless $\text{C}_5\text{H}_5\text{SbCl}_2$, intra- and intermolecular antimony–Cp π -interactions in (W. Frank), (406) 331
- Palladium-catalysed dimerisation of isoprene with carbon dioxide in the presence of organotin ethoxide and 1,8-diazabicyclo[5.4.0]undec-7-ene (DBU) (H. Hoberg, M. Minato), (406) C25

Titanium

- Bisalkynyltitanocene complexes as bidentate chelating ligands (H. Lang, L. Zsolnai), (406) C5
- Titanocene polyselenide complexes, reactions with methyldichloroarsane; synthesis and properties of $(\text{CH}_3\text{C}_5\text{H}_4)_2\text{Ti}(\mu_2\text{-Se}_2)_2\text{AsCH}_3$ and of $(\text{CH}_3\text{As})_2\text{Se}_3$ (B. Holz, R. Steudel), (406) 133

Tungsten

Four-membered ring complex $[W(CO)_5PPhC(OEt)=CPhCHPh]$, insertion reactions of $[Pt(PPh_3)_2]$ fragments into; crystal and molecular structures of $[Pt(dppe)PPh(W(CO)_5C(OEt)=CPhCHPh)]$ and $[Pt(PPh_3)_2((W(CO)_5)PhP=C(OEt)CPh=CHPh)(\eta^2-(P=C))]$ (F.A. Ajulu, S.S. Al-Juaid, D. Carmichael, P.B. Hitchcock, M.F. Meidine, J.F. Nixon, F. Mathey, N.H. Tran Huy), (406) C20

Ytterbium

Bis(t-butylcyclopentadienyl)lanthanoid chloride complexes, syntheses of; crystal structures of bis(t-butylcyclopentadienyl)chloro(bistetrahydrofuran)praseodymium and bis(t-butylcyclopentadienyl)chlorotetrahydrofuranytterbium (Q. Shen, M. Qi, J. Guan, Y. Lin), (406) 353

Zinc

Organozinc derivatives of β -functionalised γ -substituted allylic compounds, reactivity of; preparation of β - and γ -substituted α -methylene γ -butyrolactones (F. Lambert, B. Kirschleger, J. Villiéras), (406) 71

Zirconium

Zirconocene dichloride/methylalumoxane systems, catalysts for olefin polymerization; IR and NMR studies of (L.A. Nekhaeva, G.N. Bondarenko, S.V. Rykov, A.I. Nekhaev, B.A. Krentsel, V.P. Mar'in, L.I. Vyshinskaya, I.M. Krapova, A.V. Polonskii, N.N. Korneev), (406) 139

Book reviews

Gmelin handbook of inorganic chemistry, 8th edition, Fe—Organoiron compounds, part A9: ferrocene 9 (K.R. Seddon), (406) C11

Gmelin handbook of inorganic chemistry, 8th edition, Ge—Organogermanium compounds, part 3 (C. Eaborn), (406) C10

Gmelin handbook of inorganic chemistry, 8th edition, W—Tungsten, supplement volume A3: physical properties (continued) (K.R. Seddon), (406) C12

Inorganic reactions and methods, vol. 3. The formation of bonds to halogens (part 1); edited by A.P. Hagen (C. Eaborn), (406) C11

Stereochemistry of organometallic and inorganic compounds, vol. 3: chemical bonds — better ways to make them and break them; edited by I. Bernal (P.A. Chaloner), (406) C9