

JOURNAL OF ORGANOMETALLIC CHEMISTRY, VOL. 259 (1983)

SUBJECT INDEX

Aluminium

Alkylaluminium compounds, 1,6-addition to *para*-quinones of (Z. Florjańczyk, E. Szymańska-Zachara), 127

Arsenic

Organic-silicon, -germanium and -lead derivatives of dimethyl- and diphenyl-dithioarsinic acids (L. Silaghi-Dumitrescu, I. Haiduc), 65

Boron

η^2 -Alkyne-hexacarbonyldicobalt complexes with organometallic substituents (Si, Sn, B), preparation and NMR spectra of (P. Galow, A. Sebald, B. Wrackmeyer), 253

Arylboronic acids, synthesis via reactions of borane with arylmagnesium halides of (G.W. Kabalka, U. Sastry, K.A.R. Sastry, F.F. Knapp, P.C. Srivastava), 269

Chromium

Chromium(0)-promoted intramolecular nucleophilic substitution of an aryl halide; preparation of chroman (R.P. Houghton, M. Voyle, R. Price), 183

Pentacarbonyl-5-t-butyl-5-aza-2,8-dithia-1-stannobicyclo[3.3.0^{1,5}]octane-chromium(0), synthesis, spectroscopic investigation and molecular structure of (A. Tzschach, K. Jurkschat, M. Scheer, J. Meunier-Piret, M. Van Meerssche), 165

Cobalt

η^2 -Alkyne-hexacarbonyldicobalt complexes with organometallic substituents (Si, Sn, B), preparation and NMR spectra of (P. Galow, A. Sebald,

B. Wrackmeyer), 253
Cobalt(II) and nickel(II) carbonyl compounds, reversible arene-carbon monoxide exchange in (T.J. Groshens, K.J. Klabunde), 337
Dicarbonylpentamethylcyclopentadienylcobalt, (η^5 -C₅Me₅)Co(CO)₂, reactions with XCN (X = Br, I) and INCO (J. Macazaga, S. Delgado, J.R. Masaguer), 233

Copper

Bis(diphenylphosphino)methane complexation of reaction products from the reaction of arylcopper(I) compounds and carbon disulphide (A. Camus, N. Marsich, G. Pellizer), 367

General

Carbometallation, addition of organometallic compounds to isolated multiple bonds in functionally substituted compounds (Review) (J.V.N. Vara Prasad, C.N. Pillai), 1

Germanium

Organic-silicon, -germanium and -lead derivatives of dimethyl- and diphenyl-dithioarsinic acids (L. Silaghi-Dumitrescu, I. Haiduc), 65

Silylamides of Group IVA and IVB elements with spirobicycloheptane structure (H. Bürger, W. Geschwandtner, G.R. Liewald), 145

Tin-tin long-range coupling constants, two-bond coupling via carbon (T.N. Mitchell, A. Amamria, B. Fabisch, H.G. Kuivila, T.J. Karol, K. Swami), 157

β -Trimethylsilylamine-oxyl and related amine-N-oxyls, ESR study on and unusual conformational preference of the β -silyl group in (M. Kira, H. Osawa, H. Sakurai), 51

Hafnium

Silylamides of Group IVA and IVB elements with spirobicycloheptane structure (H. Bürger, W. Geschwandtner, G.R. Liewald), 145

Iridium

Chlorocyclooctadienemethylimidazoyl-iridium, reactions with methyl- and phenyl-lithium under formation of iridacyclopentadienyl complexes of (J. Müller, C. Hänsch, J. Pickardt), C21
 Dimethyl(dimethylsulphoxide)penta-methylcyclopentadienyl-rhodium and -iridium, reactions with acids of (M. Gómez, P.I.W. Yarrow, A. Vázquez de Miguel, P.M. Maitlis), 237

Iron

μ -(Alkoxymethanethione-C,S)- μ -(methylthio)-1,1,1,2,2-hexacarbonyldiiron complexes, controlled replacement of CO by thermal activation or electron-transfer catalysis in (A. Darchen, E.K. Lhadi, H. Patin), 189
 μ -(Alkoxymethanethione-C,S)- μ -(methylthio)-1-trimethylphosphite-1,1,2,2,2-pentacarbonyldiiron, preparation and structure of (E.K. Lhadi, H. Patin, A. Benoit, J.-Y. Le Marouille, A. Darchen), 321
 $[Fe(n-C_5H_5)_2(CO)_3][FeCl_4]$ and $[M(CO)_5Cl]$ ($M = Mn, Re$), convenient high yield syntheses of (A.R. Manning, G. McNally, R. Davis, C.C. Rowland), C15
 $(Me_2SiCH_2CH_2SiMe_2)(C_5H_4Fe(CO)_2)_2$, cyclopentadienyl-bridged complex, preparation and reactivity of (K.D. Janda, W.W. McConnell, G.O. Nelson, M.E. Wright), 139
 Tricarbonyl[(1,2,3,4- η -)-3,7,7-trimethylcycloheptatriene]iron, synthesis and cycloaddition reactions of (Z. Goldschmidt, S. Antebi), 119

Lithium

Allyllithium and solvated allyllithium species, MNDO study of the position of hydrogen atoms in (G. Decher, G. Boche), 31

Chlorocyclooctadienemethylimidazoyl-iridium, reactions with methyl- and phenyl-lithium under formation of iridacyclopentadienyl complexes of (J. Müller, C. Hänsch, J. Pickardt), C21

Silylamides of Group IVA and IVB elements with spirobicycloheptane structure (H. Bürger, W. Geschwandtner, G.R. Liewald), 145

Magnesium

Arylboronic acids, synthesis via reactions of borane with arylmagnesium halides of (G.W. Kabalka, U. Sastry, K.A.R. Sastry, F.F. Knapp, P.C. Srivastava), 269

Manganese

Dithiolene complexes, synthesis, substitution reactions and crystal structure of (E. Lindner, I.P. Butz, S. Hoehne, W. Hiller, R. Fawzi), 99

$[Fe(n-C_5H_5)_2(CO)_3][FeCl_4]$ and $[M(CO)_5Cl]$ ($M = Mn, Re$), convenient high yield syntheses of (A.R. Manning, G. McNally, R. Davis, C.C. Rowland), C15

(2,2,6,6-Tetramethylpiperidinyl-1-oxo-O,N)-tricarbonylmanganese(0), synthesis and X-ray structure of; side-on coordination of the nitroxyl radical to manganese (P. Jaitner, W. Huber, G. Huttner, O. Scheidsteiger), C1

Mercury

Silylmercury and organomercury derivatives, ^{199}Hg FTNMR study of (M.J. Albright, T.F. Schaaf, A.K. Hovland, J.P. Oliver), 37

Molybdenum

Molybdenum(0) arenediazo complexes, reactions with halogens, tin(IV) halides, mercury(II) halides and related agents of (F.J. Lalor, M.E. Deane, D.M. Condon), 305

Nickel

1,3-Bis[(diphenylphosphine)methyl]-benzene, facile cyclometallation reaction of (H. Rimml, L.M. Venanzi), C6

- Cobalt(II) and nickel(II) carbonyl compounds, reversible arene-carbon monoxide exchange in (T.J. Groshens, K.J. Klabunde), 337
trans-NiRR'L₂ (R, R' = 2-tolyl, 2,6-dimethoxy-3-bromophenyl, trichlorovinyl; L = t-methylphosphines), isolation and isomerization of (M. Wada, M. Kumazoe), 245

Osmium

- Arylthiocarbonylosmium(II) complexes, structure and migratory-insertion reactions of; structure of Os(η^2 -CSR)-(η^1 -O₂CCF₃)(CO)(PPh₃)₂ (G.R. Clark, T.J. Collins, K. Marsden, W.R. Roper), 215
 Phosphorus ligand substitution in penta-nuclear osmium cluster carbonyls; crystal and molecular structures of [Os₅H₂(CO)₁₄(PEt₃)₄] and [Os₅H₂(CO)₁₃(PEt₃)P(OMe)₃] (B.F.G. Johnson, J. Lewis, P.R. Raithby, M.J. Rosales), C9

Palladium

- 1,3-Bis[(diphenylphosphino)methyl]-benzene, facile cyclometallation reaction of (H. Rimml, L.M. Venanzi), C6
 Cyclopalladated primary, secondary and tertiary benzylamines, and benzal-imines, synthesis of (P.W. Clark, S.F. Dyke), C17
 Organo-silicon, -germanium and -lead derivatives of dimethyl- and diphenyl-dithioarsinic acids (L. Silaghi-Dumitrescu, I. Haiduc), 65
 Xylylisocyanide platinum and palladium complexes (A. Christofides), 355

Phosphorus

- μ -(Alkoxymethanethione-C,S)- μ -(methylthio)-1-trimethylphosphite-1,1,2,2,2-pentacarbonyldiiron, preparation and structure of (E.K. Lhadi, H. Patin, A. Benoit, J.-Y. Le Marouille, A. Darchen), 321
 Allyllithium and solvated allyllithium species, MNDO study of the position of hydrogen atoms in (G. Decher, G. Boche), 31
 Arylthiocarbonylosmium(II) complexes,

structure and migratory-insertion reactions of; structure of Os(η^2 -CSR)-(η^1 -O₂CCF₃)(CO)(PPh₃)₂ (G.R. Clark, T.J. Collins, K. Marsden, W.R. Roper), 215

Bis(diphenylphosphino)methane complexation of reaction products from the reaction of arylcopper(I) compounds and carbon disulphide (A. Camus, N. N. Marsich, G. Pellizer), 367

1,3-Bis[(diphenylphosphino)methyl]-benzene, facile cyclometallation reaction of (H. Rimml, L.M. Venanzi), C6

Hydridotetrakis(triphenylphosphine)-rhodium(I), homomolecular esterification of aldehydes catalysed by (M. Masasoui, D. Beaupère, L. Nadjo, R. Uzan), 345

trans-NiRR'L₂ (R, R' = 2-tolyl, 2,6-dimethoxy-3-bromophenyl, trichlorovinyl; L = t-methylphosphines), isolation and isomerization of (M. Wada, M. Kumazoe), 245

Phosphine-substituted ruthenium carbonyl carboxylates (M. Bianchi, P. Frediani, U. Matteoli, G. Menchi, F. Piacenti, G. Petrucci), 207

Phosphorus ligand substitution in penta-nuclear osmium cluster carbonyls; crystal and molecular structures of [Os₅H₂(CO)₁₄(PEt₃)₄] and [Os₅H₂(CO)₁₃(PEt₃)P(OMe)₃] (B.F.G. Johnson, J. Lewis, P.R. Raithby, M.J. Rosales), C9

Platinum

1,3-Bis[(diphenylphosphino)methyl]-benzene, facile cyclometallation reaction of (H. Rimml, L.M. Venanzi), C6
 Trimethylsilylacetylenes, cleavage of the C-Si bond by *trans*-[(PR₃)₂PtX(R'OH)]PF₆⁻ cations and formation of cationic alkoxy carbene complexes of platinum(II) (H.C. Clark, V.K. Jain, G.S. Rao), 275

Xylylisocyanide platinum and palladium complexes (A. Christofides), 355

Rhenium

Decacarbonyldirhenium and pentacarbonylrhenium derivatives, enthalpies of formation of (C. Al-Takhin, J.A. Connor, H.A. Skinner), 313
 [Fe(η -C₅H₅)(CO)₃]⁺[FeCl₄⁻] and [M(CO)₅Cl] (M = Mn, Re), convenient

- high yield syntheses of (A.R. Manning, G. McNally, R. Davies, C.C. Rowland), C15
 (2,2,6,6-Tetramethylpiperidinyl-1-oxo-O,N)-tricarbonylmanganese(0), synthesis and X-ray structure of; side-on coordination of the nitroxyl radical to manganese (P. Jaitner, W. Huber, G. Huttner, O. Scheidsteiger), C1
- Rhodium**
- Dimethyl(dimethylsulphoxide)penta-methylcyclopentadienyl-rhodium and -iridium, reactions with acids of (M. Gómez, P.I.W. Yarrow, A. Vázquez de Miguel, P.M. Maitlis), 237
 Hydridotetrakis(triphenylphosphine)-rhodium(I), homomolecular esterification of aldehydes catalysed by (M. Massouï, D. Beaupère, L. Nadjo, R. Uzan), 345
- Ruthenium**
- Phosphine-substituted ruthenium carbonyl carboxylates (M. Bianchi, P. Frediani, U. Matteoli, G. Menchi, F. Piacenti, G. Petrucci), 207
- Selenium**
- Diethyl organylchalcogenoalkyl(alkyl)-malonates, $\text{RX}(\text{CH}_2)_n\text{CR}'(\text{COOC}_2\text{H}_5)_2$, and 5-alkyl-5-(organylchalcogenoalkyl)-barbiturates, $\text{RX}(\text{CH}_2)_n\overset{\text{C}}{\underset{\text{R}'}{\text{C}}}(\text{R}')\text{CONHC(Y)-NHCO}$ ($\text{X} = \text{Se, Te}$), synthesis and spectral properties of (R.A. Grigsby, Jr., K.J. Irgolic, F.F. Knapp, Jr.), 171
 Octa-organyl-spirobis(cyclotristanna-chalcogenans), conformational isomerism of (H. Puff, E. Friedrichs, R. Hundt, R. Zimmer), 79
- Silicon**
- η^2 -Alkyne-hexacarbonyldicobalt complexes with organometallic substituents (Si, Sn, B), preparation and NMR spectra of (P. Galow, A. Sebald, B. Wrackmeyer), 253
 $(\text{Me}_2\text{SiCH}_2\text{CH}_2\text{SiMe}_2)(\text{C}_5\text{H}_4\text{Fe}(\text{CO})_5)_2$, cyclopentadienyl-bridged complex, preparation and reactivity of (K.D. Janda, W.W. McConnell, G.O. Nelson, M.E. Wright), 139
- Organosilicon, -germanium and -lead derivatives of dimethyl- and diphenyl-dithioarsinic acids (L. Silaghi-Dumitrescu, I. Haiduc), 65
 Pyrrolidinoallylsilanes, reactivity towards electrophiles of (R.J.P. Corriu, V. Huynh, J.E. Moreau), 283
 Silylamides of Group IVA and IVB elements with spirobicycloheptane structure (H. Bürger, W. Geschwandtner, G.R. Liewald), 145
 Silylmercury and organomercury derivatives, ^{199}Hg FTNMR study of (M.J. Albright, T.F. Schaaf, A.K. Hovland, J.P. Oliver), 37
 Tin-tin long-range coupling constants, two-bond coupling via carbon (T.N. Mitchell, A. Amamria, B. Fabisch, H.G. Kuivila, T.J. Karol, K. Swami), 157
 Trimethylsilylacetylenes, cleavage of the C-Si bond by $\text{trans}-[(\text{PR}_3)_2\text{PtX}(\text{R}'\text{OH})]\text{PF}_6^-$ cations and formation of cationic alkoxycarbene complexes of platinum(II) (H.C. Clark, V.K. Jain, G.S. Rao), 275
 β -Trimethylsilylamine-oxyl and related amine-N-oxyls, ESR study on and unusual conformational preference of the β -silyl group in (M. Kira, H. Osawa, H. Sakurai), 51
- Sodium**
- Silylamides of Group IVA and IVB elements with spirobicycloheptane structure (H. Bürger, W. Geschwandtner, G.R. Liewald), 145
- Sulphur**
- μ -(Alkoxyethanethione-C,S)- μ -(methylthio)-1,1,2,2-hexacarbonyldiiron complexes, controlled replacement of CO by thermal activation or electron-transfer catalysis in (A. Darchen, E.K. Lhadi, H. Patin), 189
 μ -(Alkoxyethanethione-C,S)- μ -(methylthio)-1-trimethylphosphite-1,1,2,2-pentacarbonyldiiron, preparation and structure of (E.K. Lhadi, H. Patin, A. Benoit, J.-Y. Le Marouille, A. Darchen), 321
 Arylthiocarbonylosmium(II) complexes, structure and migratory-insertion reactions of; structure of $\text{Os}(\eta^2\text{-CSR})$

- (η^1 -O₂CCF₃)(CO)(PPh₃)₂ (G.R. Clark, T.J. Collins, K. Marsden, W.R. Roper), 215
- Bis(diphenylphosphino)methane complexation of reaction products from the reaction of arylcopper(I) compounds and carbon disulphide (A. Camus, N. Marsich, G. Pellizer), 367
- Diethyl organylchalcogenoalkyl(alkyl)-malonates, RX(CH₂)_nCR'(COOC₂H₅)₂, and 5-alkyl-5-(organylchalcogenoalkyl)-barbiturates, RX(CH₂)_nC(R')CONHC(Y)-NHCO (X = Se, Te), synthesis and spectral properties of (R.A. Grigsby, Jr., K.J. Irgolic, F.F. Knapp, Jr.), 171
- Dimethyl(dimethylsulphoxide)penta-methylcyclopentadienyl-rhodium and -iridium, reactions with acids of (M. Gómez, P.I.W. Yarrow, A. Vázquez de Miguel, P.M. Maitlis), 237
- Dithiolene complexes, synthesis, substitution reactions and crystal structure of (E. Lindner, I.P. Butz, S. Hoehne, W. Hiller, R. Fawzi), 99
- Octa-organyl-spirobis(cyclotristanna-chalcogenans), conformational isomerism of (H. Puff, E. Friedrichs, R. Hundt, R. Zimmer), 79
- Pentacarbonyl-5-aza-2,8-dithia-1-stannobicyclo[3.3.0^{1,5}]octanechromium(0), synthesis, spectroscopic investigation and molecular structure of (A. Tzschach, K. Jurkschat, M. Scheer, J. Meunier-Piret, M. Van Meerssche), 165
- Tellurium**
- Diethyl organylchalcogenoalkyl(alkyl)-malonates, RX(CH₂)_nCR'(COOC₂H₅)₂, and 5-alkyl-5-(organylchalcogenoalkyl)-barbiturates, RX(CH₂)_nC(R')CONHC(Y)-NHCO (X = Se, Te), synthesis and spectral properties of (R.A. Grigsby, Jr., K.J. Irgolic, F.F. Knapp, Jr.), 171
- Tin**
- η^2 -Alkyne-hexacarbonyldicobalt complexes with organometallic substituents (Si, Sn, B), preparation and NMR spectra of (P. Galow, A. Sebald, B. Wrackmeyer), 253
- Allyltriethylstannane, mechanism of reaction with bromotrichloromethane of (T.V. Leshina, R.Z. Sagdeev, N.E. Polyakov, M.B. Taraban, V.I. Valyaev, V.I. Rakhlis, R.G. Mirskov, S.Kh. Khangazheev, M.G. Voronkov), 295
- Molybdenum(0) arenediazo complexes, reactions with halogens, tin(IV) halides, mercury(II) halides and related reagents of (F.J. Lalor, M.E. Deane, D.M. Condon), 305
- Octa-organyl-spirobis(cyclotristanna-chalcogenans), conformational isomerism of (H. Puff, E. Friedrichs, R. Hundt, R. Zimmer), 79
- Pentacarbonyl-5-t-butyl-5-aza-2,8-dithia-1-stannobicyclo[3.3.0^{1,5}]octanechromium(0), synthesis, spectroscopic investigation and molecular structure of (A. Tzschach, K. Jurkschat, M. Scheer, J. Meunier-Piret, M. Van Meerssche), 165
- Silylamides of Group IVA and IVB elements with spirobicycloheptane structure (H. Bürger, W. Geschwandtner, G.R. Liewald), 145
- Tin-tin long-range coupling constants, two-bond coupling via carbon (T.N. Mitchell, A. Amamria, B. Fabisch, H.G. Kuivila, T.J. Karol, K. Swami), 157
- Trichloro(4-ethoxy-4-oxobutyl)tin, Cl₃SnCH₂CH₂CH₂CO₂Et, crystal structure and coordination chemistry of (R.A. Howie, E.S. Paterson, J.L. Wardell, J.W. Burley), 71
- Titanium**
- Dicyclopentadienyltitanium chloride dimer, CO-induced disproportionation of (L.P. Battaglia, M. Nardelli, C. Pelizzi, G. Predieri, G.P. Chiusoli), 301
- Silylamides of Group IVA and IVB elements with spirobicycloheptane structure (H. Bürger, W. Geschwandtner, G.R. Liewald), 145
- Ytterbium**
- Di- η^5 -cyclopentadienyl-1,2-dimethoxyethaneytterbium(II), crystal and molecular structure of (G.B. Deacon, P.I. MacKinnon, T.W. Hambley, J.C. Taylor), 91
- Zirconium**
- Silylamides of Group IVA and IVB elements with spirobicycloheptane structure (H. Bürger, W. Geschwandtner, G.R. Liewald), 145