

JOURNAL OF ORGANOMETALLIC CHEMISTRY, VOL. 308 (1986)**SUBJECT INDEX****Antimony**

Tetramethyldipnictogens, exchange reactions with dimethyl dichalcogenides of (A.J. Ashe III, E.G. Ludwig, Jr.), (308) 289

Arsenic

Bis{[bis(trimethylsilylmethyl)arsino]diphenylgallane}, synthesis and crystal structure of (R.L. Wellis, A.P. Purdy, A.T. McPhail, C.G. Pitt), (308) 281

Diphosphine and diarsine oxides, coordination behaviour in organotin(IV) adducts of (S. Dondi, M. Nardelli, C. Pelizzi, G. Predieri), (308) 195

Neutral diphenylarsano-transition metal complex *trans*-Ph₂As(CO)₂(2,2'-bipy)WCNEt₂ (2,2'-bipy = 2,2'-bipyridyl), (A.C. Filippou, E.O. Fischer, K. Öfele, H.G. Alt), (308) 11

Tetramethyldipnictogens, exchange reactions with dimethyl dichalcogenides of (A.J. Ashe III, E.G. Ludwig, Jr.), (308) 289

Bismuth

Tetramethyldipnictogens, exchange reactions with dimethyl dichalcogenides of (A.J. Ashe III, E.G. Ludwig, Jr.), (308) 289

Boron

μ -(Boranedithiolato)bis(tricarbonyliron) compounds, XBS₂[Fe(CO)₃]₂, preparation, structure and reactions of (H. Nöth, W. Rattay), (308) 131

Carbonyl-manganese, -iron and -cobalt complexes, dehydrogenative complexation with borolenes of (G.E. Herberich, W. Boveleth, B. Hessner, D.P.J. Köffer, M. Negele, R. Saive), (308) 153

Tris(trimethylsilyl)methanol, preparation of (P.D. Lickiss), (308) 261

Chromium

Azulenechromium dinuclear complexes, synthesis and structure of (F. Edelman, S. Töfke, U. Behrens), (308) 27

Furfurylphosphanes, chemical behaviour and influence on the selectivity and homologation of ethanol synthesis from methanol of (E. Lindner, C. Scheytt, P. Wegner), (308) 311

Pentacarbonylmetal(0) intramolecularly base-stabilised tin(II) compounds, synthesis and structure of (A. Zschunke, M. Scheer, M. Völitzke, K. Jurkschat, A. Tschach), (308) 325

Phosphinidine complexes, reasons for extremely paramagnetic shifts in ³¹P NMR spectra of (G. Huttner), (308) C11

Cobalt

Carbonyl-manganese, -iron and -cobalt complexes, dehydrogenative complexation with borolenes of (G.E. Herberich, W. Boveleth, B. Hessner, D.P.J. Köffer, M. Negele, R. Saive), (308) 153

Fulvalenedithallium, synthesis and reactions of (W.C. Spink, M.D. Rausch), (308) C1

Furfurylphosphanes, chemical behaviour and influence on the selectivity and homologation of ethanol synthesis from methanol of (E. Lindner, C. Scheytt, P. Wegner), (308) 311

Metalla-indole, formation from reaction of a cobalt-containing four-membered ring compound with electrophiles (H. Werner, B. Heiser, M.L. Ziegler, K. Linse), (308) 47

Nickel and cobalt electrochemically generated complexes, catalysis of dimerisation of monoolefins by (H. Masotti, J.C. Wallet, G. Peiffer, F. Petit, A. Mortreux, G. Buono), (308) 241

Copper

Copper(I) as phosphine abstractor from $(\eta\text{-C}_5\text{H}_5)(\text{CO})(\text{PPh}_3)(\text{FeCOCH}_3)$ (S.A. Levitre, C.C. Tso, A.R. Cutler), (308) 253

Copper(I) salts and dialkylcopper magnesium halides as catalysts in α -methylene- and α -(hydroxymethyl)-alkanoic ester preparation from substitution of α -(acetoxymethyl) acrylate or addition to ethyl- α -(hydroxymethyl) acrylate (H. Amri, M. Rambaud, J. Villieras), (308) C27

Gallium

Bis{[bis(trimethylsilylmethyl)arsino]diphenylgallane}, synthesis and crystal structure of (R.L. Wellis, A.P. Purdy, A.T. McPhail, C.G. Pitt), (308) 281

Germanium

Methylene-di-Grignard reagent, synthesis of 1,3-dimetallacyclobutanes with (B.J.J. van de Heisteeg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (308) 1

Pentacarbonylmanganese-triphenylphosphine-silicon, -germanium and -tin, chemical ionisation mass spectrometry of (D. Perugini, G. Innorta, S. Torroni, A. Foffani), (308) 167

Hafnium

Methylene-di-Grignard reagent, synthesis of 1,3-dimetallacyclobutanes with (B.J.J. van de Heisteeg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (308) 1

Iridium

Fulvalenedithallium, synthesis and reactions of (W.C. Spink, M.D. Rausch), (308) C1

Hydridoiridium(III) complexes with weakly coordinated anions and N_2 as leaving groups (H. Bauer, W. Beck), (308) 73

Perfluorophenoxyiridium(I) complex, *trans*- $(\text{C}_6\text{F}_5\text{O})\text{Ir}(\text{CO})(\text{PPh}_3)_2$, synthesis, characterisation, crystal structure and carbonylation of (M.R. Churchill, J.C. Fettinger, W.M. Rees, J.D. Atwood), (308) 361

Iron

σ -Alkyl- (or σ -aryl-)iron(III) porphyrins containing Fe-C bonds, Raman spectroscopic investigation of coordination in (A. Tabard, G. Lagrange, R. Guillard, M. Jouan, N.Q. Dao), (308) 335

μ -(Boranedithiolato)bis(tricarbonyliron) compounds, $\text{XBS}_2[\text{Fe}(\text{CO})_3]_2$, preparation, structure and reactions of (H. Nöth, W. Rattay), (308) 131

Bromo(*syn*- η^3 -2,3-pentadienyl)tricarbonyliron, synthesis, characterisation and reactivity of (C.-C. Cheng, R.-S. Liu), (308) 237

Carbonyl-manganese, -iron and -cobalt complexes, dehydrogenative complexation with borolenes of (G.E. Herberich, W. Boveleth, B. Hessner, D.P.J. Köffer, M. Negele, R. Saive), (308) 153

Ferrole C-functional complexes, new synthesis of (D. Seydel, C.M. Archer, J.C. Dewan), (308) C5

Lithium

Bis(lithioamino)- and tris(lithioamino)-silane dimers containing electron-deficient Li_4N_4 and Li_6N_6 clusters, syntheses and crystal structures of (D.J. Brauer, H. Bürger, G.R. Liewald), (308) 119

Organonickel hydrides with ionic contacts to sodium and lithium, structural and bonding characteristics of (R. Goddard, C. Krüger, K.R. Pörschke, G. Wilke), (308) 85

Magnesium

Copper(I) salts and dialkylcopper magnesium halides as catalysts in α -methylene- and α -(hydroxymethyl)-alkanoic ester preparation from substitution of α -(acetoxymethyl) acrylate or addition to ethyl- α -(hydroxymethyl) acrylate (H. Amri, M. Rambaud, J. Villieras), (308) C27

Methylene-di-Grignard reagent, synthesis of 1,3-dimetallacyclobutanes with (B.J.J. van de Heisteeg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (308) 1

Manganese

Carbonylmanganese halogen-bridged cationic compounds, synthesis of; X-ray structure of

$[\text{Mn}_2(\mu\text{-I})(\text{CO})_8(\mu\text{-Ph}_2\text{PCH}_2\text{PPh}_2)]\text{[BF}_4]$
 (V. Riera, M.A. Ruiz, A. Tiripicchio, M. Tiripicchio Camellini), (308) C19

Carbonyl-manganese, -iron and -cobalt complexes, dehydrogenative complexation with borolenes of (G.E. Herberich, W. Boveleth, B. Hessner, D.P.J. Köffer, M. Negle, R. Saive), (308) 153

Carbonylnitrosyl(cycloheptadienyl)manganese cations, electrophilic reactivity of the dienyl ring in (E.D. Honig, D.A. Sweigart), (308) 229

Carbonylnitrosyl(cyclohexadienyl)manganese cations, electrophilic reactivity of the dienyl ring in (Y.K. Chung, D.A. Sweigart), (308) 223

($\eta^5\text{-C}_5\text{Me}_5$) $\text{M}(\text{CO})_2\text{S}_2$ ($\text{M} = \text{Mn, Re}$), investigations of oxidation of the disulphur ligand in (M. Herberhold, B. Schmidkonz), (308) 35

Fulvalenedithallium, synthesis and reactions of (W.C. Spink, M.D. Rausch), (308) C1

Pentacarbonylmanganese-triphenylphosphine-silicon, -germanium and -tin, chemical ionisation mass spectrometry of (D. Perugini, G. Innorta, S. Torroni, A. Foffani), (308) 167

Phosphine rhodium complexes as catalysts in enantioselective hydration of crotonic acid derivatives (H. Brunner, A. Knott, M. Kunz, E. Thalhammer), (308) 55

Metallocenes

Nickelocene, high activity in catalysis of cross-linking of an acetylene-terminated monomer of (W. Douglas, A. Overend), (308) C14

1,2,3-Triseleno[3]ruthenocenophane, crystal and molecular structure of (A.J. Blake, R.O. Gould, A.G. Osborne), (308) 297

Molybdenum

Azulenechromium dinuclear complexes, synthesis and structure of (F. Edelman, S. Töfke, U. Behrens), (308) 27

Organonickel hydrides with ionic contacts to sodium and lithium, structural and bonding characteristics of (R. Goddard, C. Krüger, K.R. Pörschke, G. Wilke), (308) 85

Pentacarbonylmetal(0) intramolecularly base-stabilised tin(II) compounds, synthesis and structure of (A. Zschunke, M. Scheer, M. Völtzke, K. Jurkschat, A. Tzschach), (308) 325

Phosphinidene complexes, reasons for extremely paramagnetic shifts in ^{31}P NMR spectra of (G. Huttner), (308) C11

Nickel

Monoazadienenickel complexes, synthesis and structure of (C. Müller, L. Stamp, H. tom Dieck), (308) 105

Nickel and cobalt electrochemically generated complexes, catalysis of dimerisation of monoolefins by (H. Masotti, J.C. Wallet, G. Peiffer, F. Petit, A. Mortreux, G. Buono), (308) 241

Nickelocene, high activity in catalysis of cross-linking of an acetylene-terminated monomer of (W. Douglas, A. Overend), (308) C14

Organonickel hydrides with ionic contacts to sodium and lithium, structural and bonding characteristics of (R. Goddard, C. Krüger, K.R. Pörschke, G. Wilke), (308) 85

Niobium

Hydridocarbonyl-vanadium, -niobium and -tantalum complexes, preparation and characterisation of (D. Rehder, P. Oltmanns, M. Hoch, C. Weidemann, W. Priebsch), (308) 19

Palladium

Trichlorostannate derivatives of chloro-bridged palladium(II) dimers, ^{31}P and ^{119}Sn NMR of (C. Arz, I.R. Herbert, P.S. Pregosin), (308) 373

Phosphorus

Carbonylmanganese halogen-bridged cationic compounds, synthesis of; X-ray structure of $[\text{Mn}_2(\mu\text{-I})(\text{CO})_8(\mu\text{-Ph}_2\text{PCH}_2\text{PPh}_2)]\text{[BF}_4]$ (V. Riera, M.A. Ruiz, A. Tiripicchio, M. Tiripicchio Camellini), (308) C19

$[(\eta\text{-C}_5\text{H}_5)\text{Ru}((S,S)\text{-Ph}_2\text{PCH}(\text{CH}_3)\text{CH}(\text{CH}_3)\text{-PPh}_2)(\text{olefin})]^+\text{PF}_6^-$ optically active complexes, enantioface selection in (G. Consiglio, F. Morandini, P. Pregosin), (308) 345

Copper(I) as phosphine abstractor from $(\eta\text{-C}_5\text{H}_5)(\text{CO})(\text{PPh}_3)(\text{FeCOCH}_3)$ (S.A. Levitre, C.C. Tso, A.R. Cutler), (308) 253

- Diphosphine and diarsine oxides, coordination behaviour in organotin(IV) adducts of (S. Dondi, M. Nardelli, C. Pelizzi, G. Predieri), (308) 195
- Furfurylphosphanes, chemical behaviour and influence on the selectivity and homologation of ethanol synthesis from methanol of (E. Lindner, C. Scheytt, P. Wegner), (308) 311
- Hydridocarbonyl-vanadium, -niobium and -tantalum complexes, preparation and characterisation of (D. Rehder, P. Oltmanns, M. Hoch, C. Weidemann, W. Priebisch), (308) 19
- Hydridoiridium(III) complexes with weakly coordinated anions and N₂ as leaving groups (H. Bauer, W. Beck), (308) 73
- Metalla-indole, formation by reaction of a cobalt-containing four-membered ring compound with electrophiles (H. Werner, B. Heiser, M.L. Ziegler, K. Linse), (308) 47
- Monoazadiennickel complexes, synthesis and structure of (C. Müller, L. Stamp, H. tom Dieck), (308) 105
- Pentacarbonylmanganese-triphenylphosphine-silicon, -germanium and -tin, chemical ionisation mass spectrometry of (D. Perugini, G. Innorta, S. Torroni, A. Foffani), (308) 167
- Perfluorophenoxyiridium(I) complex, *trans*- (C₆F₅O)Ir(CO)(PPh₃)₂, synthesis, characterisation, crystal structure and carbonylation of (M.R. Churchill, J.C. Fettinger, W.M. Rees, J.D. Atwood), (308) 361
- Phosphine rhodium complexes as catalysts in enantioselective hydration of crotonic acid derivatives (H. Brunner, A. Knott, M. Kunz, E. Thalhammer), (308) 55
- Phosphinidine complexes, reasons for extremely paramagnetic shifts in ³¹P NMR spectra of (G. Huttner), (308) C11
- [Pt₃(PPh₃)₂(CNC₆H₃Me₂)₆]₂, a linear tri-nuclear cluster, synthesis, characterisation and crystal structure of (C.E. Briant, D.I. Gilmour, D.M.P. Mingos), (308) 381
- Tetramethyldipnictogens, exchange reactions with dimethyl dichalcogenides of (A.J. Ashe III, E.G. Ludwig, Jr.), (308) 289
- Trichlorostannate derivatives of chloro-bridged palladium(II) dimers, ³¹P and ¹¹⁹Sn NMR of (C. Arz, I.R. Herbert, P.S. Pregosin), (308) 373
- Triorganostannate anion and phosphonium cation containing zwitterion, preparation of (M. Veith, V. Huch), (308) 263
- Triphosphane-rhodium complex, Rh(4-MeC₆H₄)[t-BuP(CH₂CH₂CH₂PPh₂)₂], reactions with CO₂ of (L. Dahlenburg, C. Prengel), (308) 63
- Tris(triphenylphosphine)chlororhodium(I), reductive hydrosilylation of quinones catalysed by (M.N. Bakola-Christianopoulou), (308) C24
- uctive hydrosilylation of quinones catalysed by (M.N. Bakola-Christianopoulou), (308) C24
- ## Platinum
- [Pt₃(PPh₃)₂(CNC₆H₃Me₂)₆]PF₆, a linear tri-nuclear cluster, synthesis, characterisation and crystal structure of (C.E. Briant, D.I. Gilmour, D.M.P. Mingos), (308) 381
- ## Rhenium
- (η⁵-C₅Me₅)M(CO)₂S₂ (M = Mn, Re), investigations of oxidation of the disulphur ligand in (M. Herberhold, B. Schmidkonz), (308) 35
- Fulvalenedithallium, synthesis and reactions of (W.C. Spink, M.D. Rausch), (308) C1
- ## Rhodium
- (η⁵-C₅H₅)Rh(CO)[C(NMe)CH₂CH₂(NMe)], formation and molecular structure of (D.W. Macomber, R.D. Rogers), (308) 353
- Fulvalenedithallium, synthesis and reactions of (W.C. Spink, M.D. Rausch), (308) C1
- Phosphine rhodium complexes as catalysts in enantioselective hydration of crotonic acid derivatives (H. Brunner, A. Knott, M. Kunz, E. Thalhammer), (308) 55
- Triphosphane-rhodium complex, Rh(4-MeC₆H₄)[t-BuP(CH₂CH₂CH₂PPh₂)₂], reactions with CO₂ of (L. Dahlenburg, C. Prengel), (308) 63
- Tris(triphenylphosphine)chlororhodium(I), reductive hydrosilylation of quinones catalysed by (M.N. Bakola-Christianopoulou), (308) C24
- ## Ruthenium
- [(η-C₅H₅)Ru{(S,S)-Ph₂PCH(CH₃)CH(CH₃)-PPh₂}(olefin)]⁺ PF₆ optically active complexes, enantioface selection in (G. Consiglio, F. Morandini, P. Pregosin), (308) 345
- 1,2,3-Tri selena[3]ruthenocenophane, crystal and molecular structure of (A.J. Blake, R.O. Gould, A.G. Osborne), (308) 297

Selenium

Octafluoroselenanthrene, $(C_6F_4)_2Se_2$, structure of a triclinic form of (D.S. Brown, T.K. Mishty, A.G. Massey), (308) 207

Tetramethyldipnictogens, exchange reactions with dimethyldichalcogenides of (A.J. Ashe III, E.G. Ludwig, Jr.), (308) 289

1,2,3-Triseleno[3]ruthenocenophane, crystal and molecular structure of (A.J. Blake, R.O. Gould, A.G. Osborne), (308) 297

Silicon

Bis{[bis(trimethylsilylmethyl)arsino]diphenylgallane}, synthesis and crystal structure of (R.L. Wellis, A.P. Purdy, A.T. McPhail, C.G. Pitt), (308) 281

Bis(lithioamino)- and tris(lithioamino)-silane dimers containing electron-deficient Li_4N_4 and Li_6N_6 clusters, syntheses and crystal structures of (D.J. Brauer, H. Bürger, G.R. Liewald), (308) 119

2,7-Dimethyl-2,3:7,8-diepoxy-5-silaspiro[4.4]nonane and cyclosiloxanes, synthesis by flash vacuum pyrolysis of (C.D. Juengst, W.P. Weber, G. Manuel), (308) 187

Disilanyl radical anions, 2,3:5,6-dibenzo-7,8-disilabicyclo[2.2.2]octa-2,5-dienes and a cyclo-tetrasilane, preparation and reactions of (M. Weidenburch, K.-L. Thom), (308) 177

Methylene-di-Grignard reagent, synthesis of 1,3-dimetallacyclobutanes with (B.J.J. van de Heisteeg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (308) 1

Pentacarbonylmanganese-triphenylphosphine-silicon, -germanium and -tin, chemical ionisation mass spectrometry of (D. Perugini, G. Innorta, S. Torroni, A. Foffani), (308) 167

Triorganylstannate anion and phosphonium cation containing zwitterion, preparation of (M. Veith, V. Huch), (308) 263

Tris(trimethylsilyl)methanol, preparation of (P.D. Lickiss), (308) 261

Sulphur

μ -(Boranedithiolato)bis(tricarbonyliron) compounds, $XBS_2[Fe(CO)_3]_2$, preparation, structure and reactions of (H. Nöth, W. Ratay), (308) 131

($\eta^5-C_5Me_5$) $M(CO)_2S_2$ ($M = Mn, Re$), investigations of oxidation of the disulphur ligand in (M. Herberhold, B. Schmidkonz), (308) 35

Tetramethyldipnictogens, exchange reactions with dimethyldichalcogenides of (A.J. Ashe III, E.G. Ludwig, Jr.), (308) 289

Tantalum

Hydridocarbonyl-vanadium, -niobium and -tantalum complexes, preparation and characterisation of (D. Rehder, P. Oltmanns, M. Hoch, C. Weidemann, W. Priebisch), (308) 19

Tellurium

Tetramethyldipnictogens, exchange reactions with dimethyldichalcogenides of (A.J. Ashe III, E.G. Ludwig, Jr.), (308) 289

Vinylic tellurides, synthesis of (M.J. Dabdoub, V.B. Dabdoub, J.V. Comassetto, N. Petragnani), (308) 211

Thallium

Fulvalenedithallium, synthesis and reactions of (W.C. Spink, M.D. Rausch), (308) C1

Tin

Diphosphine and diarsine oxides, coordination behaviour in organotin(IV) adducts of (S. Dondi, M. Nardelli, C. Pelizzi, G. Predieri), (308) 195

Methylene-di-Grignard reagent, synthesis of 1,3-dimetallacyclobutanes with (B.J.J. van de Heisteeg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (308) 1

Pentacarbonylmanganese-triphenylphosphine-silicon, -germanium and -tin, chemical ionisation mass spectrometry of (D. Perugini, G. Innorta, S. Torroni, A. Foffani), (308) 167

Pentacarbonylmetal(0) intramolecularly base-stabilised tin(II) compounds, synthesis and structure of (A. Zschunke, M. Scheer, M. Völzke, K. Jurkschat, A. Tzschach), (308) 325

Trichlorostannate derivatives of chloro-bridged palladium(II) dimers, ^{31}P and ^{119}Sn NMR of (C. Arz, I.R. Herbert, P.S. Pregosin), (308) 373

Triorganylstannate anion and phosphonium cation containing zwitterion, preparation of (M. Veith, V. Huch), (308) 263

Titanium

- Fulvalenedithallium synthesis and reactions of (W.C. Spink, M.D. Rausch), (308) C1
 Methylene-di-Grignard reagent, synthesis of 1,3-dimetallacyclobutanes with (B.J.J. van de Heisteeg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (308) 1

Tungsten

- Furfurylphosphanes, chemical behaviour and influence on the selectivity and homologation of ethanol synthesis from methanol of (E. Lindner, C. Scheytt, P. Wegner), (308) 311
 Neutral diphenylarsano-transition metal complex *trans*-Ph₂As(CO)₂(2,2'-bipy)WCNEt₂ (2,2'-bipy = 2,2'-bipyridyl), (A.C. Filippou, E.O. Fischer, K. Öfele, H.G. Alt), (308) 11
 Pentacarbonylmethyl(0) intramolecularly base-stabilised tin(II) compounds, synthesis and structure of (A. Zschunke, M. Scheer, M. Völtzke, K. Jurkschat, A. Tzschach), (308) 325
 Phosphinidene complexes, reasons for extremely paramagnetic shifts in ³¹P NMR spectra of (G. Huttner), (308) C11

Vanadium

- Hydridocarbonyl-vanadium, -niobium and -tantalum complexes, preparation and characterisation of (D. Rehder, P. Oltmanns, M. Hoch, C. Weidemann, W. Priebisch), (308) 19

Zirconium

- Cyclopentadienylzirconium carboxylato tri-nuclear, oxygen-centered, ionic complex, [Zr₃(μ₃-O)(μ₂-OH)₃(ω₂-C₆H₅-COO)₃(η⁵-C₅H₅)₃]⁺ C₆H₅COO⁻ · O(C₂H₅)₂, preparation and structure of (U. Thewalt, K. Döppert, W. Lasser), (308) 303
 Methylened-i-Grignard reagent, synthesis of 1,3-dimetallacyclobutanes with (B.J.J. van de Heisteeg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (308) 1

Book review

- Syntheses of fluoroorganic compounds; edited by I.L. Knunyants and G.G. Yakobson (C. Eaborn), (308) C17
 The proton: applications to organic chemistry; by R. Stewart (C. Eaborn), (308) C27