

JOURNAL OF ORGANOMETALLIC CHEMISTRY, VOL. 409 (1991)**SUBJECT INDEX****Aluminium**

Silyl-substituted phosphinomethanide ligands; preparation of dimeric Al heterocycles; crystal structure of $\{\text{Me}_2\text{Al}[\text{C}(\text{PMe}_2)(\text{SiMe}_3)_2]\}_2$ (H.H. Karsch, K. Zellner, J. Lachmann, G. Müller), (409) 109

Boron

Allylic organopotassium and organoboron compounds in the hydroxymethylation and formylation of cycloalkenes (M. Zaidlewicz), (409) 103

Caesium

Allyl alkali metals, comparative theoretical study of (N.J.R. van Eikema Hommes, M. Bühl, P.v.R. Schleyer, Y.-D. Wu), (409) 307

Allyl- and benzyl-type organoalkali intermediates, preparation via organotin compounds (O. Desponds, M. Schlosser), (409) 93

Chromium

$(\eta^2\text{-TCNE})\text{M}(\text{CO})_5$ (M = Cr; W; TCNE = tetracyanoethene), resonance Raman study of; evidence for an olefin-complex \rightarrow metallacyclopropane transition upon low-energy metal-to-ligand charge-transfer excitation (D.J. Stufkens, T.L. Snoeck, W. Kaim, T. Roth, B. Olbrich-Deussner), (409) 189

Cobalt

Homogeneous metal complex catalysts in the synthesis of cyclobutane and cyclopentane compounds (U.M. Dzhemilev, R.I. Khusnutdinov, G.A. Tolstikov), (409) 15

Copper

Bis(alkynyl) titanocene complexes of FeCl_2 and CuCl (H. Lang, M. Herres, L. Zsolnai, W. Imhof), (409) C7

Homogeneous metal complex catalysts in the synthesis of cyclobutane and cyclopentane compounds (U.M. Dzhemilev, R.I. Khusnutdinov, G.A. Tolstikov), (409) 15

Germanium

(Ferochenylacyl)germanes, chemical and structural investigations of (H.K. Sharma, F. Cervantes-Lee, K.H. Pannell), (409) 321

Group 14 metals, NQR studies of intramolecular complexes in organic compounds of (V.P. Feshin, G.A. Polygalova), (409) 1

Group 14 triflates, synthesis of (W. Uhlig), (409) 377

3-Organochlorogermylamino 2-methylthiophoates, synthesis of (M. Rivière-Baudet, P. Rivière, A. Castel, A. Morère, C. Abdennhader), (409) 131

Triphenylsilanol, molecular and crystal structure of (H. Puff, K. Braun, H. Reuter), (409) 119

Iridium

Coordinatively unsaturated σ -aryl iridium(III) complexes containing iridium-mercury bonds (W.R. Roper, G.C. Saunders), (409) C19

Iron

Bis(alkynyl) titanocene complexes of FeCl₂ and CuCl (H. Lang, M. Herres, L. Zsolnai, W. Imhof), (409) C7

[(μ -CH₃Te)Fe₂(CO)₆]₂[μ -Te(CH₂)Te- μ] methylene-bridged double butterfly shaped complex, synthesis and structural characterisation of (P. Mathur, V.D. Reddy, K. Das, U.C. Sinha), (409) 255

(Ferrocenylacyl)germanes, chemical and structural investigations of (H.K. Sharma, F. Cervantes-Lee, K.H. Pannell), (409) 321

Iron and molybdenum cyclometallated diazene complexes (H. Kisch, D. Garn), (409) 347

Iron and ruthenium cationic (η^6 -chloroarene) complexes, reactions with some *O*-silyl and *C*-silyl compounds (R.C. Cambie, S.A. Coulson, L.G. Mackay, S.J. Janssen, P.S. Rutledge, P.D. Woodgate), (409) 385

Rigid rod, iron-metal containing polyynes, synthesis of (B.F.G. Johnson, A.K. Kakkar, M.S. Khan, J. Lewis), (409) C12

Lead

Group 14 triflates, synthesis of (W. Uhlig), (409) 377

Lithium

Allyl alkali metals, comparative theoretical study of (N.J.R. van Eikema Hommes, M. Bühl, P.v.R. Schleyer, Y.-D. Wu), (409) 307

Allyl- and benzyl-type organoalkali intermediates, preparation via organotin compounds (O. Desponds, M. Schlosser), (409) 93

Butyllithium-induced dimerisation of pent-3-en-1-yne and related additions (P.A.A. Klusener, H. Hommes, J.C. Hanekamp, A.C.H.T.M. van der Kerk, L. Brandsma), (409) 67

1, ω -1-Dienes, solvent controlled unilateral or bilateral metalation of (E. Moret, O. Desponds, M. Schlosser), (409) 83

Group 14 triflates, synthesis of (W. Uhlig), (409) 377

Manganese

Metal carbonyl anions, I⁺-abstraction versus I⁻-displacement in their reactions with diidoacetylene; X-ray structure of [(OC)₅MnC \equiv Cm(CO)₅] (J.A. Davies, M. El-Ghanam, A.A. Pinkerton, D.A. Smith), (409) 367

Triorganylstannyldiazo acetates, reactions with manganese pentacarbonyl bromide (H. Kandler, H.W. Bosch, V. Shklover, H. Berke), (409) 233

Mercury

Coordinationally unsaturated σ -aryl iridium(III) complexes containing iridium-mercury bonds (W.R. Roper, G.C. Saunders), (409) C19

Metalloenes

Bis(alkynyl) titanocene complexes of FeCl₂ and CuCl (H. Lang, M. Herres, L. Zsolnai, W. Imhof), (409) C7

(Ferrocenylacyl)germanes, chemical and structural investigations of (H.K. Sharma, F. Cervantes-Lee, K.H. Pannell), (409) 321

(η^2 -Phenyltrimethylsilylacetylene)zirconocene generated *in situ*, reactions of (G. Erker, R. Zwettler), (409) 179

Molybdenum

(η^5 -C₅H₄CMe₂C₁₃H₉)M(CO)₃Me complexes (M = Mo, W), photoinduced reactions with acetylenes (H.G. Alt, J.S. Han, H.E. Maisel), (409) 197

Iron and molybdenum cyclometallated diazene complexes (H. Kisch, D. Garn), (409) 347

Molybdenum and tungsten monoalkyne complexes, syntheses and NMR studies of (J.L. Davidson, F. Sence), (409) 219

Seven-coordinate molybdenum(II) and tungsten(II) organophosphine carbonyl iodide derivatives, NMR study of (P.K. Baker, M.A. Beckett, L.M. Severs), (409) 213

Stereochemically non-rigid molybdenum-allyl complexes containing the bis(3,5-dimethylpyrazolyl)-methane ligand, synthesis of (V.S. Joshi, A. Sarkar, P.R. Rajamohanam), (409) 341

Neodymium

Bis(cyclopentadienyl)(2,6-diphenylphenoxo)bis(tetrahydrofuran)neodymium(III), preparation and crystal structure of; an unexpected example of formal nine coordination (G.B. Deacon, S. Nickel, E.R.T. Tiekink), (409) C1

Nickel

2-3- η^2 -(Butyne-1,4-diol)bis(triisopropylphosphane)nickel(0), ($i\text{-Pr}_3\text{P}$)₂Ni(HOCH₂C \equiv CCH₂OH), crystal and molecular structure of; some peculiarities of the complexation of 2-butyne-1,4-diol with nickel(0) complexes (U. Rosenthal, G. Oehme, H. Görls, V.V. Burlakov, A.V. Polyakov, A.I. Yanovsky, Yu.T. Struchkov), (409) 299

Homogeneous metal complex catalysts in the synthesis of cyclobutane and cyclopentane compounds (U.M. Dzhemilev, R.I. Khusnutdinov, G.A. Tolstikov), (409) 15

Osmium

Mesitylene osmium complexes with hydrido, carboxylato, carbonyl and vinylidene ligands (H. Werner, S. Stahl, W. Kohlmann), (409) 285

Os₃(CO)₁₀(μ_2 - η^3 -C₃H₅)(AuPEt₃), a triosmium cluster exhibiting an allyl ligand with a novel mode of coordination; synthesis, molecular and electronic structure of (C.E. Housecroft, B.F.G. Johnson, J. Lewis, J.A. Lunniss, S.M. Owen, P.R. Raithby), (409) 271

Palladium

Homogeneous metal complex catalysts in the synthesis of cyclobutane and cyclopentane compounds (U.M. Dzhemilev, R.I. Khusnutdinov, G.A. Tolstikov), (409) 15

Palladium-catalysed reactions of vinyl bromides with disubstituted alkynes; new synthesis of fulvenes (L.J. Silverberg, G. Wu, A.L. Rheingold, R.F. Heck), (409) 411

Phosphorus

2-3- η^2 -(Butyne-1,4-diol)bis(triisopropylphosphane)nickel(0), ($i\text{-Pr}_3\text{P}$)₂Ni(HOCH₂C \equiv CCH₂OH), crystal and molecular structure of; some peculiarities of the complexation of 2-butyne-1,4-diol with nickel(0) complexes (U. Rosenthal, G. Oehme, H. Görls, V.V. Burlakov, A.V. Polyakov, A.I. Yanovsky, Yu.T. Struchkov), (409) 299

Diphosphine-derived radical cations, molecular and electronic structures of; a semi-empirical PM3 study (C. Glidewell), (409) 171

Mesitylene osmium complexes with hydrido, carboxylato, carbonyl and vinylidene ligands (H. Werner, S. Stahl, W. Kohlmann), (409) 285

Silyl-substituted phosphinomethanide ligands; preparation of dimeric Al heterocycles; crystal structure of {Me₂Al[C(PMe₂)(SiMe₃)₂]}₂ (H.H. Karsch, K. Zellner, J. Lachmann, G. Müller), (409) 109

Vinylphosphines, preparation by means of free radical addition of diphenylphosphine to alkynes and allenes (T.N. Mitchell, K. Heesche), (409) 163

Potassium

Allyl alkali metals, comparative theoretical study of (N.J.R. van Eikema Hommes, M. Bühl, P.v.R. Schleyer, Y.-D. Wu), (409) 307

Allyl- and benzyl-type organoalkali intermediates, preparation via organotin compounds (O. Desponds, M. Schlosser), (409) 93

Rhenium

Bis(cyclopentadienyl)rhenium(III) chloride, crystal structure, properties and reactivity of; preparation and characterisation of Cp₃Re and Cp₂ReH (C. Apostolidis, B. Kanellakopoulos, R. Maier, J. Rebizant, M.L. Ziegler), (409) 243

Iron and ruthenium cationic (η^6 -chloroarene) complexes, reactions with some *O*-silyl and *C*-silyl compounds (R.C. Cambie, S.A. Coulson, L.G. Mackay, S.J. Janssen, P.S. Rutledge, P.D. Woodgate), (409) 385

Metal carbonyl anions, I⁻-abstraction versus I⁻-displacement in their reactions with diiodoacetylene; X-ray structure of [(OC)₅MnC≡CMn(CO)₅] (J.A. Davies, M. El-Ghanam, A.A. Pinkerton, D.A. Smith), (409) 367

Rubidium

Allyl alkali metals, comparative theoretical study of (N.J.R. van Eikema Hommes, M. Bühl, P.v.R. Schleyer, Y.-D. Wu), (409) 307

Ruthenium

[{(C₃Me₄R)Ru]₃Ru(η³-As₃)(μ₃,η³-As₃)(μ₃-As)₃] tetranuclear clusters, synthesis and crystal structure of (O.J. Scherer, C. Blath, G. Heckmann, G. Wolmershäuser), (409) C15

(Cyclopentadienyl)ruthenium(1+) complexes of aromatic diterpenoids (R.C. Cambie, L.G. Mackay, P.S. Rutledge, M. Tercel, P.D. Woodgate), (409) 263

Rigid rod, iron-metal containing polyynes, synthesis of (B.F.G. Johnson, A.K. Kakkar, M.S. Khan, J. Lewis), (409) C12

Silicon

Allylic organopotassium and organoboron compounds in the hydroxymethylation and formylation of cycloalkenes (M. Zaidlewicz), (409) 103

Bis(alkinyl) titanocene complexes of FeCl₂ and CuCl (H. Lang, M. Herres, L. Zsolnai, W. Imhof), (409) C7

Group 14 triflates, synthesis of (W. Uhlig), (409) 377

Silyl-substituted phosphinomethanide ligands; preparation of dimeric Al heterocycles; crystal structure of {Me₂Al[C(PMe₂)(SiMe₃)₂]}₂ (H.H. Karsch, K. Zellner, J. Lachmann, G. Müller), (409) 109

Triphenylsilanol, molecular and crystal structure of (H. Puff, K. Braun, H. Reuter), (409) 119

Sodium

Allyl alkali metals, comparative theoretical study of (N.J.R. van Eikema Hommes, M. Bühl, P.v.R. Schleyer, Y.-D. Wu), (409) 307

Allylic organopotassium and organoboron compounds in the hydroxymethylation and formylation of cycloalkenes (M. Zaidlewicz), (409) 103

Tellurium

[(μ-CH₃Te)Fe₂(CO)₆]₂[μ-Te(CH₂)Te-μ] methylene-bridged double butterfly shaped complex, synthesis and structural characterisation of (P. Mathur, V.D. Reddy, K. Das, U.C. Sinha), (409) 255

Tin

Allyl- and benzyl-type organoalkali intermediates, preparation via organotin compounds (O. Desponds, M. Schlosser), (409) 93

[2-(4,4-Dimethyl-2-oxazoline)-5-methylphenyl]methylphenyltin bromide, synthesis and structure of a triorganotin halide having a configurationally stable chiral tin center (J.T.B.H. Jastrzebski, E. Wehman, J. Boersma, G. van Koten, K. Goubitz, D. Heijdenrijk), (409) 157

Diorgano(chloro)tin(IV) oxinates and thiooxinates, multinuclear NMR study of (A. Lyčka, J. Holeček, A. Sebal, I. Tkáč), (409) 331

Group 14 metals, NQR studies of intramolecular complexes in organic compounds of (V.P. Feshin, G.A. Polygalova), (409) 1

Group 14 triflates, synthesis of (W. Uhlig), (409) 377

Organotin esters of dithiocarbamylacetic acids (S.W. Ng, V.G. Kumar Das), (409) 143

Rigid rod, iron-metal containing polyynes, synthesis of (B.F.G. Johnson, A.K. Kakkar, M.S. Khan, J. Lewis), (409) C12

Triorganylstannyldiazo acetates, reactions with manganese pentacarbonyl bromide (H. Kandler, H.W. Bosch, V. Shklover, H. Berke), (409) 233

Titanium

Bis(alkinyl) titanocene complexes of FeCl₂ and CuCl (H. Lang, M. Herres, L. Zsolnai, W. Imhof), (409) C7

Homogeneous metal complex catalysts in the synthesis of cyclobutane and cyclopentane compounds (U.M. Dzhemilev, R.I. Khusnutdinov, G.A. Tolstikov), (409) 15

Tungsten

$(\eta^5\text{-C}_5\text{H}_4\text{CMe}_2\text{C}_{13}\text{H}_9)\text{M}(\text{CO})_3\text{Me}$ complexes (M = Mo, W), photoinduced reactions with acetylenes (H.G. Alt, J.S. Han, H.E. Maisel), (409) 197

Molybdenum and tungsten monoalkyne complexes, syntheses and NMR studies of (J.L. Davidson, F. Sence), (409) 219

Seven-coordinate molybdenum(II) and tungsten(II) organophosphine carbonyl iodide derivatives, NMR study of (P.K. Baker, M.A. Beckett, L.M. Severs), (409) 213

$(\eta^2\text{-TCNE})\text{M}(\text{CO})_5$ (M = Cr; W; TCNE = tetracyanoethene), resonance Raman study of; evidence for an olefin-complex \rightarrow metallacyclopropane transition upon low-energy metal-to-ligand charge-transfer excitation (D.J. Stufkens, T.L. Snoeck, W. Kaim, T. Roth, B. Olbrich-Deussner), (409) 189

Tungsten carbonyl complexes derived from the dinitrogen complex *trans*- $[\text{W}(\text{N}_2)_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)_2]$ (T. Ishida, Y. Mizobe, T. Tanase, M. Hidai), (409) 355

$[\text{W}_2(\text{CO})(\text{NCMe})(\eta^2\text{-RC}_2\text{R})_2]$ (R = Me or Ph) and $[\text{W}(\text{CO})(\text{NCMe})(\text{Ph}_2\text{P}(\text{CH}_2)\text{PPh}_2)(\eta^2\text{-MeC}_2\text{Me})][\text{BF}_4]$, acetonitrile exchange reactions with thiophene-3-acetonitrile; crystal structure of $[\text{W}_2(\text{CO})\{\text{NCCH}_2(3\text{-C}_4\text{H}_3\text{S})\}(\eta^2\text{-MeC}_2\text{Me})_2]$ (P.K. Baker, M.G.B. Drew, S. Edge, S.D. Riyard), (409) 207

Zirconium

$(\eta^2\text{-Phenyltrimethylsilylacetylene})\text{zirconocene}$ generated *in situ*, reactions of (G. Erker, R. Zwieterl), (409) 179

Book reviews

Inorganic synthesis vol. 26, editor-in chief H.D. Kaesz (A.C. Sullivan), (409) C5