

SUBJECT INDEX

Aluminium

Alumohydride-yttrium complex with three-coordinated hydrogen atoms, crystal structure of $\{[(\eta^5\text{-C}_5\text{H}_5)_2\text{Y}(\mu_3\text{-H})][(\mu_2\text{-H})\text{AlH}_2 \cdot \text{OC}_4\text{H}_8]\}_2$ (V.K. Bel'skii, B.M. Bulychiev, A.B. Erofeev, G.L. Soloveichik), 107
Erofeev, G.L. Soloveichik), 107

Nitrosylmolybdenum complexes as pre-catalysts for olefin metathesis; formation and stability of $[\text{Mo}^0\text{Cl}(\text{NO})]$ -containing intermediate (K. Seyferth, R. Taube), 155

Boron

Organo-1,3,2-dioxasilacyclohexanes, ^1H NMR spectra of (R.H. Cragg, R.D. Lane), 1

1,4-Pentadienylboranes, iodination of and formation of 2-substituted 1-iodo-1,4-pentadienes (B.M. Mikhailov, L.I. Lavrinovich), 5

Chromium

Benzenetricarbonylchromium derivatives, direct, indirect and assisted electrooxidation of, comparative study in acetonitrile and in *N,N*-dimethylformamide of (C. Degrand, A. Radecki-Sudre), 63

Binuclear-chromium complex with a bridging bis-carbyne ligand, synthesis and molecular structure of (N.A. Ustynyuk, V.N. Vinogradova, V.G. Andrianov, Yu.T. Struchkov), 73

Cobalt

Cyclopentadienyldicarbonyliron-tetracarbonylcobalt, $(\eta^5\text{-C}_5\text{H}_5)_2\text{Fe}(\text{CO})_2\text{-Co}(\text{CO})_4$, evidence for two photochemical pathways of (S.C. Fletcher, M. Poliakoff, J.J. Turner), 259

Dicarbonyl- and diethylene-pentamethyl-cyclopentadienylcobalt complexes, oxidative additions of pseudohalogens to (S. Delgado, J. Macazaga, J.R. Masaguer), 79

Mono- and bis-(trialkylphosphine)cyclopentadienyl-cobalt and -rhodium derivatives, reactions with CSSe and CSe_2 of (O. Kolb, H. Werner), 49
(Propargyl)dicobalt hexacarbonyl cations ^{13}C NMR study of (S. Padmanabhan, K.M. Nicholas), C23

Germanium

Diorganyl-substituted silicon-germanium-oxygen cyclooctanes, preparation and structure of (H. Puff, M.P. Böckmann, T.R. Kök, W. Schuh), 197

Germa-trane derivatives, crystal and molecular structures of (S.N. Gurkova, A.I. Gusev, V.A. Sharapov, N.V. Alekseev, T.K. Gar, N.J. Chromova), 119

Tetraphenylcyclopentadienyl derivatives of Group IVB elements, unusual reaction with isopropylidene-triphenylphosphorane of (I.V. Borisova, Yu.N. Luzikov, N.N. Zemlyansky, Yu.A. Ustynyuk, I.P. Beletskaya), 11

Gold

2-[(Dimethylamino)methyl]phenyl-gold(III) complexes, synthesis and reactions of (J. Vicente, M.T. Chicote, M.D. Bermudez), 191

Gold cluster high nuclearity compounds, molecular orbital analysis of bonding in (K.P. Hall, D.I. Gilmour, D.M.P. Mingos), 275

Hafnium

Photogenerated transient zirconocene and hafnocene, reactions with elemental selenium; synthesis and characterisation of $[(\eta^5\text{-t-BuC}_5\text{H}_4)_2\text{M}(\mu\text{-Se})]_2$ (M = Zr, Hf) (B. Gautheron, G. Tainturier, S. Pouly), C56

Iron

$[(\eta^5\text{-C}_5\text{H}_5)_2\text{Fe}(\text{L})_2\text{CO}]^+$ (L = tertiary phosphine), reductions of; product

control by variation of phosphine ligands (S.G. Davies, S.J. Simpson), C53

Cyclopentadienyldicarbonyliron-tetracarbonylcobalt, $(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2\text{-Co}(\text{CO})_4$, evidence for two photochemical pathways of (S.C. Fletcher, M. Poliakoff, J.J. Turner), 259

Manganese

Halotricarbonylmanganese chelate complexes with phosphino-thioformamide and -thioformimido ester, ^1H , ^{13}C , ^{31}P and ^{55}Mn NMR spectroscopic investigations of (U. Kunze, A. Bruns, D. Rehder), 213

Tetraethyldiphosphite (tedip)-bridged dinuclear manganese(I) carbonyl complexes, synthesis of μ -hydride-bromide compounds; crystal structures of $\text{Mn}_2(\mu\text{-Br})_2(\text{CO})_4$ (tedip) $_2$ and $\text{Mn}_2(\mu\text{-H})(\mu\text{-Br})(\text{CO})_4$ (tedip) $_2$ (J. Gimeno, V. Riera, M.A. Ruiz, A.M.M. Lanfredi, A. Tiripicchio), C13

Mercury

2-[(Dimethylamino)methyl]phenylgold(III) complexes, synthesis and reactions of (J. Vicente, M.T. Chicote, M.D. Bermudez), 191

Metalloenes

1,3-Dienezirconium complexes, preparation from dicyclopentadienyldichlorozirconium and vinylzirconium and derivatives of (R. Beckhaus, K.-H. Thiele), C7

Photogenerated transient zirconocene and hafnocene, reactions with elemental selenium; synthesis and characterisation of $[(\eta^5\text{-}t\text{-BuC}_5\text{H}_4)_2\text{M}(\mu\text{-Se})_2]$ (M = Zr, Hf) (B. Gautheron, G. Tainurier, S. Pouly), C56

Molybdenum

Bis(dicarbonylcyclopentadienylmolybdenum) ($\text{Mo}\equiv\text{Mo}$), interaction with P_4 and formation of $\text{P}_n[\text{Mo}(\text{CO})_2(\eta^5\text{-C}_5\text{H}_5)]_{4-n}$ ($n = 2, 3$) (O.J. Scherer, H. Sitzmann, G. Wolmershäuser), C9

Nitrosylmolybdenum complexes as precatalysis for olefin metathesis; formation and stability of $[\text{Mo}^0\text{Cl}(\text{NO})]$ -containing intermediate (K. Seyferth, R. Taube), 155

Ylidic metallacyclopropane complexes, formation of a three-membered ring from a five-membered vinylketone complex; molecular structure of $\text{C}_2\text{H}_2\text{W}(\text{CO})_2[(\text{PMe}_2)_2\text{HC-CH}(\text{COMe})]$ (H.G. Alt, U. Thewalt), 235

Palladium

Lithium chloride-induced dissociation of cyclopalladated ligands from chloro-(ligand-C,N)triphenylphosphinepalladium(II) complexes in acetic acid solvent (A.D. Ryabov), 91

Palladium-catalysed reaction of nucleophiles with diacetals of allylic 1,1-dials (X. Lu, Y. Huang), 185

Palladium-catalysed conjugate addition type reaction of aryl iodides with α, β -unsaturated aldehydes (S. Cacchi, F. La Torre, G. Palmieri), C48

Palladium-graphite and related heterogeneous catalysts, nucleophilic substitution reactions of allylic esters catalysed by (G.P. Boldrini, D. Savoia, E. Tagliavini, C. Trombini, A. Umani-Ronchi), 97

N-Protected amino acid derivatives, synthesis from N-substituted phthalimides catalysed by Rh and Pd complexes of (G. Delogu, G. Faedda, S. Gladiali), 167

Six-membered palladocycles, attempts of preparation via ligand exchange reactions of (A.D. Ryabov, G.M. Kazankov), 85

Phosphorus

Bis(dicarbonylcyclopentadienylmolybdenum) ($\text{Mo}\equiv\text{Mo}$), interaction with P_4 and formation of $\text{P}_n[\text{Mo}(\text{CO})_2(\eta^5\text{-C}_5\text{H}_5)]_{4-n}$ ($n = 2, 3$) (O.J. Scherer, H. Sitzmann, G. Wolmershäuser), C9

Bis(diphenylphosphinomethyl)amino acid rhodium complexes, preparation and activity in enantioselective hydration of (K. Kellner, W. Hanke, A. Tzschach, Zs. Nagy-Magos, L. Markó), 175

Bis(diphenylphosphinomethyl)phenylphosphine-bridged trinuclear rhodium complexes, reactivity of; cluster

- families related by reversible carbon monoxide binding and oxidative addition (A.L. Balch, R.R. Guimerans, M.M. Olmstead), C38
- $[(\eta^5\text{-C}_5\text{H}_5)_2\text{Fe}(\text{L})_2\text{CO}]^+$ (L = tertiary phosphine), reduction of; product control by variation of phosphine ligands (S.G. Davies, S.J. Simpson), C53
- Gold cluster high nuclearity compounds, molecular orbital analysis of bonding in (K.P. Hall, D.I. Gilmour, D.M.P. Mingos), 275
- Halotricarbonylmanganese chelate complexes with phosphino-thioformamide and -thioformimido esters, ^1H , ^{13}C , ^{31}P and ^{55}Mn NMR spectroscopic investigations of (U. Kunze, A. Bruns, D. Rehder), 213
- Lithium chloride-induced dissociation of cyclopalladated ligands from chloro(ligand-*C,N*)-triphenylphosphinepalladium(II) complexes in acetic acid solvent (A.D. Ryabov), 91
- Mono- and bis-(trialkylphosphine)cyclopentadienyl-cobalt and -rhodium derivatives, reactions with CSSe and CSe₂ of (O. Kolb, H. Werner), 49
- $[\text{Rh}_2\text{Cl}_2(\text{CO})_2\{\mu\text{-(PhO)}_2\text{PN}(\text{Et})\text{P}(\text{OPh})_2\}_2]$, reduction products of; crystal structure of $[\text{Rh}_2\text{HgCl}(\mu\text{-H})(\text{CO})_2\{\mu\text{-(PhO)}_2\text{PN}(\text{Et})\text{P}(\text{OPh})_2\}_2]$ (J.S. Field, R.J. Haines, E. Meintjies, B. Sigwarth, P.H. Van Rooyen), C43
- Tetraethyldiphosphite (tedip)-bridged dinuclear manganese(I) carbonyl complexes, synthesis of μ -hydride-bromide compounds; crystal structures of $\text{Mn}_2(\mu\text{-Br})_2(\text{CO})_4(\text{tedip})_2$ and $\text{Mn}_2(\mu\text{-H})(\mu\text{-Br})(\text{CO})_4(\text{tedip})_2$ (J. Gimeno, V. Riera, M.A. Ruiz, A.M.M. Lanfredi, A. Tiripicchio), C13
- Tetraphenylcyclopentadienyl derivatives of Group IVB elements, unusual reaction with isopropylidetriphenylphosphorane of (I.V. Borisova, Yu.N. Luzikov, N.N. Zemlyansky, Yu.A. Ustynyuk, I.P. Beletskaya), 11
- Triisopropyl- and tricyclohexyl-phosphineruthenium complexes, deuteration with C₆D₆ and C₇D₈ as the deuterium source of (B. Chaudret), C33
- Trimethyltin-diorganothiophosphinates, preparation and vibrational spectra of; crystal structure of Me₃SnOSPM₂ (A.-F. Shihada, H.A.-A. Jassim, F. Weller), 125
- Ylidic metallacyclopropane complexes, formation of a three-membered ring from a five-membered vinylketone complex; molecular structure of C₅H₅W(CO)₂[(PM₃)HC=CH(COMe)] (H.G. Alt, U. Thewalt), 235

Rhenium

- Benzamido-bridged rhenium carbonyl cluster produced by attack of OH⁻ on coordinated PhCN; X-ray characterization of $[\text{Re}_3(\mu\text{-H})_3(\text{CO})_{10}(\mu\text{-}\eta^2\text{-OC(Ph)NH})]^-$ (T. Beringhelli, E. Cesarotti, G. Ciani, G. D'Alfonso, A. Sironi), C18

Rhodium

- Allylsilanes, reaction with diethylene- $(\eta^5\text{-indenyl})$ rhodium(I) of (J.W. Fitch, D. Westmoreland), 269
- Bis(diphenylphosphinomethyl)amino acid rhodium complexes, preparation and activity in enantioselective hydration of (K. Kellner, W. Hanke, A. Tzschach, Zs. Nagy-Magos, L. Markó), 175
- Bis(diphenylphosphinomethyl)phenylphosphine-bridged trinuclear rhodium complexes, reactivity of; cluster families related by reversible carbon monoxide binding and oxidative addition (A.L. Balch, R.R. Guimerans, M.M. Olmstead), C38
- Mono- and bis-(trialkylphosphine)cyclopentadienyl-cobalt and -rhodium derivatives, reactions with CSSe and CSe₂ of (O. Kolb, H. Werner), 49
- N*-Protected aminoacid derivatives, synthesis from *N*-substituted phthalimides catalysed by Rh and Pd complexes of (G. Delogu, G. Faedda, S. Gladiali), 167
- $[\text{Rh}_2\text{Cl}_2(\text{CO})_2\{\mu\text{-(PhO)}_2\text{PN}(\text{Et})\text{P}(\text{OPh})_2\}_2]$, reduction products of; crystal structure of $[\text{Rh}_2\text{HgCl}(\mu\text{-H})(\text{CO})_2\{\mu\text{-(PhO)}_2\text{PN}(\text{Et})\text{P}(\text{OPh})_2\}_2]$ (J.S. Field, R.J. Haines, E. Meintjies, B. Sigwarth, P.H. Van Rooyen), C43

Ruthenium

- Triisopropyl- and tricyclohexyl-phosphineruthenium complexes, deuteration with C₆D₆ and C₇D₈ as the deuterium source (B. Chaudret), C33

Selenium

Mono- and bis-(trialkylphosphine)cyclopentadienyl-cobalt and -rhodium derivatives, reactions with CSSe and CSe_2 of (O. Kolb, H. Werner), 49

Photogenerated transient zirconocene and hafnocene, reactions with elemental selenium; synthesis and characterisation of $[(\eta^5\text{-}t\text{-BuC}_5\text{H}_4)_2\text{M}(\mu\text{-Se})]_2$ ($\text{M} = \text{Zr}, \text{Hf}$) (B. Gautheron, G. Tainturier, S. Pouly), C56

Silicon

Allylsilanes, reaction with diethylene- $(\eta^5\text{-indenyl})\text{rhodium(I)}$ of (J.W. Fitch, D. Westmoreland), 269

Benzyltrimethylsilane, reaction with tellurium(IV) chloride of; structure of bis(*p*-trimethylsilyltolyl)tellurium dichloride (R.K. Chadha, J.E. Drake), 141

Dimethoxymethylsilylbis(trimethylsilyl)amine, flash vacuum pyrolysis of; 1,3-sigmatropic rearrangements of silamine intermediates (S.A. Kazoura, W.P. Weber), 19

Diorganyl-substituted silicon-germanium-oxygen cyclooctanes, preparation and structure of (H. Puff, M.P. Böckmann, T.R. Kök, W. Schuh), 197

Organo-1,3,2-dioxasilacyclohexanes, ^1H NMR spectra of (R.H. Cragg, R.D. Lane), 1

Silicon-containing aziridines, novel synthesis of (E. Lukevics, V.V. Dirnens, Y.S. Goldberg, E.E. Liepinsh, I.Ya. Kalvinsh, M.V. Shimanska), C29

Tetraphenylcyclopentadienyl derivatives of Group IVB elements unusual reaction with isopropylidetriphenylphosphorane of (I.V. Borisova, Yu.N. Luzikov, N.N. Zemlyansky, Yu.A. Ustynyuk, I.P. Beletskaya), 11

Trimethylchlorosilane, reaction with phenyltelluromagnesium bromide in THF, characterisation of the products by ^{29}Si and ^{125}Te NMR spectroscopy (C.H.W. Jones, R.D. Sharma), 113

Trimethylsilyl *N,N*-dimethylcarbamate, alcoholysis of (D. Knausz, A. Meszticzky, L. Szakács, B. Csákvári), 207

N-[Triorganylsilyl]alkyl]ethylenediamines, preparation and ^1H and ^{13}C NMR spectra of (D.H. O'Brien, K.J. Irgolic), 31

Sulphur

Mono- and bis-(trialkylphosphine)cyclopentadienyl-cobalt and -rhodium derivatives, reactions with CSSe and CSe_2 of (O. Kolb, H. Werner), 49

Trimethyltin-diorganothiophosphinates, preparation and vibrational spectra of; crystal structure of $\text{Me}_3\text{SnOSPMe}_2$ (A.-F. Shihada, H.A. Jassim, F. Weller), 125

N-[Triorganylsilyl]alkyl]ethylenediamines, preparation and ^1H and ^{13}C NMR spectra of (D.H. O'Brien, K.J. Irgolic), 31

Tellurium

Benzyltrimethylsilane, reaction with tellurium(IV) chloride of; structure of bis(*p*-trimethylsilyltolyl)tellurium dichloride (R.K. Chadha, J.E. Drake), 141

Organotellurium(IV) halides, α -elimination of organic halides from (S. Uemura, S.-I. Fukuzawa), 223

Trimethylchlorosilane, reaction with phenyltelluromagnesium bromide in THF, characterisation of the products by ^{29}Si and ^{125}Te NMR spectroscopy (C.H.W. Jones, R.D. Sharma), 113

Tin

Organotin compounds, spin trapping of radicals generated by ultrasonic decomposition of (D. Rehorek, E.G. Janzen), 135

Tetraphenylcyclopentadienyl derivatives of Group IVB elements, unusual reaction with isopropylidetriphenylphosphorane of (I.V. Borisova, Yu.N. Luzikov, N.N. Zemlyansky, Yu.A. Ustynyuk, I.P. Beletskaya), 11

Trimethyltin-diorganothiophosphinates, preparation and vibrational spectra of; crystal structure of $\text{Me}_3\text{SnOSPMe}_2$ (A.-F. Shihada, H.A. Jassim, F. Weller), 125

Triorganotin pyridines, bonding in (J.E. Phillips, R.H. Herber), 39

Titanium

Dicarbonyldicyclopentadienyltitanium, reactions with aldehydes and ketones of (T.L. Chen, T.H. Chan, A. Shaver), C1

Dichlorobis(η^5 -*t*-butylcyclopentadienyl)-titanium(IV), crystal and molecular structure of (R.A. Howie, G.P. McQuillan, D.W. Thompson), 149

Tungsten

Halo(arylcarbyne)(tetracarbonyl)tungsten complexes, halogen exchange, equilibrium constant determination and relative strength of the halogen—tungsten bond in (H. Fischer, F. Seitz), 247

Ylidic metallacyclopropane complexes, formation of a three-membered ring from a five-membered vinylketone complex; molecular structure of $C_5H_5W(CO)_2[(PMe_3)HC=CH(COMe)]$ (H.G. Alt, U. Thewalt), 235

Yttrium

Alumohydride-yttrium complex with three-coordinated hydrogen atoms, crystal structure of $\{[(\eta^5-C_5H_5)_2Y(\mu_3-H)][(\mu_2-H)AlH_2 \cdot OC_4H_9]\}_2$ (V.K. Bel'skii, B.M. Bulychev, A.B. Erofeev, G.L. Soloveichik), 107

Zirconium

1,3-Dienezirconium complexes, preparation from dicyclopentadienyldichlorozirconium and vinylzirconium derivatives of (R. Beckhaus, K.-H. Thiele), C7

Photogenerated transient zirconocene and hafnocene, reactions with elemental selenium; synthesis and characterisation of $[(\eta^5-t-BuC_5H_4)_2M(\mu-Se)]_2$ (M = Zr, Hf) (B. Gautheron, G. Tainurier, S. Pouly), C56

Book reviews

Gmelin handbook of inorganic chemistry, 8th edit., F — Perfluorohalogenoorganocompounds of the Main Groups 1 to 5 (excluding N) and with S (partially) (C. Eaborn), C59

Gmelin handbook of inorganic chemistry, 8th edit., Rh — Rhodium, Supplement Vol. B2. Coordination compounds with O- and N-containing ligands (M.F. Lappert), C58