

## SUBJECT INDEX

**Antimony**

Ruthenium cluster carbonyls containing tertiary phosphines, phosphites, arsines, triphenylstibine or isocyanides, radical-ion-initiated synthesis of (M.I. Bruce, J.G. Matisons, B.K. Nicholson), 321

**Arsenic**

$\text{Fe}_3(\text{CO})_9(\mu_3\text{-ER})$  (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), 259

Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), 203

Ruthenium cluster carbonyls containing tertiary phosphines, phosphites, arsines, triphenylstibine or isocyanides, radical-ion-initiated synthesis of (M.I. Bruce, J.G. Matisons, B.K. Nicholson), 321

Trichloronitrosylferrate,  $[\text{Fe}(\text{NO})\text{Cl}_3]^-$ , structure of (M. Steimann, U. Nagel, R. Grenz, W. Beck), 171

**Boron**

Nitrones of 2-formylphenylboronic acid esters, synthesis and properties of (W. Kliegel, D. Nanninga), 247

**Chromium**

Diphenylacetylene, interaction with chromium atoms of (L.P. Yur'eva, N.N. Zitseva, N.V. Zakurin, A. Yu. Vasil'kov, N.I. Vasyukova), 287

$\text{Fe}_3(\text{CO})_9(\mu_3\text{-S})(\mu_3\text{-ER})$  (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), 259

Paramagnetic heterobimetallic  $\eta^2\text{-CS}_2$ -bridged vanadium complexes (C. Moise), 27

Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of

(M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), 203

Pentacarbonyl(methoxyphenylcarbene)-chromium, reaction with alkynes under formation of naphthol derivatives of (K.H. Dötz, J. Mühlemeier, U. Schubert, O. Orama), 187

Tricarbonyl-chromium, -molybdenum and -tungsten complexes of the tropylium cation, relative electrophilic reactivities of (C.A. Bunton, K. Lal, W.E. Watts), C14

Tricarbonylchromium  $\eta^6\lambda^3$ -phosphorin and  $\eta^6\lambda^5$ -phosphorin-ylide complexes, reactions of (K. Dimroth, H. Kaletsch), 271

**Cobalt**

Bis-acetone adduct  $[\text{Co}(\text{Me}_2\text{CO})_2(\text{TPyEA})]-(\text{BPh}_4)_2$  (TPyEA = tris(1-pyrazolyethyl)-amine), synthesis, chemical properties and X-ray structure of (M. Di Vaira, P. Stoppioni, F. Mani), 95

Bis(alkylgermyl)undecacarbonyltetracarbonyl clusters, preparation of and metal exchange in (P. Gusbeth, H. Vahrenkamp), C53

Cyclobutadienetricarbonylcobalt salts, synthesis of (P. Härter, P.L. Pauson, S.S. Ullah), C27

Sodium tetracarbonylcobalt, reactions with  $\text{NiX}_2(\text{dppe})$ ; synthesis and crystal structure of  $\text{Co}_2(\mu\text{-CO})_2(\text{CO})_4(\text{dppe})$  (P. Braunstein, I. Pruskil, G. Predieri, A. Tiripicchio), 227

*trans*-(Tetracarbonylcobalt)tetracarbonyl-(phenylcarbyne)tungsten, synthesis and physical-chemical investigations of (E.O. Fisher, P. Friedrich, T.L. Lindner, D. Neugebauer, F.R. Kreissl, W. Uedelhoven, N.Q. Dao, G. Huttner), 239

**Copper**

Organocuprates, solvent effects on diastereoselective addition to a chiral  $\alpha,\beta$ -unsaturated oxazolidine (Y. Besace, J. Berlan, G. Pourcelot, M. Huche), C11

**Erbium**

Organolanthanide  $\sigma$ -bonded complexes, synthesis, properties and IR spectra of (C. Qian, C. Ye, H. Lu, Y. Li, J. Zhou, Y. Ge, M. Tsutsui), 161

**Gadolinium**

Organolanthanide  $\sigma$ -bonded complexes, synthesis, properties and IR spectra of (C. Qian, C. Ye, H. Lu, Y. Li, J. Zhou, Y. Ge, M. Tsutsui), 161

**Germanium**

Bis(alkylgermyl)undecacarbonyltetra-carbonyl clusters, preparation of and metal exchange in (P. Gusbeth, H. Vahrenkamp), C53

Penta-2,4-dienyl-silanes, -germanes and -stannanes, regiochemistry of electrophilic cleavages of (M. Jones, W. Kitching), C5

Polygermanes and polygermasilanes, synthesis and UV spectra and theoretical study of substitution effects in (A. Castel, P. Riviere, B. Saint-Roch, J. Satgé, J.P. Malrieu), 149

**Gold**

Diarylgold(III) complexes, synthesis using organomercury compounds of (J. Vicente, M.T. Chicote, A. Arcas, M. Artigao, R. Jimenez), 123

Tricyanate-goldtriosmium clusters, synthesis of (K. Burgess, B.F.G. Johnson, J. Lewis), C42

**Holmium**

Organolanthanide  $\sigma$ -bonded complexes, synthesis, properties and IR spectra of (C. Qian, C. Ye, H. Lu, Y. Li, J. Zhou, Y. Ge, M. Tsutsui), 161

**Iridium**

Mono- and hetero-nuclear rhodium(I) and iridium(I) complexes with 2-(2'-pyridyl)-benzimidazole, synthesis and reactivity of (R. Usón, L.A. Oro, J.A. Cabeza), 105

**Iron**

Acyliron phosphorus ylides with electron-rich organometal groups (A. Stasunik, W. Malisch), C47

Alkylthiononacarbonyltriiron clusters, synthesis and reactions of (J. Takács, L. Markó), 223

Diacetylferrocene—metal halide complexes, Mössbauer studies on (M.C. Clemance, R.M.G. Roberts, J. Silver), 219

$\text{Fe}_3(\text{CO})_9(\mu_3\text{-S})(\mu_3\text{-ER})$  (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), 259

Ferrocene stable anion, electrochemical formation of; formal rate constant of the ferrocene<sup>0/-</sup> electrode (N. Ito, T. Saji, S. Aoyagui), 301

Iron carbonyl-carbide and -nitride cluster compounds, Mössbauer spectra of (R.P. Brint, K. O'Cuill, T.R. Spalding, F.A. Deeney), 61

Iron(II) complexes with 2,3,11,12-dibenzo-1,4,7,10,13-pentathiatridecane, synthesis and reactions of (D. Sellmann, U. Kleine-Kleffmann), 307

$\eta^6$ -Ketoarene- $\eta^5$ -cyclopentadienyliron cations, synthesis and reduction with sodium borohydride of (C.C. Lee, K.J. Demchuk, U.S. Gill, R.G. Sutherland), 71

(2-Methoxy-5-methylcyclohexadienyl)tricarboxyliron hexafluorophosphate, synthesis of enantiomerically pure isomer of (J.A.S. Howell, M.J. Thomas), C21

Paramagnetic heterobimetallic  $\eta^2$ -CS<sub>2</sub>-bridged vanadium complexes (C. Moise), 27

Perfluoro-n-propyliron tetracarbonyl iodide, reactions with mercury compounds of (I.I. Guerus, Yu.L. Yagupolskii), 81

Trichloronitrosylferrate,  $[\text{Fe}(\text{NO})\text{Cl}_3]^-$ , structure of (M. Steimann, U. Nagel, R. Grenz, W. Beck), 171

**Lithium**

Bis(chloro(cyclooctadiene)rhodium) in reactions with organolithium compounds (J. Müller, B. Passon), 131

**Manganese**

Paramagnetic heterobimetallic  $\eta^2$ -CS<sub>2</sub>-bridged vanadium complexes (C. Moise), 27

Pentacarbonylmanganese-substituted tin hydrides, observations on (S.P. Foster, K.M. Mackay), 21

## Mercury

2,2'-Bipyridine- and 1,10-phenanthroline-triphenylphosphinetricarbonyl-molybdenum and -tungsten complexes, reactions with mercury halides and pseudohalides of (M.P. Pardo, M. Cano), 293

Diarylgold(III) complexes, synthesis using organomercury compounds of (J. Vicente, M.T. Chicote, A. Arcas, M. Artigao, R. Jimenez), 123

Perfluoro-n-propyliron tetracarbonyl iodide, reactions with mercury compounds of (I.I. Guerus, Yu.L. Yagupolskii), 81

## Metalloenes

Diacetylferrocene-metal halide complexes, Mössbauer studies on (M.C. Clemanace, R.M.G. Roberts, J. Silver), 219

Dinuclear diazoalkanes, metal-centred rearrangements of and synthesis of alkylideneamido and isocyanato complexes from (W.A. Herrmann, L.K. Bell, M.L. Ziegler, H. Pfisterer, C. Pahl), 39

Ferrocene stable anion, electrochemical formation of; formal rate constant of the ferrocene<sup>0/-</sup> electrode (N. Ito, T. Saki, S. Aoyagui), 301

$\eta^6$ -Ketoarene- $\eta^2$ -cyclopentadienyliron cations, synthesis and reduction with sodium borohydride of (C.C. Lee, K.J. Demchuk, U.S. Gill, R.G. Sutherland), 71

Niobium(III) complexes containing acetylene, isocyanide, phosphine or phosphite ligands (R. Serrano, P. Royo), 33

Paramagnetic heterobimetallic  $\eta^2$ -CS<sub>2</sub>-bridged vanadium complexes (C. Moise), 27

## Molybdenum

2,2'-Bipyridine- and 1,10-phenanthroline-triphenylphosphinetricarbonyl-molybdenum and -tungsten complexes, reactions with mercury halides and pseudohalides of (M.P. Pardo, M. Cano), 293

Bis(alkylgermyl)undecacarbonyltetracarbonyl clusters, preparation of and metal exchange in (P. Gusbeth, H. Vahrenkamp), C53

Dinuclear diazoalkanes, metal-centred rearrangements of and synthesis of alkylideneamido and isocyanato complexes from (W.A. Herrmann, L.K. Bell, M.L. Ziegler, H. Pfisterer, C. Pahl), 39

Paramagnetic heterobimetallic  $\eta^2$ -CS<sub>2</sub>-bridged vanadium complexes (C. Moise), 27

Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), 203

Tricarbonyl-chromium, -molybdenum and -tungsten complexes of the tropylium cation, relative electrophilic reactivities of (C.A. Bunton, K. Lal, W.E. Watts), C14

## Nickel

2,4-Pentadienoic acid methyl ester, reactions with nickel(0) and platinum(0) compounds of (H.M. Büch, G. Schroth, R. Mynott, P. Binger), C63

Phenylisothiocyanate nickel dihapto-bonded complex, synthesis and crystal structure of (C. Bianchini, D. Masi, C. Mealli, A. Meli), C29

Sodium tetracarbonylcobalt, reactions with NiX<sub>2</sub>(dppe); synthesis and crystal structure of Co<sub>2</sub>( $\mu$ -CO)<sub>2</sub>(CO)<sub>4</sub>(dppe) (P. Braunstein, I. Pruskil, G. Predieri, A. Tiripicchio), 227

## Niobium

Niobium(III) complexes containing acetylene, isocyanide, phosphine or phosphite ligands (R. Serrano, P. Royo), 33

## Osmium

Tricyanate-goldtriosmium clusters, synthesis of (K. Burgess, B.F.G. Johnson, J. Lewis), C42

## Palladium

Palladium-catalysed arylation of ethylene

with aroyl chlorides, synthesis of styrene and stilbene derivatives by (A. Spencer), 117

Palladium-catalysed sequential insertion of double bonds followed by  $\beta,\gamma$ -cleavage of a C—C bond (M. Catellani, G.P. Chiusoli), C59

## Phosphorus

Acyliiron phosphorus ylides with electron-rich organometal groups (A. Stasunik, W. Malisch), C47

Bis- $\mu$ -{bis(diphenylphosphino)methane}-chlorodihydridoplatinum(II) hexafluorophosphate, fluxional behaviour of (M.C. Gossel, R.P. Moulding, K.R. Seddon), C32

Bis(2,4,6-tri-*t*-butylphenyl)diphosphene and bis(tris(trimethylsilyl)diphosphene), photoelectron spectroscopy of (D. Gonbeau, G. Pfister-Guillouzo), C17

Cationic rhodium complexes as catalysts in activation of molecular oxygen, selective oxidation of terminal olefins and alcohols (M. Bressan, F. Morandini, P. Rigo), C8

*trans*-Chlorocarbonylbis(triphenylphosphine)-rhodium(I), crystal and molecular structure in its monoclinic form of (A. Ceriotti, G. Ciani, A. Sironi), 345

Dichloromethane oxidation to carbonate ligands (O.J. Scherer, H. Jungmann, K. Hussong), C1

Fe<sub>3</sub>(CO)<sub>9</sub>( $\mu_3$ -S)( $\mu_3$ -ER) (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), 259

Iron(II) complexes with 2,3,11,12-dibenzo-1,4,7,10,13-pentathiatridecane, synthesis and reactions of (D. Sellmann, U. Kleine-Kleffmann), 307

Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), 203

2,4-Pentadienoic acid methyl ester, reactions with nickel(0) and platinum(0) compounds of (H.M. Büch, G. Schroth, R. Mynott, P. Binger), C63

Phenylisothiocyanate nickel dihapto-bonded complex, synthesis and crystal structure of (C. Bianchini, D. Masi, C. Mealli, A. Meli), C29

Ruthenium cluster carbonyls containing tertiary phosphines, phosphites, arsines,

triphenylstibine or isocyanides, radical ion-initiated synthesis of (M.I. Bruce, J.G. Matison, B.K. Nicholson), 321

Tricarbonylchromium  $\eta^6\lambda^3$ -phosphorin and  $\eta^6\lambda^5$ -phosphorin-ylide complexes, reactions of (K. Dimroth, H. Kaletsch), 271

## Platinum

Bis- $\mu$ -{bis(diphenylphosphino)methane}-chlorodihydridoplatinum(II) hexafluorophosphate, fluxional behaviour of (M.C. Gossel, R.P. Moulding, K.R. Seddon), C32

Bis(2,4,6-trimethylpyridinedichloroplatinum) as catalyst in hydrogenation and hydrosilylation of olefins, and  $\alpha,\beta$ -unsaturated ketones and aldehydes (R. Rumin), 351

Dichloromethane oxidation to carbonate ligands (O.J. Scherer, H. Jungmann, K. Hussong), C1

Monohydridomonophosphido-bridged diplatinum complexes, synthesis and molecular structure of (J. Jans, R. Naegeli, L.M. Venanzi, A. Albinati), C37

2,4-Pentadienoic acid methyl ester, reactions with nickel(0) and platinum(0) compounds of (H.M. Büch, G. Schroth, R. Mynott, P. Binger), C63

## Rhenium

Carboethoxy(silyl)alkylidene and silyl-ketenyl-bridged dirhenium complexes as by-products in silylcarbene synthesis (E.O. Fischer, P. Rustemeyer, O. Orama, D. Neugebauer, U. Schubert), 7

## Rhodium

Bis(chloro(cyclooctadiene)rhodium) in reactions with organolithium compounds (J. Müller, B. Passon), 131

Cationic rhodium complexes as catalysts in activation of molecular oxygen, selective oxidation of terminal olefins and alcohols (M. Bressan, F. Morandini, P. Rigo), C8

*trans*-Chlorocarbonylbis(triphenylphosphine)rhodium(I), crystal and molecular structure in its monoclinic form of (A. Ceriotti, G. Ciani, A. Sironi), 345

- Mono- and hetero-nuclear rhodium(I) and iridium(I) complexes with 2-(2'-pyridyl)-benzimidazole, synthesis and reactivity of (R. Usón, L.A. Oro, J.A. Cabeza), 105
- Rhodium-catalysed hydroformylation of (+)(*R*)-1-phenylethyl vinyl ether, diastereoselectivity in (R. Lazzaroni, S. Pucci, S. Bertozzi, D. Pini), C56
- Rhodium(I) complexes of chiral Schiff bases, enantioselective transfer hydrogenation of ketones catalysed by (G. Zassinovich, F. Grisoni), C24

## Ruthenium

- Ruthenium catalysts, hydroformylation of olefins in the presence of (M. Bianchi, G. Menchi, P. Frediani, U. Matteoli, F. Piacenti), 89
- Ruthenium cluster carbonyls containing tertiary phosphines, phosphites, arsines, triphenylstibine or isocyanides, radical-ion-initiated synthesis of (M.I. Bruce, J.G. Matison, B.K. Nicholson), 321

## Selenium

- Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), 203

## Silicon

- Acyiron phosphorus ylides with electron-rich organometal groups (A. Stasunik, W. Malisch), C47
- Bis(2,4,6-trimethylpyridinedichloroplatinum) as catalyst in hydrogenation and hydrosilylation of olefins, and  $\alpha,\beta$ -unsaturated ketones and aldehydes (R. Rumin), 351
- Bis(2,4,6-tri-*t*-butylphenyl)diphosphene and bis(tris(trimethylsilyl)diphosphene), photoelectron spectroscopy of (D. Gonbeau, G. Pfister-Guillouzo), C17
- Carboethoxy(silyl)alkylidenes and silylketenyl-bridged dirhenium complexes as by-products in silylcarbene synthesis (E.O. Fischer, P. Rustemeyer, O. Orama, D. Neugebauer, U. Schubert), 7
- Diazasilametalloacycles, crystal and molecular structure of  $\text{Ti}(\text{N}(\text{Bu}-t)\text{-SiMe}_2\text{N}(\text{Bu}-t))\text{Cl}_2$  (R.A. Jones, M.H. Seeberger,

- J.L. Atwood, W.E. Hunter), 1
- Octamethylcyclotetrasilane, crystal structure at 87 K of (C. Kratky, H.G. Schuster, E. Hengge), 253
- Penta-2,4-dienyl-silanes, -germanes and -stannanes, regiochemistry of electrophilic cleavages of (M. Jones, W. Kitching), C5
- Polygermanes and polygermasilanes, synthesis and UV spectra and theoretical study of substitution effects in (A. Castel, P. Riviere, B. Saint-Roch, J. Satgé, J.P. Malrieu), 149
- Silicon resins,  $^{29}\text{Si}$  NMR investigations of the structure of (H. Jancke, G. Engelhardt, H. Grosse-Ruyken), 139

## Sulphur

- Alkylthiononacarbonyltriiron clusters, synthesis and reactions of (J. Takács, L. Markó), 223
- $\text{Fe}_3(\text{CO})_9(\mu_3\text{-S})(\mu_3\text{-ER})$  (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), 259
- Iron(II) complexes with 2,3,11,12-dibenzo-1,4,7,10,13-pentathiatridecane, synthesis and reactions of (D. Sellmann, U. Kleine-Kleffmann), 307
- Paramagnetic heterobimetallic  $\eta^2\text{-CS}_2$ -bridged vanadium complexes (C. Moise), 27
- Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), 203
- Penta-2,4-dienyl-silanes, -germanes and -stannanes, regiochemistry of electrophilic cleavages of (M. Jones, W. Kitching), C5
- Phenylisothiocyanate nickel dihapto-bonded complex, synthesis and crystal structure of (C. Bianchini, D. Masi, C. Mealli, A. Meli), C29

## Tantalum

- Organotantalum dinuclear asymmetric complex with three different bridging ligands, structure of (M.R. Churchill, H.J. Wasserman), 175

## Tin

- Pentacarbonylmanganese-substituted tin

hydrides, observations on (S.P. Foster, K.M. Mackay), 21

Penta-2,4-dienyl-silanes, -germanes and -stannanes, regiochemistry of electrophilic cleavage of (M. Jones, W. Kitching), C5

## Titanium

Diazasilametallacycles, crystal and molecular structure of  $\text{Ti}(\text{NBu-t-SiMe}_2\text{NBu-t})\text{Cl}_2$  (R.A. Jones, M.H. Seeberger, J.L. Atwood, W.E. Hunter), 1

## Tungsten

2,2'-Bipyridine- and 1,10-phenanthroline-triphenylphosphinetricarbonyl-molybdenum and -tungsten complexes, reactions with mercury halides and pseudohalides (M.P. Pardo, M. Cano), 293

$\text{Fe}_3(\text{CO})_9(\mu_3\text{-S})(\mu_3\text{-ER})$  (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), 259

Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), 203

*trans*-(Tetracarbonylcobalt)tetracarbonyl-(phenylcarbyne)tungsten, synthesis and physical-chemical investigations

(E.O. Fischer, P. Friedrich, T.L. Lindner, D. Neugebauer, F.R. Kreissl, W. Uedelhoven, N.Q. Dao, G. Huttner), 239

Tricarbonyl-chromium, -molybdenum and -tungsten complexes of the tropylium cation, relative electrophilic reactivities of (C.A. Bunton, K. Lal, W.E. Watts), C14

## Vanadium

Paramagnetic heterobimetallic  $\eta^2\text{-CS}_2$ -bridged vanadium complexes (C. Moise), 27

## Ytterbium

Organolanthanide  $\sigma$ -bonded complexes, synthesis, properties and IR spectra of (C. Qian, C. Ye, H. Lu, Y. Li, J. Zhou, Y. Ge, M. Tsutsui), 161

## Book reviews

Gmelin handbook of inorganic chemistry, 8th edit., Sb — Organoantimony compounds, Part 3. Compounds of pentavalent antimony with six, five and four Sb—C bonds; by M. Wieber (C. Eaborn), C45

Reactive intermediates, Vol. 2; ed. by R.A. Abramovitch (C. Eaborn), C45