

## JOURNAL OF ORGANOMETALLIC CHEMISTRY, VOL. 441 (1992)

---

### SUBJECT INDEX

#### Arsenic

- Bis(diisopropylgalliumdiisopropylphosphid) und -arsenid. Kristallstruktur des Phosphidderivats— ein „angegedeuter“ butterfly (G.G. Hoffmann, R. Fischer, U. Schubert und B. Hirle), (441) 7  
 Stereoselektive Additionsreaktionen von Komplex-gebundenen Phosphanen und Arsanen an Alkine (H. Lang und U. Lay), (441) 389

#### Cadmium

- Chiral cyclopentadiene–cyclopentadienyl complexes of cobalt (V.P. Maryin and P.V. Petrovskii), (441) 125  
 Reactions of metallocenes with organocadmium and organomercury compounds (V.P. Maryin), (441) 241  
 Synthesis of phenyl(perfluoroorgano)mercury derivatives  $C_6H_5Hg(R_f)$  [ $R_f = C_nF_{2n+1}$  ( $n = 1$ – $4$  or  $6$ ) or  $C_6F_5$ ] by the reactions of bis(perfluoroorgano)cadmium compounds with phenylmercury chloride (H. Layeghi, D. Naumann and W. Tyrra), (441) 355

#### Chalcogenides

- Cyclopentadienyl chromium chalcogenide complexes. Synthesis of  $[CpCr(EPh)]_2E$  ( $E = S, Se$ ) and their  $Cr(CO)_5$  adducts. Crystal structures of  $[CpCr(SePh)]_2Se \cdot 1/2C_6H_6$  and  $[CpCr(SePh)]_2Se[Cr(CO)_5]$  (L.Y. Goh, M.S. Tay, Y.Y. Lim, W. Chen, Z.-Y. Zhou and T.C.W. Mak), (441) 51

#### Chromium

- Cyclopentadienyl chromium chalcogenide complexes. Synthesis of  $[CpCr(EPh)]_2E$  ( $E = S, Se$ ) and their  $Cr(CO)_5$  adducts. Crystal structures of  $[CpCr(SePh)]_2Se \cdot 1/2C_6H_6$  and  $[CpCr(SePh)]_2Se[Cr(CO)_5]$  (L.Y. Goh, M.S. Tay, Y.Y. Lim, W. Chen, Z.-Y. Zhou and T.C.W. Mak), (441) 51  
 Reactions of metallocenes with organocadmium and organomercury compounds (V.P. Maryin), (441) 241  
 Static and dynamic structures of pentacarbonyl-chromium( $0$ ) and -tungsten( $0$ ) complexes of dithioether ligands. II. Unsymmetrical dithioether ligand complexes of general type  $[M(CO)_5(MeSCH_2SR)]$  (E.W. Abel, K.G. Orrell, H. Rahoo and V. Šík), (441) 255  
 Stereoselektive Additionsreaktionen von Komplex-gebundenen Phosphanen und Arsanen an Alkine (H. Lang und U. Lay), (441) 389  
 Kohlenwasserstoffverbrückte Komplexe. XXVI. Reaktionen von anionischen Aromatenkomplexen  $[(OC)_3Cr(Ar)]^-$  mit metallorganischen Elektrophilen. Darstellung von  $(OC)_3Cr(\mu\text{-}\eta^6:\eta^6-C_6H_5-C_7H_7M(CO)_3$  ( $M = Cr, Mo$ ),  $(OC)_3Cr(\mu\text{-}\eta^6:\eta^5-C_6H_5-C(O)C_5H_4)Fe(\eta^5-C_5H_5)$ ,  $(OC)_3Cr(\mu\text{-}\eta^6:\eta^6-C_8H_5S-C_7H_7)Mo(CO)_3$ ,  $(OC)_3Cr(\mu\text{-}\eta^6:\eta^6-C_9H_7-C_7H_7)Mo(CO)_3$ ,  $(OC)_3Cr(\mu\text{-}\eta^6:\eta^6-C_{13}H_9-C_7H_7)M(CO)_3$  und  $(OC)_3Cr(\mu\text{-}\eta^6:\eta^6-C_{13}H_{11}-C_7H_7)M(CO)_3$  ( $M = Cr, Mo, W$ ) (J. Breimair, M. Wieser und W. Beck), (441) 429  
 Static and dynamic structures of pentacarbonyl-chromium( $0$ ) and tungsten( $0$ ) complexes of dithioether ligands. III. 1,3-Metallotropic shifts of sulphur coordination sites (E.W. Abel, K.G. Orrell, H. Rahoo and V. Šík), (441) 441

## Cobalt

- The preparation and structures of two Ge–Co–Fe anionic clusters;  $[\text{GeCoFe}_3(\text{CO})_{14}]^-$  and  $[\text{Ge}_2\text{Co}_5\text{Fe}_2(\text{CO})_{22}]^-$  (S.G. Anema, G.C. Barris, K.M. Mackay and B.K. Nicholson), (441) 35  
 Chiral cyclopentadiene–cyclopentadienyl complexes of cobalt (V.P. Maryin and P.V. Petrovskii), (441) 125  
 Reactions of metallocenes with organocadmium and organomercury compounds (V.P. Maryin), (441) 241  
 Stereoselektive Additionsreaktionen von Komplex-gebundenen Phosphanen und Arsanen an Alkine (H. Lang und U. Lay), (441) 389

## Copper

- Synthesis, electrochemistry and complexation studies of new redox active bisferrocene acyclic and macrocyclic thioethers (P.D. Beer, J.E. Nation, M.E. Harman and M.B. Hursthouse), (441) 465

## Gallium

- Bis(diisopropylgalliumdiisopropylphosphid) und -arsenid. Kristallstruktur des Phosphidderivats—ein “angedeuteter” butterfly (G.G. Hoffmann, R. Fischer, U. Schubert und B. Hirle), (441) 7  
 Synthesis and properties of pentafluorophenylgallium derivatives. The preparation of tris(pentafluorophenyl)gallium and its adducts, and of bis(pentafluorophenyl)gallium bromide, pentafluorophenyl-gallium dibromide, and tetrabutylammonium tetrakis(pentafluorophenyl)gallate (K. Ludovici, W. Tyrra and D. Naumann), (441) 363

## Germanium

- The preparation and structures of two Ge–Co–Fe anionic clusters;  $[\text{GeCoFe}_3(\text{CO})_{14}]^-$  and  $[\text{Ge}_2\text{Co}_5\text{Fe}_2(\text{CO})_{22}]^-$  (S.G. Anema, G.C. Barris, K.M. Mackay and B.K. Nicholson), (441) 35  
 Cleavage of Si–C and Ge–C bonds in heterysilanes and -germanes by organolithium reagents (V. Gevorgyan, L. Borisova and E. Lukevics), (441) 381  
 Synthesis of stanna- and germa-cycloheptatrienes (Y. Nakadaira, R. Sato and H. Sakurai), (441) 411

## Gold

- Neutral or cationic ( $\mu$ -methylene)bisylide digold(III) complexes (M. Bardají, M.C. Gimeno, J. Jiménez, A. Laguna, M. Laguna and P.G. Jones), (441) 339  
 Synthesis and structural characterisation of some triangular and tetrahedral mixed metal platinum–gold clusters (C.M. Hill, D.M.P. Mingos, H. Powell and M.J. Watson), (441) 499

## Iridium

- Synthesis and molecular structure of new families of iridium(III)-Cp\* and rhodium(III)-Cp\* complexes derived from 1,2-dicyanoethene-1,2-dithiolate, 2,2'-biimidazole or 2,2'-bithiazole. Single crystal structures of  $[(\eta^5\text{-Me}_5\text{C}_5)\text{Ir}(\text{biimH}_2)\text{Cl}]\text{Cl}$  and  $[(\eta^5\text{-Me}_5\text{C}_5)\text{Rh}(\text{dcdt})]$  (R. Ziessel, M.-T. Youinou, F. Balegroune and D. Grandjean), (441) 143  
 Carbon monoxide activation in  $[\text{Ir}(\text{HPz}_3)(\text{CO})_2]$ : formation of carbamoyl complexes by direct reaction with amines (M.J. Fernandez, J. Modrego, M.J. Rodriguez, M.C. Santamaría and L.A. Oro), (441) 155

## Iron

- The preparation and structures of two Ge–Co–Fe anionic clusters;  $[\text{GeCoFe}_3(\text{CO})_{14}]^-$  and  $[\text{Ge}_2\text{Co}_5\text{Fe}_2(\text{CO})_{22}]^-$  (S.G. Anema, G.C. Barris, K.M. Mackay and B.K. Nicholson), (441) 35  
 Das Verhalten von stereoisomeren Bistriflaten des Tetrahydrofuran gegenüber ein- und zweiwertigen Carbonylmessallaten (E. Lindner, M. Pabel, R. Fawzi und M. Steimann), (441) 63  
 Coupling reactions of ynaminic acids. Syntheses, structural characterization and electrochemistry of some *nido* and *clos* ferracyclopentadiene complexes (B. Heim, J.C. Daran, Y. Jeannin, B. Eber, G. Huttner and W. Imhof), (441) 81

- Synthesis, reactivity of the  $[(CO)_3(L)Fe(CO_2R)_2]$  dialkoxy carbonyl carbonyl iron complexes ( $L = CO$  or  $PPh_3$ ;  $R = ClH_3, C_2H_5$ ), and an easy access to  $[(CO)_5Fe(CO_2Me)]^+$  (J.-Y. Salaün, G. le Gall, P. Laurent and H. des Abbayes), (441) 99
- On the problem of stabilization of  $\alpha$ -metallocenyl carbocations. Synthesis,  $^1H$  and  $^{13}C$  NMR spectra of metallocenyl diphenylmethyl hexafluorophosphates and X-ray investigation of  $(C_5H_5OsC_5-H_4CPH_2)^+PF_6^-$  (U. Turpeinen, A.Z. Kreindlin, P.V. Petrovskii and M.I. Rybinskaya), (441) 109
- Highly selective hydroformylation and dimerization reactions of 2-ferrocenylpropene (L. Kollár and B. Floris), (441) 117
- Reactions of metallocenes with organocadmium and organomercury compounds (V.P. Maryin), (441) 241
- Crystal and molecular structure of bis( $\mu_3$ -tellurido)-decacarbonyltriiron,  $[Fe_3(CO)_{10}Te_2]$  (G. Gervasio), (441) 271
- Reaction of  $Ru_3(CO)_{12}$  with ferrocenyl acetylene. Crystal and molecular structure of  $Ru_2(CO)_6[C_4-H_2(C_5H_4FeC_5H_3)_2]$  (A.A. Koridze, A.I. Yanovsky and Y.T. Struchkov), (441) 277
- Substituted cyclopentadienyl complexes. X. An absolute integrated infrared intensity study of  $[(\eta^5-C_5H_4R)Fe(CO)(L)]$  (K.E. du Plooy, T.A. Ford and N.J. Coville), (441) 285
- Kohlenwasserstoffverbrückte Komplexe. XXVI. Reaktionen von anionischen Aromatenkomplexen  $[(OC)_3Cr(Ar)]^-$  mit metallorganischen Elektrophilen. Darstellung von  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_6H_5-C_7H_7)M(CO)_3$  ( $M = Cr, Mo$ ),  $(OC)_3Cr(\mu-\eta^6:\eta^5-C_6H_5-C(O)C_5H_4)Fe(\eta^5-C_5H_5)$ ,  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_8H_5S-C_7H_7)Mo(CO)_3$ ,  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_9H_7-C_7H_7)Mo(CO)_3$ ,  $(OC)_3Cr(\mu-\eta^6:C_{13}H_9-C_7H_7)M(CO)_3$  und  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_{13}H_{11}-C_7H_7)M(CO)_3$  ( $M = Cr, Mo, W$ ) (J. Breimair, M. Wieser and W. Beck), (441) 429
- Synthesis and reactivity of tricarbonyl( $\eta^5$ -4-triethylsilyl-1-methylpentadienyl)iron(+1) cation (W.A. Donaldson, P.T. Bell and M.-J. Jin), (441) 449
- Neue Derivierungswege ethynylsubstituierter Metallocene (M. Buchmeiser und H. Schottenberger), (441) 457
- Synthesis, electrochemistry and complexation studies of new redox active bisferrocene acyclic and macrocyclic thioethers (P.D. Becc, J.E. Nation, M.E. Harman and M.B. Hursthouse), (441) 465
- Electronic structure of ferrocenylacrylonitrile ion radicals (Z.V. Todres, A.I. Safronov, D.S. Ermekov and R.M. Minyaev), (441) 479

## Lead

Untersuchungen an Arylbleitriacetaten. Röntgenstrukturanalyse von 2-Methylphenyl- und 2-Chlorphenylbleitriacetat (F. Huber, H. Preut, D. Scholz und M. Schürmann), (441) 227

## Lithium

- Selectivity between deprotonation and attack on tellurium in the reaction of 1,4-thiatellurins with strongly basic reagents (H.J.M. Schoufs, A. Maercker and L. Brandsma), (441) 1
- Beiträge zur Chemie organometallischer metallacyclischer Nebengruppenmetallverbindungen. V. Synthese von  $Li_2Ni\{CH_2CH_2CH_2CH_2\}_2(Solv)_x$  aus  $K[Ni(NPh_2)_3]THF$  und  $LiCH_2CH_2CH_2CH_2Li$ ; Molekülstruktur von  $(Li(THF))_2Ni\{CH_2CH_2CH_2CH_2\}_2$  (H.-O. Fröhlich, R. Wyrwa und H. Görts), (441) 169
- Beiträge zur Chemie organometallischer metallacyclischer Nebengruppenmetallverbindungen. VI. Synthese und Eigenschaften von Zincacyclohexankomplexen des Typs  $(Li(D))_2Zn\{CH_2CH_2-CH_2CH_2CH_2\}_2$  ( $D = (C_2H_5)_2O; 2D = (CH_3)_2NC_2H_4N(CH_3)_2$ ); Molekülstruktur von  $(Li(CH_3)_2-NC_2H_4N(CH_3)_2)_2Zn\{CH_2CH_2CH_2CH_2CH_2\}_2$  (H.-O. Fröhlich, B. Kosan, B. Müller und W. Hiller), (441) 177
- Metallation reactions. XVIII. Regioselective metallation of (alkylthio)benzenes by superbases (S. Cabiddu, C. Fattuoni, C. Floris, G. Gelli and S. Melis), (441) 197

## Magnesium

Synthesis of phenyl(perfluoroorgano)mercury derivatives  $C_6H_5Hg(R_f)$  [ $R_f = C_nF_{2n+1}$  ( $n = 1-4$  or 6) or  $C_6F_5$ ] by the reactions of bis(perfluoroorgano)cadmium compounds with phenylmercury chloride (H. Layeghi, D. Naumann and W. Tyrra), (441) 355

## Manganese

Das Verhalten von stereoisomeren Bistriflaten des Tetrahydrofurans gegenüber ein- und zweiwertigen Carbonylmallaten (E. Lindner, M. Pabel, R. Fawzi und M. Steimann), (441) 63

Reactions of metallocenes with organocadmium and organomercury compounds (V.P. Maryin), (441) 241

Kohlenwasserstoffverbrückte Komplexe. XXVI. Reaktionen von anionischen Aromatenkomplexen  $[(OC)_3Cr(Ar)]^-$  mit metallorganischen Elektrophilen. Darstellung von  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_6H_5-C_7H_7)M(CO)_3$  ( $M = Cr, Mo$ ),  $(OC)_3Cr(\mu-\eta^6:\eta^5-C_6H_5-C(O)C_5H_4)Fe(\eta^5-C_5H_5)$ ,  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_8H_5S-C_7H_7)Mo(CO)_3$ ,  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_9H_7-C_7H_7)Mo(CO)_3$ ,  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_{13}H_9-C_7H_7)M(CO)_3$  und  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_{13}H_{11}-C_7H_7)M(CO)_3$  ( $M = Cr, Mo, W$ ) (J. Breimair, M. Wieser und W. Beck), (441) 429

## Mercury

Reactions of metallocenes with organocadmium and organomercury compounds (V.P. Maryin), (441) 241

## Metallocenes

On the problem of stabilization of  $\alpha$ -metallocenylcarbocations. Synthesis,  $^1H$  and  $^{13}C$  NMR spectra of metallocenyldiphenylmethyl hexafluorophosphates and X-ray investigation of  $(C_5H_5OsC_5-H_4CPh_2)^+PF_6^-$  (U. Turpeinen, A.Z. Kreindlin, P.V. Petrovskii and M.I. Rybinskaya), (441) 109

Highly selective hydroformylation and dimerization reactions of 2-ferrocenylpropene (L. Kollár and B. Floris), (441) 117

Chiral cyclopentadiene–cyclopentadienyl complexes of cobalt (V.P. Maryin and P.V. Petrovskii), (441) 125

Reactions of metallocenes with organocadmium and organomercury compounds (V.P. Maryin), (441) 241

Reaction of  $Ru_3(CO)_{12}$  with ferrocenylacetylene. Crystal and molecular structure of  $Ru_2(CO)_6[C_4-H_2(C_5H_4FeC_5H_4)_2]$  (A.A. Koridze, A.I. Yanovsky and Y.T. Struchkov), (441) 277

Substituted cyclopentadienyl complexes. X. An absolute integrated infrared intensity study of  $[(\eta^5-C_5H_4R)Fe(CO)(L)I]$  (K.E. du Plooy, T.A. Ford and N.J. Coville), (441) 285

Mixed-valence state of 1',1'''-dialkylbiruthenocene(II,IV) salts (M. Watanabe, T. Iwamoto, H. Sano, A. Kubo and I. Motoyama), (441) 309

Rearrangement processes of bis-( $\eta^5$ -alkylcyclopentadienyl)-zirconium dichlorides under electron impact (Y.A. Andrianov and V.P. Maryin), (441) 419

Neue Derivierungswege ethinylsubstituierter Metallocene (M. Buchmeiser und H. Schottenberger), (441) 457

Synthesis, electrochemistry and complexation studies of new redox active bisferrocene acyclic and macrocyclic thioethers (P.D. Beer, J.E. Nation, M.E. Harman and M.B. Hursthouse), (441) 465

Electronic structure of ferrocenylacrylonitrile ion radicals (Z.V. Todres, A.I. Safronov, D.S. Ermekov and R.M. Minyaev), (441) 479

## Molybdenum

Das Verhalten von stereoisomeren Bistriflaten des Tetrahydrofurans gegenüber ein- und zweiwertigen Carbonylmallaten (E. Lindner, M. Pabel, R. Fawzi und M. Steimann), (441) 63

Kohlenwasserstoffverbrückte Komplexe. XXVI. Reaktionen von anionischen Aromatenkomplexen  $[(OC)_3Cr(Ar)]^-$  mit metallorganischen Elektrophilen. Darstellung von  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_6H_5-C_7H_7)M(CO)_3$  ( $M = Cr, Mo$ ),  $(OC)_3Cr(\mu-\eta^6:\eta^5-C_6H_5-C(O)C_5H_4)Fe(\eta^5-C_5H_5)$ ,  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_8H_5S-C_7H_7)Mo(CO)_3$ ,  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_9H_7-C_7H_7)Mo(CO)_3$ ,  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_{13}H_9-C_7H_7)M(CO)_3$  und  $(OC)_3Cr(\mu-\eta^6:\eta^6-C_{13}H_{11}-C_7H_7)M(CO)_3$  ( $M = Cr, Mo, W$ ) (J. Breimair, M. Wieser und W. Beck), (441) 429

## Nickel

Beiträge zur Chemie organometallischer metallacyclischer Nebengruppenmetallverbindungen. V. Synthese von  $Li_2Ni(CH_2CH_2CH_2CH_2)_2(Solv)_x$  aus  $K[Ni(NPh_2)_3]THF$  und  $LiCH_2CH_2CH_2CH_2Li$ ; Molekülstruktur von  $(Li(THF)_2)_2Ni(CH_2CH_2CH_2CH_2)_2$  (H.-O. Fröhlich, R. Wyrwa und H. Görls), (441) 169

- Reactions of metallocenes with organocadmium and organomercury compounds (V.P. Maryin), (441) 241  
 Synthesis, electrochemistry and complexation studies of new redox active bisferrocene acyclic and macrocyclic thioethers (P.D. Beer, J.E. Nation, M.E. Harman and M.B. Hursthouse), (441) 465

## Niobium

- Electrochemical studies on organometallic compounds. XLII. Electrogeneration and spectroscopic characterization of  $[\text{Nb}(\eta^5\text{-C}_5\text{H}_4\text{SiMe}_3)_2(\text{PhC}\equiv\text{CPh}-C,C)]$  (H. Chollet, D. Lucas, Y. Mugnier, A. Antíñolo, A. Otero and M. Fajardo), (441) 45

## Osmium

- Das Verhalten von stereoisomeren Bistriflaten des Tetrahydrofuran gegenüber ein- und zweiwertigen Carbonylmallaten (E. Lindner, M. Pabel, R. Fawzi und M. Steimann), (441) 63  
 On the problem of stabilization of  $\alpha$ -metallocenylcarbocations. Synthesis,  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of metallocenyldiphenylmethyl hexafluorophosphates and X-ray investigation of  $(\text{C}_5\text{H}_5\text{OsC}_5\text{-H}_4\text{CPh}_2)^+\text{PF}_6^-$  (U. Turpeinen, A.Z. Kreindlin, P.V. Petrovskii and M.I. Rybinskaya), (441) 109  
 Mehrfachbindungen zwischen Hauptgruppenelementen und Übergangsmetallen. CXI. Perfluorpinakolat-Komplexe von Rhenium(VII) und Osmium(VI) (W.A. Herrmann und P. Watzlowik), (441) 265  
 Reaction of  $\text{Ru}_3(\text{CO})_{12}$  with ferrocenylacetylene. Crystal and molecular structure of  $\text{Ru}_2(\text{CO})_6[\text{C}_4\text{-H}_2(\text{C}_5\text{H}_4\text{FeC}_5\text{H}_5)_2]$  (A.A. Koridze, A.I. Yanovsky and Y.T. Struchkov), (441) 277

## Palladium

- Bildung eines oxalatverbrückten Phenylpalladium(II)-Komplexes aus Phenylglyoxylsäure und Palladiumacetat: Synthese und Struktur von  $[(\text{Bu}_2\text{S})(\text{Ph})\text{Pd}(\mu\text{-C}_2\text{O}_4)\text{Pd}(\text{Ph})(\text{SBu}_2)]$  (R. Krämer, K. Polborn und W. Beck), (441) 333  
 Synthesis, electrochemistry and complexation studies of new redox active bisferrocene acyclic and macrocyclic thioethers (P.D. Beer, J.E. Nation, M.E. Harman and M.B. Hursthouse), (441) 465  
 Some attempts to prepare chelating nitrophenylpalladium(II) complexes. Crystal and molecular structure of *catena-trans*- $\{[\text{Pd}(\text{C}_6\text{H}_2(\text{NO}_2)_3\text{-2,6})\text{tth}]_2(\text{H}_2\text{O})\}\text{ClO}_4$ <sub>n</sub> (tth = tetrahydrothiophene) (J. Vicente, A. Arcas, M.V. Borrachero, E. Molins and C. Miravittles), (441) 487

## Phosphorus

- Bis(diisopropylgalliumdiisopropylphosphid) und -arsenid. Kristallstruktur des Phosphidderivats—ein “angedeuteter” butterfly (G.G. Hoffmann, R. Fischer, U. Schubert und B. Hirle), (441) 7  
 Zweikernige Rutheniumcluster mit  $\mu_2\text{-}\eta^2\text{-Sulfonatoliganden}$ . Synthese und Molekülstruktur von  $\text{Ru}_2(\text{CO})_4[\mu_2\text{-}\eta^2\text{-OOS(O)Tol}_2(\text{PPh}_3)_2]$  (G. Rheinwald, H. Stoeckli-Evans und G. Süss-Fink), (441) 295  
 Synthesis and reactivity of dithiodiphenylphosphinato-derivatives of rhodium. Crystal structure of the square-pyramidal rhodium(III) complex  $[\text{RhI}(\eta^2\text{-S}_2\text{PPh}_2)(\text{COMe})(\text{PPh}_3)]$  (J.A. Cabeza, V. Riera, M.A. Villa-García, L. Ouahab and S. Triki), (441) 323  
 Stereoselektive Additionsreaktionen von Komplex-gebundenen Phosphanen und Arsanen an Alkine (H. Lang und U. Lay), (441) 389

## Platinum

- Highly selective hydroformylation and dimerization reactions of 2-ferrocenylpropene (L. Kollár and B. Floris), (441) 117  
 Dimeric complexes of trimethylplatinum(IV) with ethylacetacetate, methylacetacetate, dimethylmalonate and diethylmalonate, and their pyridine and 2,2'-bipyridyl adducts (K. Kite and A.F. Psaila), (441) 159  
 Synthesis and structural characterisation of some triangular and tetrahedral mixed metal platinum–gold clusters (C.M. Hill, D.M.P. Mingos, H. Powell and M.J. Watson), (441) 499

## Potassium

*Cis / trans* conversion of potassium derivatives of 2- and 4-nitrostilbenes (Z.V. Todres), (441) 349

## Rhenium

Das Verhalten von stereoisomeren Bistriflaten des Tetrahydrofuran gegenuber ein- und zweiseitigen Carbonylmetallaten (E. Lindner, M. Pabel, R. Fawzi und M. Steimann), (441) 63

Metallorganische Lewis-Säuren. XLV. Pentacarbonylrhenium-Komplexe mit Oxoanionen (Trifluoromethoxyborat, Phosphat, Sulfat, Dichromat) sowie von Heteropolysäuren. Chemisorption von kationischen Carbonylrhenium-Komplexen auf  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, TiO<sub>2</sub> und in Zeolithen (E. Fritsch, J. Heidrich, K. Polborn und W. Beck), (441) 203

Mehr Fachbindungen zwischen Hauptgruppenelementen und Übergangsmetallen. CXI. Perfluorpinakolat-Komplexe von Rhenium(VII) und Osmium(VI) (W.A. Herrmann und P. Watzlowik), (441) 265

## Rhodium

Highly selective hydroformylation and dimerization reactions of 2-ferrocenylpropene (L. Kollár and B. Floris), (441) 117

Synthesis and molecular structure of new families of iridium(III)-Cp\* and rhodium(III)-Cp\* complexes derived from 1,2-dicyanoethene-1,2-dithiolate, 2,2'-biimidazole or 2,2'-bithiazole. Single crystal structures of  $[(\eta^5\text{-Me}_5\text{C}_5)\text{Ir}(\text{biimH}_2)\text{Cl}] \text{Cl}$  and  $[(\eta^5\text{-Me}_5\text{C}_5)\text{Rh}(\text{dcdt})]$  (R. Ziessel, M.-T. Youinou, F. Balegroune and D. Grandjean), (441) 143

Synthesis and reactivity of dithiodiphenylphosphinato-derivatives of rhodium. Crystal structure of the square-pyramidal rhodium(III) complex  $[\text{RhI}(\eta^2\text{-S}_2\text{PPh}_2)(\text{COMe})(\text{PPh}_3)]$  (J.A. Cabeza, V. Riera, M.A. Villa-García, L. Ouahab and S. Triki), (441) 323

Synthesis, electrochemistry and complexation studies of new redox active bisferrocene acyclic and macrocyclic thioethers (P.D. Beer, J.E. Nation, M.E. Harman and M.B. Hursthouse), (441) 465

## Ruthenium

On the problem of stabilization of  $\alpha$ -metallocenylcarbocations. Synthesis, <sup>1</sup>H and <sup>13</sup>C NMR spectra of metallocenyldiphenylmethyl hexafluorophosphates and X-ray investigation of  $(\text{C}_5\text{H}_5\text{OsC}_5\text{-H}_4\text{CPh}_2)^+\text{PF}_6^-$  (U. Turpeinen, A.Z. Kreindlin, P.V. Petrovskii and M.I. Rybinskaya), (441) 109

Reaction of Ru<sub>3</sub>(CO)<sub>12</sub> with ferrocenylacetylene. Crystal and molecular structure of Ru<sub>2</sub>(CO)<sub>6</sub>[C<sub>4</sub>H<sub>2</sub>(C<sub>5</sub>H<sub>4</sub>FeC<sub>5</sub>H<sub>5</sub>)<sub>2</sub>] (A.A. Koridze, A.I. Yanovsky and Y.T. Struchkov), (441) 277

Zweikernige Rutheniumcluster mit  $\mu_2\text{-}\eta^2\text{-Sulfonatoliganden}$ . Synthese und Molekülstruktur von Ru<sub>2</sub>(CO)<sub>4</sub>[\mathbf{\mu}\_2\text{-}\eta^2\text{-OOS(O)Tol}\_2](PPh<sub>3</sub>)<sub>2</sub> (G. Rheinwald, H. Stoeckli-Evans und G. Süss-Fink), (441) 295

Mixed-valence state of 1',1'''-dialkylbiruthenocene(II,IV) salts (M. Watanabe, T. Iwamoto, H. Sano, A. Kubo and I. Motoyama), (441) 309

Neue Derivierungswege ethinylsubstituierter Metallocene (M. Buchmeiser und H. Schottenberger), (441) 457

## Selenium

Cyclopentadienyl chromium chalcogenide complexes. Synthesis of [CpCr(EPh)]<sub>2</sub>E (E = S, Se) and their Cr(CO)<sub>5</sub> adducts. Crystal structures of [CpCr(SePh)]<sub>2</sub>Se·1/2C<sub>6</sub>H<sub>6</sub> and [CpCr(SePh)]<sub>2</sub>Se[Cr(CO)<sub>5</sub>] (L.Y. Goh, M.S. Tay, Y.Y. Lim, W. Chen, Z.-Y. Zhou and T.C.W. Mak), (441) 51

## Silicon

On the synthesis of siloxanes. XXI. Verification of inductive and steric substituent constants for siloxy groups by reaction of triorganylchlorosilanes and chlorosiloxanes with lithium silanolates and lithium isopropylate (K. Käppler, U. Scheim, K. Rühlmann and A. Porzel), (441) 15

Rearrangement of silatranyl- and 3,7,10-trimethylsilatranyloxiranes to silatranylaldehydes and the crystal structure of silatranylacetraldehyde (M. Nasim, V.S. Petrosyan, G.S. Zaitseva, J. Lorberth, S. Wocadlo and W. Massa), (441) 27

Siliciumverbindungen mit starken intramolekularen sterischen Wechselwirkungen. XLVIII. Trisilacyclobutanimine: Molekülstrukturen und lichtinduzierte Reaktionen (M. Weidenbruch, J. Hamann, K. Peters, H.G. von Schnering und H. Marsmann), (441) 185

**Metallation reactions. XVIII. Regioselective metallation of (alkylthio)benzenes by superbases (S. Cabiddu, C. Fattuoni, C. Floris, G. Gelli and S. Melis), (441) 197**

**Metallorganische Lewis-Säuren. XLV. Pentacarbonylrhenium-Komplexe mit Oxoanionen (Trifluoromethoxyborat, Phosphat, Sulfat, Dichromat) sowie von Heteropolysäuren. Chemisorption von kationischen Carbonylrhenium-Komplexen auf  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, TiO<sub>2</sub> und in Zeolithen (E. Fritsch, J. Heidrich, K. Polborn und W. Beck), (441) 203**

**Dimethylvinylsilylation of Si<sub>8</sub>O<sub>20</sub><sup>8-</sup> silicate anion in methanol solutions of tetramethylammonium silicate (I. Hasegawa and S. Motojima), (441) 373**

**Cleavage of Si-C and Ge-C bonds in heterosilanes and -germanes by organolithium reagents (V. Gevorgyan, L. Borisova and E. Lukevics), (441) 381**

**Stereoselektive Additionsreaktionen von Komplex-gebundenen Phosphanen und Arsanen an Alkine (H. Lang und U. Lay), (441) 389**

**Dehydrierende Copolymerisation zu den neuen Polysilan-Copolymeren Poly(methyl-co-phenylsilan) H[(MeSiH)<sub>x</sub>(PhSiH)<sub>y</sub>]<sub>n</sub>H und Poly(methyl-co-dimethylsilan) H[(MeSiH)<sub>x</sub>(Me<sub>2</sub>Si)<sub>y</sub>]<sub>n</sub>H (E. Hengge und M. Weinberger), (441) 397**

## Tellurium

**Crystal and molecular structure of bis( $\mu_3$ -tellurido)-decacarbonyltriiron, [Fe<sub>3</sub>(CO)<sub>10</sub>Te<sub>2</sub>] (G. Gervasio), (441) 271**

## Tin

**Steric effects on the formation of isolable products in the reactions of dibutyltin oxides with carboxylic acids (V.B. Mokal and V.K. Jain), (441) 215**

**Synthesis of stanna- and germa-cycloheptatrienes (Y. Nakadaira, R. Sato and H. Sakurai), (441) 411**

## Titanium

**Dehydrierende Copolymerisation zu den neuen Polysilan-Copolymeren Poly(methyl-co-phenylsilan) H[(MeSiH)<sub>x</sub>(PhSiH)<sub>y</sub>]<sub>n</sub>H und Poly(methyl-co-dimethylsilan) H[(MeSiH)<sub>x</sub>(Me<sub>2</sub>Si)<sub>y</sub>]<sub>n</sub>H (E. Hengge und M. Weinberger), (441) 397**

## Tungsten

**Das Verhalten von stereoisomeren Bistriflaten des Tetrahydrofuran gegenüber ein- und zweiwertigen Carbonylmittallen (E. Lindner, M. Pabel, R. Fawzi und M. Steimann), (441) 63**

**Reversible Acyl-Keten-Umwandlung (F.R. Kreißl, H. Keller und W. Schütt), (441) 75**

**Static and dynamic structures of pentacarbonyl-chromium(0) and -tungsten(0) complexes of dithioether ligands. II. Unsymmetrical dithioether ligand complexes of general type [M(CO)<sub>5</sub>(MeSCH<sub>2</sub>SR)] (E.W. Abel, K.G. Orrell, H. Rahoo and V. Šík), (441) 255**

**Kohlenwasserstoffverbrückte Komplexe. XXVI. Reaktionen von anionischen Aromatenkomplexen [(OC)<sub>3</sub>Cr(Ar)]<sup>-</sup> mit metallorganischen Elektrophilen. Darstellung von (OC)<sub>3</sub>Cr( $\mu$ - $\eta^6$ : $\eta^6$ -C<sub>6</sub>H<sub>5</sub>-C<sub>7</sub>H<sub>7</sub>)M(CO)<sub>3</sub> (M = Cr, Mo), (OC)<sub>3</sub>Cr( $\mu$ - $\eta^6$ : $\eta^5$ -C<sub>6</sub>H<sub>5</sub>-C(O)C<sub>5</sub>H<sub>4</sub>)Fe( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>), (OC)<sub>3</sub>Cr( $\mu$ - $\eta^6$ : $\eta^6$ -C<sub>8</sub>H<sub>8</sub>-C<sub>2</sub>H<sub>7</sub>)Mo(CO)<sub>3</sub>, (OC)<sub>3</sub>Cr( $\mu$ - $\eta^6$ : $\eta^6$ -C<sub>9</sub>H<sub>7</sub>-C<sub>2</sub>H<sub>7</sub>)Mo(CO)<sub>3</sub>, (OC)<sub>3</sub>Cr( $\mu$ - $\eta^6$ : $\eta^6$ -C<sub>13</sub>H<sub>9</sub>-C<sub>7</sub>H<sub>7</sub>)M(CO)<sub>3</sub> und (OC)<sub>3</sub>Cr( $\mu$ - $\eta^6$ : $\eta^6$ -C<sub>13</sub>H<sub>11</sub>-C<sub>7</sub>H<sub>7</sub>)M(CO)<sub>3</sub> (M = Cr, Mo, W) (J. Breimair, M. Wieser und W. Beck), (441) 429**

**Static and dynamic structures of pentacarbonyl-chromium(0) and tungsten(0) complexes of dithioether ligands. III. 1,3-Metallotropic shifts of sulphur coordination sites (E.W. Abel, K.G. Orrell, H. Rahoo and V. Šík), (441) 441**

## Vanadium

**Reactions of metallocenes with organocadmium and organomercury compounds (V.P. Maryin), (441) 241**

## Zinc

**Beiträge zur Chemie organometallischer metallacyclischer Nebengruppenmetallverbindungen. VI. Synthese und Eigenschaften von Zincacyclohexankomplexen des Typs (Li(D)<sub>2</sub>)<sub>2</sub>Zn-CH<sub>2</sub>CH<sub>2</sub>-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub> (D = (C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>O; 2D = (CH<sub>3</sub>)<sub>2</sub>NC<sub>2</sub>H<sub>4</sub>N(CH<sub>3</sub>)<sub>2</sub>); Molekülstruktur von {Li(CH<sub>3</sub>)<sub>2</sub>**

$\text{NC}_2\text{H}_4\text{N}(\text{CH}_3)_2\}_{2-\overline{\text{Zn}}(\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2)_2}$  (H.-O. Fröhlich, B. Kosan, B. Müller und W. Hiller), (441) 177

## Zirconium

Dehydrierende Copolymerisation zu den neuen Polysilan-Copolymeren Poly(methyl-co-phenylsilan)  
 $\text{H}[(\text{MeSiH})_x(\text{PhSiH})_y]_n\text{H}$  und Poly(methyl-co-dimethylsilan)  $\text{H}[(\text{MeSiH})_x(\text{Me}_2\text{Si})_y]_n\text{H}$  (E. Hengge  
und M. Weinberger), (441) 397

Rearrangement processes of bis-( $\eta^5$ -alkylcyclopentadienyl)-zirconium dichlorides under electron impact  
(Y.A. Andrianov and V.P. Maryin), (441) 419