

## Subject Index of Volume 511

### Alkali metals

Stoichiometry of protonation of aromatic hydrocarbon radical anions by weak proton donors. A marked discrepancy between the number of protons used and those incorporated into the aromatic structure (C.G. Screttas, G.I. Ioannou and M. Micha-Screttas), 217

### Alkenyl

Reactivity of a cationic triruthenium hydridoalkenylcarbonyl cluster complex toward nucleophilic reagents. Carbonyl substitution versus alkene elimination reactions (J.A. Cabeza, I. Del Río, A. Llamazares and V. Riera), 103

### Alkoxide

Synthesis of Group 4 metal compounds containing cyclopentadienyl ligands with a pendant alkoxide function: molecular structure of  $[\{\eta^5 : \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_2\text{O}\}\text{TiCl}_2]_2$  and  $[\eta^5 : \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_3\text{O}\}\text{TiCl}_2$  (G. Trouvé, D.A. Laske, A. Meetsma and J.H. Teuben), 255

### Alkyl

The mixed alkyl gallium or indium *N,N,N*-trimethylpropylenediaminedithiocarbamates. Crystal structure of diethyl(*N,N',N'*-trimethylpropylenediamine)dithiocarbamateindium(III) (S.W. Haggata, M. Azad Malik, M. Motevalli and P. O'Brien), 199

### Alkylation

Alkylation of cyanide at  $[\text{NBu}_4]\text{trans-}[\text{Re}(\text{CN})_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)_2]$ . Syntheses and properties of derived isocyanide complexes and X-ray structure of *trans-}[\text{Re}(\text{CNEt})\_2(\text{Ph}\_2\text{PCH}\_2\text{CH}\_2\text{PPh}\_2)\_2][\text{PF}\_6] (M.F.N.N. Carvalho, M.T. Duarte, A.M. Galvão and A.J.L. Pombeiro), 163*

### Alkyls

Synthesis, mass spectrometry and NMR spectroscopy studies of the  $(\text{CH}_3)_2\text{In}(\text{C}_2\text{H}_5)$  system: X-ray crystal structure of a diphosphine-bridged complex (P. Visonà, F. Benetollo, G. Rossetto, P. Zanella and P. Traldi), 59

### $\eta^2$ -Alkynes

Complexes of lanthanoids with neutral  $\pi$  donor ligands (G.B. Deacon and Q. Shen), 1

### Alkynyl ligands

Stable paramagnetic bis(alkynyl) manganese complexes (V.V. Krivykh, I.L. Eremenko, D. Veghini, I.A. Petrunenko, D.L. Pountney, D. Unsel and H. Berke), 111

### Allylic carbonates

Palladium(0)-catalyzed phenoxycarbonylation of allylic carbonates (C. Goux, P. Lhoste, D. Sinou and A. Masdeu), 139

### Aluminium

Theoretical investigations on Ziegler–Natta catalysis: models for the cocatalyst components (E. Puhakka, T.T. Pakkanen, T.A. Pakkanen and E. Iiskola), 19

### Anthracenyl Grignard

Strukturen ladungsgestörter Moleküle. 79. Dimeres Anthracenylmagnesiumbromid-Dibutylether (H. Bock, K. Ziemer und C. Näther), 29

### $\eta^6$ -Arenes

Complexes of lanthanoids with neutral  $\pi$  donor ligands (G.B. Deacon and Q. Shen), 1

### Aromatic radical anions

Stoichiometry of protonation of aromatic hydrocarbon radical anions by weak proton donors. A marked discrepancy between the number of protons used and those incorporated into the aromatic structure (C.G. Screttas, G.I. Ioannou and M. Micha-Screttas), 217

### Asymmetric synthesis

Asymmetric synthesis of a chiral tetradentate ligand based on a bis(diphenylphosphinoferrocenyl) moiety. Electrochemical behavior of free ligand and its  $\text{Ru}^{\text{II}}$  and  $\text{Cu}^{\text{I}}$  complexes (A. Masson-Szymczak, O. Riant, A. Gref and H.B. Kagan), 193

### Bis(isocyanide complexes)

Alkylation of cyanide at  $[\text{NBu}_4]\text{trans-}[\text{Re}(\text{CN})_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)_2]$ . Syntheses and properties of derived isocyanide complexes and X-ray structure of *trans-}[\text{Re}(\text{CNEt})\_2(\text{Ph}\_2\text{PCH}\_2\text{CH}\_2\text{PPh}\_2)\_2][\text{PF}\_6] (M.F.N.N. Carvalho, M.T. Duarte, A.M. Galvão and A.J.L. Pombeiro), 163*

### Borane adducts

Electron-deficient organouranium chemistry: synthesis and reactivity of monocyclopentadienyldiphenylphosphidouranium trisborohydrides  $[\text{C}_5\text{R}_4\text{PPh}_2\text{U}(\text{BH}_4)_3]$  ( $\text{R} = \text{H}$  or  $\text{CH}_3$ ) and of their borane adducts (D. Baudry, A. Dormond, A. Hafid and C. Raillard), 37

### Bulky ligands

Auf dem Wege zu einem stabilen Germaethen  $>\text{Ge}=\text{C}<$ : Sterisch überladene Digermysilylmethane  ${}^t\text{Bu}_2\text{SiX-CY}(\text{GeMe}_3)_2$  und Struktur der Germaethenquelle  ${}^t\text{Bu}_2\text{SiF-Cl}(\text{GeMe}_3)_2 \cdot 2\text{THF}$  (N. Wiberg, H.-S. Hwang-Park, P. Mikulcik und G. Müller), 239

### Carbene

Synthesis and characterization of neutral and cationic diamino carbene complexes of gold(I) (H.G. Raubenheimer, L. Lindeque and S. Cronje), 177

### Carbon dioxide

Structure and reactivity of dimeric rhodium(I) formate complexes: X-ray crystal structure of  $[\{(\text{cod})\text{Rh}(\mu\text{-}\kappa^2\text{O},\text{O}'\text{-HCO}_2)_2\}]$  and phosphane-induced hydride transfer to give an  $\eta^3$ -cyclooctenyl complex (R. Fornika, E. Dinjus, H. Görls and W. Leitner), 145

Structure and reactivity of dimeric rhodium(I) formate complexes: X-ray crystal structure of  $[\{(\text{cod})\text{Rh}(\mu\text{-}\kappa^2\text{O},\text{O}'\text{-HCO}_2)_2\}]$  and phosphane-induced hydride transfer to give an  $\eta^3$ -cyclooctenyl complex (R. Fornika, E. Dinjus, H. Görls and W. Leitner), 145

### Carbon monoxide

Reactions of  $\sigma$ -ferrocenylplatinum complexes with carbon monoxide and isocyanide (T. Yoshida, K. Onitsuka and K. Sonogashira), 47

### Carbonyl

Reactivity of a cationic triruthenium hydridoalkenylcarbonyl cluster complex toward nucleophilic reagents. Carbonyl substitution ver-

- sus alkene elimination reactions (J.A. Cabeza, I. Del Río, A. Llamazares and V. Riera), 103  
 The molecular structure of cyclopentadienyl vanadium tetracarbonyl determined by gas-phase electron diffraction (M.J. Almond, E.M. Page, D.A. Rice and K. Hagen), 303  
 The reduction and oxidation of cationic carbonyl complexes of manganese with phosphonodithioformate: X-ray crystal structure of  $[\text{Mn}(\text{CO})_4(\text{S}_2\text{CPCy}_3)]\text{ClO}_4$  (G.A. Carriedo, J.A. Pérez-Martínez, D. Miguel, V. Riera, S. García-Granda and E. Pérez-Carreño), 77
- Catalysis**  
 Palladium(0)-catalyzed phenoxycarbonylation of allylic carbonates (C. Goux, P. Lhoste, D. Sinou and A. Masdeu), 139  
 Structure and reactivity of dimeric rhodium(I) formate complexes: X-ray crystal structure of  $[\{(\text{cod})\text{Rh}(\mu\text{-}\kappa^2\text{O},\text{O}'\text{-HCO}_2)\}_2]$  and phosphane-induced hydride transfer to give an  $\eta^3$ -cyclooctenyl complex (R. Fornika, E. Dinjus, H. Görls and W. Leitner), 145
- Cationic clusters**  
 Reactivity of a cationic triruthenium hydridoalkenylcarbonyl cluster complex toward nucleophilic reagents. Carbonyl substitution versus alkene elimination reactions (J.A. Cabeza, I. Del Río, A. Llamazares and V. Riera), 103
- Chemical vapour deposition**  
 The mixed alkyl gallium or indium *N,N,N*-trimethylpropylenediaminedithiocarbamates. Crystal structure of diethyl(*N,N',N'*-trimethylpropylenediamine)dithiocarbamatoindium(III) (S.W. Haggata, M. Azad Malik, M. Motevalli and P. O'Brien), 199
- Cluster**  
 Reactivity of a cationic triruthenium hydridoalkenylcarbonyl cluster complex toward nucleophilic reagents. Carbonyl substitution versus alkene elimination reactions (J.A. Cabeza, I. Del Río, A. Llamazares and V. Riera), 103
- Cobalt**  
 Acid catalysed condensation reactions of 1,3-dihydroxybenzene with new redox-active metallocene aldehydes (P.D. Beer, M.G.B. Drew, D. Heseck and S.M. Lacy), 207
- Copper**  
 Asymmetric synthesis of a chiral tetradentate ligand based on a bis[diphenylphosphinoferrocenyl] moiety. Electrochemical behavior of free ligand and its  $\text{Ru}^{\text{II}}$  and  $\text{Cu}^{\text{I}}$  complexes (A. Masson-Szymczak, O. Riant, A. Gref and H.B. Kagan), 193
- Crystal structure**  
 1,3-Dipolar cycloaddition to the Fe–N=C fragment. XVI. Reactivity of  $\text{Fe}(\text{alkyl-NC})_3(^1\text{Pr-DAB})$  complexes towards aromatic isothiocyanates as dipolarophiles. Insertion of isothiocyanate into the Fe–N bond (N. Feiken, H.-W. Frühauf, K. Vrieze, N. Veldman and A.L. Spek), 281  
 Acid catalysed condensation reactions of 1,3-dihydroxybenzene with new redox-active metallocene aldehydes (P.D. Beer, M.G.B. Drew, D. Heseck and S.M. Lacy), 207  
 Auf dem Wege zu einem stabilen Germaethen  $>\text{Ge}=\text{C}<$ : Sterisch überladene Digermysilylmethane  $^1\text{Bu}_2\text{SiX-CY}(\text{GeMe}_3)_2$  und Struktur der Germaethenquelle  $^1\text{Bu}_2\text{SiF-Cl}(\text{GeMe}_3)_2 \cdot 2\text{THF}$  (N. Wiberg, H.-S. Hwang-Park, P. Mikulcik und G. Müller), 239  
 Organotin(IV) derivatives of acylpyrazol-5-ones (M.F. Mahon, K.C. Molloy, B.A. Omotowa and M.A. Mesubi), 227  
 Synthesis of Group 4 metal compounds containing cyclopentadienyl ligands with a pendant alkoxide function: molecular structure of  $\{[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_2\text{O}]\text{TiCl}_2\}_2$  and  $[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_3\text{O}]\text{TiCl}_2$  (G. Trouvé, D.A. Laske, A. Meetsma and J.H. Teuben), 255  
 The mixed alkyl gallium or indium *N,N,N*-trimethylpropylenediaminedithiocarbamates. Crystal structure of diethyl(*N,N',N'*-trimethylpropylenediamine)dithiocarbamatoindium(III) (S.W. Haggata, M. Azad Malik, M. Motevalli and P. O'Brien), 199
- Cyclic voltammetry**  
 Asymmetric synthesis of a chiral tetradentate ligand based on a bis[diphenylphosphinoferrocenyl] moiety. Electrochemical behavior of free ligand and its  $\text{Ru}^{\text{II}}$  and  $\text{Cu}^{\text{I}}$  complexes (A. Masson-Szymczak, O. Riant, A. Gref and H.B. Kagan), 193
- Cycloaddition**  
 1,3-Dipolar cycloaddition to the Fe–N=C fragment. XVI. Reactivity of  $\text{Fe}(\text{alkyl-NC})_3(^1\text{Pr-DAB})$  complexes towards aromatic isothiocyanates as dipolarophiles. Insertion of isothiocyanate into the Fe–N bond (N. Feiken, H.-W. Frühauf, K. Vrieze, N. Veldman and A.L. Spek), 281
- Cyclometallation**  
 Dinuclear cyclometallated complexes of  $\text{Pd}^{\text{II}}$  with diphosphines. X-ray crystal structure of  $[1,4\text{-}\{\text{Pd}[2,4\text{-}(\text{MeO})_2\text{C}_6\text{H}_2\text{C}(\text{H})=\text{N}]\}_2\text{-C}_6\text{H}_4(\text{Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2\text{-P,P})_2][\text{PF}_6]_2$  (J.M. Vila, M. Gayoso, M. López Torres, J.J. Fernández, A. Fernández, J.M. Ortigueira, N.A. Bailey and H. Adams), 129
- Cyclooctenyl**  
 Structure and reactivity of dimeric rhodium(I) formate complexes: X-ray crystal structure of  $[\{(\text{cod})\text{Rh}(\mu\text{-}\kappa^2\text{O},\text{O}'\text{-HCO}_2)\}_2]$  and phosphane-induced hydride transfer to give an  $\eta^3$ -cyclooctenyl complex (R. Fornika, E. Dinjus, H. Görls and W. Leitner), 145
- Cyclopentadienyl**  
 Synthesis of Group 4 metal compounds containing cyclopentadienyl ligands with a pendant alkoxide function: molecular structure of  $\{[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_2\text{O}]\text{TiCl}_2\}_2$  and  $[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_3\text{O}]\text{TiCl}_2$  (G. Trouvé, D.A. Laske, A. Meetsma and J.H. Teuben), 255  
 The molecular structure of cyclopentadienyl vanadium tetracarbonyl determined by gas-phase electron diffraction (M.J. Almond, E.M. Page, D.A. Rice and K. Hagen), 303
- Cyclopentadienyl complexes**  
 Synthesis and characterization of Eu(II) and Sm(II) complexes containing the cyclopentadienylvanadiumnaphthalene anion. Molecular structure of  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)]_2\text{Eu}(\text{THF})(\text{DME})$  and  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)\text{Eu}(\text{C}_5\text{H}_5)(\text{THF})]_n$  (I.L. Fedushkin, V.K. Nevodchikov, V.K. Cherkasov, M.N. Bochkarev, H. Schumann, F. Girgsdies, F.H. Görlitz, G. Kociok-Köhn and J. Pickardt), 157
- Digermysilylmethanides**  
 Auf dem Wege zu einem stabilen Germaethen  $>\text{Ge}=\text{C}<$ : Sterisch überladene Digermysilylmethane  $^1\text{Bu}_2\text{SiX-CY}(\text{GeMe}_3)_2$  und Struktur der Germaethenquelle  $^1\text{Bu}_2\text{SiF-Cl}(\text{GeMe}_3)_2 \cdot 2\text{THF}$  (N. Wiberg, H.-S. Hwang-Park, P. Mikulcik und G. Müller), 239
- Dihydrides**  
 Reactivity of the unsaturated manganese dihydrides  $[\text{Mn}_2(\mu\text{-H})_2(\text{CO})_6(\mu\text{-L}_2)]$  ( $\text{L}_2 = \text{Ph}_2\text{PCH}_2\text{PPh}_2$  or  $(\text{EtO})_2\text{POP}(\text{OEt})_2$ ) towards small molecules (F.J. García Alonso, M. García Sanz, X.Y. Liu, A. Oliveira, M.A. Ruiz, V. Riera and C. Bois), 93
- Diimine**  
 1,3-Dipolar cycloaddition to the Fe–N=C fragment. XVI. Reactivity of  $\text{Fe}(\text{alkyl-NC})_3(^1\text{Pr-DAB})$  complexes towards aromatic isothiocyanates as dipolarophiles. Insertion of isothiocyanate into the Fe–N bond (N. Feiken, H.-W. Frühauf, K. Vrieze, N. Veldman and A.L. Spek), 281
- Dimeric anthracenylmagnesiumbromide-dibutylether**  
 Strukturen ladungsgestörter Moleküle. 79. Dimeres Anthracenylmagnesiumbromid-Dibutylether (H. Bock, K. Ziemer und C. Näther), 29
- Dinuclear**  
 Symmetric and dissymmetric pyrazolyl-bridged rhodium dimers. Two X-ray dirhodium structures with short metal–metal interactions (C. López, J.A. Jiménez, R.M. Claramunt, M. Cano, J.V. Heras, J.A. Campo, E. Pinilla and A. Monge), 115

- Synthesis of bis(diphenylphosphinocyclopentadienyl)yttrium chloride complexes and heterodimetallic derivatives. X-ray structure of bis( $\mu$ -chloro)bis(diphenylphosphinocyclopentadienyl)yttrium(III) (R. Broussier, G. Delmas, P. Perron, B. Gautheron and J.L. Petersen), 185
- Dinuclear complexes**
- Dinuclear cyclometallated complexes of Pd<sup>II</sup> with diphosphines. X-ray crystal structure of [1,4-{Pd[2,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>2</sub>C(H)=N]}<sub>2</sub>-C<sub>6</sub>H<sub>4</sub>{Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>3</sub>PPh<sub>2</sub>-P,P]}<sub>2</sub>][PF<sub>6</sub>]<sub>2</sub> (J.M. Vila, M. Gayoso, M. López Torres, J.J. Fernández, A. Fernández, J.M. Ortiueira, N.A. Bailey and H. Adams), 129
- (8-Dimethylamino-1-naphthyl)diphenylphosphane
- Evidences for intramolecular N  $\rightarrow$  P coordination in (8-dimethylamino-1-naphthyl)diphenylphosphane and derivatives (C. Chuit, R.J.P. Corriu, P. Monforte, C. Reyé, J.-P. Declercq and A. Dubourg), 171
- Diphosphine complexes**
- Dinuclear cyclometallated complexes of Pd<sup>II</sup> with diphosphines. X-ray crystal structure of [1,4-{Pd[2,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>2</sub>C(H)=N]}<sub>2</sub>-C<sub>6</sub>H<sub>4</sub>{Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>3</sub>PPh<sub>2</sub>-P,P]}<sub>2</sub>][PF<sub>6</sub>]<sub>2</sub> (J.M. Vila, M. Gayoso, M. López Torres, J.J. Fernández, A. Fernández, J.M. Ortiueira, N.A. Bailey and H. Adams), 129
- Electrochemistry**
- Alkylation of cyanide at [NBu<sub>4</sub>]*trans*-[Re(CN)<sub>2</sub>(Ph<sub>2</sub>PCH<sub>2</sub>-CH<sub>2</sub>PPh<sub>2</sub>)<sub>2</sub>]. Syntheses and properties of derived isocyanide complexes and X-ray structure of *trans*-[Re(CN)Et<sub>2</sub>(Ph<sub>2</sub>PCH<sub>2</sub>-CH<sub>2</sub>PPh<sub>2</sub>)<sub>2</sub>][PF<sub>6</sub>] (M.F.N.N. Carvalho, M.T. Duarte, A.M. Galvão and A.J.L. Pombeiro), 163
- The reduction and oxidation of cationic carbonyl complexes of manganese with phosphoniodithioformate: X-ray crystal structure of [Mn(CO)<sub>4</sub>(S<sub>2</sub>CPCy<sub>3</sub>)ClO<sub>4</sub>] (G.A. Carriedo, J.A. Pérez-Martínez, D. Miguel, V. Riera, S. García-Granda and E. Pérez-Carreño), 77
- UV-vis, IR and EPR spectroelectrochemical study of the EC redox transition [(PR<sub>3</sub>)<sub>n</sub>(CO)<sub>3</sub>(R'-pz)M]<sup>+ / 0</sup>; M = Mo, W; R'-pz = N-alkylpyrazinium; R = isopropyl, cyclohexyl; n = 1 or 2 (F. Hilgers, W. Bruns, J. Fiedler and W. Kaim), 273
- Electron-deficient compounds**
- Electron-deficient organouranium chemistry: synthesis and reactivity of monocyclopentadienyldiphenylphosphidouranium trisborohydrides [C<sub>5</sub>R<sub>4</sub>PPh<sub>2</sub>U(BH<sub>4</sub>)<sub>3</sub>] (R = H or CH<sub>3</sub>) and of their borane adducts (D. Baudry, A. Dormond, A. Hafid and C. Raillard), 37
- Electron diffraction**
- The molecular structure of cyclopentadienyl vanadium tetracarbonyl determined by gas-phase electron diffraction (M.J. Almond, E.M. Page, D.A. Rice and K. Hagen), 303
- Europium**
- Synthesis and characterization of Eu(II) and Sm(II) complexes containing the cyclopentadienylnaphthalene anion. Molecular structure of [(C<sub>5</sub>H<sub>5</sub>V(C<sub>10</sub>H<sub>8</sub>))<sub>2</sub>Eu(THF)(DME)] and [(C<sub>5</sub>H<sub>5</sub>)V(C<sub>10</sub>H<sub>8</sub>)Eu(C<sub>5</sub>H<sub>5</sub>X)(THF)]<sub>n</sub> (I.L. Fedushkin, V.K. Nevodchikov, V.K. Cherkasov, M.N. Bochkarev, H. Schumann, F. Girgsdies, F.H. Görlitz, G. Kociok-Köhn and J. Pickardt), 157
- Ferrocene**
- Reactions of  $\sigma$ -ferrocenylplatinum complexes with carbon monoxide and isocyanide (T. Yoshida, K. Onitsuka and K. Sonogashira), 47
- Ferrocenyl phosphine**
- Asymmetric synthesis of a chiral tetradentate ligand based on a bis[diphenylphosphinoferrrocenyl] moiety. Electrochemical behavior of free ligand and its Ru<sup>II</sup> and Cu<sup>I</sup> complexes (A. Masson-Szymczak, O. Riant, A. Gref and H.B. Kagan), 193
- Ferrole complexes**
- Reactions of the 'ferrole' complex [Fe<sub>2</sub>(CO)<sub>6</sub>(C<sub>2</sub>Et<sub>2</sub>)<sub>2</sub>] with Group 15 donor ligands and with alkynes. Stepwise formation and disengagement of tropones. Crystal and molecular structure of [Fe<sub>2</sub>(CO)<sub>5</sub>{(CEt)<sub>2</sub>CO(CEt)<sub>2</sub>CHCPh}] (R. Giordano, E. Sappa, D. Cauzzi, G. Predieri and A. Tiripicchio), 263
- Fluoromethyl group**
- Siloxanes and silylamines with fluoromethyl-methylsilicon groups: X-ray study of [CH<sub>2</sub>F(CH<sub>3</sub>)SiO]<sub>4</sub> (H. Beckers, D.J. Brauer, H. Bürger, R. Gielen and P. Moritz), 293
- Gallium**
- The mixed alkyl gallium or indium *N,N,N*-trimethylpropylenediaminedithiocarbamates. Crystal structure of diethyl(*N,N',N'*-trimethylpropylenediamine)dithiocarbamatoindium(III) (S.W. Hagata, M. Azad Malik, M. Motevalli and P. O'Brien), 199
- Germanium**
- Auf dem Wege zu einem stabilen Germaethen > Ge=C <: Sterisch überladene Digermysilylmethane <sup>1</sup>Bu<sub>2</sub>SiX-CY(GeMe<sub>3</sub>)<sub>2</sub> und Struktur der Germaethenquelle <sup>1</sup>Bu<sub>2</sub>SiF-Cl(GeMe<sub>3</sub>)<sub>2</sub> · 2THF (N. Wiberg, H.-S. Hwang-Park, P. Mikulcik und G. Müller), 239
- Gold**
- Synthesis and characterization of neutral and cationic diamino carbene complexes of gold(I) (H.G. Raubenheimer, L. Lindeque and S. Cronje), 177
- Group 4**
- Synthesis of Group 4 metal compounds containing cyclopentadienyl ligands with a pendant alkoxy function: molecular structure of {[\eta<sup>5</sup>: \eta<sup>1</sup>-C<sub>5</sub>H<sub>4</sub>(CH<sub>2</sub>)<sub>2</sub>O]TiCl<sub>2</sub>]<sub>2</sub> and [\eta<sup>5</sup>: \eta<sup>1</sup>-C<sub>5</sub>H<sub>4</sub>(CH<sub>2</sub>)<sub>3</sub>O]TiCl<sub>2</sub> (G. Trouvé, D.A. Laske, A. Meetsma and J.H. Teuben), 255
- Heterodimetallics**
- Electron-deficient organouranium chemistry: synthesis and reactivity of monocyclopentadienyldiphenylphosphidouranium trisborohydrides [C<sub>5</sub>R<sub>4</sub>PPh<sub>2</sub>U(BH<sub>4</sub>)<sub>3</sub>] (R = H or CH<sub>3</sub>) and of their borane adducts (D. Baudry, A. Dormond, A. Hafid and C. Raillard), 37
- Hydride transfer**
- Structure and reactivity of dimeric rhodium(I) formate complexes: X-ray crystal structure of [((cod)Rh(\mu-\kappa<sup>2</sup>O,O'-HCO<sub>2</sub>))<sub>2</sub>] and phosphane-induced hydride transfer to give an \eta<sup>3</sup>-cyclooctenyl complex (R. Fornika, E. Dinjus, H. Görls and W. Leitner), 145
- Imidazolinylidene complexes**
- Synthesis and characterization of neutral and cationic diamino carbene complexes of gold(I) (H.G. Raubenheimer, L. Lindeque and S. Cronje), 177
- Indium**
- Synthesis, mass spectrometry and NMR spectroscopy studies of the (CH<sub>3</sub>)<sub>2</sub>In(C<sub>2</sub>H<sub>5</sub>) system: X-ray crystal structure of a diphosphine-bridged complex (P. Visonà, F. Benetollo, G. Rossetto, P. Zanella and P. Traldi), 59
- The mixed alkyl gallium or indium *N,N,N*-trimethylpropylenediaminedithiocarbamates. Crystal structure of diethyl(*N,N',N'*-trimethylpropylenediamine)dithiocarbamatoindium(III) (S.W. Hagata, M. Azad Malik, M. Motevalli and P. O'Brien), 199
- Intramolecular  $\pi$ -bonding**
- Complexes of lanthanoids with neutral  $\pi$  donor ligands (G.B. Deacon and Q. Shen), 1
- Iron**
- 1,3-Dipolar cycloaddition to the Fe-N=C fragment. XVI. Reactivity of Fe(alkyl-NC)<sub>3</sub>(<sup>i</sup>Pr-DAB) complexes towards aromatic isothiocyanates as dipolarophiles. Insertion of isothiocyanate into the Fe-N bond (N. Feiken, H.-W. Frühauf, K. Vrieze, N. Veldman and A.L. Spek), 281
- Acid catalysed condensation reactions of 1,3-dihydroxybenzene with new redox-active metallocene aldehydes (P.D. Beer, M.G.B. Drew, D. Heseck and S.M. Lacy), 207

- Reactions of  $\sigma$ -ferrocenylplatinum complexes with carbon monoxide and isocyanide (T. Yoshida, K. Onitsuka and K. Sonogashira), 47
- Reactions of the 'ferrole' complex  $[\text{Fe}_2(\text{CO})_6(\text{C}_2\text{Et}_2)_2]$  with Group 15 donor ligands and with alkynes. Stepwise formation and disengagement of tropones. Crystal and molecular structure of  $[\text{Fe}_2(\text{CO})_5\{(\text{CEt})_2\text{CO}(\text{CEt})_2\text{CHCPh}\}]$  (R. Giordano, E. Sappa, D. Cauzzi, G. Predieri and A. Tiripicchio), 263
- Isocyanide**
- 1,3-Dipolar cycloaddition to the Fe–N=C fragment. XVI. Reactivity of  $\text{Fe}(\text{alkyl-NC})_3(^i\text{Pr-DAB})$  complexes towards aromatic isothiocyanates as dipolarophiles. Insertion of isothiocyanate into the Fe–N bond (N. Feiken, H.-W. Frühauf, K. Vrieze, N. Veldman and A.L. Spek), 281
- Reactions of  $\sigma$ -ferrocenylplatinum complexes with carbon monoxide and isocyanide (T. Yoshida, K. Onitsuka and K. Sonogashira), 47
- Isocyanide complexes**
- Alkylation of cyanide at  $[\text{NBu}_4]\text{trans-}[\text{Re}(\text{CN})_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)_2]$ . Syntheses and properties of derived isocyanide complexes and X-ray structure of *trans*- $[\text{Re}(\text{CNEt})_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)_2][\text{PF}_6]$  (M.F.N.N. Carvalho, M.T. Duarte, A.M. Galvão and A.J.L. Pombeiro), 163
- Isothiocyanates**
- 1,3-Dipolar cycloaddition to the Fe–N=C fragment. XVI. Reactivity of  $\text{Fe}(\text{alkyl-NC})_3(^i\text{Pr-DAB})$  complexes towards aromatic isothiocyanates as dipolarophiles. Insertion of isothiocyanate into the Fe–N bond (N. Feiken, H.-W. Frühauf, K. Vrieze, N. Veldman and A.L. Spek), 281
- Lanthanoid**
- Complexes of lanthanoids with neutral  $\pi$  donor ligands (G.B. Deacon and Q. Shen), 1
- Lewis–base catalysed hydrogenation**
- Basekatalysierte Hydrierung von Methylchlortri- und -tetrasilanen mit Trialkylstannanen zu Methylchlorwasserstofftri- und -tetrasilanen (U. Herzog, E. Brendler und G. Roewer), 85
- Lithium**
- Stoichiometry of protonation of aromatic hydrocarbon radical anions by weak proton donors. A marked discrepancy between the number of protons used and those incorporated into the aromatic structure (C.G. Screttas, G.I. Ioannou and M. Micha-Screttas), 217
- Manganese**
- Organometallic selenolates. Part 2. A new synthesis of dimeric (selenolato)tetracarbonylmanganese(I) complexes. Crystal structures of  $[\text{Mn}(\text{CO})_4\text{SeR}]_2$ ; R =  $\text{CH}_2\text{Ph}$ ,  $\text{C}(\text{O})\text{Ph}$  and  $\text{CO}_2\text{Me}$  (W. Eikens, S. Jäger, P.G. Jones and C. Thöne), 67
- Reactivity of the unsaturated manganese dihydrides  $[\text{Mn}_2(\mu\text{-H})_2(\text{CO})_6(\mu\text{-L}_2)]$  ( $\text{L}_2 = \text{Ph}_2\text{PCH}_2\text{PPh}_2$  or  $(\text{EtO})_2\text{POP}(\text{OEt})_2$ ) towards small molecules (F.J. García Alonso, M. García Sanz, X.Y. Liu, A. Oliveira, M.A. Ruiz, V. Riera and C. Bois), 93
- Stable paramagnetic bis(alkynyl) manganese complexes (V.V. Krivykh, I.L. Eremenko, D. Veghini, I.A. Petrunenko, D.L. Pountney, D. Unsel and H. Berke), 111
- The reduction and oxidation of cationic carbonyl complexes of manganese with phosphoniodithioformate: X-ray crystal structure of  $[\text{Mn}(\text{CO})_4(\text{S}_2\text{CPCy}_3)]\text{ClO}_4$  (G.A. Carriedo, J.A. Pérez-Martínez, D. Miguel, V. Riera, S. García-Granda and E. Pérez-Carreño), 77
- Metalocenes**
- Acid catalysed condensation reactions of 1,3-dihydroxybenzene with new redox-active metallocene aldehydes (P.D. Beer, M.G.B. Drew, D. Heseck and S.M. Lacy), 207
- Metal–metal bonds**
- Symmetric and dissymmetric pyrazolyl-bridged rhodium dimers. Two X-ray dirhodium structures with short metal–metal interactions (C. López, J.A. Jiménez, R.M. Claramunt, M. Cano, J.V. Heras, J.A. Campo, E. Pinilla and A. Monge), 115
- 1-Methylbenzimidazole**
- Synthesis and characterization of neutral and cationic diamino carbene complexes of gold(I) (H.G. Raubenheimer, L. Lindeque and S. Cronje), 177
- 1-Methylimidazole**
- Synthesis and characterization of neutral and cationic diamino carbene complexes of gold(I) (H.G. Raubenheimer, L. Lindeque and S. Cronje), 177
- Methylrhodium(V) oxo complexes**
- Multiple bonds between main group elements and transition metals, 154 methylrhodium(V) oxo complexes: derivatives of di(4-*t*-butylpyridine)dichloromethyloxorhenium(V) (W.A. Herrmann, M.U. Rauch and P.W. Roesky), 299
- MO calculations**
- Theoretical investigations on Ziegler–Natta catalysis: models for the cocatalyst components (E. Puhakka, T.T. Pakkanen, T.A. Pakkanen and E. Iiskola), 19
- Molecular orbital calculations**
- The reduction and oxidation of cationic carbonyl complexes of manganese with phosphoniodithioformate: X-ray crystal structure of  $[\text{Mn}(\text{CO})_4(\text{S}_2\text{CPCy}_3)]\text{ClO}_4$  (G.A. Carriedo, J.A. Pérez-Martínez, D. Miguel, V. Riera, S. García-Granda and E. Pérez-Carreño), 77
- Molybdenum compounds**
- UV-vis, IR and EPR spectroelectrochemical study of the EC redox transition  $[(\text{PR}_3)_n(\text{CO})_3(\text{R}'\text{-pz})\text{M}]^{+/0}$ ; M = Mo, W; R'-pz = N-alkylpyrazinium; R = isopropyl, cyclohexyl;  $n = 1$  or 2 (F. Hilgers, W. Bruns, J. Fiedler and W. Kaim), 273
- Mössbauer spectroscopy**
- Organotin(IV) derivatives of acylpyrazol-5-ones (M.F. Mahon, K.C. Molloy, B.A. Omotowa and M.A. Mesubi), 227
- Naphthalene complexes**
- Synthesis and characterization of Eu(II) and Sm(II) complexes containing the cyclopentadienylvanadiumnaphthalene anion. Molecular structure of  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)]_2\text{Eu}(\text{THF})(\text{DME})$  and  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)\text{Eu}(\text{C}_5\text{H}_5)(\text{THF})]_n$  (I.L. Fedushkin, V.K. Nevodchikov, V.K. Cherkasov, M.N. Bochkarev, H. Schumann, F. Girgsdies, F.H. Görlitz, G. Kociok-Köhn and J. Pickardt), 157
- Neutral  $\pi$  donors**
- Complexes of lanthanoids with neutral  $\pi$  donor ligands (G.B. Deacon and Q. Shen), 1
- NMR**
- Evidences for intramolecular N  $\rightarrow$  P coordination in (8-dimethylamino-1-naphthyl)diphenylphosphane and derivatives (C. Chuit, R.J.P. Corriu, P. Monforte, C. Reyé, J.-P. Declercq and A. Dubourg), 171
- N–P coordination**
- Evidences for intramolecular N  $\rightarrow$  P coordination in (8-dimethylamino-1-naphthyl)diphenylphosphane and derivatives (C. Chuit, R.J.P. Corriu, P. Monforte, C. Reyé, J.-P. Declercq and A. Dubourg), 171
- Palladium**
- Dinuclear cyclometallated complexes of  $\text{Pd}^{\text{II}}$  with diphosphines. X-ray crystal structure of  $[1,4\text{-}[\text{Pd}\{2,4\text{-}(\text{MeO})_2\text{C}_6\text{H}_2\text{C}(\text{H})=\text{N}\}]_2\text{-C}_6\text{H}_4\{\text{Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2\text{-P,P}\}_2][\text{PF}_6]_2$  (J.M. Vila, M. Gayoso, M. López Torres, J.J. Fernández, A. Fernández, J.M. Ortigueira, N.A. Bailey and H. Adams), 129
- Palladium(0)-catalyzed phenoxycarbonylation of allylic carbonates (C. Goux, P. Lhoste, D. Sinou and A. Masdeu), 139
- Phenoxycarbonylation**
- Palladium(0)-catalyzed phenoxycarbonylation of allylic carbonates (C. Goux, P. Lhoste, D. Sinou and A. Masdeu), 139

## Phosphine complexes

Reactions of the 'ferrole' complex  $[\text{Fe}_2(\text{CO})_6(\text{C}_2\text{Et}_2)_2]$  with Group 15 donor ligands and with alkynes. Stepwise formation and disengagement of tropones. Crystal and molecular structure of  $[\text{Fe}_2(\text{CO})_5\{(\text{CEt})_2\text{CO}(\text{CEt})_2\text{CHCPh}\}]$  (R. Giordano, E. Sappa, D. Cauzzi, G. Predieri and A. Tiripicchio), 263

Synthesis, mass spectrometry and NMR spectroscopy studies of the  $(\text{CH}_3)_2\text{In}(\text{C}_2\text{H}_5)_2$  system: X-ray crystal structure of a diphosphine-bridged complex (P. Visonà, F. Benetollo, G. Rossetto, P. Zanella and P. Traldi), 59

## Phosphine ligands

Reactivity of a cationic triruthenium hydridoalkenylcarbonyl cluster complex toward nucleophilic reagents. Carbonyl substitution versus alkene elimination reactions (J.A. Cabeza, I. Del Río, A. Llamazares and V. Riera), 103

## Phosphinocyclopentadienyl complexes

Synthesis of bis(diphenylphosphinocyclopentadienyl)yttrium chloride complexes and heterodimetallic derivatives. X-ray structure of bis( $\mu$ -chloro)bis(diphenylphosphinocyclopentadienyl)yttrium(III) (R. Broussier, G. Delmas, P. Perron, B. Gautheron and J.L. Petersen), 185

## Phosphoniodithioformate complexes

The reduction and oxidation of cationic carbonyl complexes of manganese with phosphoniodithioformate: X-ray crystal structure of  $[\text{Mn}(\text{CO})_4(\text{S}_2\text{CPCy}_3)\text{ClO}_4]$  (G.A. Carriedo, J.A. Pérez-Martínez, D. Miguel, V. Riera, S. García-Granda and E. Pérez-Carreño), 77

## Platinum

Reactions of  $\sigma$ -ferrocenylplatinum complexes with carbon monoxide and isocyanide (T. Yoshida, K. Onitsuka and K. Sonogashira), 47

## Potassium

Stoichiometry of protonation of aromatic hydrocarbon radical anions by weak proton donors. A marked discrepancy between the number of protons used and those incorporated into the aromatic structure (C.G. Screttas, G.I. Ioannou and M. Micha-Screttas), 217

## Preparations

Synthesis, mass spectrometry and NMR spectroscopy studies of the  $(\text{CH}_3)_2\text{In}(\text{C}_2\text{H}_5)_2$  system: X-ray crystal structure of a diphosphine-bridged complex (P. Visonà, F. Benetollo, G. Rossetto, P. Zanella and P. Traldi), 59

## Pyrazolate complexes

Symmetric and dissymmetric pyrazolyl-bridged rhodium dimers. Two X-ray dirhodium structures with short metal-metal interactions (C. López, J.A. Jiménez, R.M. Claramunt, M. Cano, J.V. Heras, J.A. Campo, E. Pinilla and A. Monge), 115

## Pyrazolone

Organotin(IV) derivatives of acylpyrazol-5-ones (M.F. Mahon, K.C. Molloy, B.A. Omotowa and M.A. Mesubi), 227

## Radical ligands

UV-vis, IR and EPR spectroelectrochemical study of the EC redox transition  $[(\text{PR}_3)_n(\text{CO})_3(\text{R}'\text{-pz})\text{M}]^{+/\cdot}$ ; M = Mo, W; R'-pz = N-alkylpyrazinium; R = isopropyl, cyclohexyl; n = 1 or 2 (F. Hilgers, W. Bruns, J. Fiedler and W. Kaim), 273

## Reaction mechanisms

Reactions of the 'ferrole' complex  $[\text{Fe}_2(\text{CO})_6(\text{C}_2\text{Et}_2)_2]$  with Group 15 donor ligands and with alkynes. Stepwise formation and disengagement of tropones. Crystal and molecular structure of  $[\text{Fe}_2(\text{CO})_5\{(\text{CEt})_2\text{CO}(\text{CEt})_2\text{CHCPh}\}]$  (R. Giordano, E. Sappa, D. Cauzzi, G. Predieri and A. Tiripicchio), 263

## Reactions with alkynes

Reactions of the 'ferrole' complex  $[\text{Fe}_2(\text{CO})_6(\text{C}_2\text{Et}_2)_2]$  with Group 15 donor ligands and with alkynes. Stepwise formation and disengagement of tropones. Crystal and molecular structure of  $[\text{Fe}_2(\text{CO})_5\{(\text{CEt})_2\text{CO}(\text{CEt})_2\text{CHCPh}\}]$  (R. Giordano, E. Sappa, D. Cauzzi, G. Predieri and A. Tiripicchio), 263

## Reactivity

Alkylation of cyanide at  $[\text{NBu}_4]\text{trans-}[\text{Re}(\text{CN})_2(\text{Ph}_2\text{PCH}_2\text{-CH}_2\text{PPh}_2)_2]$ . Syntheses and properties of derived isocyanide complexes and X-ray structure of  $\text{trans-}[\text{Re}(\text{CNET})_2(\text{Ph}_2\text{PCH}_2\text{-CH}_2\text{PPh}_2)_2][\text{PF}_6]$  (M.F.N.N. Carvalho, M.T. Duarte, A.M. Galvão and A.J.L. Pombeiro), 163

## Rhenium

Alkylation of cyanide at  $[\text{NBu}_4]\text{trans-}[\text{Re}(\text{CN})_2(\text{Ph}_2\text{PCH}_2\text{-CH}_2\text{PPh}_2)_2]$ . Syntheses and properties of derived isocyanide complexes and X-ray structure of  $\text{trans-}[\text{Re}(\text{CNET})_2(\text{Ph}_2\text{PCH}_2\text{-CH}_2\text{PPh}_2)_2][\text{PF}_6]$  (M.F.N.N. Carvalho, M.T. Duarte, A.M. Galvão and A.J.L. Pombeiro), 163

Multiple bonds between main group elements and transition metals, 154 methylrhenium(V) oxo complexes: derivatives of di(4-t-butylpyridine)dichloromethyloxorhenium(V) (W.A. Herrmann, M.U. Rauch and P.W. Roesky), 299

## Rhodium

Symmetric and dissymmetric pyrazolyl-bridged rhodium dimers. Two X-ray dirhodium structures with short metal-metal interactions (C. López, J.A. Jiménez, R.M. Claramunt, M. Cano, J.V. Heras, J.A. Campo, E. Pinilla and A. Monge), 115

## Rhodium formate complexes

Structure and reactivity of dimeric rhodium(I) formate complexes: X-ray crystal structure of  $[\{(\text{cod})\text{Rh}(\mu\text{-}\kappa^2\text{O}'\text{-HCO}_2)\}_2]$  and phosphane-induced hydride transfer to give an  $\eta^3$ -cyclooctenyl complex (R. Fornika, E. Dinjus, H. Görls and W. Leitner), 145

## Ruthenium

Asymmetric synthesis of a chiral tetradentate ligand based on a bis(diphenylphosphinoferrrocenyl) moiety. Electrochemical behavior of free ligand and its Ru<sup>II</sup> and Cu<sup>I</sup> complexes (A. Masson-Szymczak, O. Riant, A. Graf and H.B. Kagan), 193

Reactivity of a cationic triruthenium hydridoalkenylcarbonyl cluster complex toward nucleophilic reagents. Carbonyl substitution versus alkene elimination reactions (J.A. Cabeza, I. Del Río, A. Llamazares and V. Riera), 103

## Samarium

Synthesis and characterization of Eu(II) and Sm(II) complexes containing the cyclopentadienylvanadiumnaphthalene anion. Molecular structure of  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)]_2\text{Eu}(\text{THF})(\text{DME})$  and  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)\text{Eu}(\text{C}_5\text{H}_5)(\text{THF})]_n$  (I.L. Fedushkin, V.K. Nevodchikov, V.K. Cherkasov, M.N. Bochkarev, H. Schumann, F. Girgsdies, F.H. Görlitz, G. Kociok-Köhn and J. Pickardt), 157

## Schiff base

Dinuclear cyclometallated complexes of Pd<sup>II</sup> with diphosphines. X-ray crystal structure of  $[1,4\text{-}\{\text{Pd}[2,4\text{-}(\text{MeO})_2\text{C}_6\text{H}_2\text{C}(\text{H})=\text{N}\}]_2\text{-C}_6\text{H}_4\{\text{Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2\text{-P,P}\}_2][\text{PF}_6]_2$  (J.M. Vila, M. Gayoso, M. López Torres, J.J. Fernández, A. Fernández, J.M. Ortigueira, N.A. Bailey and H. Adams), 129

## Schiff base ligands

Multiple bonds between main group elements and transition metals, 154 methylrhenium(V) oxo complexes: derivatives of di(4-t-butylpyridine)dichloromethyloxorhenium(V) (W.A. Herrmann, M.U. Rauch and P.W. Roesky), 299

## Selenolates

Organometallic selenolates. Part 2. A new synthesis of dimeric (selenolato)tetracarbonylmanganese(I) complexes. Crystal structures of  $[\text{Mn}(\text{CO})_4\text{SeR}]_2$ ; R = CH<sub>2</sub>Ph, C(O)Ph and CO<sub>2</sub>Me (W. Eikens, S. Jäger, P.G. Jones and C. Thöne), 67

## Silicon

Auf dem Wege zu einem stabilen Germaethen  $>\text{Ge}=\text{C}<:$  Sterisch überladene Digermysilylmethane  $^t\text{Bu}_2\text{SiX-CY}(\text{GeMe}_3)_2$  und Struktur der Germaethenquelle  $^t\text{Bu}_2\text{SiF-Cl}(\text{GeMe}_3)_2 \cdot 2\text{THF}$  (N. Wiberg, H.-S. Hwang-Park, P. Mikulcik und G. Müller), 239

- Basekatalysierte Hydrierung von Methylchlortri- und -tetrasilanen mit Trialkylstannanen zu Methylchlorwasserstofftri- und -tetrasilanen (U. Herzog, E. Brendler und G. Roewer), 85
- Siloxanes and silylamines with fluoromethyl-methylsilicon groups: X-ray study of  $[\text{CH}_2\text{F}(\text{CH}_3)\text{SiO}]_4$  (H. Beckers, D.J. Brauer, H. Bürger, R. Gielen and P. Moritz), 293
- Theoretical investigations on Ziegler-Natta catalysis: models for the cocatalyst components (E. Puhakka, T.T. Pakkanen, T.A. Pakkanen and E. Iiskola), 19
- Siloxanes**
- Siloxanes and silylamines with fluoromethyl-methylsilicon groups: X-ray study of  $[\text{CH}_2\text{F}(\text{CH}_3)\text{SiO}]_4$  (H. Beckers, D.J. Brauer, H. Bürger, R. Gielen and P. Moritz), 293
- Silylamides**
- Siloxanes and silylamines with fluoromethyl-methylsilicon groups: X-ray study of  $[\text{CH}_2\text{F}(\text{CH}_3)\text{SiO}]_4$  (H. Beckers, D.J. Brauer, H. Bürger, R. Gielen and P. Moritz), 293
- Single crystal structure**
- Strukturen ladungsgestörter Moleküle. 79. Dimeres Anthracenylmagnesiumbromid-Dibutylether (H. Bock, K. Ziemer und C. Näther), 29
- Sodium**
- Stoichiometry of protonation of aromatic hydrocarbon radical anions by weak proton donors. A marked discrepancy between the number of protons used and those incorporated into the aromatic structure (C.G. Screttas, G.I. Ioannou and M. Micha-Screttas), 217
- Spectroelectrochemistry**
- UV-vis, IR and EPR spectroelectrochemical study of the EC redox transition  $[(\text{PR}_3)_n(\text{CO})_3(\text{R}'\text{-pz})\text{M}]^{+/0}$ ; M = Mo, W; R'-pz = N-alkylpyrazinium; R = isopropyl, cyclohexyl; n = 1 or 2 (F. Hilgers, W. Bruns, J. Fiedler and W. Kaim), 273
- Spectroscopy**
- UV-vis, IR and EPR spectroelectrochemical study of the EC redox transition  $[(\text{PR}_3)_n(\text{CO})_3(\text{R}'\text{-pz})\text{M}]^{+/0}$ ; M = Mo, W; R'-pz = N-alkylpyrazinium; R = isopropyl, cyclohexyl; n = 1 or 2 (F. Hilgers, W. Bruns, J. Fiedler and W. Kaim), 273
- Stannane**
- Basekatalysierte Hydrierung von Methylchlortri- und -tetrasilanen mit Trialkylstannanen zu Methylchlorwasserstofftri- und -tetrasilanen (U. Herzog, E. Brendler und G. Roewer), 85
- Synthesis**
- Auf dem Wege zu einem stabilen Germaethen  $> \text{Ge}=\text{C} <$ : Sterisch überladene Digermisilylmethane  ${}^1\text{Bu}_2\text{SiX}-\text{CY}(\text{GeMe}_3)_2$  und Struktur der Germaethenquelle  ${}^1\text{Bu}_2\text{SiF}-\text{CLi}(\text{GeMe}_3)_2 \cdot 2\text{THF}$  (N. Wiberg, H.-S. Hwang-Park, P. Mikulcik und G. Müller), 239
- Synthesis of Group 4 metal compounds containing cyclopentadienyl ligands with a pendant alkoxide function: molecular structure of  $\{[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_2\text{O}]\text{TiCl}_2\}_2$  and  $[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_3\text{O}]\text{-TiCl}_2$  (G. Trouvé, D.A. Laske, A. Meetsma and J.H. Teuben), 255
- Tetradentate ligand**
- Asymmetric synthesis of a chiral tetradentate ligand based on a bis[diphenylphosphiniferrocenyl] moiety. Electrochemical behavior of free ligand and its  $\text{Ru}^{\text{II}}$  and  $\text{Cu}^{\text{I}}$  complexes (A. Masson-Szymczak, O. Riant, A. Gref and H.B. Kagan), 193
- Tetrasilanes**
- Basekatalysierte Hydrierung von Methylchlortri- und -tetrasilanen mit Trialkylstannanen zu Methylchlorwasserstofftri- und -tetrasilanen (U. Herzog, E. Brendler und G. Roewer), 85
- Thiocarbonate**
- The mixed alkyl gallium or indium *N,N,N'*-trimethylpropylenediaminedithiocarbamates. Crystal structure of diethyl(*N,N',N'*-trimethylpropylenediamine)dithiocarbamateindium(III) (S.W. Haggata, M. Azad Malik, M. Motevalli and P. O'Brien), 199
- Tin**
- Organotin(IV) derivatives of acylpyrazol-5-ones (M.F. Mahon, K.C. Molloy, B.A. Omotowa and M.A. Mesubi), 227
- Titanium**
- Synthesis of Group 4 metal compounds containing cyclopentadienyl ligands with a pendant alkoxide function: molecular structure of  $\{[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_2\text{O}]\text{TiCl}_2\}_2$  and  $[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_3\text{O}]\text{-TiCl}_2$  (G. Trouvé, D.A. Laske, A. Meetsma and J.H. Teuben), 255
- Trisilanes**
- Basekatalysierte Hydrierung von Methylchlortri- und -tetrasilanen mit Trialkylstannanen zu Methylchlorwasserstofftri- und -tetrasilanen (U. Herzog, E. Brendler und G. Roewer), 85
- Tungsten compounds**
- UV-vis, IR and EPR spectroelectrochemical study of the EC redox transition  $[(\text{PR}_3)_n(\text{CO})_3(\text{R}'\text{-pz})\text{M}]^{+/0}$ ; M = Mo, W; R'-pz = N-alkylpyrazinium; R = isopropyl, cyclohexyl; n = 1 or 2 (F. Hilgers, W. Bruns, J. Fiedler and W. Kaim), 273
- Uranium**
- Electron-deficient organouranium chemistry: synthesis and reactivity of monocyclopentadienyldiphenylphosphidouranium trisborohydrides  $[\text{C}_5\text{R}_4\text{PPh}_2\text{U}(\text{BH}_4)_3]$  (R = H or  $\text{CH}_3$ ) and of their borane adducts (D. Baudry, A. Dormond, A. Hafid and C. Raillard), 37
- Vanadium**
- Synthesis and characterization of Eu(II) and Sm(II) complexes containing the cyclopentadienylnaphthalene anion. Molecular structure of  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)]_2\text{Eu}(\text{THF})(\text{DME})$  and  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)\text{Eu}(\text{C}_5\text{H}_5)(\text{THF})]_n$  (I.L. Fedushkin, V.K. Nevodchikov, V.K. Cherkasov, M.N. Bochkarev, H. Schumann, F. Girgsdies, F.H. Görlitz, G. Kociok-Köhn and J. Pickardt), 157
- The molecular structure of cyclopentadienyl vanadium tetracarbonyl determined by gas-phase electron diffraction (M.J. Almond, E.M. Page, D.A. Rice and K. Hagen), 303
- X-ray crystal structure**
- The reduction and oxidation of cationic carbonyl complexes of manganese with phosphoniodithioformate: X-ray crystal structure of  $[\text{Mn}(\text{CO})_4(\text{S}_2\text{CPCy}_3)]\text{ClO}_4$  (G.A. Carriedo, J.A. Pérez-Martínez, D. Miguel, V. Riera, S. García-Granda and E. Pérez-Carreño), 77
- X-ray diffraction**
- Organotin(IV) derivatives of acylpyrazol-5-ones (M.F. Mahon, K.C. Molloy, B.A. Omotowa and M.A. Mesubi), 227
- Synthesis of Group 4 metal compounds containing cyclopentadienyl ligands with a pendant alkoxide function: molecular structure of  $\{[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_2\text{O}]\text{TiCl}_2\}_2$  and  $[\eta^5: \eta^1\text{-C}_5\text{H}_4(\text{CH}_2)_3\text{O}]\text{-TiCl}_2$  (G. Trouvé, D.A. Laske, A. Meetsma and J.H. Teuben), 255
- X-ray structure**
- Alkylation of cyanide at  $[\text{NBu}_4]\text{trans-}[\text{Re}(\text{CN})_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{-PPh}_2)_2]$ . Syntheses and properties of derived isocyanide complexes and X-ray structure of *trans-}[\text{Re}(\text{CNEt})\_2(\text{Ph}\_2\text{PCH}\_2\text{-CH}\_2\text{PPh}\_2)\_2][\text{PF}\_6] (M.F.N.N. Carvalho, M.T. Duarte, A.M. Galvão and A.J.L. Pombeiro), 163*
- Dinuclear cyclometallated complexes of  $\text{Pd}^{\text{II}}$  with diphosphines. X-ray crystal structure of  $[1,4\text{-}[\text{Pd}\{2,4\text{-}(\text{MeO})_2\text{C}_6\text{H}_2\text{C}(\text{H})=\text{N}\}]_2\text{-C}_6\text{H}_4(\text{Ph}_2\text{P}(\text{CH}_2)_3\text{PPh}_2\text{-P,P})_2][\text{PF}_6]_2$  (J.M. Vila, M. Gayoso, M. López Torres, J.J. Fernández, A. Fernández, J.M. Ortigueira, N.A. Bailey and H. Adams), 129
- Evidences for intramolecular N  $\rightarrow$  P coordination in (8-dimethylamino-1-naphthyl)diphenylphosphane and derivatives (C. Chuit, R.J.P. Corriu, P. Monforte, C. Reyé, J.-P. Declercq and A. Dubourg), 171
- Organometallic selenolates. Part 2. A new synthesis of dimeric (selenolato)tetracarbonylmanganese(I) complexes. Crystal struc-

- tures of  $[\text{Mn}(\text{CO})_4\text{SeR}]_2$ ;  $\text{R} = \text{CH}_2\text{Ph}$ ,  $\text{C}(\text{O})\text{Ph}$  and  $\text{CO}_2\text{Me}$  (W. Eikens, S. Jäger, P.G. Jones and C. Thöne), 67
- Reactions of the 'ferrole' complex  $[\text{Fe}_2(\text{CO})_6(\text{C}_2\text{Et}_2)_2]$  with Group 15 donor ligands and with alkynes. Stepwise formation and disengagement of tropones. Crystal and molecular structure of  $[\text{Fe}_2(\text{CO})_5\{(\text{CEt})_2\text{CO}(\text{CEt})_2\text{CHCPh}\}]$  (R. Giordano, E. Sappa, D. Cauzzi, G. Predieri and A. Tiripicchio), 263
- Reactivity of the unsaturated manganese dihydrides  $[\text{Mn}_2(\mu\text{-H})_2(\text{CO})_6(\mu\text{-L}_2)]$  ( $\text{L}_2 = \text{Ph}_2\text{PCH}_2\text{PPh}_2$  or  $(\text{EtO})_2\text{POP}(\text{OEt})_2$ ) towards small molecules (F.J. García Alonso, M. García Sanz, X.Y. Liu, A. Oliveira, M.A. Ruiz, V. Riera and C. Bois), 93
- Structure and reactivity of dimeric rhodium(I) formate complexes: X-ray crystal structure of  $[\{(\text{cod})\text{Rh}(\mu\text{-}\kappa^2\text{O},\text{O}'\text{-HCO}_2)\}_2]$  and phosphane-induced hydride transfer to give an  $\eta^3$ -cyclooctenyl complex (R. Fornika, E. Dinjus, H. Görls and W. Leitner), 145
- Symmetric and dissymmetric pyrazolyl-bridged rhodium dimers. Two X-ray dirhodium structures with short metal-metal interactions (C. López, J.A. Jiménez, R.M. Claramunt, M. Cano, J.V. Heras, J.A. Campo, E. Pinilla and A. Monge), 115
- Synthesis and characterization of Eu(II) and Sm(II) complexes containing the cyclopentadienylvanadionaphthalene anion. Molecular structure of  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)]_2\text{Eu}(\text{THF})(\text{DME})$  and  $[(\text{C}_5\text{H}_5)\text{V}(\text{C}_{10}\text{H}_8)\text{Eu}(\text{C}_5\text{H}_5)(\text{THF})]_n$  (I.L. Fedushkin, V.K. Nevodchikov, V.K. Cherkasov, M.N. Bochkarev, H. Schumann, F. Girgsdies, F.H. Görlitz, G. Kociok-Köhn and J. Pickardt), 157
- Synthesis, mass spectrometry and NMR spectroscopy studies of the  $(\text{CH}_3)_2\text{In}(\text{C}_2\text{H}_5)$  system: X-ray crystal structure of a diphosphine-bridged complex (P. Visonà, F. Benetollo, G. Rossetto, P. Zanella and P. Traldi), 59
- Synthesis of bis(diphenylphosphinocyclopentadienyl)yttrium chloride complexes and heterodimetallic derivatives. X-ray structure of bis( $\mu$ -chloro)bis(diphenylphosphinocyclopentadienyl)yttrium(III) (R. Broussier, G. Delmas, P. Perron, B. Gautheron and J.L. Petersen), 185
- X-ray structure, EPR spectroscopy
- Stable paramagnetic bis(alkynyl) manganese complexes (V.V. Krivykh, I.L. Eremenko, D. Veghini, I.A. Petrunenko, D.L. Pountney, D. Unseld and H. Berke), 111
- Yttrium**
- Synthesis of bis(diphenylphosphinocyclopentadienyl)yttrium chloride complexes and heterodimetallic derivatives. X-ray structure of bis( $\mu$ -chloro)bis(diphenylphosphinocyclopentadienyl)yttrium(III) (R. Broussier, G. Delmas, P. Perron, B. Gautheron and J.L. Petersen), 185
- Ziegler-Natta catalysis**
- Theoretical investigations on Ziegler-Natta catalysis: models for the cocatalyst components (E. Puhakka, T.T. Pakkanen, T.A. Pakkanen and E. Iiskola), 19