

## Subject Index of Volume 482

### Acetonitrile

Crystallographic disorder of carbonyl, propyl isocyanide and acetonitrile groups in the structures of  $\text{Os}_3(\text{CO})_{10}(\text{CNR})(\text{NCMe})$  (K.-L. Lu, L.-K. Liu, C.-J. Su, H.-M. Gau, Y. Wang and G.-H. Lee), 67

### Acetylene

Ruthenium(II)  $\sigma$ -acetylide complexes; monomers, dimers and polymers (C.W. Faulkner, S.L. Ingham, M.S. Khan, J. Lewis, N.J. Long and P.R. Raithby), 139

### Alkynes

1,3-Dipolar cycloaddition to the  $\text{C}=\text{X}-\text{M}$  fragment. 13. Regioselectivity in the reactions of mononuclear iminoketone complexes  $\text{Fe}(\text{CO})_3(^1\text{Bu}-\text{N}=\text{C}(\text{H})-\text{C}(\text{R})=\text{O})$  ( $\text{R} = \text{Ph}, \text{Me}$ ) with the asymmetric alkyne methyl propynoate (M. Van Wijnkoop, R. Siebenlist, J.M. Ernsting, P.P.M. De Lange, H.-W. Frühauf, E. Horn and A.L. Spek), 99

Synthesis and coordination chemistry of tellurium alkynes (H. Keller, J.C. Daran and H. Lang), 63

### Ambidentate ligands

Phosphinomethanid-Komplexe der Lanthanoide (H.H. Karsch, G. Ferazin, H. Kooijman, O. Steigelmann, A. Schier, P. Bissinger und W. Hiller), 151

### Amides

Synthesis and characterization of bridged half-sandwich amides of titanium and zirconium (W.A. Herrmann and M.J.A. Morawietz), 169

### Amine

Asymmetrische Katalyse. IV. Hydrosilylierung von Acetophenon mit Pyrrolin-2,5-dion/-modifizierten  $[\text{Rh}(\text{COD})\text{Cl}]_2$ -Katalysatoren (A. Tillack, M. Michalik, D. Fenske und H. Goemann), 85

Synthesis and structural studies of phenyl(iodo)- and methyl(phenyl)palladium(II) complexes of bidentate nitrogen donor ligands (B.A. Markies, A.J. Canty, W. De Graaf, J. Boersma, M.D. Janssen, M.P. Hogerheide, W.J.J. Smeets, A.L. Spek and G. Van Koten), 191

### $\pi$ -aromatic ligands

$\eta^5$ -Pentabenzylcyclopentadienyl derivatives of titanium (IV), (III), and (II). The crystal structures of  $(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{Bz}_5)\text{TiCl}_2$  (Bz = benzyl),  $(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{Bz}_5)\text{TiCl}$ , and  $(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{Bz}_5)\text{Ti}[\eta^2\text{-}(\text{CSiMe}_3)_2]$  (G. Schmid, U. Thewalt, M. Poláček, K. Mach and P. Sedmera), 231

### Aryl epoxide cleavage

Bismuth(III)-catalyzed oxidative cleavage of aryl epoxides: substituent effects on the kinetics of the oxidation reaction (V. Le Boisselier, E. Duñach and M. Postel), 119

### Aryl Halides

Synthesis of *trans*-arylvinyboronates via a palladium catalysed cross-coupling of a vinylboronate ester with aryl halides (S.K. Stewart and A. Whiting), 293

### Benzothiazole-2-thiolato

Bimetallic reactivity: unusual change in the coordination mode of the bridging ligands arising from an oxidative addition process (M.A. Ciriano, J.J. Pérez-Torrente, F.J. Lahoz and L.A. Oro), 53

### Bi(III) catalysis

Bismuth(III)-catalyzed oxidative cleavage of aryl epoxides: substituent effects on the kinetics of the oxidation reaction (V. Le Boisselier, E. Duñach and M. Postel), 119

### Binuclear complexes

Synthesis of diphosphine-linked binuclear metal-ring carbonyl complexes (D.A. Brown, I. El-Gamati, W.K. Glass and K. Kreddan), 301

### Biphatic medium Phosphines

Carbonylation of bromobenzene in a biphasic medium catalysed by water-soluble palladium complexes derived from tris(3-sulphophenyl)phosphine (F. Monteil and P. Kalck), 45

### Bipyridine

Synthesis and structural studies of phenyl(iodo)- and methyl(phenyl)palladium(II) complexes of bidentate nitrogen donor ligands (B.A. Markies, A.J. Canty, W. De Graaf, J. Boersma, M.D. Janssen, M.P. Hogerheide, W.J.J. Smeets, A.L. Spek and G. Van Koten), 191

### Bismuth

Bismuth(III)-catalyzed oxidative cleavage of aryl epoxides: substituent effects on the kinetics of the oxidation reaction (V. Le Boisselier, E. Duñach and M. Postel), 119

### Bond enthalpies

Photomicrocalorimetry: photosubstitution of carbonyl by phosphites in  $[\text{Mn}(\eta^5\text{-C}_5\text{H}_4\text{CH}_3)(\text{CO})_3]$  (P.B. Dias, C. Teixeira, A.R. Dias, J. De Alencar Simoni and J.A. Martinho Simões), 111

### Boronate

Synthesis of *trans*-arylvinyboronates via a palladium catalysed cross-coupling of a vinylboronate ester with aryl halides (S.K. Stewart and A. Whiting), 293

### Bridging ligands

Bimetallic reactivity: unusual change in the coordination mode of the bridging ligands arising from an oxidative addition process (M.A. Ciriano, J.J. Pérez-Torrente, F.J. Lahoz and L.A. Oro), 53

### Carbene

Kooperative Wirkung in  $\pi$ -Ligand-verbrückten Zweikernkomplexen. XIV.  $\{[\text{CpM}(\text{CO})_2\mu\text{-}(\eta^{1:1}\text{-Et}_2\text{NC}\equiv\text{CNEt}_2)]\}$  ( $\text{M} = \text{Mo}, \text{W}$ ), ein zweikerniger Bis(Fischer-Carben)-Komplex mit einem 1,2-Dimetallaverring als zentralem Baustein (J. Heck, K.-A. Kriebisch, W. Massa und S. Wocadlo), 81

### Carbon-chlorine bonds

Hydrogenolysis of carbon-chlorine bonds in carbon tetrachloride and trichlorofluoromethane in the presence of catalytic quantities of tris(triphenylphosphine) ruthenium(II) dichloride (S. Xie, E.M. Georgiev, D.M. Roundhill and K. Troev), 39

### Carbonyl

1,3-Dipolar cycloaddition to the  $\text{C}=\text{X}-\text{M}$  fragment. 13. Regioselectivity in the reactions of mononuclear iminoketone complexes  $\text{Fe}(\text{CO})_3(^1\text{Bu}-\text{N}=\text{C}(\text{H})-\text{C}(\text{R})=\text{O})$  ( $\text{R} = \text{Ph}, \text{Me}$ ) with the asymmetric alkyne methyl propynoate (M. Van Wijnkoop, R. Siebenlist, J.M. Ernsting, P.P.M. De Lange, H.-W. Frühauf, E. Horn and A.L. Spek), 99

- Crystallographic disorder of carbonyl, propyl isocyanide and acetonitrile groups in the structures of  $\text{Os}_3(\text{CO})_{10}(\text{CNR})(\text{NCMe})$  (K.-L. Lu, L.-K. Liu, C.-J. Su, H.-M. Gau, Y. Wang and G.-H. Lee), 67
- Solid state studies of some nitrosoaromatic iron carbonyls (M. Cameron, B.G. Gowenlock, R.V. Parish and G. Vasapollo), 227
- Synthesis and coordination chemistry of tellurium alkynes (H. Keller, J.C. Daran and H. Lang), 63
- Synthesis and structural characterization of  $[\text{N}(\text{PPh}_3)_2][\text{H}_2\text{Ru}_3\text{-Rh}(\text{CO})_{12}]$  (H.J. Kakkonen, M. Ahlgrèn, T.A. Pakkanen and J. Pursiainen), 279
- Synthesis of diphosphine-linked binuclear metal–ring carbonyl complexes (D.A. Brown, I. El-Gamati, W.K. Glass and K. Kreddan), 301
- Carbonylation**
- Carbonylation of bromobenzene in a biphasic medium catalysed by water-soluble palladium complexes derived from tris(3-sulphophenyl)phosphine (F. Monteil and P. Kalck), 45
- Mechanistic investigations of palladium-catalysed single and double carbonylation of aryl and vinyl halides by methyl formate (J.-F. Carpentier, Y. Castanet, A. Mortreux and F. Petit), 31
- Carbonyls**
- Coordination of the potentially tridentate ligands 2,6-diacetylpyridine-bis(anil) (dapa) and 2-(2-(2'-methylidenepyridyl)-aminoethyl)pyridine (map) in the complexes *fac*-BrMn(CO)<sub>3</sub>L, *fac*-(CO)<sub>5</sub>MM'(CO)<sub>3</sub>L (M, M' = Mn, Re; L = dapa, map) and their photoproducts. The crystal structure of BrMn(CO)<sub>2</sub>(N,N,N-dapa) (G.J. Stor, M. Van der Vis, D.J. Stufkens, A. Oskam, J. Fraanje and K. Goubitz), 15
- Carboranes**
- Synthesis and characterisation of metal complexes of ether carboranes. Molecular structures of  $d^6 \text{ML}_3$ ,  $d^8 \text{ML}_2$  and  $d^{10} \text{ML}$  complexes of mono- and di-ether C<sub>2</sub>B<sub>9</sub> carborane ligands, showing the progressive importance of secondary M...O bonding (K.F. Shaw, B.D. Reid and A.J. Welch), 207
- Carbyne**
- Hydroboration of carbon–tungsten triple bonds: crystal structures of the  $\eta^3$ -benzyl complexes  $(\eta\text{-C}_5\text{H}_5)(\text{CO})_2\text{W}(\eta^3\text{-CH}[\text{B}(\text{C}_2\text{H}_5)_2]\text{C}_6\text{H}_4\text{Me-4})$  and  $(\eta\text{-C}_5\text{Me}_5)(\text{CO})_2\text{W}(\eta^3\text{-CH}[\text{B}(\text{C}_2\text{H}_5)_2]\text{C}_6\text{H}_4\text{Me-4})$  (H. Wadehoff, G.P. Elliott, H. Pritzkow, F.G.A. Stone and A. Wolf), 243
- Catalysis**
- Asymmetrische Katalyse. IV. Hydrosilylierung von Acetophenon mit Pyrrolin-2,5-dion/-modifizierten  $[\text{Rh}(\text{COD})\text{Cl}]_2$ -Katalysatoren (A. Tillack, M. Michalik, D. Fenske und H. Goemann), 85
- Mechanistic investigations of palladium-catalysed single and double carbonylation of aryl and vinyl halides by methyl formate (J.-F. Carpentier, Y. Castanet, A. Mortreux and F. Petit), 31
- Chromium**
- Synthesis of diphosphine-linked binuclear metal–ring carbonyl complexes (D.A. Brown, I. El-Gamati, W.K. Glass and K. Kreddan), 301
- Cluster**
- Synthesis and structural characterization of  $[\text{N}(\text{PPh}_3)_2][\text{H}_2\text{Ru}_3\text{-Rh}(\text{CO})_{12}]$  (H.J. Kakkonen, M. Ahlgrèn, T.A. Pakkanen and J. Pursiainen), 279
- Cobalt**
- Synthesis and coordination chemistry of tellurium alkynes (H. Keller, J.C. Daran and H. Lang), 63
- Coupling**
- Synthesis of *trans*-arylvinylboronates via a palladium catalysed cross-coupling of a vinylboronate ester with aryl halides (S.K. Stewart and A. Whiting), 293
- Crystallography**
- Crystallographic disorder of carbonyl, propyl isocyanide and acetonitrile groups in the structures of  $\text{Os}_3(\text{CO})_{10}(\text{CNR})(\text{NCMe})$  (K.-L. Lu, L.-K. Liu, C.-J. Su, H.-M. Gau, Y. Wang and G.-H. Lee), 67
- Crystal structure**
- 1,3-Dipolar cycloaddition to the C=X–M fragment. 13. Regioselectivity in the reactions of mononuclear iminoketone complexes  $\text{Fe}(\text{CO})_3(^t\text{Bu-N}=\text{C}(\text{H})-\text{C}(\text{R})=\text{O})$  (R = Ph, Me) with the asymmetric alkyne methyl propynoate (M. Van Wijnkoop, R. Siebenlist, J.M. Ernsting, P.P.M. De Lange, H.-W. Frühauf, E. Horn and A.L. Spek), 99
- Coordination of the potentially tridentate ligands 2,6-diacetylpyridine-bis(anil) (dapa) and 2-(2-(2'-methylidenepyridyl)-aminoethyl)pyridine (map) in the complexes *fac*-BrMn(CO)<sub>3</sub>L, *fac*-(CO)<sub>5</sub>MM'(CO)<sub>3</sub>L (M, M' = Mn, Re; L = dapa, map) and their photoproducts. The crystal structure of BrMn(CO)<sub>2</sub>(N,N,N-dapa) (G.J. Stor, M. Van der Vis, D.J. Stufkens, A. Oskam, J. Fraanje and K. Goubitz), 15
- Is electrophilic substitution possible in the coordinated cyclopentadienyl ligand of early transition metal metallocene complexes? Molecular structure of binuclear nitrene niobocene complex  $[(\text{C}_5\text{H}_4\text{C}(\text{COOEt})=\text{N}-\mu\text{-N})-(\text{C}_5\text{H}_5\text{Nb})_2]$  (G.I. Nikonov, M. Putala, N.B. Kazennova, D.A. Lemenovskii, A.S. Batsanov and Yu.T. Struchkov), 187
- New arytellurium(II) diorganophosphinodithioates. Crystal structure of red (294 K) and yellow (173 K)  $[\text{PhTeS}(\text{S})\text{PPh}_2]$ , a supramolecular polymer displaying an unusual coordination pattern of the phosphinodithioato ligand (A. Silvestru, I. Haiduc, K.H. Ebert, H.J. Breunig and D.B. Sowerby), 253
- Reactions of coordinated tetrafluoroethylene with halogens. Synthesis of  $\sigma$ -bonded halotetrafluoroethyl complexes of ruthenium(II) and osmium(II) and the structure of  $\text{Os}[(\text{C}_2\text{F}_4\text{I})(\text{CO})_2(\text{PPh}_3)_2]$  (A.K. Burrell, G.R. Clark, C.E.F. Rickard, W.R. Roper and D.C. Ware), 271
- Structures of 4-tolyl 2-(triphenylstannyl)ethyl sulphone and 4-tolyl 4-(triphenylstannyl)butyl sulphone (P.J. Cox and J.L. Wardell), 221
- Synthesis and characterisation of metal complexes of ether carboranes. Molecular structures of  $d^6 \text{ML}_3$ ,  $d^8 \text{ML}_2$  and  $d^{10} \text{ML}$  complexes of mono- and di-ether C<sub>2</sub>B<sub>9</sub> carborane ligands, showing the progressive importance of secondary M...O bonding (K.F. Shaw, B.D. Reid and A.J. Welch), 207
- Synthesis and coordination chemistry of tellurium alkynes (H. Keller, J.C. Daran and H. Lang), 63
- Synthesis and structural characterization of  $[\text{N}(\text{PPh}_3)_2][\text{H}_2\text{Ru}_3\text{-Rh}(\text{CO})_{12}]$  (H.J. Kakkonen, M. Ahlgrèn, T.A. Pakkanen and J. Pursiainen), 279
- Synthesis and structural studies of phenyl(iodo)- and methyl(phenyl)palladium(II) complexes of bidentate nitrogen donor ligands (B.A. Markies, A.J. Canty, W. De Graaf, J. Boersma, M.D. Janssen, M.P. Hogerheide, W.J.J. Smeets, A.L. Spek and G. Van Koten), 191
- Synthesis and structure of silylmethylsilatranes  $\text{RR}'\text{R}''\text{SiCH}_2\text{-Si}(\text{OCH}_2\text{CH}_2)_3\text{N}$  (V. Gevorgyan, L. Borisova, A. Vjater, J. Popelis, S. Belyakov and E. Lukevics), 73
- Tetrafluoroethyl complexes of iridium(III) derived from a tetrafluoroethylene complex of iridium(I). A study of  $\alpha$ -fluoride abstraction and determination of the structure of  $\text{IrCl}_2\text{-(CF}_2\text{CF}_2\text{Cl)(CO)(PPh}_3)_2$  (A.K. Burrell, G.R. Clark, C.E.F. Rickard and W.R. Roper), 261

CS<sub>2</sub> complexes

Studies of the reactivity towards insertion and electrophilic processes of Nb–H and Nb( $\eta^2$ -CS<sub>2</sub>) moieties of bis(trimethylsilylcyclopentadienyl)niobium complexes (A. Antiñolo, F. Carrillo, M. Fajardo, S. Garcia-Yuste and A. Otero), 93

## Cycloaddition

1,3-Dipolar cycloaddition to the C=X–M fragment. 13. Regioselectivity in the reactions of mononuclear iminoketone complexes Fe(CO)<sub>3</sub>(<sup>t</sup>Bu–N=C(H)–C(R)=O) (R = Ph, Me) with the asymmetric alkyne methyl propynoate (M. Van Wijnkoop, R. Siebenlist, J.M. Ernsting, P.P.M. De Lange, H.-W. Frühauf, E. Horn and A.L. Spek), 99

## Cyclopentadienyl

$\eta^5$ -Pentabenzylcyclopentadienyl derivatives of titanium (IV), (III), and (II). The crystal structures of ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)( $\eta^5$ -C<sub>5</sub>Bz<sub>5</sub>)TiCl<sub>2</sub> (Bz = benzyl), ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)( $\eta^5$ -C<sub>5</sub>Bz<sub>5</sub>)TiCl, and ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)( $\eta^5$ -C<sub>5</sub>Bz<sub>5</sub>)Ti[ $\eta^2$ -(CSiMe<sub>3</sub>)<sub>2</sub>] (G. Schmid, U. Thewalt, M. Polášek, K. Mach and P. Sedmera), 231

Is electrophilic substitution possible in the coordinated cyclopentadienyl ligand of early transition metal metallocene complexes? Molecular structure of binuclear nitrene niobocene complex [(C<sub>5</sub>H<sub>4</sub>C(COOEt)=N- $\mu$ -N)-(C<sub>5</sub>H<sub>5</sub>)Nb]<sub>2</sub> (G.I. Nikonov, M. Putala, N.B. Kazennova, D.A. Lemenovskii, A.S. Batsanov and Yu.T. Struchkov), 187

## Cyclopentadienyl complexes

Studies of the reactivity towards insertion and electrophilic processes of Nb–H and Nb( $\eta^2$ -CS<sub>2</sub>) moieties of bis(trimethylsilylcyclopentadienyl)niobium complexes (A. Antiñolo, F. Carrillo, M. Fajardo, S. Garcia-Yuste and A. Otero), 93

## Cyclotriene

Formation of stable cationic (cyclooctadiene)Rhodium(I) complexes containing thiophene ligands (J.R. Polam and L.C. Porter), 1

## Diacetyl complex

Bimetallic reactivity: unusual change in the coordination mode of the bridging ligands arising from an oxidative addition process (M.A. Ciriano, J.J. Pérez-Torrente, F.J. Lahoz and L.A. Oro), 53

## Dihydrogen

Effects of chelate ring rigidity on intramolecular hydrogen exchange in hydrido(dihydrogen)bis(diphosphine)ruthenium(II) ions [RuH( $\eta^2$ -H<sub>2</sub>)(diphosphine)<sub>2</sub>]<sup>+</sup> (diphosphine = binap and dpbp) (M. Ogasawara and M. Saburi), 7

## Diimine

Coordination of the potentially tridentate ligands 2,6-diacetylpyridine-bis(anil) (dapa) and 2-(2-(2'-methylidenepyridyl)aminoethyl)pyridine (map) in the complexes fac-BrMn(CO)<sub>3</sub>L, fac-(CO)<sub>3</sub>MM'(CO)<sub>3</sub>L (M, M' = Mn, Re; L = dapa, map) and their photoproducts. The crystal structure of BrMn(CO)<sub>2</sub>(N,N,N-dapa) (G.J. Stor, M. Van der Vis, D.J. Stufkens, A. Oskam, J. Fraanje and K. Goubitz), 15

## Diphosphine

Effects of chelate ring rigidity on intramolecular hydrogen exchange in hydrido(dihydrogen)bis(diphosphine)ruthenium(II) ions [RuH( $\eta^2$ -H<sub>2</sub>)(diphosphine)<sub>2</sub>]<sup>+</sup> (diphosphine = binap and dpbp) (M. Ogasawara and M. Saburi), 7

Synthesis of diphosphine-linked binuclear metal–ring carbonyl complexes (D.A. Brown, I. El-Gamati, W.K. Glass and K. Kredan), 301

## Disorder

Crystallographic disorder of carbonyl, propyl isocyanide and acetonitrile groups in the structures of Os<sub>3</sub>(CO)<sub>10</sub>(CNR)(NCMe) (K.-L. Lu, L.-K. Liu, C.-J. Su, H.-M. Gau, Y. Wang and G.-H. Lee), 67

## Fluorine

Tetrafluoroethyl complexes of iridium(III) derived from a tetrafluoroethylene complex of iridium(I). A study of  $\alpha$ -fluoride abstraction and determination of the structure of IrCl<sub>2</sub>(CF<sub>2</sub>CF<sub>2</sub>Cl)(CO)(PPh<sub>3</sub>)<sub>2</sub> (A.K. Burrell, G.R. Clark, C.E.F. Rickard and W.R. Roper), 261

## Fluoroalkyl

Tetrafluoroethyl complexes of iridium(III) derived from a tetrafluoroethylene complex of iridium(I). A study of  $\alpha$ -fluoride abstraction and determination of the structure of IrCl<sub>2</sub>(CF<sub>2</sub>CF<sub>2</sub>Cl)(CO)(PPh<sub>3</sub>)<sub>2</sub> (A.K. Burrell, G.R. Clark, C.E.F. Rickard and W.R. Roper), 261

## Germanium

Cyclotrigermanes. Synthesis and thermal decomposition (T. Tsumuraya, Y. Kabe and W. Ando), 131

Synthesis and structure of silylmethylsilatranes RR'R''SiCH<sub>2</sub>-Si(OCH<sub>2</sub>CH<sub>2</sub>)<sub>3</sub>N (V. Gevorgyan, L. Borisova, A. Vjater, J. Popelis, S. Belyakov and E. Lukevics), 73

## Group 5

Is electrophilic substitution possible in the coordinated cyclopentadienyl ligand of early transition metal metallocene complexes? Molecular structure of binuclear nitrene niobocene complex [(C<sub>5</sub>H<sub>4</sub>C(COOEt)=N- $\mu$ -N)-(C<sub>5</sub>H<sub>5</sub>)Nb]<sub>2</sub> (G.I. Nikonov, M. Putala, N.B. Kazennova, D.A. Lemenovskii, A.S. Batsanov and Yu.T. Struchkov), 187

## Hammet correlation

Bismuth(III)-catalyzed oxidative cleavage of aryl epoxides: substituent effects on the kinetics of the oxidation reaction (V. Le Boisselier, E. Duñach and M. Postel), 119

## Homogeneous catalysis

Hydrogenolysis of carbon–chlorine bonds in carbon tetrachloride and trichlorofluoromethane in the presence of catalytic quantities of tris(triphenylphosphine) ruthenium(II) dichloride (S. Xie, E.M. Georgiev, D.M. Roundhill and K. Troev), 39

## Hydrazine

Lithium-bis(silyl)hydrazide, Tris(silyl)hydrazine und 1,2-Diaza-3,5-disilacyclopentane (K. Bode, C. Drost, C. Jäger, U. Klingebiel, M. Noltemeyer and Z. Zak), 285

## Hydride

Effects of chelate ring rigidity on intramolecular hydrogen exchange in hydrido(dihydrogen)bis(diphosphine)ruthenium(II) ions [RuH( $\eta^2$ -H<sub>2</sub>)(diphosphine)<sub>2</sub>]<sup>+</sup> (diphosphine = binap and dpbp) (M. Ogasawara and M. Saburi), 7

## Hydrides

Studies of the reactivity towards insertion and electrophilic processes of Nb–H and Nb( $\eta^2$ -CS<sub>2</sub>) moieties of bis(trimethylsilylcyclopentadienyl)niobium complexes (A. Antiñolo, F. Carrillo, M. Fajardo, S. Garcia-Yuste and A. Otero), 93

## Hydroboration

Hydroboration of carbon–tungsten triple bonds: crystal structures of the  $\eta^3$ -benzyl complexes ( $\eta$ -C<sub>5</sub>H<sub>5</sub>)(CO)<sub>2</sub>W( $\eta^3$ -CH-[B(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>]C<sub>6</sub>H<sub>4</sub>Me-4) and ( $\eta$ -C<sub>5</sub>Me<sub>5</sub>)(CO)<sub>2</sub>W( $\eta^3$ -CH-[B(C<sub>2</sub>H<sub>5</sub>)<sub>2</sub>]C<sub>6</sub>H<sub>4</sub>Me-4) (H. Wadeholl, G.P. Elliott, H. Pritzkow, F.G.A. Stone and A. Wolf), 243

## Hydrogen bonding

Synthesis and structure of silylmethylsilatranes RR'R''SiCH<sub>2</sub>-Si(OCH<sub>2</sub>CH<sub>2</sub>)<sub>3</sub>N (V. Gevorgyan, L. Borisova, A. Vjater, J. Popelis, S. Belyakov and E. Lukevics), 73

## Hydrogen exchange

Effects of chelate ring rigidity on intramolecular hydrogen exchange in hydrido(dihydrogen)bis(diphosphine)ruthenium(II) ions [RuH( $\eta^2$ -H<sub>2</sub>)(diphosphine)<sub>2</sub>]<sup>+</sup> (diphosphine = binap and dpbp) (M. Ogasawara and M. Saburi), 7

## Hydrogenolysis

Hydrogenolysis of carbon–chlorine bonds in carbon tetrachloride and trichlorofluoromethane in the presence of catalytic quantities of tris(triphenylphosphine) ruthenium(II) dichloride (S. Xie, E.M. Georgiev, D.M. Roundhill and K. Troev), 39

## Insertion

Studies of the reactivity towards insertion and electrophilic processes of Nb–H and Nb( $\eta^2$ -CS<sub>2</sub>) moieties of bis(trimethylsilylcyclopentadienyl)niobium complexes (A. Antiñolo, F. Carrillo, M. Fajardo, S. Garcia-Yuste and A. Otero), 93

## Iridium

Tetrafluoroethyl complexes of iridium(III) derived from a tetrafluoroethylene complex of iridium(I). A study of  $\alpha$ -fluoride abstraction and determination of the structure of IrCl<sub>2</sub>(CF<sub>2</sub>CF<sub>2</sub>Cl)(CO)(PPh<sub>3</sub>)<sub>2</sub> (A.K. Burrell, G.R. Clark, C.E.F. Rickard and W.R. Roper), 261

## Iron

1,3-Dipolar cycloaddition to the C=X–M fragment. 13. Regioselectivity in the reactions of mononuclear iminoketone complexes Fe(CO)<sub>3</sub>(<sup>t</sup>Bu–N=C(H)–C(R)=O) (R = Ph, Me) with the asymmetric alkyne methyl propynoate (M. Van Wijnkoop, R. Siebenlist, J.M. Ernsting, P.P.M. De Lange, H.-W. Frühauf, E. Horn and A.L. Spek), 99

Oligosilane mit Fe- oder Mo-Komplexsubstituenten (B. Stadelmann, P. Lassacher, H. Stüger und E. Hengge), 201

Solid state studies of some nitrosoaromatic iron carbonyls (M. Cameron, B.G. Gowenlock, R.V. Parish and G. Vasapollo), 227

Synthesis of diphosphine-linked binuclear metal–ring carbonyl complexes (D.A. Brown, I. El-Gamati, W.K. Glass and K. Kreddan), 301

## Isocyanide

Crystallographic disorder of carbonyl, propyl isocyanide and acetonitrile groups in the structures of Os<sub>3</sub>(CO)<sub>10</sub>(CNR)(NCMe) (K.-L. Lu, L.-K. Liu, C.-J. Su, H.-M. Gau, Y. Wang and G.-H. Lee), 67

## Isomerism

Lithium-bis(silyl)hydrazide, Tris(silyl)hydrazine und 1,2-Diaza-3,5-disilacyclopentane (K. Bode, C. Drost, C. Jäger, U. Klingebiel, M. Noltemeyer und Z. Zak), 285

## Ketone

Asymmetrische Katalyse. IV. Hydrosilylierung von Acetophenon mit Pyrrolin-2,5-dion/-modifizierten [Rh(COD)Cl]<sub>2</sub>-Katalysatoren (A. Tillack, M. Michalik, D. Fenske und H. Goesmann), 85

## Lanthanides

2,4-Dimethylpentadienyl complexes of neodymium, samarium and ytterbium (D. Baudry, F. Nief and L. Ricard), 125

## Lanthanoids

Phosphinomethanid-Komplexe der Lanthanoide (H.H. Karsch, G. Ferazin, H. Kooijman, O. Steigelmann, A. Schier, P. Bissinger und W. Hiller), 151

## Lanthanum

Synthesis and characterisation of metal complexes of ether carbaboranes. Molecular structures of d<sup>6</sup> ML<sub>3</sub>, d<sup>8</sup> ML<sub>2</sub> and d<sup>10</sup> ML complexes of mono- and di-ether C<sub>2</sub>B<sub>9</sub> carbaborane ligands, showing the progressive importance of secondary M...O bonding (K.F. Shaw, B.D. Reid and A.J. Welch), 207

## Linked cyclopentadienyl

Synthesis and characterization of bridged half-sandwich amides of titanium and zirconium (W.A. Herrmann and M.J.A. Morawietz), 169

## Lithium

Lithium-bis(silyl)hydrazide, Tris(silyl)hydrazine und 1,2-Diaza-3,5-disilacyclopentane (K. Bode, C. Drost, C. Jäger, U. Klingebiel, M. Noltemeyer und Z. Zak), 285

## Manganese

Coordination of the potentially tridentate ligands 2,6-diacetylpyridine-bis(anil) (dapa) and 2-(2-(2'-methylidenepyrindyl)-aminoethyl)pyridine (map) in the complexes *fac*-BrMn(CO)<sub>3</sub>L, *fac*-(CO)<sub>3</sub>MM'(CO)<sub>3</sub>L (M, M' = Mn, Re; L = dapa, map) and their photoproducts. The crystal structure of BrMn(CO)<sub>2</sub>(N,N,N-dapa) (G.J. Stor, M. Van der Vis, D.J. Stufkens, A. Oskam, J. Fraanje and K. Goubitz), 15

Photomicrocalorimetry: photosubstitution of carbonyl by phosphites in [Mn( $\eta^5$ -C<sub>5</sub>H<sub>4</sub>CH<sub>3</sub>)(CO)<sub>3</sub>] (P.B. Dias, C. Teixeira, A.R. Dias, J. De Alencar Simoni and J.A. Martinho Simões), 111

Synthesis of diphosphine-linked binuclear metal–ring carbonyl complexes (D.A. Brown, I. El-Gamati, W.K. Glass and K. Kreddan), 301

## Mechanism

Carbonylation of bromobenzene in a biphasic medium catalysed by water-soluble palladium complexes derived from tris(3-sulphophenyl)phosphine (F. Monteil and P. Kalck), 45

## Molybdenum

Kooperative Wirkung in  $\pi$ -Ligand-verbrückten Zweikernkomplexen. XIV. [(CpM(CO)<sub>2</sub>)<sub>2</sub> $\mu$ -( $\eta^{1:1}$ -Et<sub>2</sub>NC≡CNET<sub>2</sub>)] (M = Mo, W), ein zweikerniger Bis(Fischer-Carben)-Komplex mit einem 1,2-Dimetallavierring als zentralem Baustein (J. Heck, K.-A. Kriebisch, W. Massa und S. Wocadlo), 81

Oligosilane mit Fe- oder Mo-Komplexsubstituenten (B. Stadelmann, P. Lassacher, H. Stüger und E. Hengge), 201

## Mössbauer spectra

Solid state studies of some nitrosoaromatic iron carbonyls (M. Cameron, B.G. Gowenlock, R.V. Parish and G. Vasapollo), 227

## Neodymium

2,4-Dimethylpentadienyl complexes of neodymium, samarium and ytterbium (D. Baudry, F. Nief and L. Ricard), 125

## Niobium

Is electrophilic substitution possible in the coordinated cyclopentadienyl ligand of early transition metal metallocene complexes? Molecular structure of binuclear nitrene niobocene complex [(C<sub>5</sub>H<sub>4</sub>C(COOEt)=N- $\mu$ -N)-(C<sub>5</sub>H<sub>5</sub>)Nb]<sub>2</sub> (G.I. Nikonov, M. Putala, N.B. Kazennova, D.A. Lemenovskii, A.S. Batsanov and Yu.T. Struchkov), 187

Studies of the reactivity towards insertion and electrophilic processes of Nb–H and Nb( $\eta^2$ -CS<sub>2</sub>) moieties of bis(trimethylsilylcyclopentadienyl)niobium complexes (A. Antiñolo, F. Carrillo, M. Fajardo, S. Garcia-Yuste and A. Otero), 93

## Nitroso compound

Solid state studies of some nitrosoaromatic iron carbonyls (M. Cameron, B.G. Gowenlock, R.V. Parish and G. Vasapollo), 227

## Nuclear magnetic resonance

Effects of chelate ring rigidity on intramolecular hydrogen exchange in hydrido(dihydrogen)bis(diphosphine)ruthenium(II) ions [RuH( $\eta^2$ -H<sub>2</sub>)(diphosphine)<sub>2</sub>]<sup>+</sup> (diphosphine = binap and dppb) (M. Ogasawara and M. Saburi), 7

Solid state studies of some nitrosoaromatic iron carbonyls (M. Cameron, B.G. Gowenlock, R.V. Parish and G. Vasapollo), 227

## Oligosilanes

Oligosilane mit Fe- oder Mo-Komplexsubstituenten (B. Stadelmann, P. Lassacher, H. Stüger und E. Hengge), 201

## Optical resolution

Asymmetrische Katalyse. IV. Hydrosilylierung von Acetophenon mit Pyrrolin-2,5-dion/-modifizierten  $[\text{Rh}(\text{COD})\text{Cl}]_2$ -Katalysatoren (A. Tillack, M. Michalik, D. Fenske und H. Goemann), 85

## Organotin

Structures of 4-tolyl 2-(triphenylstannyl)ethyl sulphone and 4-tolyl 4-(triphenylstannyl)butyl sulphone (P.J. Cox and J.L. Wardell), 221

## Osmium

Crystallographic disorder of carbonyl, propyl isocyanide and acetonitrile groups in the structures of  $\text{Os}_3(\text{CO})_{10}(\text{CNR})(\text{NCMe})$  (K.-L. Lu, L.-K. Liu, C.-J. Su, H.-M. Gau, Y. Wang and G.-H. Lee), 67

Reactions of coordinated tetrafluoroethylene with halogens. Synthesis of  $\sigma$ -bonded halotetrafluoroethyl complexes of ruthenium(II) and osmium(II) and the structure of  $\text{Os}(\text{C}_2\text{F}_4)(\text{CO})_2(\text{PPh}_3)_2$  (A.K. Burrell, G.R. Clark, C.E.F. Rickard, W.R. Roper and D.C. Ware), 271

## Oxidation

Bismuth(III)-catalyzed oxidative cleavage of aryl epoxides: substituent effects on the kinetics of the oxidation reaction (V. Le Boisselier, E. Duñach and M. Postel), 119

## Oxidative addition

Bimetallic reactivity: unusual change in the coordination mode of the bridging ligands arising from an oxidative addition process (M.A. Ciriano, J.J. Pérez-Torrente, F.J. Lahoz and L.A. Oro), 53

Synthesis and structural studies of phenyl(iodo)- and methyl(phenyl)palladium(II) complexes of bidentate nitrogen donor ligands (B.A. Markies, A.J. Canty, W. De Graaf, J. Boersma, M.D. Janssen, M.P. Hogerheide, W.J.J. Smeets, A.L. Spek and G. Van Koten), 191

## Palladium

Carbonylation of bromobenzene in a biphasic medium catalysed by water-soluble palladium complexes derived from tris(3-sulphophenyl)phosphine (F. Monteil and P. Kalck), 45

Mechanistic investigations of palladium-catalysed single and double carbonylation of aryl and vinyl halides by methyl formate (J.-F. Carpentier, Y. Castanet, A. Mortreux and F. Petit), 31

Synthesis and structural studies of phenyl(iodo)- and methyl(phenyl)palladium(II) complexes of bidentate nitrogen donor ligands (B.A. Markies, A.J. Canty, W. De Graaf, J. Boersma, M.D. Janssen, M.P. Hogerheide, W.J.J. Smeets, A.L. Spek and G. Van Koten), 191

Synthesis of *trans*-arylvinyboronates via a palladium catalysed cross-coupling of a vinylboronate ester with aryl halides (S.K. Stewart and A. Whiting), 293

## Palladium

Synthesis and characterisation of metal complexes of ether carbaboranes. Molecular structures of  $d^6 \text{ML}_3$ ,  $d^8 \text{ML}_2$  and  $d^{10} \text{ML}$  complexes of mono- and di-ether  $\text{C}_2\text{B}_9$  carbaborane ligands, showing the progressive importance of secondary M...O bonding (K.F. Shaw, B.D. Reid and A.J. Welch), 207

## Pentadienyl

2,4-Dimethylpentadienyl complexes of neodymium, samarium and ytterbium (D. Baudry, F. Nief and L. Ricard), 125

## Phosphine

Solid state studies of some nitrosoaromatic iron carbonyls (M. Cameron, B.G. Gowenlock, R.V. Parish and G. Vasapollo), 227

## Phosphinodithioates

New aryltellurium(II) diorganophosphinodithioates. Crystal structure of red (294 K) and yellow (173 K)  $[\text{PhTeS}(\text{S})\text{PPh}_2]$ , a supramolecular polymer displaying an unusual coordination pattern of the phosphinodithioato ligand (A. Silvestru, I. Haiduc, K.H. Ebert, H.J. Breunig and D.B. Sowerby), 253

## Phosphinomethanides

Phosphinomethanid-Komplexe der Lanthanoide (H.H. Karsch, G. Ferazin, H. Kooijman, O. Steigelmann, A. Schier, P. Bissinger und W. Hiller), 151

## Phosphite

Photomicrocalorimetry: photosubstitution of carbonyl by phosphites in  $[\text{Mn}(\eta^5\text{-C}_5\text{H}_4\text{CH}_3\text{XCO})_3]$  (P.B. Dias, C. Teixeira, A.R. Dias, J. De Alencar Simoni and J.A. Martinho Simões), 111

## Photochemistry

Coordination of the potentially tridentate ligands 2,6-diacetylpyridine-bis(anil) (dapa) and 2-(2-(2'-methylidenepyridyl)aminoethyl)pyridine (map) in the complexes *fac*- $\text{BrMn}(\text{CO})_3\text{L}$ , *fac*- $(\text{CO})_5\text{MM}'(\text{CO})_3\text{L}$  (M, M' = Mn, Re; L = dapa, map) and their photoproducts. The crystal structure of  $\text{BrMn}(\text{CO})_2(\text{N,N,N-dapa})$  (G.J. Stor, M. Van der Vis, D.J. Stufkens, A. Oskam, J. Fraanje and K. Goubitz), 15

Cyclotrimeranes. Synthesis and thermal decomposition (T. Tsumuraya, Y. Kabe and W. Ando), 131

## Photomicrocalorimetry

Photomicrocalorimetry: photosubstitution of carbonyl by phosphites in  $[\text{Mn}(\eta^5\text{-C}_5\text{H}_4\text{CH}_3\text{XCO})_3]$  (P.B. Dias, C. Teixeira, A.R. Dias, J. De Alencar Simoni and J.A. Martinho Simões), 111

## Photosubstitution

Photomicrocalorimetry: photosubstitution of carbonyl by phosphites in  $[\text{Mn}(\eta^5\text{-C}_5\text{H}_4\text{CH}_3\text{XCO})_3]$  (P.B. Dias, C. Teixeira, A.R. Dias, J. De Alencar Simoni and J.A. Martinho Simões), 111

## Polymer

New aryltellurium(II) diorganophosphinodithioates. Crystal structure of red (294 K) and yellow (173 K)  $[\text{PhTeS}(\text{S})\text{PPh}_2]$ , a supramolecular polymer displaying an unusual coordination pattern of the phosphinodithioato ligand (A. Silvestru, I. Haiduc, K.H. Ebert, H.J. Breunig and D.B. Sowerby), 253

## Rhenium

Coordination of the potentially tridentate ligands 2,6-diacetylpyridine-bis(anil) (dapa) and 2-(2-(2'-methylidenepyridyl)aminoethyl)pyridine (map) in the complexes *fac*- $\text{BrMn}(\text{CO})_3\text{L}$ , *fac*- $(\text{CO})_5\text{MM}'(\text{CO})_3\text{L}$  (M, M' = Mn, Re; L = dapa, map) and their photoproducts. The crystal structure of  $\text{BrMn}(\text{CO})_2(\text{N,N,N-dapa})$  (G.J. Stor, M. Van der Vis, D.J. Stufkens, A. Oskam, J. Fraanje and K. Goubitz), 15

## Rhodium

Asymmetrische Katalyse. IV. Hydrosilylierung von Acetophenon mit Pyrrolin-2,5-dion/-modifizierten  $[\text{Rh}(\text{COD})\text{Cl}]_2$ -Katalysatoren (A. Tillack, M. Michalik, D. Fenske und H. Goemann), 85

Bimetallic reactivity: unusual change in the coordination mode of the bridging ligands arising from an oxidative addition process (M.A. Ciriano, J.J. Pérez-Torrente, F.J. Lahoz and L.A. Oro), 53

Formation of stable cationic (cyclooctadiene)Rhodium(I) complexes containing thiophene ligands (J.R. Polam and L.C. Porter), 1

Synthesis and characterisation of metal complexes of ether carbaboranes. Molecular structures of  $d^6 \text{ML}_3$ ,  $d^8 \text{ML}_2$  and  $d^{10} \text{ML}$  complexes of mono- and di-ether  $\text{C}_2\text{B}_9$  carbaborane

- ligands, showing the progressive importance of secondary M...O bonding (K.F. Shaw, B.D. Reid and A.J. Welch), 207
- Synthesis and structural characterization of  $[\text{N}(\text{PPh}_3)_2][\text{H}_2\text{Ru}_3\text{-Rh}(\text{CO})_{12}]$  (H.J. Kakkonen, M. Ahlgrèn, T.A. Pakkanen and J. Pursiainen), 279
- Ruthenium**
- Effects of chelate ring rigidity on intramolecular hydrogen exchange in hydrido(dihydrogen)bis(diphosphine)ruthenium(II) ions  $[\text{RuH}(\eta^2\text{-H}_2)(\text{diphosphine})_2]^+$  (diphosphine = binap and dpbp) (M. Ogasawara and M. Saburi), 7
- Hydrogenolysis of carbon–chlorine bonds in carbon tetrachloride and trichlorofluoromethane in the presence of catalytic quantities of tris(triphenylphosphine) ruthenium(II) dichloride (S. Xie, E.M. Georgiev, D.M. Roundhill and K. Troev), 39
- Reactions of coordinated tetrafluoroethylene with halogens. Synthesis of  $\sigma$ -bonded halotetrafluoroethyl complexes of ruthenium(II) and osmium(II) and the structure of  $\text{OsI}(\text{C}_2\text{F}_4\text{I})(\text{CO})_2(\text{PPh}_3)_2$  (A.K. Burrell, G.R. Clark, C.E.F. Rickard, W.R. Roper and D.C. Ware), 271
- Ruthenium(II)  $\sigma$ -acetylide complexes; monomers, dimers and polymers (C.W. Faulkner, S.L. Ingham, M.S. Khan, J. Lewis, N.J. Long and P.R. Raithby), 139
- Synthesis and characterisation of metal complexes of ether carboranes. Molecular structures of  $d^6$   $\text{ML}_3$ ,  $d^8$   $\text{ML}_2$  and  $d^{10}$   $\text{ML}$  complexes of mono- and di-ether  $\text{C}_2\text{B}_9$  carborane ligands, showing the progressive importance of secondary M...O bonding (K.F. Shaw, B.D. Reid and A.J. Welch), 207
- Synthesis and structural characterization of  $[\text{N}(\text{PPh}_3)_2][\text{H}_2\text{Ru}_3\text{-Rh}(\text{CO})_{12}]$  (H.J. Kakkonen, M. Ahlgrèn, T.A. Pakkanen and J. Pursiainen), 279
- Samarium**
- 2,4-Dimethylpentadienyl complexes of neodymium, samarium and ytterbium (D. Baudry, F. Nief and L. Ricard), 125
- Silacyclic compounds**
- Lithium-bis(silyl)hydrazide, Tris(silyl)hydrazine und 1,2-Diaza-3,5-disilacyclopentane (K. Bode, C. Drost, C. Jäger, U. Klingebiel, M. Noltemeyer und Z. Zak), 285
- Silane**
- Asymmetrische Katalyse. IV. Hydrosilylierung von Acetophenon mit Pyrrolin-2,5-dion/-modifizierten  $[\text{Rh}(\text{COD})\text{Cl}]_2$ -Katalysatoren (A. Tillack, M. Michalik, D. Fenske und H. Goemann), 85
- Silatrane**
- Synthesis and structure of silylmethylsilatranes  $\text{RR}'\text{R}''\text{SiCH}_2\text{-}\overset{\text{Si}}{\text{Si}}(\text{OCH}_2\text{CH}_2)_3\text{N}$  (V. Gevorgyan, L. Borisova, A. Vjater, J. Popelis, S. Belyakov and E. Lukevics), 73
- Silicon**
- Lithium-bis(silyl)hydrazide, Tris(silyl)hydrazine und 1,2-Diaza-3,5-disilacyclopentane (K. Bode, C. Drost, C. Jäger, U. Klingebiel, M. Noltemeyer und Z. Zak), 285
- Synthesis and reactions of silylcarbamates with bulky substituents (M. Mörtl, D. Knausz, Zs. Kolos, L. Szakács and B. Csákvári), 183
- Synthesis and structure of silylmethylsilatranes  $\text{RR}'\text{R}''\text{SiCH}_2\text{-}\overset{\text{Si}}{\text{Si}}(\text{OCH}_2\text{CH}_2)_3\text{N}$  (V. Gevorgyan, L. Borisova, A. Vjater, J. Popelis, S. Belyakov and E. Lukevics), 73
- Spectroscopy**
- Oligosilane mit Fe- oder Mo-Komplexsubstituenten (B. Stadelmann, P. Lassacher, H. Stüger und E. Hengge), 201
- Structure**
- $\eta^5$ -Pentabenzylcyclopentadienyl derivatives of titanium (IV), (III), and (II). The crystal structures of  $(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{Bz}_5)\text{TiCl}_2$  (Bz = benzyl),  $(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{Bz}_5)\text{TiCl}$ , and  $(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{Bz}_5)\text{Ti}[\eta^2\text{-}(\text{CSiMe}_3)_2]$  (G. Schmid, U. Thewalt, M. Polásek, K. Mach and P. Sedmera), 231
- Hydroboration of carbon–tungsten triple bonds: crystal structures of the  $\eta^3$ -benzyl complexes  $(\eta\text{-C}_5\text{H}_5)(\text{CO})_2\text{W}(\eta^3\text{-CH-}[\text{B}(\text{C}_2\text{H}_5)_2]\text{C}_6\text{H}_4\text{Me-4})$  and  $(\eta\text{-C}_5\text{Me}_5)(\text{CO})_2\text{W}(\eta^3\text{-CH-}[\text{B}(\text{C}_2\text{H}_5)_2]\text{C}_6\text{H}_4\text{Me-4})$  (H. Wadepohl, G.P. Elliott, H. Pritzkow, F.G.A. Stone and A. Wolf), 243
- Phosphinomethanid-Komplexe der Lanthanoide (H.H. Karsch, G. Ferazin, H. Kooijman, O. Steigelmann, A. Schier, P. Bissinger und W. Hiller), 151
- Substituent effects**
- Bismuth(III)-catalyzed oxidative cleavage of aryl epoxides: substituent effects on the kinetics of the oxidation reaction (V. Le Boisselier, E. Duñach and M. Postel), 119
- Supramolecular association**
- New aryltellurium(II) diorganophosphinodithioates. Crystal structure of red (294 K) and yellow (173 K)  $[\text{PhTeS}(\text{S})\text{PPh}_2]$ , a supramolecular polymer displaying an unusual coordination pattern of the phosphinodithioato ligand (A. Silvestru, I. Haiduc, K.H. Ebert, H.J. Breunig and D.B. Sowerby), 253
- Synthesis**
- Synthesis and characterization of bridged half-sandwich amides of titanium and zirconium (W.A. Herrmann and M.J.A. Morawietz), 169
- Tellurium**
- New aryltellurium(II) diorganophosphinodithioates. Crystal structure of red (294 K) and yellow (173 K)  $[\text{PhTeS}(\text{S})\text{PPh}_2]$ , a supramolecular polymer displaying an unusual coordination pattern of the phosphinodithioato ligand (A. Silvestru, I. Haiduc, K.H. Ebert, H.J. Breunig and D.B. Sowerby), 253
- Synthesis and coordination chemistry of tellurium alkynes (H. Keller, J.C. Daran and H. Lang), 63
- Tetrafluoroethylene**
- Reactions of coordinated tetrafluoroethylene with halogens. Synthesis of  $\sigma$ -bonded halotetrafluoroethyl complexes of ruthenium(II) and osmium(II) and the structure of  $\text{OsI}(\text{C}_2\text{F}_4\text{I})(\text{CO})_2(\text{PPh}_3)_2$  (A.K. Burrell, G.R. Clark, C.E.F. Rickard, W.R. Roper and D.C. Ware), 271
- Tetrazole**
- Crystal structure of triphenyl(5-mercapto-1-phenyl-1,2,3,4-tetrazolato)tin(IV) (J. Bravo, M.B. Cordero, J.S. Casas, A. Sánchez, J. Sordo, E.E. Castellano and J. Zukerman-Schpector), 147
- Thermochemistry**
- Photomicrocalorimetry: photosubstitution of carbonyl by phosphites in  $[\text{Mn}(\eta^5\text{-C}_5\text{H}_4\text{CH}_3)(\text{CO})_3]$  (P.B. Dias, C. Teixeira, A.R. Dias, J. De Alencar Simoni and J.A. Martinho Simões), 111
- Thiopenes**
- Formation of stable cationic (cyclooctadiene)Rhodium(I) complexes containing thiophene ligands (J.R. Polam and L.C. Porter), 1
- Tin**
- Crystal structure of triphenyl(5-mercapto-1-phenyl-1,2,3,4-tetrazolato)tin(IV) (J. Bravo, M.B. Cordero, J.S. Casas, A. Sánchez, J. Sordo, E.E. Castellano and J. Zukerman-Schpector), 147
- Ruthenium(II)  $\sigma$ -acetylide complexes; monomers, dimers and polymers (C.W. Faulkner, S.L. Ingham, M.S. Khan, J. Lewis, N.J. Long and P.R. Raithby), 139
- Structures of 4-tolyl 2-(triphenylstanny)ethyl sulphone and 4-tolyl 4-(triphenylstanny)butyl sulphone (P.J. Cox and J.L. Wardell), 221
- Titanium**
- $\eta^5$ -Pentabenzylcyclopentadienyl derivatives of titanium (IV), (III), and (II). The crystal structures of  $(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{Bz}_5)\text{TiCl}_2$

(Bz = benzyl),  $(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{Bz}_5)\text{TiCl}$ , and  $(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_5\text{Bz}_5)\text{Ti}[\eta^2\text{-(CSiMe}_3)_2]$  (G. Schmid, U. Thewalt, M. Poláček, K. Mach and P. Sedmera), 231

Synthesis and characterization of bridged half-sandwich amides of titanium and zirconium (W.A. Herrmann and M.J.A. Morawietz), 169

#### Tungsten

Hydroboration of carbon-tungsten triple bonds: crystal structures of the  $\eta^3$ -benzyl complexes  $(\eta\text{-C}_5\text{H}_5)(\text{CO})_2\text{W}\{\eta^3\text{-CH-[B(C}_2\text{H}_5)_2\text{]C}_6\text{H}_4\text{Me-4}\}$  and  $(\eta\text{-C}_5\text{Me}_5)(\text{CO})_2\text{W}\{\eta^3\text{-CH-[B(C}_2\text{H}_5)_2\text{]C}_6\text{H}_4\text{Me-4}\}$  (H. Wadepohl, G.P. Elliott, H. Pritzkow, F.G.A. Stone and A. Wolf), 243

Kooperative Wirkung in  $\pi$ -Ligand-verbrückten Zweikernkomplexen. XIV.  $[(\text{CpM}(\text{CO})_2)_2\mu\text{-(}\eta^{1:1}\text{-Et}_2\text{NC}\equiv\text{CNEt}_2\text{)}]$  (M = Mo, W), ein zweikerniger Bis(Fischer-Carben)-Komplex mit einem 1,2-Dimetallaverring als zentralem Baustein (J. Heck, K.-A. Kriebisch, W. Massa und S. Wocadlo), 81

#### Uranium

Synthesis and characterisation of metal complexes of ether carbaboranes. Molecular structures of  $d^6$   $\text{ML}_3$ ,  $d^8$   $\text{ML}_2$  and  $d^{10}$   $\text{ML}$  complexes of mono- and di-ether  $\text{C}_2\text{B}_9$  carbaborane ligands, showing the progressive importance of secondary M...O bonding (K.F. Shaw, B.D. Reid and A.J. Welch), 207

#### Vinyl

Synthesis of *trans*-arylvinylboronates via a palladium catalysed cross-coupling of a vinylboronate ester with aryl halides (S.K. Stewart and A. Whiting), 293

#### X-ray crystal structure

Ruthenium(II)  $\sigma$ -acetylide complexes; monomers, dimers and polymers (C.W. Faulkner, S.L. Ingham, M.S. Khan, J. Lewis, N.J. Long and P.R. Raithby), 139

#### X-ray diffraction

Kooperative Wirkung in  $\pi$ -Ligand-verbrückten Zweikernkomplexen. XIV.  $[(\text{CpM}(\text{CO})_2)_2\mu\text{-(}\eta^{1:1}\text{-Et}_2\text{NC}\equiv\text{CNEt}_2\text{)}]$  (M = Mo, W), ein zweikerniger Bis(Fischer-Carben)-Komplex mit einem 1,2-Dimetallaverring als zentralem Baustein (J. Heck, K.-A. Kriebisch, W. Massa und S. Wocadlo), 81

Structures of 4-tolyl 2-(triphenylstannyl)ethyl sulphone and 4-tolyl 4-(triphenylstannyl)butyl sulphone (P.J. Cox and J.L. Wardell), 221

#### X-ray structure

2,4-Dimethylpentadienyl complexes of neodymium, samarium and ytterbium (D. Baudry, F. Nief and L. Ricard), 125

Bimetallic reactivity: unusual change in the coordination mode of the bridging ligands arising from an oxidative addition process (M.A. Ciriano, J.J. Pérez-Torrente, F.J. Lahoz and L.A. Oro), 53

Crystal structure of triphenyl(5-mercapto-1-phenyl-1,2,3,4-tetra-zolato)tin(IV) (J. Bravo, M.B. Cordero, J.S. Casas, A. Sánchez, J. Sordo, E.E. Castellano and J. Zukerman-Schpector), 147

#### Ytterbium

2,4-Dimethylpentadienyl complexes of neodymium, samarium and ytterbium (D. Baudry, F. Nief and L. Ricard), 125

#### Zirconium

Synthesis and characterization of bridged half-sandwich amides of titanium and zirconium (W.A. Herrmann and M.J.A. Morawietz), 169