

## Subject Index of Volume 669

### Acetonitrile

Borohydride reduction of a rhenium-bound acetonitrile: an example of a chelating iminoborane ligand at a low valent metal center, 14

### Acyl complex

The first example of a structurally characterized octahedral hydrotris(pyrazolyl)borate iron methyl complex, 200

### Addition

Addition of diazoalkanes to alkyne(pentacarbonyl)–chromium and –tungsten — formation of 3*H*-pyrazole complexes, 6

### Aldol condensation

Organotransition metal modified sugars: Part 23. Synthesis of vinylcarbene chromium complexes containing a *C*-monosaccharide ligand, 1

### Alkenes

Hydroboration of alkyne-1-yl(methyl)silanes bearing functional substituents at silicon, 72

### Alkoxy ligands

Influence of alkoxy ligands on the Cp–Al bonding mode in [Cp<sub>2</sub>Al-μ-OR]<sub>2</sub> from X-ray crystallographic and <sup>27</sup>Al-NMR spectroscopic solution studies, 64

### Alkyl complex

The first example of a structurally characterized octahedral hydrotris(pyrazolyl)borate iron methyl complex, 200

### Alkyne complexes

Addition of diazoalkanes to alkyne(pentacarbonyl)–chromium and –tungsten — formation of 3*H*-pyrazole complexes, 6

### Aminato complexes

Synthesis of titanium(IV) (cyclopentadienylalkyl)aminato complexes, 101

### Amino acid

Comparative study of structure–activity relationship of di- and tri-organotin(IV) derivatives of amino acid and peptides, 109

### Amphiphilic phosphines

Hydridorhodium(I) complexes with amphiphilic polyether phosphines: NMR study and biphasic hydroformylation of 1-octene, 172

### Bicyclic ligand

Synthesis and X-ray structure of palladium dichloride complexed with THF and 2,6,7-trioxa-3,5,8-tris(trichloromethyl)-1,4-diphosphabicyclo[2.2.2]octane, 32

### Bimetallic selenido clusters

Syntheses of a series of trinuclear M<sub>3</sub>Ir<sub>2</sub> or pentanuclear M<sub>4</sub>Ir<sub>4</sub> bimetallic bis(selenido) and selenido–sulfido clusters (M = Pd, Pt, Fe, Co) from diiridium μ-bis(hydroselenido) and μ-hydro-selenido–hydrosulfido complexes [(η<sup>5</sup>-C<sub>5</sub>Me<sub>5</sub>)IrCl]<sub>2</sub>(μ-SeH)(μ-EH) (E = Se, S), 124

### Bioorganometallic chemistry

Organotransition metal modified sugars: Part 23. Synthesis of vinylcarbene chromium complexes containing a *C*-monosaccharide ligand, 1

### Biphasic hydroformylation

Hydridorhodium(I) complexes with amphiphilic polyether phosphines: NMR study and biphasic hydroformylation of 1-octene, 172

### Borohydride

Borohydride reduction of a rhenium-bound acetonitrile: an example of a chelating iminoborane ligand at a low valent metal center, 14

### *C*-Deprotonated-2-phenylpyridine complexes

Preparation and oxidation of polarized Au(III) complexes having both the *C*-deprotonated-2-phenylpyridine (ppy) and a sulfur-rich dithiolate ligand and X-ray crystal structure of [Au(η<sup>2</sup>-*C,N*-ppy)(η<sup>2</sup>-*S,S*-C<sub>8</sub>H<sub>4</sub>S<sub>8</sub>)]·0.5DMF, 141

### *C*-glycosides

Organotransition metal modified sugars: Part 23. Synthesis of vinylcarbene chromium complexes containing a *C*-monosaccharide ligand, 1

### Chelate

Synthesis, structure, and reactivity of novel iron(II) complexes with a five-membered chelate ligand κ<sup>2</sup>(*Si,N*)-SiMe<sub>2</sub>O(2-C<sub>5</sub>H<sub>4</sub>N), 189

### Chiral phosphorus ligands

Late transition metal complexes derived from diphosphazane monosulfide ligands: X-ray crystal structures of [Ru<sub>3</sub>(μ-CO)(CO)<sub>7</sub>(μ<sub>3</sub>-S){Ph<sub>2</sub>PN((*S*)-\*CHMePh)PPh<sub>2</sub>-κ<sup>2</sup>*P,P*}] and [Rh(CO)Cl{Ph<sub>2</sub>PN((*S*)-\*CHMePh)P(S)Ph<sub>2</sub>}-κ<sup>2</sup>*P,S*]}: Part 16. Organometallic chemistry of diphosphazanes, 79

### Chromium

Addition of diazoalkanes to alkyne(pentacarbonyl)–chromium and –tungsten — formation of 3*H*-pyrazole complexes, 6

### Chromium carbene complexes

Organotransition metal modified sugars: Part 23. Synthesis of vinylcarbene chromium complexes containing a *C*-monosaccharide ligand, 1

### Cluster

Anomalous reaction of an aryl silane with Co<sub>2</sub>(CO)<sub>8</sub>; characterization of Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>Si[Co(CO)<sub>4</sub>][OCCO<sub>3</sub>(CO)<sub>2</sub>], 106

### Cluster compounds

Late transition metal complexes derived from diphosphazane monosulfide ligands: X-ray crystal structures of [Ru<sub>3</sub>(μ-CO)(CO)<sub>7</sub>(μ<sub>3</sub>-S){Ph<sub>2</sub>PN((*S*)-\*CHMePh)PPh<sub>2</sub>-κ<sup>2</sup>*P,P*}] and [Rh(CO)Cl{Ph<sub>2</sub>PN((*S*)-\*CHMePh)P(S)Ph<sub>2</sub>}-κ<sup>2</sup>*P,S*]}: Part 16. Organometallic chemistry of diphosphazanes, 79

### Cobalt carbonyl

Anomalous reaction of an aryl silane with Co<sub>2</sub>(CO)<sub>8</sub>; characterization of Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>Si[Co(CO)<sub>4</sub>][OCCO<sub>3</sub>(CO)<sub>2</sub>], 106

### Conformation

Synthesis and X-ray structures of some metal carbonyl complexes containing dipyriddyformamide ligands, 182

### Coupling constant

Modelling nucleophilic substitution at silicon using solution <sup>19</sup>F-NMR chemical shift, <sup>1</sup>J<sub>Si-F</sub> and <sup>2</sup>J<sub>C-F</sub> coupling constant data of pentacoordinate silicon compounds. Correlation with other magnetic nuclei and X-ray structures, 154

### Cp–Al bond mode

Influence of alkoxy ligands on the Cp–Al bonding mode in [Cp<sub>2</sub>Al-μ-OR]<sub>2</sub> from X-ray crystallographic and <sup>27</sup>Al-NMR spectroscopic solution studies, 64

## Crystal structure

The first example of a structurally characterized octahedral hydrotris(pyrazolyl)borate iron methyl complex, 200

## Cubic

Synthesis and characterization of cyclopentadienyl thiolato complexes of magnesium, 37

## Cyclopentadienyl

Synthesis and characterization of cyclopentadienyl thiolato complexes of magnesium, 37

Synthesis of titanium(IV) (cyclopentadienylalkyl)aminato complexes, 101

Tetranuclear heterodimetallic metallamacrocycles with M–Sn(IV) (M = Mo or W) bonds. Crystal structures of  $\{p\text{-}[(\text{CO})_3\text{MoC}_5\text{H}_4\text{C}(\text{O})]_2\text{C}_6\text{H}_4\}\{(\text{Ph}_2\text{Sn})_2\text{S}\}$  and  $\{p\text{-}[(\text{CO})_3\text{MoC}_5\text{H}_4\text{C}(\text{O})]_2\text{C}_6\text{H}_4\}\{(\text{Ph}_2\text{Sn})_2\text{CH}_2\}$ , 57

## Cycloplatination

Synthesis, characterisation and study of the first luminescent platinum(II) compound with a  $[\text{C},\text{N},\text{S}]^-$  terdentate ligand. X-ray crystal structure of  $[\text{Pt}\{\text{C}_6\text{H}_4\text{-CH=N-(C}_6\text{H}_4\text{-2-SMe)}\}\text{Cl}]$ , 164

## [4+2]Diels–Alder cycloaddition

Conformationally rigid diphosphine arene–ruthenium(II) complexes as catalysts for transfer hydrogenation of ketones, 48

## Difunctional phosphorus ligand

Synthesis and X-ray structure of palladium dichloride complexed with THF and 2,6,7-trioxa-3,5,8-tris(trichloromethyl)-1,4-diphosphabicyclo[2.2.2]octane, 32

## Diiridium hydroselenido complexes

Syntheses of a series of trinuclear  $\text{MIR}_2$  or pentanuclear  $\text{MIR}_4$  bimetallic bis(selenido) and selenido–sulfido clusters (M = Pd, Pt, Fe, Co) from diiridium  $\mu$ -bis(hydroselenido) and  $\mu$ -hydroselenido–hydrosulfido complexes  $[(\eta^2\text{-C}_5\text{Me}_5)\text{IrCl}]_2(\mu\text{-SeH})(\mu\text{-EH})$  (E = Se, S), 124

## Dipyridylformamidine

Synthesis and X-ray structures of some metal carbonyl complexes containing dipyridylformamidine ligands, 182

## Dithiolate complexes

Preparation and oxidation of polarized Au(III) complexes having both the C-deprotonated-2-phenylpyridine (ppy) and a sulfur-rich dithiolate ligand and X-ray crystal structure of  $[\text{Au}(\eta^2\text{-C},\text{N-ppy})(\eta^2\text{-S},\text{S-C}_8\text{H}_4\text{S}_8)]\cdot 0.5\text{DMF}$ , 141

## Electrical conductivities

Preparation and oxidation of polarized Au(III) complexes having both the C-deprotonated-2-phenylpyridine (ppy) and a sulfur-rich dithiolate ligand and X-ray crystal structure of  $[\text{Au}(\eta^2\text{-C},\text{N-ppy})(\eta^2\text{-S},\text{S-C}_8\text{H}_4\text{S}_8)]\cdot 0.5\text{DMF}$ , 141

## Fe(II) organometallic complexes

Synthesis and reactivity of a new Fe(II) 5-(4-pyridyl)-tetrazolate complex and X-ray structure of its doubly protonated derivative., 135

## Fluorine NMR

Modelling nucleophilic substitution at silicon using solution  $^{19}\text{F}$ -NMR chemical shift,  $^1J_{\text{Si-F}}$  and  $^2J_{\text{C-F}}$  coupling constant data of pentacoordinate silicon compounds. Correlation with other magnetic nuclei and X-ray structures, 154

## Gold(III) complexes

Preparation and oxidation of polarized Au(III) complexes having both the C-deprotonated-2-phenylpyridine (ppy) and a sulfur-rich dithiolate ligand and X-ray crystal structure of  $[\text{Au}(\eta^2\text{-C},\text{N-ppy})(\eta^2\text{-S},\text{S-C}_8\text{H}_4\text{S}_8)]\cdot 0.5\text{DMF}$ , 141

## 3H-Pyrazole complex

Addition of diazoalkanes to alkyne(pentacarbonyl)–chromium and –tungsten — formation of 3H-pyrazole complexes, 6

## Hydridorhodium(I) complexes

Hydridorhodium(I) complexes with amphiphilic polyether phosphines: NMR study and biphasic hydroformylation of 1-octene, 172

## Hydroboration

Hydroboration of alkyn-1-yl(methyl)silanes bearing functional substituents at silicon, 72

## Interannular conjugation

Synthesis and reactivity of a new Fe(II) 5-(4-pyridyl)-tetrazolate complex and X-ray structure of its doubly protonated derivative., 135

## Iron complex

The first example of a structurally characterized octahedral hydrotris(pyrazolyl)borate iron methyl complex, 200

## Iron complexes

Synthesis, structure, and reactivity of novel iron(II) complexes with a five-membered chelate ligand  $\kappa^2(\text{Si},\text{N})\text{-SiMe}_2\text{O(2-C}_5\text{H}_4\text{N)}$ , 189

## Isomerisation

Hydroboration of alkyn-1-yl(methyl)silanes bearing functional substituents at silicon, 72

## Lithiation reaction

The lithiation of arylamines and the preparation of cyclopentadienyltitanium(IV) arylamine complexes, 87

## Lithio derivatives

The lithiation of arylamines and the preparation of cyclopentadienyltitanium(IV) arylamine complexes, 87

## Luminescence

Synthesis, characterisation and study of the first luminescent platinum(II) compound with a  $[\text{C},\text{N},\text{S}]^-$  terdentate ligand. X-ray crystal structure of  $[\text{Pt}\{\text{C}_6\text{H}_4\text{-CH=N-(C}_6\text{H}_4\text{-2-SMe)}\}\text{Cl}]$ , 164

## Magnesium

Synthesis and characterization of cyclopentadienyl thiolato complexes of magnesium, 37

## Magnesocene

Synthesis and characterization of cyclopentadienyl thiolato complexes of magnesium, 37

## Metal carbonyl complexes

Synthesis and X-ray structures of some metal carbonyl complexes containing dipyridylformamidine ligands, 182

## Metallamacrocycle

Tetranuclear heterodimetallic metallamacrocycles with M–Sn(IV) (M = Mo or W) bonds. Crystal structures of  $\{p\text{-}[(\text{CO})_3\text{MoC}_5\text{H}_4\text{C}(\text{O})]_2\text{C}_6\text{H}_4\}\{(\text{Ph}_2\text{Sn})_2\text{S}\}$  and  $\{p\text{-}[(\text{CO})_3\text{MoC}_5\text{H}_4\text{C}(\text{O})]_2\text{C}_6\text{H}_4\}\{(\text{Ph}_2\text{Sn})_2\text{CH}_2\}$ , 57

## Molybdenum

Tetranuclear heterodimetallic metallamacrocycles with M–Sn(IV) (M = Mo or W) bonds. Crystal structures of  $\{p\text{-}[(\text{CO})_3\text{MoC}_5\text{H}_4\text{C}(\text{O})]_2\text{C}_6\text{H}_4\}\{(\text{Ph}_2\text{Sn})_2\text{S}\}$  and  $\{p\text{-}[(\text{CO})_3\text{MoC}_5\text{H}_4\text{C}(\text{O})]_2\text{C}_6\text{H}_4\}\{(\text{Ph}_2\text{Sn})_2\text{CH}_2\}$ , 57

## Multi-nuclear NMR

Comparative study of structure–activity relationship of di- and triorganotin(IV) derivatives of amino acid and peptides, 109

## NMR

Hydroboration of alkyn-1-yl(methyl)silanes bearing functional substituents at silicon, 72

## Nucleophilic substitution

Modelling nucleophilic substitution at silicon using solution  $^{19}\text{F}$ -NMR chemical shift,  $^1J_{\text{Si-F}}$  and  $^2J_{\text{C-F}}$  coupling constant data of

- pentacoordinate silicon compounds. Correlation with other magnetic nuclei and X-ray structures, 154
- Organometallic compounds**  
Late transition metal complexes derived from diphosphazane monosulfide ligands: X-ray crystal structures of  $[\text{Ru}_3(\mu\text{-CO})(\text{CO})_7(\mu_3\text{-S})\{\text{Ph}_2\text{PN}((S)\text{-*CHMePh})\text{PPh}_2\text{-}\kappa^2\text{P},\text{P}\}]$  and  $[\text{Rh}(\text{CO})\text{Cl}\{\text{Ph}_2\text{PN}((S)\text{-*CHMePh})\text{P}(\text{S})\text{Ph}_2\}\text{-}\kappa^2\text{P},\text{S}]$ : Part 16. Organometallic chemistry of diphosphazanes, 79
- Organometallic monosaccharides**  
Organotransition metal modified sugars: Part 23. Synthesis of vinylcarbene chromium complexes containing a C-monosaccharide ligand, 1
- Organosilanes**  
Anomalous reaction of an aryl silane with  $\text{Co}_2(\text{CO})_8$ ; characterisation of  $\text{Me}_2\text{NC}_6\text{H}_4\text{Si}[\text{Co}(\text{CO})_4][\text{OCCO}_3(\text{CO})_9]_2$ , 106
- Organotin(IV)**  
Comparative study of structure–activity relationship of di- and triorganotin(IV) derivatives of amino acid and peptides, 109
- Palladium(II) chloride**  
Synthesis and X-ray structure of palladium dichloride complexed with THF and 2,6,7-trioxa-3,5,8-tris(trichloromethyl)-1,4-diphosphabicyclo[2.2.2]octane, 32
- Pentacoordinate**  
Modelling nucleophilic substitution at silicon using solution  $^{19}\text{F}$ -NMR chemical shift,  $^1J_{\text{Si-F}}$  and  $^2J_{\text{C-F}}$  coupling constant data of pentacoordinate silicon compounds. Correlation with other magnetic nuclei and X-ray structures, 154
- Peptide**  
Comparative study of structure–activity relationship of di- and triorganotin(IV) derivatives of amino acid and peptides, 109
- Phosphole**  
Conformationally rigid diphosphine arene–ruthenium(II) complexes as catalysts for transfer hydrogenation of ketones, 48
- Photochemical decarbonylation**  
The first example of a structurally characterized octahedral hydrotris(pyrazolyl)borate iron methyl complex, 200
- Photolysis**  
Synthesis, structure, and reactivity of novel iron(II) complexes with a five-membered chelate ligand  $\kappa^2(\text{Si},\text{N})\text{-SiMe}_2\text{O}(2\text{-C}_5\text{H}_4\text{N})$ , 189
- Platinum(II)**  
Synthesis, characterisation and study of the first luminescent platinum(II) compound with a  $[\text{C},\text{N},\text{S}]^-$  terdentate ligand. X-ray crystal structure of  $[\text{Pt}\{\text{C}_6\text{H}_4\text{-CH=N-(C}_6\text{H}_4\text{-2-SMe)}\}\text{Cl}]$ , 164
- P,S-donor ligands**  
Late transition metal complexes derived from diphosphazane monosulfide ligands: X-ray crystal structures of  $[\text{Ru}_3(\mu\text{-CO})(\text{CO})_7(\mu_3\text{-S})\{\text{Ph}_2\text{PN}((S)\text{-*CHMePh})\text{PPh}_2\text{-}\kappa^2\text{P},\text{P}\}]$  and  $[\text{Rh}(\text{CO})\text{Cl}\{\text{Ph}_2\text{PN}((S)\text{-*CHMePh})\text{P}(\text{S})\text{Ph}_2\}\text{-}\kappa^2\text{P},\text{S}]$ : Part 16. Organometallic chemistry of diphosphazanes, 79
- Rhenium**  
Borohydride reduction of a rhenium-bound acetonitrile: an example of a chelating iminoborane ligand at a low valent metal center, 14
- Ruthenium**  
Conformationally rigid diphosphine arene–ruthenium(II) complexes as catalysts for transfer hydrogenation of ketones, 48
- Ruthenium carbonyl clusters synthesis**  
Reproducible high-yield syntheses of  $[\text{Ru}_3(\text{CO})_{12}]$ ,  $[\text{H}_4\text{Ru}_4(\text{CO})_{12}]$ , and  $[\text{Ru}_6\text{C}(\text{CO})_{16}]^{2-}$  by a convenient two-step methodology involving controlled reduction in ethylene glycol of  $\text{RuCl}_3\cdot n\text{-H}_2\text{O}$ , 44
- Ruthenium trichloride reductive carbonylation**  
Reproducible high-yield syntheses of  $[\text{Ru}_3(\text{CO})_{12}]$ ,  $[\text{H}_4\text{Ru}_4(\text{CO})_{12}]$ , and  $[\text{Ru}_6\text{C}(\text{CO})_{16}]^{2-}$  by a convenient two-step methodology involving controlled reduction in ethylene glycol of  $\text{RuCl}_3\cdot n\text{-H}_2\text{O}$ , 44
- Secondary bonding**  
Secondary bonding in *para*-substituted diphenyltellurium dichlorides ( $p\text{-XC}_6\text{H}_4$ ) $_2\text{TeCl}_2$  (X = H, Me, MeO) probed by  $^{125}\text{Te}$  MAS NMR spectroscopy. Crystal and molecular structure of ( $p\text{-MeC}_6\text{H}_4$ ) $_2\text{TeCl}_2$ , 149
- Silanes**  
Hydroboration of alkyn-1-yl(methyl)silanes bearing functional substituents at silicon, 72
- Silicon**  
Modelling nucleophilic substitution at silicon using solution  $^{19}\text{F}$ -NMR chemical shift,  $^1J_{\text{Si-F}}$  and  $^2J_{\text{C-F}}$  coupling constant data of pentacoordinate silicon compounds. Correlation with other magnetic nuclei and X-ray structures, 154
- Silyl complexes**  
Synthesis, structure, and reactivity of novel iron(II) complexes with a five-membered chelate ligand  $\kappa^2(\text{Si},\text{N})\text{-SiMe}_2\text{O}(2\text{-C}_5\text{H}_4\text{N})$ , 189
- $^{119}\text{Sn}$ -Mössbauer  
Comparative study of structure–activity relationship of di- and triorganotin(IV) derivatives of amino acid and peptides, 109
- Structural correlation**  
Modelling nucleophilic substitution at silicon using solution  $^{19}\text{F}$ -NMR chemical shift,  $^1J_{\text{Si-F}}$  and  $^2J_{\text{C-F}}$  coupling constant data of pentacoordinate silicon compounds. Correlation with other magnetic nuclei and X-ray structures, 154
- Structure–activity relationship**  
Comparative study of structure–activity relationship of di- and triorganotin(IV) derivatives of amino acid and peptides, 109
- Tellurium**  
Secondary bonding in *para*-substituted diphenyltellurium dichlorides ( $p\text{-XC}_6\text{H}_4$ ) $_2\text{TeCl}_2$  (X = H, Me, MeO) probed by  $^{125}\text{Te}$  MAS NMR spectroscopy. Crystal and molecular structure of ( $p\text{-MeC}_6\text{H}_4$ ) $_2\text{TeCl}_2$ , 149
- $^{125}\text{Te}$  MAS NMR spectroscopy  
Secondary bonding in *para*-substituted diphenyltellurium dichlorides ( $p\text{-XC}_6\text{H}_4$ ) $_2\text{TeCl}_2$  (X = H, Me, MeO) probed by  $^{125}\text{Te}$  MAS NMR spectroscopy. Crystal and molecular structure of ( $p\text{-MeC}_6\text{H}_4$ ) $_2\text{TeCl}_2$ , 149
- Tetrazolate ligands**  
Synthesis and reactivity of a new Fe(II) 5-(4-pyridyl)-tetrazolate complex and X-ray structure of its doubly protonated derivative., 135
- Thiolato**  
Synthesis and characterization of cyclopentadienyl thiolato complexes of magnesium, 37
- Tin**  
Tetranuclear heterodimetallic metallamacrocycles with M–Sn(IV) (M = Mo or W) bonds. Crystal structures of  $\{p\text{-}[(\text{CO})_3\text{Mo-C}_5\text{H}_4\text{C}(\text{O})_2\text{C}_6\text{H}_4]\}(\text{Ph}_2\text{Sn})_2\text{S}$  and  $\{p\text{-}[(\text{CO})_3\text{MoC}_5\text{H}_4\text{C}(\text{O})_2\text{C}_6\text{H}_4]\}(\text{Ph}_2\text{Sn})_2\text{CH}_2\}$ , 57
- Titanium**  
Synthesis of titanium(IV) (cyclopentadienylalkyl)aminato complexes, 101
- Transfer hydrogenation**  
Conformationally rigid diphosphine arene–ruthenium(II) complexes as catalysts for transfer hydrogenation of ketones, 48
- Trinuclear and pentanuclear cores**  
Syntheses of a series of trinuclear  $\text{MIR}_2$  or pentanuclear  $\text{MIR}_4$  bimetallic bis(selenido) and selenido–sulfido clusters (M = Pd, Pt, Fe, Co) from diiridium  $\mu$ -bis(hydroselenido) and  $\mu$ -hydro-

- selenido–hydrosulfido complexes [ $\{(\eta^5\text{-C}_5\text{Me}_5)\text{IrCl}\}_2(\mu\text{-SeH})(\mu\text{-EH})$ ] (E = Se, S), 124
- Tris(pyrazolyl)borate  
The first example of a structurally characterized octahedral hydrotris(pyrazolyl)borate iron methyl complex, 200
- Tungsten  
Addition of diazoalkanes to alkyne(pentacarbonyl)–chromium and –tungsten — formation of 3*H*-pyrazole complexes, 6  
Tetranuclear heterodimetallic metallamacrocycles with M–Sn(IV) (M = Mo or W) bonds. Crystal structures of  $\{p\text{-}[(\text{CO})_3\text{MoC}_5\text{H}_4\text{C}(\text{O})]_2\text{C}_6\text{H}_4\}\{(\text{Ph}_2\text{Sn})_2\text{S}\}$  and  $\{p\text{-}[(\text{CO})_3\text{MoC}_5\text{H}_4\text{C}(\text{O})]_2\text{C}_6\text{H}_4\}\{(\text{Ph}_2\text{Sn})_2\text{CH}_2\}$ , 57
- Vinylphosphine  
Conformationally rigid diphosphine arene–ruthenium(II) complexes as catalysts for transfer hydrogenation of ketones, 48
- X-ray  
Hydroboration of alkyn-1-yl(methyl)silanes bearing functional substituents at silicon, 72
- X-ray crystallography  
Anomalous reaction of an aryl silane with  $\text{Co}_2(\text{CO})_8$ ; characterisation of  $\text{Me}_2\text{NC}_6\text{H}_4\text{Si}[\text{Co}(\text{CO})_4][\text{OCCo}_3(\text{CO})_9]_2$ , 106  
Influence of alkoxy ligands on the Cp–Al bonding mode in  $[\text{Cp}_2\text{Al-}\mu\text{-OR}]_2$  from X-ray crystallographic and  $^{27}\text{Al}$ -NMR spectroscopic solution studies, 64  
Secondary bonding in *para*-substituted diphenyltellurium dichlorides ( $p\text{-XC}_6\text{H}_4$ ) $_2\text{TeCl}_2$  (X = H, Me, MeO) probed by  $^{125}\text{Te}$  MAS NMR spectroscopy. Crystal and molecular structure of ( $p\text{-MeC}_6\text{H}_4$ ) $_2\text{TeCl}_2$ , 149
- X-ray crystal structures  
Preparation and oxidation of polarized Au(III) complexes having both the C-deprotonated-2-phenylpyridine (ppy) and a sulfur-rich dithiolate ligand and X-ray crystal structure of  $[\text{Au}(\eta^2\text{-C},N\text{-ppy})(\eta^2\text{-S},S\text{-C}_8\text{H}_4\text{S}_8)]\cdot 0.5\text{DMF}$ , 141
- X-ray diffractometry  
Synthesis and reactivity of a new Fe(II) 5-(4-pyridyl)-tetrazolate complex and X-ray structure of its doubly protonated derivative., 135
- X-ray structure  
Synthesis and X-ray structure of palladium dichloride complexed with THF and 2,6,7-trioxa-3,5,8-tris(trichloromethyl)-1,4-diphosphabicyclo[2.2.2]octane, 32  
Synthesis and X-ray structures of some metal carbonyl complexes containing dipyridylformamidine ligands, 182
- X-ray structure analysis  
Synthesis, structure, and reactivity of novel iron(II) complexes with a five-membered chelate ligand  $\kappa^2(\text{Si},N)\text{-SiMe}_2\text{O}(2\text{-C}_5\text{H}_4\text{N})$ , 189
- X-ray structures  
The lithiation of arylamines and the preparation of cyclopentadienyltitanium(IV) arylamine complexes, 87
- X-ray study  
Modelling nucleophilic substitution at silicon using solution  $^{19}\text{F}$ -NMR chemical shift,  $^1J_{\text{Si-F}}$  and  $^2J_{\text{C-F}}$  coupling constant data of pentacoordinate silicon compounds. Correlation with other magnetic nuclei and X-ray structures, 154