

## JOURNAL OF ORGANOMETALLIC CHEMISTRY

## CUMULATIVE SUBJECT INDEX: VOL. 326 (1987)–350 (1988)

## Aluminium

- Alkali metal- $\mu_3$ -hydridotetraethenedinickel(0) complexes, formation and properties of (K.R. Pörschke, G. Wilke), (349) 257
- Alkyl-group 13 metal compounds, interaction with crown ethers of; synthesis and structure of  $[\text{Ga}(\text{CH}_3)_3]_2[\text{dibenzo-18-crown-6}]$  and  $[\text{Al}(\text{CH}_3)_3]_2[\text{dicyclohexano-18-crown-6}]$  (G.H. Robinson, W.E. Hunter, S.G. Bott, J.L. Atwood), (326) 9
- Aluminium compounds, polymerization and copolymerization of  $\beta$ -butyrolactone by (N.C. Billingham, M.G. Proctor, J.D. Smith), (341) 83
- Aluminohydridoruthenium(II) complexes, preparation of (D.H. Lee, H. Suzuki, Y. Morooka), (330) C20
- 1,4-Bis(trimethylsilyl)-1,3-butadiene anion, trapping by double ate-complex formation with  $\text{AlR}_3$  of (W. Kaim), (339) 253
- $(\eta^5\text{-C}_5\text{H}_5)_2\text{Lu}(\mu_2\text{-H})\text{AlH}_3 \cdot \text{NEt}_3$  monomer with a monodentate alumohydride group, crystal and molecular structure of (S.Ya. Knjazhanski, B.M. Bulychev, V.K. Belsky, G.L. Soloveichik), (327) 173
- $(\eta^5\text{-C}_5\text{H}_5)_2\text{Ti}(\mu_2\text{-H})_2\text{Al}(\text{Cl})(\mu_2\text{-H})_2\text{Ti}(\eta^5\text{-C}_5\text{H}_5)_2$ , catalyst-presursor for hydrogenation in the  $[(\eta^5\text{-C}_5\text{H}_5)_2\text{TiCl}]_2 \cdot \text{LiAlH}_4$  system, molecular structure and physico-chemical properties of (A.I. Sizov, I.V. Molodnitskaya, B.M. Bulychev, E.V. Evdokimova, G.L. Soloveichik, A.I. Gusev, E.B. Chuklanova, V.I. Andrianov), (335) 323
- Cyclopentadienyltitanium chlorides and organoaluminium chlorides, effects of methyl substituents at the  $\text{C}_5\text{H}_5$  ligand on properties of (K. Mach, V. Varga, H. Antropiusová, J. Poláček), (333) 205
- Di- $\eta^5$ -cyclopentadienyl(diethylalane)- $\mu$ -chloro titanium(III), EPR spectra of reaction products with  $\text{C}_1$  compounds of (S.K. Tyrlík, A. Korda, L. Poppe, A. Rockenbauer, M. Györ), (336) 343
- Dicyclopentadienyl-yttrium and -aluminium hydrido-chloride complexes; crystal and molecular structures of  $[(\eta^5\text{-C}_5\text{H}_5)_2\text{Y}(\mu_2\text{-Cl})(\mu_3\text{-H})\text{Y}(\eta^5\text{-C}_5\text{H}_5)_2](\mu_2\text{-H})_2\text{AlH} \cdot \text{NEt}_3 \cdot \text{C}_6\text{H}_6$  (A.B. Erofeev, B.M. Bulychev, V.K. Bel'skii, G.L. Soloveichik), (335) 189
- Dihalogeno(organylthio)alane, preparation and properties of (G.G. Hoffmann), (335) 143
- "Ethylaluminium diethoxide", a mixture of four compounds (R. Benn, E. Janssen, H. Lehmkuhl, A. Ruffinska), (333) 181
- Exchange reactions in coordination sphere of Al atom; crystal and molecular structure of  $[(\eta^5\text{-C}_5\text{H}_5)_2\text{Ti}(\mu_2\text{-H})_2]_2\text{Al}(\eta^2\text{-H}_2\text{BH}_2)$  (A.I. Sizov, I.V. Molodnitskaya, B.M. Bulychev, G.L. Soloveichik, V.K. Bel'skii), (344) 185
- Group 3 organic compounds, possibility of complex formation with molecular oxygen of (Yu.A. Alexandrov, N.N. Vyshinskii, V.N. Kokorev, V.A. Alferov, N.V. Chikina, G.I. Makin), (332) 259
- Monoalkylaminomethylation of organometals ( $\text{M} = \text{Al}, \text{Mg}, \text{Zn}$ ) with *N*-alkyl-*N*-trimethylsilylalkoxymethylamines (G. Courtois, L. Miginiac), (340) 127
- Organoaluminium compounds,  $^{27}\text{Al}$  NMR spectroscopic characterisation of (R. Benn, E. Janssen, H. Lehmkuhl, A. Ruffinska), (333) 155
- N*-Organyl-*N*-methylsilylamidodialkylaluminium, preparation and properties of (G. Sonnek, M. Päch, H. Bredereck, L. Oswald), (329) 31
- Polycyclic alumina-, lithia-, magnesia-, and sodia-silazanes with intra- and inter-molecular bonds (M. Veith, W. Frank, F. Töllner, H. Lange), (326) 315
- Titanium and aluminium bimetallic hydride complexes, crystal and molecular structures of  $(\eta^5\text{-C}_5\text{H}_5)_2\text{Ti}(\mu_2\text{-H})_2\text{Al}(\text{CH}_3)(\mu_2\text{-H})_2\text{Ti}(\eta^5\text{-C}_5\text{H}_5)_2$  and  $[(\eta^5\text{-C}_5\text{H}_5)_2\text{Ti}(\mu_2\text{-H})_2\text{Al}(\mu_2\text{-H})(\eta^1\text{-}\eta^5\text{-C}_5\text{H}_4)\text{Ti}(\eta^5\text{-C}_5\text{H}_5)(\mu_2\text{-H})]_2 \cdot \text{C}_6\text{H}_6$  (A.I. Sizov, I.V. Molodnitskaya, B.M. Bulychev, E.V. Evdokimova, V.K. Bel'skii, G.L. Soloveichik), (344) 293
- Titanocene chloro(ethyl)aluminates, influence on

- properties by methyl-substituted cyclopentadienyl ligands in (K. Mach, V. Varga), (347) 85
- Trialkylaluminium coordination complexes with dialkylaluminium alkoxides (R. Benn, E. Janssen, H. Lehmkuhl, A. Rufinska), (333) 169
- Triethylaluminium,  $^{27}\text{Al}$  NMR determination of monomer proportion in solution of (Z. Černý, S. Heřmánek, J. Fusek, O. Kříž, B. Čáseňský), (345) 1
- Trimethylaluminium in reaction with a macrocyclic tetradentate tertiary amine; synthesis and molecular structures of  $[\text{Al}(\text{CH}_3)_3]_4[\text{N-tetramethylcyclam}]$  (G.H. Robinson, H. Zhang, J.L. Atwood), (331) 153
- Ziegler-type systems, activation of C-C bonds in alkanes and cycloalkanes by (M.E. Vol'pin, I.S. Akhrem, S.V. Reznichenko, V.V. Grushin), (334) 109

## Antimony

- $\eta^3$ -Allylbis(ligand)nickel(II) tetrafluoroborates, catalysis for stereospecific butadiene polymerisation (R. Taube, J.-P. Gehrke), (328) 393
- Bis(bis(trimethylstannyl)distibane,  $(\text{Me}_3\text{Sn})_2\text{-Sb-Sb}(\text{SnMe}_3)_2$ , preparation and crystal structure of (S. Roller, M. Dräger, H.J. Breunig, M. Ates, S. Gülec), (329) 319
- trans*- $\text{Br}(\text{CO})_2\text{L}_2\text{WCNEt}_2$  ( $\text{L}_2 = 2,2'$ -bipyridyl-1,10-phenanthroline), structure of the reaction product with  $[(\text{CO})_5\text{MEPh}_2]^-$  ( $\text{M} = \text{Cr}, \text{Mo}, \text{W}; \text{E} = \text{P}, \text{As}, \text{Sb}$ ) (A.C. Filippou, E.O. Fischer, H.G. Alt, U. Thewalt), (326) 59
- $[\text{C}_5\text{H}_5\text{Fe}(\text{CO})\text{L}(\text{EMe}_2)]^+$  ( $\text{E} = \text{S}, \text{Se}, \text{Te}$ ), synthesis and reactivity of (N. Kuhn, H. Schumann, E. Zauder), (327) 17
- Cyclopentadienylantimony halides, syntheses and  $^{121}\text{Sb}$  Mössbauer spectroscopy of (T.F. Berlitz, J. Pebler, J. Lorberth), (348) 175
- Di-*t*-butylcyclopentadienyl-group 15 compounds, synthesis, structure and fluxional behaviour of (S.T. Abu-Orabi, P. Jutzi), (347) 307
- Diphenyltrimethylsilyl-amine, -phosphine, -arsine, and -stibine, UV photoelectron spectroscopy of (G. Distefano, L. Zanathy, L. Szepes, H.J. Breunig), (338) 181
- Dodecamethyl-2,3,5,6,7,8-hexasila-diarsa-, -distiba- and -dibismutha-bicyclo[2.2.2]octane, formation and identification of (K. Hassler, S. Seidl), (347) 27
- Indium-arsenic and gallium-antimony six-membered rings, conformations of (A.H. Cowley, R.A. Jones, K.B. Kidd, C.M. Nunn, D.L.

- Westmoreland), (341) C1
- $\mu$ -Oxobis[chlorotriphenylantimony(V)] benzene solvate (1/2), crystal and molecular structure of (E.R.T. Tiekink), (333) 199
- $\mu$ -Oxobis(triorgano-antimony- and -bismuth-sulphonates), preparation of; crystal structure of  $\{[(\text{CH}_3)_3\text{SbOH}_2]_2\text{O}\}(\text{O}_3\text{SC}_6\text{H}_5)_2$  (R. Rütther, F. Huber, H. Preut), (342) 185
- Phenyl- and benzyl-group 14 element complexes, hyperconjugation in (A.N. Egorochkin, G.A. Razuvaev, M.A. Lopatin), (344) 49
- Phenylchloroantimonates(III), preparations and crystal structures of  $\text{Me}_4\text{N}[\text{PhSbCl}_3]$ ,  $[\text{Hpy}]_2\text{-}[\text{PhSbCl}_4]$ , and  $\text{Me}_4\text{N}[\text{Ph}_2\text{SbCl}_2]$  (M. Hall, D.B. Sowerby), (347) 59
- 2-Phenyl-1,3-dithia-2-stibolane, synthesis and structure of (H.M. Hoffmann, M. Dräger), (329) 51
- Stibinidene complexes, oxidative addition of thioles to (A. Lombard, G. Huttner, K. Evertz), (350) 243
- Tricarbonyl(trichlorostibine)nickel(0),  $\text{Ni}(\text{CO})_3\text{-SbCl}_3$ , force constant calculations for (H.G.M. Edwards, V. Fawcett, B.M.Y. Ip), (347) 391
- Tris(trifluoromethyl)antimony,  $\text{Sb}(\text{CF}_3)_3$ , synthesis and NMR spectra of (D. Naumann, W. Tyrra, F. Leifeld), (333) 193
- Tris(2,4,6-trimethylphenyl)hydroxyantimony carboxylates, synthesis of; crystal structure of tris(2,4,6-trimethylphenyl)hydroxyantimony 1-adamantylcarboxylate (T. Westhoff, F. Huber, H. Preut), (348) 185

## Arsenic

- Arsinodithiadiimido eight-membered heterocycle, *t*-BuAs(NSN) $_2$ As-*t*-Bu, carbonylmetal complexes of (M. Herberhold, K. Schamel), (346) 13
- trans*- $\text{Br}(\text{CO})_2\text{L}_2\text{WCNEt}_2$  ( $\text{L}_2 = 2,2'$ -bipyridyl-1,10-phenanthroline), structure of the reaction product with  $[(\text{CO})_5\text{MEPh}_2]^-$  ( $\text{M} = \text{Cr}, \text{Mo}, \text{W}; \text{E} = \text{P}, \text{As}, \text{Sb}$ ) (A.C. Filippou, E.O. Fischer, H.G. Alt, U. Thewalt), (326) 59
- $[\text{C}_5\text{H}_5\text{Fe}(\text{CO})\text{L}(\text{EMe}_2)]^+$  ( $\text{E} = \text{S}, \text{Se}, \text{Te}$ ), synthesis and reactivity of (N. Kuhn, H. Schumann, E. Zauder), (327) 17
- Di-*t*-butylcyclopentadienyl-group 15 compounds, synthesis, structure and fluxional behaviour of (S.T. Abu-Orabi, P. Jutzi), (347) 307
- Dimethylarsino-bridged triosmium clusters, synthesis of; X-ray crystal structures of  $[\text{Os}_3\text{H}(\text{CO})_{11}(\mu\text{-AsMe}_2)]$  and  $[\text{Os}_3(\mu\text{-H})_2(\text{CO})_6(\mu\text{-AsMe}_2)_2]$  (K. Guldner, B.F.G. Johnson, J. Lewis, S.M. Owen, P.R. Raithby), (341) C45

- Diphenyltrimethylsilyl-amine, -phosphine, -arsine, and -stibine, UV photoelectron spectroscopy of (G. Distefano, L. Zanathy, L. Szepes, H.J. Breunig), (338) 181
- Dodecacarbonyl-triruthenium and -triosmium group 15 ligand-substituted derivatives; X-ray structures of undeca-, deca- and nona-carbonyl complexes derived from (M.I. Bruce, M.J. Liddell, C.A. Hughes, B.W. Skelton, A.H. White, and in part J.M. Patrick, O. bin Shawkataly), (347) 157, 181, 207
- Dodecamethyl-2,3,5,6,7,8-hexasila-diarsa-, distiba- and -dibismutha-bicyclo[2.2.2]octane, formation and identification of (K. Hassler, S. Seidl), (347) 27
- Indium-arsenic and gallium-antimony six-membered rings, conformations of (A.H. Cowley, R.A. Jones, K.B. Kidd, C.M. Nunn, D.L. Westmoreland), (341) C1
- Octacarbonyl[bis(diphenylarsenido)]dirhenium,  $\text{Re}_2(\text{CO})_8[\mu\text{-As}(\text{C}_6\text{H}_5)_2]_2$ , synthesis and molecular structure of (A.-J. DiMaio, S.J. Geib, A.L. Rheingold), (335) 97
- Organobis(thiophenolato)bismuth(III) complexes, synthesis, spectroscopic characterisation and microbiological effects of (T. Klapötke), (331) 299
- Pentacarbonylchromiumdihydro(phenyl)arsenic,  $\text{Cr}(\text{CO})_5\text{As}(\text{C}_6\text{H}_5)\text{H}_2$ , insertion of alkenes and alkynes into As-H bonds of (L.-R. Frank, I. Jibril, L. Zsolnai, G. Huttner), (336) 337
- Pentamethylcyclopentadienyl- and tributylphenyl-substituted diphosphenes and phospharsenes, synthesis of (P. Jutzi, U. Meyer), (326) C6
- Pentamethylcyclopentadienyl-substituted diphosphenes and phospharsenes (P. Jutzi, U. Meyer), (333) C18
- Phenyl- and benzyl-group 14 element complexes, hyperconjugation in (A.N. Egorochkin, G.A. Razuvaev, M.A. Lopatin), (344) 49
- Phosphanes and arsanes, reactions with diselenium complexes of (L.-R. Frank, K. Evertz, L. Zsolnai, G. Huttner), (335) 179
- Tetrakis[(diiodoarsino)methyl]methane, hydrolysis and oxidative hydrolysis of; crystal structure of an arsonous acid-organoarsenic oxide (J. Ellermann, L. Brehm, E. Köck, E. Lindner, W. Hiller, R. Fawzi), (336) 323
- Trimethylsilyl terminal enynes, synthesis via silylated arsonium ylide of (Y. Shen, W. Liao), (346) 181
- Triphenylarsine derivatives of cyclopentadienyl-carbonylmolybdenum compounds, formation of (J.A. Clark, M. Kilner), (347) 107

## Beryllium

- Hydridotrialkylboronates as reagents for preparation of beryllium halides (N.A. Bell, G.E. Coates, J.A. Heslop), (329) 287

## Bismuth

- Bi-Co heteronuclear carbonyl bonds,  $[\text{Bi}(\text{Co}(\text{CO})_4)_4]^-$  synthesis and X-ray structure of its  $\text{NMe}_4$  salt (S. Martinengo, A. Fumagalli, G. Ciani, M. Moret), (347) 413
- Dodecamethyl-2,3,5,6,7,8-hexasila-diarsa-, -distiba- and -dibismutha-bicyclo[2.2.2]octane, formation and identification of (K. Hassler, S. Seidl), (347) 27
- Mixed clusters of bismuth with osmium and ruthenium, preparation and characterisation of; crystal and molecular structures of  $\text{Os}_3(\mu\text{-H})_3(\text{CO})_9(\mu_3\text{-Bi})$ ,  $\text{Os}_4(\text{CO})_{12}(\mu_4\text{-Bi})_2$ ,  $\text{Ru}_3(\mu\text{-H})_3(\text{CO})_9(\mu_3\text{-Bi})$ , and  $\text{Ru}_4(\text{CO})_{12}(\mu_4\text{-Bi})_2$  (H.G. Ang, C.M. Hay, B.F.G. Johnson, J. Lewis, P.R. Raithby, A.J. Whittton), (330) C5
- Organobis(thiophenolato)bismuth(III) complexes, synthesis, spectroscopic characterisation and microbiological effects of (T. Klapötke), (331) 299
- Organo-molybdenum and -tungsten complexes containing bismuth, synthesis of (W. Clegg, N.A. Compton, R.J. Errington, N.C. Norman), (335) C1
- $\mu$ -Oxobis(triorgano-antimony- and -bismuth-sulphonates), preparation of; crystal structure of  $\{[(\text{CH}_3)_3\text{SbOH}_2]_2\text{O}\}(\text{O}_3\text{SC}_6\text{H}_5)_2$  (R. Rütger, F. Huber, H. Preut), (342) 185
- Tris(perfluoroorgano)bismuth compounds,  $\text{Bi}(\text{R}_1)_3$  ( $\text{R}_1 = \text{CF}_3$ ,  $\text{C}_2\text{F}_5$ ,  $n\text{-C}_3\text{F}_7$ ,  $n\text{-C}_4\text{H}_9$ ,  $n\text{-C}_6\text{F}_{13}$ ,  $n\text{-C}_8\text{F}_{17}$ ,  $\text{C}_6\text{F}_5$ ) (D. Naumann, W. Tyrra), (334) 323

## Boron

- $\beta$ -Binaphthyl-silane, -stannane and -borane asymmetric complexes, synthesis of (U.-M. Gross, M. Bartels, D. Kaufmann), (344) 277
- ( $\eta^5$ -Borole)-chromium, -tungsten and -molybdenum complexes, synthesis via borole ammonia adducts of; crystal and molecular structure of tetracarbonyl[ $\eta^5$ -(1-phenylborole)]-chromium and -molybdenum (G.E. Herberich, B. Hessner, M. Negele, J.A.K. Howard), (336) 29
- ( $\eta^5$ -Borole)( $\eta^4$ -1,5-cyclooctadiene)-nickel, -palladium and -platinum complexes, preparation and reactions of (G.E. Herberich, M. Negele), (350) 81

- Boron: boranes in organic synthesis, annual survey covering the year 1985 (G.W. Kabalka) (337) 169
- $(\eta^5\text{-C}_5\text{H}_5\text{Co})_2(\mu\text{-PPh}_2)\text{B}_2\text{H}_5$ , preparation and characterisation of; evidence for multicentre cluster bonding (J. Feilong, T.P. Fehlner, A.L. Rheingold), (348) C22
- Cluster compounds with cylindrical topologies, theoretical analysis of (L. Zhenyang, D.M.P. Mingos), (339) 367
- trans*-[CpWMe(CHO)(CO)<sub>2</sub>]<sup>-</sup> and *trans*-[Cp-WH(COMe)(CO)<sub>2</sub>]<sup>-</sup>, formation from Cp-WMe(CO)<sub>3</sub> and LiEt<sub>3</sub>BH of (J.T. Gauntlett, B.E. Mann, M.J. Winter, S. Woodward), (342) C5
- Dibenzobicyclic phenylboronates, synthesis and structures of (N. Farfán, P. Joseph-Nathan, L.M. Chiquete, R. Contreras), (348) 149
- 1,3-Dibora- and 1,3-borasilaindanes, synthesis by thermolysis of arylhalogenoboranes of (W. Schacht, D. Kaufmann), (331) 139
- Di-*s*-butylaminophenylboranes, determination of activation parameters for restricted rotation about the B-N bond using <sup>13</sup>C NMR in (C. Brown, R.H. Cragg, T.J. Miller, D. O'N Smith), (342) 153
- 1,3-Di-*t*-butyl-2,4-dimethyl-1,3-diaza-2,4-diborolidine, synthesis and investigations of G. Schmid, D. Vehreschild-Yzermann, R. Boese), (326) 307
- Dichloro(diisopropylamino)boranes, borylation of benzene and naphthalene by dehalogenation products of (A. Meller, D. Bromm, W. Maringgele, D. Böhler, G. Elter), (347) 11
- Dihydrobenzoboretos, synthesis of (W. Schacht, D. Kaufman), (339) 33
- 1-(Diisopropylamino)borole as ligand in transition metal complexes; crystal and molecular structures of *cis*-Cr(CO)<sub>2</sub>(C<sub>4</sub>H<sub>4</sub>BNPr<sub>2</sub>)<sub>2</sub> and Mn(CO)(C<sub>4</sub>H<sub>4</sub>BNPr<sub>2</sub>)<sub>2</sub> (G.E. Herberich, B. Hessner, H. Ohst, I.A. Raap), (348) 305
- Dimethylaminotrimethylborane, crystal structure of (K. Ouzounis, H. Riffel, H. Hess), (332) 253
- cis*-Dimethyl(chloro)stannyldiethylborylalkene, exchange reactions with organyltrimethylstannanes of (S. Kersch, B. Wrackmeyer) (338) 195
- Fluoroorganylboranes, convenient method of synthesis of (G. Bir, W. Schacht, D. Kaufmann), (340) 267
- Group 3 organic compounds, possibility of complex formation with molecular oxygen of (Yu.A. Alexandrov, N.N. Vyshinskii, V.N. Kokorev, V.A. Alferov, N.V. Chikina, G.I. Makin), (332) 259
- Hydridotrialkylboronates as reagents for preparation of beryllium halides (N.A. Bell, G.E. Coates, J.A. Heslop), (329) 287
- 2-Hydroxy-2-(dimethylaminomethyl)-1,1,4,4-tetramethyl-1,4-diazonia-2,5-diboratacyclohexane, chemistry of (M.J. Magera, N.E. Miller), (339) 231
- Lithiation of 2-methylbenzoxazol, organometallic derivatives containing a tridentate ligand (S. Kersch, B. Wrackmeyer), (332) 25
- Low-valent cobalt reagent from CoCl<sub>2</sub> and NaBH<sub>4</sub>/C<sub>2</sub>H<sub>5</sub>OH in the presence of CO, reactions of (N. Satyanarayana, M. Periasamy), (333) C33
- (4*R-trans*)-2-(1-Methylethenyl)-1,3,2-dioxaborolane-4,5-dicarboxylic acid bis-ethyl ester, asymmetric aldol reactions by use of (G.P. Boldrini, L. Lodi, E. Tagliavini, C. Trombini, A. Umani-Ronchi), (336) 23
- Monocyclopentadienyl- and hydrido-uranium(IV) complexes,  $(\eta\text{-C}_5\text{H}_5)\text{U}(\text{CH}_3)_3$  and  $(\text{CH}_3\text{OCH}_2\text{CH}_2\text{OCH}_3)\text{U}(\text{BH}_4)_3\text{H}$ , synthesis of (D. Baudry, M. Ephritikhine), (349) 123
- Organoaluminium compounds, <sup>27</sup>Al NMR spectroscopic characterisation of (R. Benn, E. Janssen, H. Lehmkuhl, A. Rufínska), (333) 155
- Organoboranes derived from  $\alpha$ -amino acid and borinic or boronic esters, optical purity of (H.C. Brown, A.K. Gupta), (341) 73
- Organo-silicon or -boron halides, kinetically and thermodynamically controlled interaction with acylphosphine-lithium salts of (I.F. Lutsenko, V.L. Foss, Yu.A. Veits, E.G. Neganova, A.A. Borisenko), (333) C45
- Palladium(0)-catalysed carbonylation of alkenyl and aryl-borates and boronic acids with CO (T. Ohe, K. Ohe, S. Uemura, N. Sugita), (344) C5
- Palladium-catalyzed allylic alkylation of carbonylnucleophiles with allylic borates or allylic alcohols and boron oxide under neutral conditions (X. Lu, X. Jiang, X. Tao), (344) 109
- Per-coordinated boron- or phosphorus-containing compounds, structure and acidity of (L. Lamandé, D. Boyer, A. Munoz), (329) 1
- Phenyl- and benzyl-group 14 element complexes, hyperconjugation in (A.N. Egorochkin, G.A. Razuvaev, M.A. Lopatin), (344) 49
- Phosphinegold(I) derivatives of metal-rich metal-laborane HFe<sub>4</sub>(CO)<sub>12</sub>BH<sub>2</sub>, phosphine exchange involving cation and cluster-bound phosphine ligands (K.S. Harpp, C.E. Housecroft), (340) 389
- Platinum complex catalysed carbonylative cross-coupling of alkyl iodides with sodium tetraphenylborate; synthesis of alkyl phenyl

- ketones (T. Kondo, Y. Tsuji, Y. Watanabe), (345) 397
- (RP)Fe<sub>3</sub>(CO)<sub>9</sub>(R'CCR'') clusters, EHT model calculations for isomerisation processes of (G. Huttner, K. Knoll, T. Fässler, H. Berke), (340) 223
- Ru<sub>3</sub>(CO)<sub>9</sub>BH<sub>5</sub>, preparation of a case of isomerisation involving *endo*-hydrogen migration (A.K. Chipperfield, C.E. Housecroft) (349) C17
- Tetraazaborol-2-ines, access to (F. Truchet, B. Carboni, M. Vaultier, R. Carrié), (327) 1
- 1,1,4,4-Tetramethyl-1,4-diazonia-2,5-diborata-cyclohexane, chemistry of (N.E. Miller, D.L. Reznicek), (349) 11
- N,N,N',N'*-Tetramethylethylenediamine adducts of monosubstituted boranes, preparation of (B. Györi, I. Lázár, J. Emri), (344) 29
- To tilt or not to tilt? The dilemma of  $\mu$ -C<sub>3</sub>R<sub>3</sub> ligands in binuclear complexes (E.D. Jemmis, B.V. Prasad), (347) 401
- Transition metal mediated homologation of BH<sub>3</sub>·THF: synthesis and crystal structure of [WH<sub>3</sub>(PMe<sub>3</sub>)<sub>3</sub>B<sub>3</sub>H<sub>8</sub>] (P.D. Grevenik, J.B. Leach, M.L.H. Green, N.M. Walker), (345) C31
- (Trifluoromethyl)dialkylaminoboranes, reactions with HF, HCl, HBr of; X-ray structure of (CF<sub>3</sub>)<sub>2</sub>B(X)NHMe<sub>2</sub> (X = F, OH) (D.J. Brauer, H. Bürger, G. Pawelke, W. Weuter, J. Wilke), (329) 293
- Tris(pyrazolyl)boratotin(II) compounds, synthesis and structures of (A.H. Cowley, R.L. Geerts, C.M. Nunn, C.J. Carrano), (341) C27

## Cadmium

- Bis[2-(dimethylamino)methyl]phenylcadmium(II), crystal and molecular structure of (O.F.Z. Khan, D.M. Frigo, P. O'Brien, A. Howes, M.B. Hursthouse), (334) C27
- Cadmium-metal-mediated allylation of carbonyl compounds (S. Araki, H. Ito, Y. Butsugan), (347) 5
- Tris(trifluoromethyl)antimony, Sb(CF<sub>3</sub>)<sub>3</sub>, synthesis and NMR spectra of (D. Naumann, W. Tyrre, F. Leifeld), (333) 193
- Zinc, cadmium and mercury alkyls and amides, bond structures in; thermolysis of Zn-C, M-N (M = Zn, Cd, Hg) bonds (I.E. Gümrükcüoğlu, J. Jeffery, M.F. Lappert, J.B. Pedley, A.K. Rai), (341) 53

## Calcium

- Organocalcium halides, preparation by cocondensation of calcium vapour with solvents (K. Mochida, T. Yamanishi), (332) 247

## Chromium

- Alkene-carbene complexes of tungsten, chromium and rhenium containing a six-membered ring, synthesis and structure of (C. Alvarez-Toledano, A. Parlier, M. Rudler, J.C. Daran, C. Knobler, Y. Jeannin), (328) 357
- Alkoxy(triphenylsilyl)carbene complexes, (CO)<sub>5</sub>-MC(OR)SiPh<sub>3</sub> (M = Cr, Mo, W), thermal fragmentation pattern of (U. Schubert, H. Hörnig), (336) 307
- Aminocarbenechromium complexes containing C=C coordinated bonds, reactivity towards alkynes of; formation of azabicyclo[4.1.0]heptene systems (A. Parlier, H. Rudler, R. Yefsah), (328) C21
- ( $\eta^6$ -Anisole)( $\eta^2$ -benzene)dicarbonylchromium(0), intermediate on photochemical carbonyl substitution of ( $\eta^6$ -anisole)tricarbonylchromium(0) in benzene (S. Oishi), (335) 207
- Arenecarbonylcoalt clusters with functional substituents in a side chain (V.S. Kaganovich, M.I. Rybinskaya), (344) 383
- Arene-chromium and -iron complexes, transannular substituent effects in (V.V. Litvak, P.P. Kun, V.D. Shteingarts), (348) 219
- (Arene)tricarbonylchromium(0) complexes, preparation, structure and reactions of; crystal structure of tricarbonyl[(8,9,11,12,13,14- $\eta$ -methyl-1,2,3,4-tetrahydronaphthalene]chromium(0) (R.C. Cambie, G.R. Clark, S.R. Gallagher, P.S. Rutledge, M.J. Stone, P.D. Woodgate), (342) 315
- Arenetricarbonylchromium complexes, reactions with Grignard reagent, *n*-BuMgBr, of (S. Top, G. Jaouen), (336) 143
- Arenetricarbonylchromium complexes, stereoselective synthesis of; benzylic oxygen directing effects for 1-tetralol derivatives (S.G. Davies, C.L. Goodfellow), (340) 195
- Aryldiisocyanide-chromium, -molybdenum and -tungsten zero-valent polymers, synthesis and characterization of (I. Feinstein-Jaffe, S.E. Maisuls), (350) 57
- $\eta^6$ -Arylphosphinemolybdenum(0) electron rich complexes as ligands in group 6 carbonylmetal complexes (R.L. Luck, R.H. Morris), (347) 349
- $\eta^6$ -Benzenetricarbonylchromium analogues of chalcones, preparation of (J. Federič, Š. Toma, B. Gautheron), (338) 211

- (Benzophenone)tricarbonylchromium and (benzophenone)bis(tricarbonylchromium), electrochemical reductive alkylation of (B. Gautheron, C. Degrand, M. Bikrani), (329) 349
- Bimetallic biphenylene biscarbene complexes, synthesis, X-ray crystal structure and reactivity towards nucleophilic reagents of (N. Hoa Tran Huy, P. Lefloch, F. Robert, Y. Jeannin), (327) 211
- Binuclear dihalogenide cyclopentadienyl-*t*-butylate chromium(III) complexes, synthesis and molecular structure of (S.E. Nefedov, A.A. Pasyonskii, I.L. Eremenko, B. Orazsakhov, O.G. Ellert, V.M. Novotortsev, S.B. Katser, A.S. Antyshkina, M.A. Porai-Koshits), (345) 97
- 2,2'-Bipyridine and 4,4'-diphenyl-2,2'-bipyridine and their  $M(CO)_4$  complexes, electrochemical reduction of (D. Miholová, B. Gaš, S. Záliš, J. Klima, A.A. Vlček), (330) 75
- Bis(arene)chromium complexes, electrochemical oxidation and ionisation potentials of (L.P. Yur'eva, S.M. Peregodova, D.N. Kravtsov, A.Yu. Vasil'kov, L.M. Nekrasov, N.L. Asfandiarov, M.M. Timoshenko, Yu.V. Chizhov), (336) 371
- 1,3-Bis(diphenylphosphino)propanedecarbonyldi-chromium, -molybdenum and -tungsten singly bridging complexes, synthesis and decomposition of (T.S.A. Hor), (340) 51
- 1,2-Bis(*di-p*-tolylphosphino)ethane-group 6 metal carbonyls, preparation and vibrational spectra of (P.N. Kapoor, P. Mercykutty), (339) 97
- Bis{ $\eta^6$ -*anti*-[2<sub>2</sub>]metacyclopentane}chromium(0), preparation and <sup>1</sup>H and <sup>13</sup>C NMR spectra of (C. Elschenbroich, J. Schneider, H. Meltinghoff), (333) 37
- $\eta^6, \eta^6$ -Bis(tricarbonylchromium)fluorene and the corresponding carbanion, <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy of (A. Ceccon, A. Gambaro, A. Venzo, V. Lucchini, T.E. Bitterwolf, J. Shade), (349) 315
- Bis(triphenylphosphine)iminium(tetracarbonylnitrosylchromium), synthesis, characterisation and reactivity of (D.R. Mantell, W.L. Gladfelter), (347) 333
- ( $\eta^5$ -Borole)-chromium, -tungsten and -molybdenum complexes, synthesis via borole ammonia adducts of; crystal and molecular structure of tetracarbonyl [ $\eta^5$ -(1-phenylborole)]-chromium and -molybdenum (G.E. Herberich, B. Hessner, M. Negele, J.A.K. Howard), (336) 29
- trans*-Br(CO)<sub>2</sub>L<sub>2</sub>WCNEt<sub>2</sub> (L<sub>2</sub> = 2,2'-bipyridyl-1,10-phenanthroline), structure of the reaction product with [(CO)<sub>5</sub>MEPh<sub>2</sub>]<sup>-</sup> (M = Cr, Mo, W; E = P, As, Sb) (A.C. Filippou, E.O. Fischer, H.G. Alt, U. Thewalt), (326) 59
- Carbenechromium complexes, solvent, chelation and concentration effects on benzannulation reaction with acetylenes of (K.S. Chan, G.A. Peterson, T.A. Brandvold, K.L. Faron, C.A. Challener, C. Hyldahl, W.D. Wulff), (334) 9
- Carbenometal chelates, stable reactive intermediates in cycloaddition reactions (K.H. Dötz, M. Popall, G. Müller), (334) 57
- Chalcocarbonylchromium complexes, arene displacement by tertiary phosphorus ligands in (A.A. Ismail, I.S. Butler), (346) 185
- Chromium, molybdenum and tungsten organometallic polymeric networks with aryldiisocyanide ligands (I. Feinstein-Jaffe, S.E. Maisuls), (326) C97
- Chromium, tungsten and iron isocyanide complexes, addition reactions to heteroallenes of (E. Bär, W.P. Fehlhammer, W. Weigand, W. Beck), (347) 101
- (C<sub>5</sub>Me<sub>5</sub>)<sub>2</sub>Mo<sub>2</sub>P<sub>x</sub>S<sub>y</sub> complexes ( $x = 2, 4$ ;  $y = 5 - x$ ), P/S ligands in (H. Brunner, U. Klement, W. Meier, J. Wachter, O. Serhadle, M.L. Ziegler), (335) 339
- Cocyclisation of bimetallic bis-carbene complexes, synthesis of bis-naphthol and bis-indene derivatives (N. Hoa Tran Huy, P. Lefloch), (344) 303
- "Cr-H" species, reductive defluorination of perfluoropropylene trimer and perfluoro- $\Delta^9$ (10)-octalin by (Y.-Z. Huang, J.-Q. Zhou), (348) 235
- (C<sub>5</sub>R<sub>5</sub>)<sub>2</sub>M<sub>2</sub>(CO)<sub>4</sub> (R = H, Me; M = Cr, Mo, W), reactivity of the M≡M bonds towards condensed chalcogenide vapours of (K. Endrich, E. Guggolz, O. Serhadle, M.L. Ziegler, R.P. Korswagen), (349) 323
- Crystalline inorganic and organometallic complexes, estimation of standard enthalpies of formation of (A.R. Dias, J.A. Martinho Simões, C. Teixeira, C. Airoidi, A.P. Chagas), (335) 71
- C=S-functionalised compounds, coordination chemistry of; dithioesters as  $\eta^1$ ,  $\eta^2$ , and  $\eta^3$  ligands in transition metal complexes of (W.A. Schenk, D. Rüb, C. Burschka), (328) 287
- C=S-functionalised compounds, reactions and  $\eta^1$ -,  $\eta^2$ -, and  $\eta^3$ -dithioester complexes of (W.A. Schenk, D. Rüb, C. Burschka), (328) 305
- Cyclobutabenzenetricarbonylchromium(0) derivatives, preparation and characterisation of (H.G. Wey, H. Butenschön), (350) C8
- Cycloheptatriene(dicarbonyl){ethoxy(aryl)carbene}-molybdenum and -chromium and bicy-

- cloheptadiene(tricarbonyl)[ethoxy(aryl)carbene]molybdenum complexes, synthesis, spectra and structure of (J. Chen, J. Yin, G. Lei, W. Xu, M. Shao, Z. Zhang, Y. Tang), (329) 69
- ( $\eta^5$ -Cyclopentadienyl)dicarbonylnitrosylchromium,  $^1\text{H}$  and  $^{13}\text{C}$  NMR study of carbonium ion stabilisation by (M.D. Rausch, D.J. Kowalski, E.A. Mintz), (342) 201
- Diamagnetic heterometallic clusters with a  $\text{CrCo}_2$  butterfly frame,  $(\text{RC}_5\text{H}_4)_2\text{Cr}_2(\mu_3\text{-S})_2(\mu_4\text{-S})\text{Co}_2(\text{CO})_4$  synthesis and molecular structure of (I.L. Eremenko, A.A. Pasynskii, B. Orazsakhov, A.F. Shestakov, G.Sh. Gasanov, A.S. Katugin, Yu.T. Struchkov, V.E. Shklover), (338) 369
- Diaminodiphosphene and aminophosphinidene complexes, synthesis and characterisation of (J. Borm, G. Huttner, L. Zsolnai, K. Evertz, H. Berke), (327) 223
- Dibenzenechromium(0) alkyl-substituted derivatives, electronic absorption spectra in the vapour phase of (G.A. Domrachev, S.Yu. Ketkov, G.A. Razuvaev), (328) 341
- Dibenzenechromium(0) complexes, geometric and optical isomers of (H. Brunner, J. Ernst, T. Wischert, U. Thewalt), (328) 331
- 5,10-Dihydroindeno[2,1-*a*]indenyltricarbonylchromium complexes, synthesis and reactions of (O.I. Trifonova, R.A. Galiullin, Yu.A. Ustynyuk, N.A. Ustynyuk, P.V. Petrovsky, D.N. Kravtsov), (328) 321
- 1-(Diisopropylamino)borole as ligand in transition metal complexes; crystal and molecular structures of *cis*- $\text{Cr}(\text{CO})_2(\text{C}_4\text{H}_4\text{BNPr}_2^i)_2$  and  $\text{Mn}(\text{CO})(\text{C}_4\text{H}_4\text{BNPr}_2^i)_2$  (G.E. Herberich, B. Hessner, H. Ohst, I.A. Raap), (348) 305
- 1,1-Dimethylindene, spirocyclopropane-1,1-indene and spirocyclopropane-9,9-fluorene, reactions with  $\text{L}_3\text{M}(\text{CO})_3$  ( $\text{L} = \text{NH}_3, \text{Py}$ ;  $\text{M} = \text{Cr}, \text{Mo}, \text{W}$ ) of (N.A. Ustynyuk, L.N. Novikova, V.E. Zvorykin, D.N. Kravtsov, Yu. Ustynyuk), (338) 19
- 2,3-Dimethyltrisopropylsilyloxybenzenetricarbonylchromium, conformation and regioselective lithiation of (J. Levisalles, F. Rose-Munch, E. Rose, A. Semra, Y. Jeannin, F. Robert), (328) 109
- Dimethyl{tris(trimethylsilyl)methyl}silanolotantalum(V), -chromium(III) and -manganese(II), formation of (H. Blanchard, M.B. Hursthouse, A.C. Sullivan), (341) 367
- Dinuclear cyclooctatetraenemetal complexes, results of synthesis attempts of; molecular dynamics of  $(\text{CpCr})_2\text{-}\mu\text{-C}_8\text{H}_8$  and  $\text{CpCrC}_8\text{H}_8$  (J. Heck, G. Rist), (342) 45
- Di- and poly-nuclear transition metal complexes as catalysts for metal carbonyl-substitution reactions; role of supported metals and metal oxides as catalyst promoters (M.O. Alberts, N.J. Coville, E. Singleton), (326) 229
- $\mu$ -[Di- $\eta^6$ -phenyl(trimethylsilyl)methane][bis(tricarbonyl)chromium], synthesis and crystal structure of (N.H. Buttrus, C. Eaborn, M.E. Molla, P.B. Hitchcock, J.D. Smith), (344) 313
- Diterpenoid ( $\eta^6$ -arene)tricarbonylchromium(0) complex, reactions of and functionalisation of C(14) (R.C. Cambie, A.D. Erson, A.C. Gourdi, P.S. Rutledge, P.D. Woodgate), (348) 317
- Ephedrine analogs, asymmetric synthesis of (A. Solladié-Cavallo, G. Lapidajs, P. Buchert, A. Klein, S. Colonna, A. Manfredi), (330) 357
- (Fluorenyl)- $\text{Cr}(\text{CO})_2\text{L}$  anions ( $\text{L} = \text{CO}, \text{P}(\text{OPh})_3, \text{PPh}_3, \text{P}(\text{n-Bu})_3$ ), influence of metal basicity on the  $\eta^6 \rightleftharpoons \eta^7$  haptotropic equilibrium of (A. Ceccon, A. Gambaro, A. Venzo, V. Luchini, T.E. Bitterwolf, J. Shade), (327) 55
- Germylene-chromium and -tungsten complexes, interaction with 1,2-dipoles of (A. Castel, P. Rivière, J. Satgé, M. Ahbala), (328) 123
- Group 6 metal tricarbonyls with ligating  $\alpha$ -diimine and triethyl phosphite, convenient synthesis and characterisation of (T.S.A. Hor, S.R.B. Rus), (348) 343
- Hetero-dinuclear azulene complexes, preparation and characterisation of (S. Töfke, U. Behrens), (338) 29
- Heterometallic di- and tri-nuclear complexes with bridging thiocarbonyl and methylthiocarbonyne ligands; crystal and molecular structure of  $\text{C}_5\text{H}_5(\text{PMe}_2)(\mu\text{-CO})[\mu\text{-CSMn}(\text{CO})_2\text{C}_5\text{H}_5]\text{-Mn}(\text{CO})\text{C}_5\text{H}_5$  (H. Werner, O. Kolb, P. Thometzek), (347) 137
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, preparation and reactive behaviour of (R.A. Fischer, W.A. Herrmann), (330) 377
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, synthesis of (R.A. Fischer, H.-J. Kneuper, W.A. Herrmann), (330) 365
- Isocyanidoferrrocene derivatives, preparation, complexation and redox properties of (T. El-Shihi, F. Sigmüller, R. Herrmann, M.F.N.N. Carvalho, A.J.L. Pombeiro), (335) 239
- Isocyanomethylene phosphorane, [3 + 2] cycloaddition reactions with heteroallenes of (W.P. Fehlhammer, G. Zinner, M. Bakola-Christianopoulou), (331) 193
- Manganese, rhenium, chromium, molybdenum and tungsten binuclear carbonyls with double hydrogen bridges, MO calculations of (B.

- Jeżowska-Trzebiatowska, B. Nissen-Sobocińska), (342) 215
- [M(CO)<sub>4</sub>{(Ph<sub>2</sub>P)<sub>2</sub>C=CH<sub>2</sub>}] (M = W, Mo, Cr), conjugate additions of functionalised carbanions to the vinylidene groups of (A.M. Herring, S.H. Koskimies, B.L. Shaw), (338) 13
- Metallacyclic alkenyl ketone substituted complexes, ( $\eta^5$ -C<sub>5</sub>Me<sub>5</sub>)(CO)<sub>2</sub>M[R<sup>1</sup>C=CR<sup>2</sup>C(O)Me] (M = Cr, Mo, W; R<sup>1</sup>, R<sup>2</sup> = H, Me, Ph), reactions with NO or ClNO of (H.G. Alt, U. Freytag, M. Herberhold, H.I. Hayen), (336) 361
- Metallacyclic pentamethylcyclopentadienyl-alkenylketone complexes of chromium, molybdenum and tungsten, competition of electronic and steric influence of substituents of  $\pi$ ; molecular structure of C<sub>5</sub>Me<sub>5</sub>(CO)<sub>2</sub>Cr[HC=CPhC(O)Me] (H.G. Alt, G.S. Herrmann, H.E. Engelhardt, R.D. Rogers), (331) 329
- ortho*-Methoxybenzaldehydic tricarbonylchromium complex, stereospecific Reformatsky reaction of (J. Brocard, L. Pelinski, J. Lebib), (336) C47
- N*-Methyl-3-arylopyrrole anions and their Cr(CO)<sub>3</sub> complexes, experimental and SCCC-MO studies on (N.J. Gogan, I.S. Jayasinghe, P.K. Sayal), (336) 137
- Monohydrido-bridged carbonyl complexes of early transition metals containing  $\eta^5$ -C<sub>5</sub>H<sub>5</sub>Nb(CO)<sub>3</sub> moiety (P. Oltmanns, D. Rehder), (345) 87
- Naphthalenetricarbonylchromium complexes, interring  $\eta^6 \rightleftharpoons \eta^6$  haptotropic rearrangements in (Yu.F. Oprunenko, S.G. Malugina, Yu.A. Ustynuk, N.A. Ustynuk, D.N. Kravtsov), (338) 357
- $\eta^6$ -Naphthalenetricarbonylchromium, lithiation of (E.P. Kündig, C. Grivet, S. Spichiger), (332) C13
- Nitrogen-substituted  $\eta^6$ -arenetricarbonylchromium(0) compounds, reversible addition of carbon nucleophiles to (B. Ohlsson, C. Ullenius), (350) 35
- Organo-chromium and -tungsten complexes containing functional germylene ligands (A. Castel, P. Rivière, J. Satgé, M. Ahbala), (331) 11
- Paramagnetic metallocenes bearing Me, Me<sub>3</sub>E (E = C, Si, Ge, Sn) substituents, syntheses and <sup>1</sup>H/<sup>13</sup>C NMR studies of (F.H. Köhler, W.A. Geike), (328) 35
- Pentacarbonyl-chromium and -tungsten complexes, structural isomers of cyclic adducts of perfluoro-2-phosphapropene and isoprene as ligands in (J. Grobe, D. Le Van, W. Meyring, B. Krebs, M. Dartmann), (340) 143
- Pentacarbonylchromium complex of 2-(pentafluoroethyl)-3-fluoro-3-(trifluoromethyl-2-phosphabicyclo[2.2.1]hept-5-ene, synthesis and molecular structure of (J. Grobe, J. Szameitat, M. Möller), (344) 61
- Pentacarbonylchromium complexes, Cr(CO)<sub>5</sub>-PRH<sub>2</sub> (R = Ph, cyclohexyl), reactions with mercury(II) and silver(I) compounds of (D. Obendorf, P. Peringer, N. Müller, H. Falk), (326) 375
- Pentacarbonylchromium(0) deprotonated sulphur donor complexes, reactions with carbon disulphide or carbon diselenide of (H.G. Raubenheimer, S. Lotz, G.J. Kruger, A.v.A. Lombard, J.C. Viljoen), (336) 349
- Pentacarbonylchromiumdihydro(phenyl)arsenic, Cr(CO)<sub>5</sub>As(C<sub>6</sub>H<sub>5</sub>)H<sub>2</sub>, insertion of alkenes and alkynes into As-H bonds of (L.-R. Frank, I. Jibril, L. Zsolnai, G. Huttner), (336) 337
- Pentacarbonyl-5-phenyl-5-phospha-1-stannabicyclo[3.3.0<sup>1,5</sup>]octanechromium(0) · pyridine, crystal structure of (K. Jurkschat, A. Tzschach, J. Meunier-Piret, M. Van Meersehe), (349) 143
- Pentamethylcyclopentadienyloxomolybdenum sulphides, preparation and reactivity of (H. Brunner, H. Kauermann, J. Pfauntsch, J. Wachter, J.H. Enemark, C.G. Young), (331) 45
- Pentaphenylethanetricarbonylchromium(0) isomeric complexes, synthesis and X-ray structure determinations of (B. Misra, H.E. Zieger, J. Bordner), (348) 79
- Phosphorus-substituted butadiene systems, complexation of (R. Appel, B. Niemann, W. Schuhn, N. Siabalis), (347) 299
- (RC<sub>5</sub>H<sub>4</sub>)<sub>2</sub>Cr<sub>2</sub>( $\mu_3$ -S)<sub>2</sub>( $\mu_4$ -S)M<sub>2</sub>L<sub>n</sub> clusters, (M = Co, Ni), effect of electronic structure on geometry of (I.L. Eremenko, A.A. Pasynskii, A.S. Katugin, B. Orazsakhmatov, V.L. Shirokii, V.E. Shklover, Yu.T. Struchkov), (345) 177
- Sulphide-bridged methylcyclopentadienylmetal tetrahedra, effect of electron deficit on; synthesis, characteristics and structures of Cp<sub>3</sub>Cr<sub>3</sub>( $\mu_3$ -S)<sub>4</sub>Co(CO), Cp<sub>4</sub>Cr<sub>4</sub>( $\mu_3$ -O)( $\mu_3$ -S)<sub>3</sub><sup>+</sup>ZnCl<sub>3</sub><sup>-</sup>·C<sub>4</sub>H<sub>8</sub>O<sup>-</sup>, and Cp<sub>4</sub>V<sub>4</sub>S<sub>4</sub> (Cp' =  $\pi$ -CH<sub>3</sub>C<sub>5</sub>H<sub>4</sub>) (A.A. Pasynskii, I.L. Eremenko, A.S. Katugin, G.S. Gasanov, E.A. Turchanova, O.G. Ellert, Yu.T. Struchkov, V.E. Shklover, N.T. Berberova, A.G. Sogomonova, O.Yu. Okhlobystin), (344) 195
- Tetracarbonyl-chromium, -molybdenum and -tungsten complexes containing secondary and tertiary phosphines (R.L. Keiter, M.J. Madigan), (331) 341
- Tetracarbonyl-chromium, -molybdenum and -tungsten complexes of dithioethers, steric influences on sulphur inversion barriers in



- (E.W. Abel, I. Moss, K.G. Orrell, C. Šik), (326) 187
- Tetracarbonyl[ $\eta^4$ -(1,1,3,4-tetramethylsilo)]chromium, crystal structure of (G.E. Herberich, B. Hessner, E. Colomer, M. Lheureux), (335) 91
- Tetranuclear chromium complex formed by fluoride abstraction from hexafluorophosphate; synthesis and structure of [ $\eta^5$ -Me<sub>5</sub>C<sub>5</sub>]<sub>4</sub>-Cr<sub>4</sub>( $\mu$ -F)<sub>5</sub>Cl<sub>2</sub>]PF<sub>6</sub> (B.J. Thomas, J.F. Mitchell, K.H. Theopold, J.A. Leary) (348) 333
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands, <sup>125</sup>Te and <sup>77</sup>Se NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Transition metal coordinated selenoketones, kinetics and mechanism of reactions with 1-diethylamino-1-propyne of (H. Fischer, U. Gerbing, A. Tirilomis), (332) 105
- Transition metal coordinated thioaldehydes, selenoaldehydes and seleno ketones, kinetic investigations of (H. Fischer), (345) 65
- Tricarbonyl-chromium, -molybdenum and -tungsten complexes containing bipyridyl and a unidentate diphosphine; facile synthesis via trimethylamine *N*-oxide-induced decarbonylations (T.S.A. Hor, S.-M. Chee), (331) 23
- Tricarbonylchromium radical anion, reactions with alkenes and polyenes of (I.K. Gregor), (329) 201
- Tricarbonylchromium-bithiophene complexes, cyclovoltammetric investigations of (M. Dietrich, J. Heinze, D. Andrejewski, W.A. Herrmann), (329) 343
- Tricarbonyl(methylbenzo[*b*]thiophene)chromium complexes, synthesis and lithiation of (J.L. Davidson, H. Patel, P.N. Preston), (336) C44
- Trimethylphosphane and hydridocarbonyl half-sandwich chromium, molybdenum and tungsten complexes, preparation and properties of (H.G. Alt, H.E. Engelhardt, W. Kläui, A. Müller), (331) 317
- 1,3,5-Triphenylbenzenetricarbonylchromium complexes, X-ray crystallographic and high-field NMR spectroscopic study of (B. Mailvaganam, B.E. McCarry, B.G. Sayer, R.E. Perrier, R. Faggiani, M.J. McGlinchey), (335) 213
- Cobalt**
- Acetylodocarbonylcobaltate, crystal structure of (M. Röper, C. Krüger), (339) 159
- $\mu$ ( $\alpha$ , $\omega$ )-Alkanediylcobaloximes and their halogenoalkyl precursors, synthesis and characterisation of (K.P. Finch, J.R. Moss), (346) 253
- Alkyl- and aryl-mono- $\eta^5$ -cyclopentadienylphosphine-iron, -cobalt and -nickel compounds, preparation of (F. Scott, S. Cronjé, H.G. Raubenheimer), (326) C40
- $\sigma$ -Alkynylmanganese ligands, preparation, crystal structure and reactivity of {[Co<sub>2</sub>(CO)<sub>6</sub>] $\mu$ -PhCCMn(CO)<sub>4</sub>(P(cyclo-C<sub>6</sub>H<sub>11</sub>))}] (G.A. Carriedo, D. Miguel, V. Riera), (342) 373
- $\mu$ -Amido ligand formation by carbanion addition or catalytic hydration of  $\mu$ -nitrosyl ligands (J. Müller, G. Manzoni de Oliveira, J. Pickardt), (329) 241
- Arene-solvated cobalt atoms, cyclocotrimerisation of  $\alpha$ , $\omega$ -dialkynes and nitriles to alkynylpyridines catalysed by (G. Vitulli, S. Bertozzi, M. Vignali, R. Lazzaroni, P. Salvadori), (326) C33
- Arene-carbonylcobalt clusters with functional substituents in a side chain (V.S. Kaganovich, M.I. Rybinskaya), (344) 383
- Arsinodithiadiimido eight-membered heterocycle, *t*-BuAs(NSN)<sub>2</sub>As-*t*-Bu, carbonylmetal complexes of (M. Herberhold, K. Schamel), (346) 13
- 2-Aryl-2-ketoethylcobaloximes, synthesis, characterisation and acid-induced decomposition of (Y.-Y.P. Wo, K.L. Brown), (329) 115
- Bi-Co heteronuclear carbonyl bonds, [Bi{Co(CO)<sub>4</sub>}]<sup>-</sup> synthesis and X-ray structure of its NMe<sub>4</sub> salt (S. Martinengo, A. Fumagalli, G. Ciani, M. Moret), (347) 413
- Bis(pentamethylcyclopentadienyl)carbonyl-cobalt and -rhodium complexes, stepwise formation of dinuclear chalcogenic complexes with elemental sulphur, selenium or tellurium from (H. Brunner, N. Janietz, W. Meier, J. Wachter, E. Herdtweck, W.A. Herrmann, O. Serhadli, M.L. Ziegler), (347) 237
- Bis(trifluoromethylisocyanido)( $\eta$ -pentamethylcyclopentadienyl)cobalt, formation and oxidation to trifluoromethylisocyanido( $\eta$ -pentamethylcyclopentadienyl)dihalogenocobalt of (D. Lentz, B. Pötter), (336) 393
- 1-(But-3-enyl)-2,3,4,5-tetramethylcyclopentadienyl-iron and -cobalt complexes, synthesis of (J. Okuda, K.H. Zimmermann), (344) C1
- $\mu$ -Carbene-cobalt complexes from substituted diazirines, synthesis of (S.A. Benyunes, P.A. Chaloner), (341) C50
- [(C<sub>5</sub>(CH<sub>3</sub>)<sub>5</sub>)CoCl]<sub>2</sub>( $\mu$ -NO)( $\mu$ -Cl), binuclear complex containing a nitrosyl bridge without a metal-metal bond (R.C. Strauss, E. Keller, H.H. Brintzinger), (340) 249
- [(C<sub>5</sub>H<sub>5</sub>Co)<sub>2</sub>( $\mu$ -PMe<sub>2</sub>)<sub>2</sub>( $\mu$ -H)]<sup>+</sup>, dinuclear complexes with alkynes of; crystal structure of

- $[(C_5H_5Co)_2(\mu-PM e_2)(\mu-\eta^4-M e_2PC(CO_2Me)=CHC(OMe)=O)]BF_4$  (R. Zolk, H. Werner), (331) 95
- $(\eta^5-C_5H_5Co)_2(\mu-PPh_2)B_2H_5$ , preparation and characterisation of; evidence for multicentre cluster bonding (J. Feilong, T.P. Fehlner, A.L. Rheingold), (348) C22
- $(\eta^5-C_5H_5)Fe[\eta^5-C_5H_4CCO_3(CO)_9]$  and  $(\eta^5-C_5H_5)Fe[\eta^5-C_5H_4CCO_3(\eta^5-C_5H_5)_3CH]$ , crystal and electronic structures of (S.B. Colbran, L.R. Hanton, B.H. Robinson, W.T. Robinson, J. Simpson), (330) 415
- Cobalt-mixed Schiff base/oxime chelates, electrochemistry of (G. Costa, C. Tavagnacco, A. Puxeddu, G. Balducci, R. Kumar), (330) 185
- Cobalt-nickel carbide bimetallic clusters; synthesis and crystal structure of the dianions  $[Co_2Ni_{10}(CO)_{20}C]^{2-}$  and  $[Co_3Ni_6(CO)_{20}C]^{2-}$  (A. Ceriotti, R. Della Pergola, G. Longoni, M. Manassero, N. Masciocchi, M. Sansoni), (330) 237
- Cobalt-ruthenium systems as catalysts in hydrocarbonylation of linear and branched aliphatic  $C_2-C_4$  alcohols (G. Jenner), (346) 237
- $[Co_xRh_{4-x}(CO)_{12}]$  ( $x = 3, 2$ ), ligand substitution with tertiary phosphines or phosphites in; X-ray structure of  $[Co_2Rh_2(CO)_{11}(PPh_3)]$  (M. Bojczuk, B.T. Heaton, S. Johnson, C.A. Ghilardi, A. Orlandini), (341) 473
- $[CoRu_3(\mu-CO)_2(CO)_9(\mu_4, \eta^2-C_2Ph_2)]$ [PPN] cluster, synthesis and crystal structure of (O. Benali-Baitich, J.-C. Daran, Y. Jeannin), (344) 393
- $[Cp_2Co_4(CO)_4(\mu-CO)(CF_3C_2CF_3)]$ , reactions with phosphine and isocyanide ligands of; characterisation and electrochemistry of the mono- and di-substituted derivatives (F.V. Pétillon, R. Rumin, J. Talarmin) (346) 111
- $Cp(CO)CoPt(PPh_3)_2(\mu-CH_2)$  and  $Cp_2Co_2Pt(PPh_3)_2(\mu-CO)_2$ , synthesis from reaction of  $Pt(PPh_3)_2(C_2H_4)$  with  $[CpCo(CO)]_2(\mu-CH_2)$ , synthesis of (P.D. Macklin, C.A. Mirkin, N. Viswanathan, G.D. Williams, G.L. Geoffroy, A.L. Rheingold), (334) 117
- $CS_2W$  complexes, activated addition of alkynes to and formation of tetrahedral methylidenedicobalttungsten with (W.A. Schenk, D. Kuemmerle, C. Burschka), (349) 183
- $\eta^5$ -Cyclooctadienyl- $\eta^5$ -cyclopentadienylcobalt and related cations, kinetics and mechanism of addition of tertiary phosphines and phosphites to (L.A.P. Kane-Maguire, P.A. Mouncher, A. Salzer), (347) 383
- Cyclooctaselenadiazole, synthesis, decomposition pathway, and reaction with  $(\eta^5-C_5H_5)Co(L)_2$  ( $L = C_2H_4, PPh_3$ ); crystal and molecular structures of  $[(\eta^5-C_5H_5)Co]_2(\mu_2-\eta^3, \eta^2-$
- $C_8H_6Se)$  (J. Knebel, C.P. Moley, G. Wilke, C. Krüger, J.M. Wallis), (334) C39
- Cyclopentadienylcobalt(III) complexes with dithiocarbamate and xanthate ligands, preparation, spectra and fluxional behaviour of; crystal structure of  $[Co(\eta-C_5H_5)(I)(S_2CNEt_2)]$  (E.P. Cullen, J. Doherty, A.R. Manning, P. McArdle, D. Cunningham), (348) 109
- Cyclopentadienylcobalt neutral and cationic complexes, formation and reactions of (T. Avilés, F. Barroso, P. Royo), (326) 423
- Dialkylaminotrimethylsilylacetylenes, reactions with metal carbonyls of (R.B. King, R.M. Murray, R.E. Davis, P.K. Ross), (330) 115
- Diamagnetic heterometallic clusters with a  $CrCo_2$  butterfly frame,  $(RC_5H_4)_2Cr_2(\mu_3-S)_2(\mu_4-S)Co_2(CO)_4$ , synthesis and molecular structure of (I.L. Eremenko, A.A. Pasynskii, B. Orazsakhov, A.F. Shestakov, G.Sh. Gasanov, A.S. Katugin, Yu.T. Struchkov, V.E. Shklover), (338) 369
- 1,8-Diazabicyclo[5.4.0]undec-7-ene, intermediate ligand in selective CO substitution in a Ru-Co complex (R. Regragui, P. Dixneuf), (344) C11
- Dicarbonylcarbyne-molybdenum and -tungsten stabilised by tridentate oxygen ligands (W. Kläui, H. Hamers), (345) 287
- Dicarbonylnitrosyl-(5-diphenylphosphinouracil) cobalt(-I) · methanol(1/2), synthesis and X-ray structure of (J. Ellermann, E. Köck, H. Zimmermann, M. Gomm), (345) 167
- Dicobalt octacarbonyl, mechanistic studies on disproportionation with hard Lewis bases of (A. Sisak, L. Markó), (330) 201
- Dioxanylmethyl-diorganylphosphanes, selectivity in hydrocarbonylation of methanol under formation of acetaldehyde and acetic acid (E. Lindner, A. Sickinger, P. Wegner), (349) 75
- Diphenylphosphido-bridged tetracarbonylruthenium-tricarbonylcobalt, reaction with bis(diphenylphosphino)methane of; synthesis and crystal structures of heterobimetallic (Ru-Co) compounds with chelating and bridging dpmm ligands (S. Guesmi, P.H. Dixneuf, N.J. Taylor, A.J. Carty), (328) 193
- Dodecacarbonyltetra-cobalt, -rhodium and -iridium complexes containing bridging CO ligands, M-M bond length shortening effects in (D. Braga, F. Grepioni), (336) C9
- Doubly charged sandwich compounds in the gas phase, charge separation (coulomb explosion) processes of; evidence for junction of two  $C_5H_5$  units (T. Drewello, C.B. Lebrilla, H. Schwarz, T. Ast), (339) 333
- Enantioselective hydrosilylation, complexes with

- free donor groups as co-catalysts for (H. Brunner, H. Fisch), (335) 15
- Heterometallic di- and tri-nuclear complexes with bridging thiocarbonyl and methylthiocarbonyl ligands; crystal and molecular structure of  $C_5H_5(PMe_2)(\mu-CO)[\mu-CSMn(CO)_2C_5H_5]_2Mn(CO)C_5H_5$  (H. Werner, O. Kolb, P. Thometzek), (347) 137
- Homogeneous bimetallic catalysis, selective synthesis of acetic acid from hydrogen and carbon monoxide by (H. Ono, M. Hashimoto, K. Fujiwara, E. Sugiyama, K. Yoshida), (331) 387
- Iron-cobalt trinuclear mixed cluster capped with sulphur, structural determination of (Y. Wakatsuki, H. Yamazaki, G. Cheng), (347) 151
- Isonitrile-functionalised polymer supports as versatile ligands toward metal centres (B. Corain, M. Basato, P. Main, M. Zecca, R. De Pieri, R. Arshady), (326) C43
- Japanese hop ether, synthesis from *cis*-4-methylpent-2-ene-1,4-diol and ethyhexacarbonyldicobalt of (D.C. Billington, W.J. Kerr, P.L. Pauson), (328) 223
- Low-valent cobalt reagent from  $CoCl_2$  and  $NaBH_4/C_2H_5OH$  in the presence of CO, reactions of (N. Satyanarayana, M. Periasamy), (333) C33
- Metal acylium mixed clusters, chemical and spectroscopic study of (M.F. D'Agostino, M. Mlekuz, M.J. McGlinchey), (345) 371
- $\mu$ -Methyleneiron complexes, reduction of bridged carbonyl groups as a route to (G. Ortaggi, R. Paolesse), (346) 219
- trans*- $[Mo(CO)_5(R_2PNHCH_2CH_2N=CHC_6H_4-o-O)]_2M$  (M = Co, Ni, Cu) complexes, synthesis and characterisation of; crystal structure of *trans*- $[Mo(CO)_5(Ph_2PNHCH_2CH_2N=CHC_6H_4-o-O)]_2Ni \cdot 2Et_2O$  (G.M. Gray, N. Takada, A.L. Zell, H. Einspahr), (342) 339
- $Na_6[(PhSiO_{1.5})_{22}Co_3O_6] \cdot 7H_2O$ , synthesis and crystal structure of (Yu.E. Ovchinnikov, V.E. Shklover, Yu.T. Struchkov, M.M. Levitsky, A.A. Zhdanov), (347) 253
- (Norbornadiene)tris(trimethylphosphine)cobalt(I)tetraphenylborate complex,  $[Co(\eta^4-C_7H_8)(PMe_3)_3]BPPh_4$ , crystal and molecular structure of (M. Dartiguenave, L.C. Ananias de Carvalho, Y. Dartiguenave, F. Bélanger-Gariépy, M. Simard, A.L. Beauchamp), (326) 139
- Octacarbonyldicobalt-mediated and -catalysed carbonylation of diaryl diselenides and ditellurides to seleno and telluro esters (H. Takahashi, K. Ohe, S. Uemura, N. Sugita), (334) C43
- Organocobaloximes, regioselective reactions with *N*-halogeno compounds of (M.D. Johnson, G.M. Lampman, R.W. Koops, B.D. Gupta), (326) 281
- Organocobalt chelates with tridentate Schiff bases, template synthesis of; crystal structure of  $[MeCo(7-Me-salen-N-Me)(N-Me-en)]I$  (I.Ya. Levitin, M.V. Tsikalova, V.I. Bakhmutov, A.I. Yanovsky, Yu.T. Struchkov, M.E. Vol'pin), (330) 161
- Organometallic cobaloximes, *cis* and *trans* effects and NMR correlations in (J.M. Gilaberte, C. López, S. Alvarez), (342) C13
- Paramagnetic metallocenes bearing Me,  $Me_3E$  (E = C, Si, Ge, Sn) substituents, syntheses and  $^1H/^{13}C$  NMR studies of (F.H. Köhler, W.A. Geike), (328) 35
- Pentafluorophenyl group distortion in metal complexes, limitations of rigid-body refinement (P.G. Jones), (345) 405.
- Phenylenebis(salicylideneiminato)cobalt, electrochemical behaviour of (F. Bedioui, Y. Robin, J. Devynck, C. Bied-Charreton), (326) 117
- $(Ph_3P)_2Co(CH_2=CHCH_2CH_2CHO)$ , 17-electron intermediate in paramagnetic cobalt(0) catalysis of 4-pentenal intramolecular hydroacylation (M.G. Vinogradov, A.B. Tuzikov, G.I. Nikishin, B.N. Shelimov, V.B. Kazanisky), (348) 123
- Propargyl-hexacarbonyldicobalt groups at poly-substituted arene rings, selective attachment of (M. Gruselle, J.-J. Rossignol, A. Vessières, G. Jaouen), (328) C12
- $[\mu_4-SiCo(CO)_4]_2Co_4(CO)_{11}$ , a carbonylcobalt cluster incorporating five-coordinate silicon (M. Van Tiel, K.M. Mackay, B.K. Nicholson), (326) C101
- $SiR_3$  and  $PR_3$ , behaviour towards substitution of  $\eta^3$ -allyl ligands of; preparation of  $Co(CO)_2(PR_3)_2SiR_3$  from  $(\eta^3-C_3H_5)Co(CO)_2PR_3$  (U. Schubert, J. Müller), (340) 101
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Stereochemically active lone pairs of electrons in group 14 compounds; crystal structure of  $\{\eta^3-C_5H_5Co[P(OC_2H_5)_2O]_3\}_2M^{II}$  (M = Sn, Pb) (E.M. Holt, W. Kläui, J.J. Zuckerman), (335) 29
- Stoichiometric hydrogenation of  $\alpha,\beta$ -unsaturated ketones by  $HCo(CO)_4$  (J.A. Roth, K. Grega, M. Orchin), (342) 129
- Sulphide-bridged methylcyclopentadienylmetal tetrahedra, effect of electron deficit on; synthesis, characteristics and structures of  $Cp'_3Cr_3(\mu_3-S)_4Co(CO)$ ,  $Cp'_4Cr_4(\mu_3-O)(\mu_3-S)_3^+ ZnCl_3 \cdot C_4H_8O^-$ ,  $Cp'_4V_4S_4$  ( $Cp' = \pi-CH_3C_5H_4$ )

- (A.A. Paysniskii, I.L. Eremenko, A.S. Katugin, G.S. Gasanov, E.R. Turchanova, O.G. Ellert, Yu.T. Struchkov, V.E. Shklover, N.T. Berberova, A.G. Sogomonova, O.Yu. Okhlobystin), (344) 195
- Tetrahedral and butterfly  $M_2E_2$  clusters, structure and electron counting of; MO analysis of  $(L_nM)_2(\mu-X)_2$  ( $X = P, PR, PM'L_5$ ) complexes (J.-F. Halet, J.-Y. Saillard), (327) 365
- (2,2,6,6-Tetramethylpiperidyl-1-oxyl)tricarbonylvanadium, -manganese and -cobalt electron-deficient complexes,  $^{51}V$ ,  $^{55}Mn$  and  $^{59}Co$  NMR investigations of (D. Rehder, P. Jaitner), (329) 337
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands,  $^{125}Te$  and  $^{77}Se$  NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Tricyclopentadienyldinitrosyltricobalt and tricyclopentadienylnitrosyldicobaltiron clusters, preparation of (J. Müller, G. Manzoni de Oliveira, H. Sonn), (340) C15
- Trimethylphosphane and hydridocarbonyl half-sandwich chromium, molybdenum and tungsten complexes, preparation and properties of (H.G. Alt, H.E. Engelhardt, W. Kläui, A. Müller), (331) 317
- Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient catalysts for fluoride synthesis via carbonylation of organic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205
- Tungsten-cobalt ion containing complexes, synthesis via alkyldiyne group coupling reactions of; structure of  $[WCo\{\mu-C(C_6H_4Me_4)C(O)C(C_6H_4Me_4)\}(CO)_5(\eta-C_5H_5)]$  (I.J. Hart, A.E. Jardin, J.C. Jeffery, F.G.A. Stone), (341) 391
- Vinyl-, allyl- and alkynyl-siloles, coordination chemistry of; synthesis and structure of  $\eta^4, \eta^2$ -allyl- and 1-vinyl-2,5-diphenylsilylcyclopentadiene complexes (F. Carré, R.J.P. Corriu, C. Guerin, B.J.L. Henner, B. Kolani, W.W.C. Wong Chi Man), (328) 15
- Zirconoxycarbene complex,  $Cp_2Zr(C_6H_4)(OC=)Co(CO)(\eta-C_5H_4X)$ , molecular structure and equilibration with  $(\eta-C_5H_4X)Co(CO)_2/Cp_2Zr(\text{butadiene})$  of (G. Erker, R. Lecht, C. Krüger, Y.-H. Tsay, H. Bönne-mann), (327) C75
- Copper**
- $\mu_3\text{-}\eta^1$ -Acetylide bridging ligands in tetranuclear copper(I) complexes, coordination mode of; crystal structure of  $[Cu(\mu_3\text{-}\eta^1\text{-C}\equiv\text{CPh})$
- $(Ph_2Ppy\text{-}P)]_4$  (E. Lastra, M.P. Gamasa, J. Gimeno, X. Solans), (346) 277
- Alkene-copper complexes, bonding in the ground and excited states of (P.H.M. Budzelaar, P.J.J.A. Timmermans, A. Mackor, E.J. Baerends), (331) 397
- $\sigma$ -Alkyne organometallic compounds, synthesis catalysed by copper(I) iodide in triethylamine of (D. Villemin, E. Schigeko), (346) C24
- Bis(hexafluoroacetoacetato)copper(II), complex formation during cyclization of 1-diazo-3-phenoxy-2-propanone catalysed by (M. Branca, G. Micera, A. Saba), (332) 229
- Carbonyl-osmium mixed metal clusters, fluxionality in (S.R. Drake, B.F.G. Johnson, J. Lewis), (340) C31
- Carbophilic vs. thiophilic attack in reactions of metallated aromates and heteroaromates with carbon disulphide (H.D. Verkrujisse, L. Brandsma), (332) 95
- Copper(II) chloride and alkoxide alkoxometal-lates and termetallic isopropoxides, synthesis of (R.K. Dubey, A. Singh, R.C. Mehrotra), (341) 569
- Cuprous ions, influence on allylic substitution of stable enolates of (T. Cuvigny, M. Julia), (331) 121
- $[Cu_2Ru_4(\mu_3\text{-}H)_2(CO)_{12}L_2]$  ( $L = \text{phosphine}$ ) clusters in solution, NMR investigation of stereochemical non-rigidity in metal framework in (P.J. McCarthy, I.D. Salter, V. Šik), (344) 411
- From 2-thienylcopper couplings to trimethylsilyl-promoted organocopper additions (E.-L. Lindstedt, M. Nilsson, T. Olsson), (334) 255
- Homo- and hetero-nuclear vinyl- and vinylidene-bridged dinuclear complexes (H. Werner, J. Wolf, G. Müller, C. Krüger), (342) 381
- Isonitrile-functionalised polymer supports as versatile ligands toward metal centres (B. Corain, M. Basato, P. Main, M. Zecca, R. De Pieri, R. Arshady), (326) C43
- Mixed metal cluster compounds,  $[M_2Ru(\mu\text{-}CO)_{10}(PPh_3)_2]$  ( $M = Cu, Ag, Au$ ), synthesis and structural characterisation of; X-ray crystal structures of  $[M_2Ru_4(\mu\text{-}CO)_3\text{-}(CO)_{10}(PPh_3)_2]$  ( $M = Cu, Ag$ ) (S.S.D. Brown, I.D. Salter, T. Adatia, M. McPartlin), (332) C6
- trans*- $[Mo(CO)_5(R_2PNHCH_2CH_2N=CHC_6H_4\text{-}o\text{-}O)]_2M$  ( $M = Co, Ni, Cu$ ) complexes, synthesis and characterisation of; crystal structure of *trans*- $[Mo(CO)_5(Ph_2PNHCH_2\text{-}CH_2N=CHC_6H_4\text{-}o\text{-}O)]_2Ni \cdot 2Et_2O$  (G.M. Gray, N. Takada, A.L. Zell, H. Einspahr), (342) 339

Organocuprates, diastereoselective addition reactions with unsaturated imides of (G. Pourcelot, J. Aubouet, A. Caspar, P. Cresson), (328) C43

Organometallic compounds, primary aminomethylation via *N,N*-bis(trimethylsilyl)methylthiomethylamine of (L. Fiocca, K. Fiorenza, G. Reginato, A. Ricci, P. Dembech, G. Seconi) (341) C23

Palladium catalysed synthesis of substituted phenylethylpentamethyldisilanes and phenylethynylheptamethyltrisilanes (K.A. Horn, R.B. Grossman, A.A. Whitenack), (332) 271

1-Pentene-3-one/copper(I) chloride polymeric complex, synthesis and crystal structure of (M. Håkansson, S. Jagner, M. Nilsson), (336) 279

[(Phen)(Ph<sub>3</sub>P)Cu(O<sub>2</sub>COH)], C-C coupling of activated alkanes with CO<sub>2</sub> by (G. La Monica, M.A. Angaroni, G.A. Ardizzoia), (348) 279

Phenylcoppermagnesium reagent prepared from 2PhMgBr + CuI, reactions with organic halides of (M.T. Rahman, S.K. Nahar), (329) 133

Saturated lithium organocuprates, reactions with CH<sub>3</sub>(CH=CH)<sub>2</sub>COCH<sub>3</sub> and with CH<sub>3</sub>(CH=CH)<sub>2</sub>COOC<sub>2</sub>H<sub>5</sub> of (F. Barbot, A. Kadib-Elban, P. Miginiac), (345) 239

## Erbium

Tricyclopentadienyllanthanides/ sodium hydride, reduction and isomerisation of olefins with (C. Qian, Y. Ge, D. Deng, Y. Gu, C. Zhang), (344) 175

## Gallium

Alkyl-group 13 metal compounds, interaction with crown ethers of; synthesis and structure of [Ga(CH<sub>3</sub>)<sub>3</sub>]<sub>2</sub>[dibenzo-18-crown-6] and [Al(CH<sub>3</sub>)<sub>3</sub>]<sub>2</sub>[dicyclohexano-18-crown-6] (G.H. Robinson, W.E. Hunter, S.G. Bott, J.L. Atwood), (326) 9

Group 3 organic compounds, possibility of complex formation with molecular oxygen of (Yu.A. Alexandrov, N.N. Vyshinskii, V.N. Kokorev, V.A. Alferov, N.V. Chikina, G.I. Makin), (332) 259

Indium-arsenic and gallium-antimony six-membered rings, conformations of (A.H. Cowley, R.A. Jones, K.B. Kidd, C.M. Nunn, D.L. Westmoreland), (341) C1

Organo- and organohalogeno-hydrogermanes, 1,4-addition to 3,5-di-*t*-butylorthoquinone (P. Rivière, A. Castel, J. Satgé, D. Guyot, Y.H. Ko), (339) 51

Trialkyl-gallium and -indium adducts of tetramethyldiphosphine, synthesis of (H.D. Hodes, A.D. Berry), (336) 299

## Germanium

Allylic and vinylic silanes, germanes, stannanes and plumbanes, reactivity towards S<sub>H</sub>2' or S<sub>H</sub>2 substitution by carbon- or heteroatom-centered free radicals of (J.P. Light II, M. Ridenour, L. Beard, J.W. Hershberger), (326) 17

Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167

Arylhydrogermyllithiums, synthesis and applications of (A. Castel, P. Rivière, J. Satgé, Y.-H. Ko), (342) C1

Benzoyltriethylgermane, Et<sub>3</sub>GeCOPh, mechanism of photolysis of (M.B. Taraban, V.I. Maryasova, T.V. Leshina, L.I. Rybin, D.V. Gendin, N.S. Vyazankin), (326) 347

Bis(2,4,6-tri-*t*-butylphenyl)germylene and bis-(2,4,6-tri-*t*-butylphenyl)germathione, isomerisation by spontaneous C,H insertion of (L. Lange, B. Meyer, W.-W. du Mont), (329) C17

Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359

Bis(trimethylsilyl)diphenylgermane, kinetic spectroscopy of the Ph<sub>2</sub>Ge group on laser flash photolysis of (S. Konieczny, S.J. Jacobs, J.K.B. Wilking, P.P. Gaspar), (341) C17

Bivalent group 14 metal amides and alkyls, addition reactions of organic halides of acid anhydrides to (M.F. Lappert, M.C. Misra, M. Onyszczuk, R.S. Rowe, P.P. Power, M.J. Slade), (330) 31

*t*-Butyl (trialkylstannyl)(trimethylgermyl)acetates synthesis and application of their anions to the Peterson-type reaction of (N. Kanemoto, Y. Sato, S. Inoue), (348) 25

Di-*t*-butylcyclopentadienyl-silanes, -stannanes and -germanes, synthesis, structure and fluxional behaviour of (S.T. Abu-Orabi, P. Jutzi), (329) 169

1,3-Dilithiopropanes: dimethylbis( $\alpha$ -lithiobenzyl)-silane and -germane, synthesis and applications of (O.S. Akkerman, F. Bickelhaupt), (338) 159

$\beta$ -Ethyleneic organogermanium derivatives, thermolysis of (P. Mazerolles, E. Gregoire, R. Moranco, A. Reynes, N. Sefiani), (328) 49

- <sup>73</sup>Ge NMR spectroscopic studies of organogermanium compounds (*Review*) (E. Liepiņš, I. Zicmane, E. Lukevics), (341) 315
- Germanium and nitrogen containing heterocyclic compounds, synthesis of (K. Shitara, Y. Sato), (346) 1
- Germanium- and nitrogen-containing heterocyclic compounds, synthesis of (K. Shitara, Y. Sato, R. Nakagawa), (339) 259
- Germylene-chromium and -tungsten complexes, interaction with 1,2-dipoles of (A. Castel, P. Rivière, J. Satgé, M. Ahbala), (328) 123
- Germylemercurate complexes, reactivity of (L.V. Pankratov, I.M. Penyafina, L.N. Zakharov, M.N. Bochkarev, G.A. Razuvaev, Yu.K. Grishin, Yu.A. Ustynyuk, Yu.T. Struchkov), (335) 313
- Group 14 free radicals derived from hydroxynaphthoquinones, ESR studies on (I.M. Ahmed, A. Hudson, A. Alberti), (333) 9
- Group 14-iron bonds containing complexes, photochemical diastereoselective synthesis of (B. Rouida, M. Pankowski, W. Chodkiewicz, G. Jaouen), (342) C10
- Hexa-*t*-butyl-digermanium and -cyclo-trigermanium, Ge-Ge and Ge-C bond lengths in (M. Weidenbruch, F.-T. Grimm, M. Herrndorf, A. Schäfer, K. Peters, H.G. von Schnering), (341) 335
- Hexamethyldigerinoxane, exchange reactions with triethylsilyl azide of (Q. Zhou, W.P. Weber), (342) 291
- Hydroxyanthraquinones-group 14 adducts and chryszazin-phosphorus adducts, ESR studies of (B.M. Ahmed, A. Hudson, A. Alberti), (350) 9
- {[μ-(Me<sub>3</sub>Si)C(PMe<sub>2</sub>)<sub>2</sub>]<sub>3</sub>Ge<sub>4</sub>Cl<sub>2</sub>}<sup>+</sup> [GeCl<sub>3</sub>]<sup>-</sup>, dispirocyclic cationic germylene complex with bent Ge chain (H.H. Karsch, B. Deubelly, J. Riede, G. Müller), (336) C37
- M[Fe<sub>2</sub>(CO)<sub>8</sub>]<sub>2</sub> (M = Si, Ge, Sn), improved synthesis of; X-ray crystal structure of Si[Fe<sub>2</sub>(CO)<sub>8</sub>]<sub>2</sub> (S.G. Anema, G.C. Barris, K.M. Mackay, B.K. Nicholson), (350) 207
- Monomeric and oligomeric carbodiimides with polysilane and siloxane fragments, synthesis of (G.A. Razuvaev, A.S. Gordetsov, A.P. Kozina, T.N. Brevnova, V.V. Semenov, S.E. Skobeleva, N.A. Boxer, Yu.I. Dergunov), (327) 303
- Monoorganylgermanium trichlorides, chalcogenolysis of sesquioxides (H. Puff, K. Braun, S. Franken, T.R. Kök, W. Schuh), (349) 293
- Nickel halide reduction by magnesium, catalysation of cyclotrimerisation of alcyne by (P. Alphonse, F. Moyen, P. Mazerolles), (345) 209
- Organo-chromium and -tungsten complexes containing functional germylene ligands (A. Castel, P. Rivière, J. Satgé, M. Ahbala), (331) 11
- Organogermanium and organotin adducts with triphenylphosphine oxide and hexamethylphosphoramide (J.N. Spencer, S.M. Coley, J.C. Otter, A. Grushow, B.G. Enders, W.L. Nachlis, C.H. Yoder), (346) 161
- Organylgermanium sesquichlorochalcogenides, (RGe)<sub>2n</sub>Y<sub>3n-1</sub>Cl<sub>2</sub> (n = 1-3; Y = O, S, Se; R = *t*-Bu, mesityl), preparation and X-ray analysis of (H. Puff, K. Braun, S. Franken, T.R. Kök, W. Schuh), (335) 157
- Paramagnetic metallocenes bearing Me, Me<sub>3</sub>E (E = C, Si, Ge, Sn) substituents, syntheses and <sup>1</sup>H/<sup>13</sup>C NMR studies of (F.H. Köhler, W.A. Geike), (328) 35
- Phenyl- and benzyl-group 14 element complexes, hyperconjugation in (A.N. Egorochkin, G.A. Razuvaev, M.A. Lopatin), (344) 49
- Phenylgermanes, oligomerisation by catalytic dehydrocoupling of (C. Aitken, J.F. Harrod, A. Malek, E. Samuel), (349) 285
- Phosphane-germylene spirocyclic complexes [XC(PMe<sub>2</sub>)<sub>2</sub>]<sub>2</sub>Ge (X = PMe<sub>2</sub>, SiMe<sub>3</sub>), preparation, structure and dynamic behaviour of (H.H. Karsch, B. Deubelly, G. Hanika, J. Riede, G. Müller), (344) 153
- Silyl- and germyl-ketenes, reaction with silyldiazomethanes of (G.S. Zaitseva, I.F. Lutsenko, A.V. Kisin, Yu.T. Baukov, J. Lorberth), (345) 253
- 6-Thia-3,3-diphenyl-3-sila(and -germa)-bicyclo-[3.1.0]hexanes, preparation of (G. Manuel, A. Faucher, P. Mazerolles), (327) C25
- Thiagermetane, Me<sub>2</sub>GeCH<sub>2</sub>SCH<sub>2</sub>, dithiagermolane, Me<sub>2</sub>GeCH<sub>2</sub>SSCH<sub>2</sub> and thiagermetane dioxide, Me<sub>2</sub>GeCH<sub>2</sub>SO<sub>2</sub>CH<sub>2</sub>, thermolysis, pyrolysis and photolysis of (J. Barrau, G. Rima, M. El-Amine, J. Satgé), (345) 39
- Trialkyl-(2-furyl)germanes, reactions with electrophilic reagents of (E. Lukevics, L. Ignatovich, Yu. Goldberg, F. Polyak, A. Gaukhman, S. Rozite, J. Popelis), (348) 11
- Tris(2-phenyl-2-methylpropyl)germyl radical, ESR study of conformation of (M. Lehnig, W.P. Neumann, E. Wallis), (333) 17

## Gold

- Amorphous organogold compounds, radial distribution function study of molecular structure of (V.I. Korsunsky, K.I. Grandberg, E.I. Smyslova, T.V. Baukova), (335) 277
- [AuX<sub>3</sub>(ylide)] and *trans*-[Au(C<sub>6</sub>F<sub>5</sub>)<sub>2</sub>(ylide)] (X = halide or psuedohalide) neutral complexes,

- synthesis and reactivity of; X-ray structure of  $[\text{Au}(\text{SCN})_3(\text{CHPPH}_3)]$  (R. Usón, A. Laguna, M. Laguna, M.C. Gimeno, P.G. Jones, K. Meyer-Bäse, C.F. Erdrügger), (336) 461
- Carbonylosmium mixed metal clusters, fluxionality in (S.R. Drake, B.F.G. Johnson, J. Lewis), (340) C31
- $\text{C}_2\{\text{Au}[\text{P}(\text{C}_6\text{H}_4\text{R}-3)_3]\}_2 \cdot n\text{C}_6\text{H}_6$  (R = H,  $n = 2$ ; R = Me,  $n = 0, 1$ ), crystal structures of (M.I. Bruce, K.R. Grundy, M.J. Liddell, M.R. Snow, E.R.T. Tiekink), (344) C49
- Fluorenyl(triphenylphosphine)gold(I), synthesis and structure of (Yu.T. Struchkov, Yu.L. Slovokhotov, D.N. Kravtsov, T.V. Baukova, E.G. Perevalova, K.J. Grandberg), (338) 269
- Hydrogen dimethylbis(2-pyridyl)aurate(III), isolation of (S. Komiya, S. Meguro, A. Shibue, S. Ozaki), (328) C40
- Keto-stabilised phosphorus ylide gold(I) and gold(III) complexes (J. Vicente, M.T. Chicote, I. Saura-Llamas, J. Turpin, J. Fernandez-Baeza), (333) 129
- Mixed metal cluster compounds,  $[\text{M}_2\text{Ru}(\mu\text{-CO})_{10}(\text{PPh}_3)_2]$  (M = Cu, Ag, Au), synthesis and structural characterisation of; X-ray crystal structures of  $[\text{M}_2\text{Ru}_4(\mu\text{-CO})_3(\text{CO})_{10}(\text{PPh}_3)_2]$  (M = Cu, Ag) (S.S.D. Brown, I.D. Salter, T. Adatia, M. McPartlin), (332) C6
- Pentafluorophenyl group distortion in metal complexes, limitations of rigid-body refinement (P.G. Jones), (345) 405
- Pentafluorophenyl(dithiocarbamate)gold(III) complexes, crystal and molecular structure of  $(\text{C}_6\text{F}_5)_2\text{Au}\{\text{S}_2\text{CN}(\text{CH}_2\text{Ph})_2\}$  (R. Usón, A. Laguna, M. Laguna, M. Luz Castilla, P.G. Jones, K. Meyer-Bäse), (336) 453
- Phosphinegold(I) derivatives of metal-rich metal-laborane  $\text{HFe}_4(\text{CO})_{12}\text{BH}_2$ , phosphine exchange involving cation and cluster-bound phosphine ligands (K.S. Harpp, C.E. Housecroft), (340) 389
- $[\text{Pt}_3\text{Au}(\mu_2\text{-CO})_3(\text{PPh}_3)_5]\text{NO}_3$ , synthesis and structural characterisation of (J.J. Bour, R.P.F. Kanters, P.P.J. Schlebos, W. Bos, W.P. Bosman, H. Behm, P.T. Beurskens, J.J. Stegerda), (329) 405
- $[\text{Pt}(\text{C}\equiv\text{CH})_2(\text{Ph}_2\text{PCH}_2\text{PPh}_2)_2]$ , synthesis and formation of heterobimetallic Pt-Ag, Pt-Au, Pt-Rh, Pt-Ir, and Pt-W derivatives of (S.W. Carr, P.G. Pringle, B.L. Shaw), (341) 543
- (Tertiary phosphine)gold(I) substituted imidazoles or pyrazolones, reactions with acidic reagents of; crystal structure of 1-methyl-2-(cyclohexylphosphinegoldthiolato)imidazole · 2benzimidazole (F. Bonati, A. Burini, B.R. Pietroni, E. Giorgini, B. Bovio), (344) 119
- Transmetallation of a binuclear complex of nickel(0); synthesis and structure of  $[\text{NiAu}(\text{CNMe})_2(\text{dppm})_2]\text{Cl}$  (H.P. Kim, P.E. Fanwick, C.P. Kubiak), (346) C39
- (Triphenylphosphine)gold(I) enolate and homo-enolate complexes, preparation and crystal structures of (Y. Ito, M. Inouye, M. Sugimoto, M. Murakami), (342) C41

## Hafnium

- Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167
- Group 4 metallocene-substituted ylides, synthesis and reactions with ketones of (G. Erker, P. Czisch, R. Mynott), (334) 91
- Hafnacyclopentadiene unsymmetrically substituted compounds, synthesis and structure of (M.B. Sabade, M.F. Farona, E.A. Zarate, W.J. Youngs), (338) 347
- (Pentamethylcyclopentadienyl)trimethylsilicon, effective reagent for transfer of  $\text{C}_5\text{Me}_5$  rings; route to monopentamethylcyclopentadienyl trihalides of group 4 elements (G.H. Llinás, M. Mena, F. Palacios, P. Royo, R. Serrano), (340) 37

## Indium

- Alkyl- and aryl-thioindanes, preparation and properties of (G.G. Hoffmann), (338) 305
- Indium-arsenic and gallium-antimony six-membered rings, conformations of (A.H. Cowley, R.A. Jones, K.B. Kidd, C.M. Nunn, D.L. Westmoreland), (341) C1
- Monocyclopentadienyl-indium and -thallium complexes, vibrational spectra and structure of (O.G. Garkusha, B.V. Lokshin, R.B. Materikova, L.M. Golubinskaya, V.I. Bregadze, A.P. Kurbakova), (342) 281
- Trialkyl-gallium and -indium adducts of tetramethyldiphosphine, synthesis of (H.D. Hodes, A.D. Berry), (336) 299
- Trimethylsilyl-substituted cyclopentadienylindium(I) compounds, synthesis and properties of (P. Jutzi, W. Leffers, G. Müller), (334) C24

## Iridium

- Alkyl-, aryl- and *cis*-dihydrido-iridium complexes with  $\text{P}(\text{CH}_2\text{CH}_2\text{PPh}_2)_3$ , excellent precursors for activation of hydrocarbon C-H bonds (C. Bianchini, M. Peruzzini, F. Zanobini), (326) C79

- $\eta^6$ -Arene-rhodium(III) and -iridium(III) complexes,  $[(Me_2SiC_6H_5)_4M_2H_2]$  ( $M = Rh, Ir$ ), synthesis and structure determination of (M.-J. Fernandez, M.A. Esteruelas, L.A. Oro, J. Ruiz, A.J. Smith, P.M. Maitlis), (330) 179
- Carbonyliridium clusters, chemistry of; preparation of  $Ir_4(CO)_{12}$  (R. Della Pergola, L. Garlaschelli, S. Martinengo), (331) 271
- $(COD)_2M_2(\mu-R)_2$ , reactions with organolithium reagents under formation of  $(COD)_2M_2R_4Li_2$  ( $M = Rh, Ir$ ) of; crystal structure of  $(COD)_2Rh_2(CH_2SiMe_3)_4Li_2$  and  $(COD)Rh(CH_2SiMe_3)_2Li(Me_2NCH_2CH_2NMe_2)$  (M.A. Kulzick, R.A. Andersen, E.L. Muettterties, V.W. Day), (336) 221
- Cycloheptatrienyl-bridged heterobimetallic complexes synthesis and reactivity of  $(\mu-C_7H_7)Fe(CO)_3Ir(CO)_2$  (F. Edelmann, J. Takats), (344) 351
- Cyclometallated transition metal complexes, formation by metal exchange in organomercury complexes of (E.C. Constable, T.A. Leese), (335) 293
- Cyclopentadienyl(olefin)(trisopropylphosphine)-iridium and cyclopentadienyl(bis-olefin)iridium, preparation and reactions of (M. Dziallas, A. Höhn, H. Werner), (330) 207
- 2,6-Diallylpyridine (DAP) complexes of iridium(I), ruthenium(II), palladium(II), synthesis of; crystal structures of  $[RuCl_2(PPh_3)(DAP)]$  and  $[PdCl_2(DAP)_2]$  (G. Vasapollo, C.F. Nobile, M. Latronico, M. Lanfranchi, M.A. Pellinghelli), (336) 429
- Dodecacarbonyltetra-cobalt, -rhodium and -iridium complexes containing bridging CO ligands, M-M bond length shortening effects in (D. Brage, F. Grepioni), (336) C9
- Ether-phosphane-iridium complexes, synthesis and behaviour towards hydrogen of (E. Lindner, S. Meyer), (339) 193
- Fischer-Tropsch reaction, models for formation of oxygenates in (I.M. Saez, P.M. Maitlis), (334) C14
- Hydride, alkyl and halide iridium and zirconium complexes, MO study of stereoselective addition to (L. Zhu, N.M. Kostic), (335) 395
- $[Ir(cod)(\eta^2-o-HalC_6H_4PPh_2)]SbF_6$  ( $Hal = Br, Cl$ ), structural and chemical studies of halo-carbon chelation in (M.J. Burk, R.H. Crabtree, E.M. Holt), (341) 495
- Iridium-initiated C-C coupling of malonodinitrile with  $CS_2$ ; synthesis and crystal structure of  $[H_2Ir(PPhMe_2)_4]^+ [HS(S)CC(CN)_2]^-$  (A. Behr, W. Keim, W. Kipshagen, D. Vogt, E. Herdtweck, W.A. Herrmann), (344) C15
- $Ir(OMe)(CO)(PPh_3)_2(SO_4)$ , synthesis, characterisation and disordered crystal structure of (J.C. Fettinger, M.R. Churchill, K.A. Bernard, J.D. Atwood), (340) 377
- Nitrilium triflate salts, reactions with *trans*- $[IrCl(CO)(PPh_3)_2]$  of (M. Barber, B.L. Booth, P.J. Bowers, L. Tetler), (328) C25
- Pentadienyl-iridium(III) and -rhodium(III) complexes, synthesis and characterisation of (C.-C. Chen, R.-S. Liu), (336) 249
- Pentafluorophenyl group distortion in metal complexes, limitations of rigid-body refinement (P.G. Jones), (345) 405
- Phosphine-ruthenium, -osmium and -iridium complexes as precursors of terminal phosphido complexes, crystal structure of  $[Os(\mu-PH_2)Cl(CO)(PPh_3)_2]_2 \cdot (C_2H_2Cl_4)_4$  (D.S. Bohle, G.R. Clark, C.E.F. Rickard, W.R. Roper, M.J. Taylor), (348) 385
- $[Pt(C\equiv CH)_2(Ph_2PCH_2PPh_2-P)_2]$ , synthesis and formation of heterobimetallic Pt-Ag, Pt-Au, Pt-Rh, Pt-Ir, and Pt-W derivatives of (S.W. Carr, P.G. Pringle, B.L. Shaw), (341) 543
- Rhodium(I) dimeric complex with bridging  $\sigma$ - and  $\pi$ -bonded 2,5-dimethylpyrrolido ligands, synthesis, structure and reactions of (K. Yünlü, F. Basolo, A.L. Rheingold), (330) 221
- $[3-(\eta^5\text{-Tetramethylcyclopentadienyl})-1-(\eta^6\text{-mesityl})\text{propane}]iridium(II)$  bistetrafluoroborate mononitromethane, crystal and molecular structure of (P.O. Lumme, U. Turpeinen, V.S. Kaganovich, R.R. Kudinov, M.I. Rybinskaya), (348) 255
- Tris(pyrazol-1-yl)methane-rhodium(I) and -iridium(I) complexes, crystal structure of  $[Rh(COD)(tpz)m][RhCl_2(COD)] \cdot 3CHCl_3$  (M.A. Esteruelas, L.A. Oro, M.C. Apreda, C. Foces-Foces, F.H. Cano, R.M. Claramunt, C. Lopez, J. Elguero, M. Begtrup), (344) 93
- Vaska's compound, *trans*- $IrCl(CO)(PPh_3)_2$ , X-ray study including resolution of the CO/Cl disorder problem of (M.R. Churchill, J.C. Fettinger, L.A. Buttrey, M.D. Barkan, J.S. Thompson), (340) 257
- Vinylidene-metal complexes from norbornadiene, isolation of a metallacyclic compound as intermediate (M. Dziallas, H. Werner), (333) C29

## Iron

- 1-Acetoxy-1-ferrocenylethane,  $\alpha$ -alkylation of carbonyl compounds by reactions with (M.T. Retz, M. Sauerwald), (328) 155
- Acetylene-dicarbonylbis(trimethylphosphite)iron fragments, coordination and chemistry of (R. Birk, U. Grössmann, H.-U. Hund, H. Berke), (345) 321
- $(\mu-\sigma, \pi\text{-Acetylido})(\mu\text{-alkane- and } \mu\text{-arene-thiolate})\text{bis}(\text{tricarboxyliron})$  complexes, synthesis



- and reactivity of (D. Seyferth, J.B. Hoke, D.R. Wheeler), (341) 421
- Acyliron complex,  $\text{CpFe}(\text{CO})(\text{PPh}_3)(\text{COCH}_2\text{-CHCHCOOCOCHCHCRH}=\text{CH})$ , synthesis, characterization and molecular structure of (G.-H. Lee, S.-M. Peng, S.-F. Lush, R.-S. Liu), (349) 219
- $\eta^2$ -Aldehyde-metal complexes,  $(\text{CO})_2(\text{PET}_3)_2\text{-FeRCHO}$  (R = H, Ph), synthesis of (R. Birk, H. Berke, H.-U. Hund, K. Evertz, G. Huttner, L. Zsolnai), (342) 67
- Alkali(diphosphoallyl)ferrate, synthesis and reactions of (R. Appel, W. Schuhn), (329) 179
- Alkyl- and aryl-mono- $\eta^5$ -cyclopentadienylphosphine-iron, -cobalt and -nickel compounds, preparation of (F. Scott, S. Cronjé, H.G. Raubenheimer), (326) C40
- $\mu$ -Alkylidynediiron complexes, conversion to nitriles of (C.P. Casey, L.K. Woo), (328) 161
- Alkylolithium and Grignard reagent addition to tetracarbonyliron complexes of  $\alpha, \beta$ -unsaturated esters (D. Rakshit, S.E. Thomas), (333) C3
- Alkyne- and phosphalkyne-metal carbonyl complexes, difference in coordination chemistry of; synthesis, crystal and molecular structures of  $[\text{Mo}_2(\text{CO})_4(\eta^5\text{-C}_5\text{H}_5)_2\text{-}(\text{Bu}^i\text{CP})\text{Fe}(\text{CO})_4]$  and  $[\text{Mo}_2(\text{CO})_4(\eta^5\text{-C}_5\text{H}_5)_2(\text{Bu}^i\text{CP})\text{W}(\text{CO})_5]$  (P.B. Hitchcock, M.F. Meidine, J.F. Nixon), (333) 337
- $\sigma$ -Alkyne organometallic compounds, synthesis catalysed by copper(I) iodide in triethylamine of (D. Villemain, E. Schigeko), (346) C24
- Alkyneiron bi- and tri-nuclear complexes, synthesis and characterisation of; crystal structures of  $[(\eta^5\text{-C}_5\text{H}_5)_2\text{Fe}_3(\text{CO})_3(\mu_3\text{-CO})(\mu\text{-CO})(\text{CF}_3)_2\text{CF}_3)]$  and  $[(\mu\text{-CF}_3\text{CC}(\text{CF}_3)\text{S})\text{-}\{\text{Fe}(\text{CO})_3\}_2]$  (R. Rumin, F.Y. Pétillon, A.H. Henderson, L. Manojlović-Muir, K.W. Muir), (336) C50
- Alkynyl-iron and -ruthenium complexes, synthetic and electrochemical studies on (C. Bitcon, M.W. Whitely), (336) 385
- Allyl cationic complexes from trinuclear carbonyl clusters of iron, ruthenium and osmium, synthesis of (V.V. Krivykh, T. Asunta, O.V. Gusev, M.I. Rybinskaya), (338) 55
- Arenecarbonylcobalt clusters with functional substituents in a side chain (V.S. Kaganovich, M.I. Rybinskaya), (344) 383
- Arene-chromium and -iron complexes, transanular substituent effects in (V.V. Litvak, P.P. Kun, V.D. Shteingarts), (348) 219
- $(\eta^6\text{-Arene})(\eta^5\text{-cyclopentadienyl})\text{iron(II)}$  salts,  $^{57}\text{Fe}$  Mössbauer study of (A. Houlton, K.G. Ofori-Okai, R.M.G. Roberts, J. Silver, A.S. Wells), (326) 217
- $\pi$ -Areneiron, catalytic and stoichiometric reactions with alkynes of (A. Funhoff, H. Schäuufele, U. Zenneck), (345) 331
- Arenetricarbonylchromium, reactions with Grignard reagent, *n*-BuMgBr, of (S. Top, G. Jaouen), (336) 143
- Benzeneiron labile complexes, crystal structure of *cis*- and *trans*- $\text{FeHI}(\text{CO})_2(\text{PPh}_3)_2$  (M.J. Begley, S.G. Puntambekar, A.H. Wright), (329) C7
- Binuclear transition metal complexes with mixed bridges, characterisation of the bridges on MO calculations of (B. Jeżowska-Trzebiatowska, B. Nissen-Sobocińska), (342) 353
- $\eta^6$ -(Biphenyl)- $\eta^5$ -(cyclopentadienyl)iron(II) hexafluorophosphates, synthesis and structure of (R.M.G. Roberts, J. Silver, A.S. Wells, S.P. Wilkinson), (327) 247
- Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359
- Bis(dicarbonyl- $\eta^5$ -cyclopentadienyl)iron)diphenyltin, crystal structure of (L. Párkányi, K.H. Pannell, C. Hernandez), (347) 295
- Bis(diphenylphosphineethane)(pentamethylcyclopentadienyl)iron complexes, direct and specific sonochemically assisted preparation of (C. Roger, P. Marseille, C. Salus, J.-R. Hamon, C. Lapinte), (336) C13
- Bis(diphenylphosphineethyl)hydridoiron cation,  $(\text{FeH}(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)_2)^+$ , electrochemical metal-hydride bond cleavage at (M.A.N.D.A. Lemos, A.J.L. Pombeiro), (332) C17
- [Bis(diphenylphosphino)ethane]tricarbonyliron(0), crystal and molecular structure of (L.P. Battaglia, D. Delledonne, M. Nardelli, C. Pelizzi, G. Predieri, G.P. Chiusoli), (330) 101
- Bis(ferrocenylamino)glyoxime and its nickel complex, synthesis of (M. Ertas, V. Ahsen, A. Gül, Ö. Bekâröglü), (333) 383
- Bis(pentadienyl)-iron, -ruthenium and -osmium compounds, synthetic, structural and PE spectroscopic studies on; the role of the heavy metal in (L. Stahl, H. Ma, R.D. Ernst, I. Hyla-Kryspin, R. Gleiter, M.L. Ziegler), (326) 257
- Bis( $\mu$ -phenylphosphidolithium)bis(tricarbonyliron) ( $\mu$ -PhPLi) $_2\text{Fe}_2(\text{CO})_6$ , reactions with organic halides of; anionic rearrangement of a chelating diphosphido ligand (D. Seyferth, T.G. Wood and R.S. Henderson), (336) 163
- Bis- $\mu$ -(*S*-alkyl)hexacarbonyldiiron binuclear complexes, preparation by decarbonylation reactions of dithiocarbonates with nonacarbonyl-

- diiron of (A. Lagadec, R. Dabard, A. Le Rouzic, H. Patin), (326) 381
- Bis-porphyrin-ferrocene, synthesis and electrochemistry of (P.D. Beer, S.S. Kurek), (336) C17
- Butadienetricarbonyliron complexes, synthesis of chlorhydrins and epoxydienes with (J.P. Lelouche, E. Bulot, J.P. Beaucourt, J. Martelli, R. Gree), (342) C21
- 1-(But-3-enyl)-2,3,4,5-tetramethylcyclopentadienyl-iron and -cobalt complexes, synthesis of (J. Okuda, K.H. Zimmermann), (344) C1
- t-Butylphosphaacetylene, ring formation with  $\pi$ -areneiron complexes of (M. Driess, D. Hu, H. Pritzkow, H. Schäufele, U. Zenneck, M. Regitz, W. Rösch), (334) C35
- (t-Butylthio)(hydrido)nonacarbonyltriiron,  $\text{Fe}_3(\text{CO})_9(\mu_2\text{-H})(\mu_3\text{-S-t-Bu})$ , kinetic investigations of deprotonation by amines of (L.-R. Frank, A. Winter, G. Huttner), (335) 249
- Carbon monoxide replacement by trimethylphosphite, detection of motions of ancillary bridging ligands during (A. Darchen, E.K. Lhadi, H. Patin), (327) C37
- Carbonyliron trinuclear derivatives from reactions of disodium octacarbonyldiferrate with (dialkylamino)dichlorophosphines (R.B. King, G.S. Chorghade), (341) 407
- $([\eta\text{-C}_5\text{H}_5)(\text{CO})_2\text{FeC}(\text{S})\text{SMLn}]$  ( $\text{MLn} = \text{Fe}(\eta\text{-C}_5\text{H}_5)(\text{CO})_2$ ,  $\text{Re}(\text{CO})_5$ ), reactions with organic electrophiles of (L. Busetto, S. Bordoni, V. Zanotti), (339) 125
- $(\text{C}_5\text{H}_5)(\text{CO})\text{LFeH}$  ( $\text{L} = \text{CO}$ ,  $\text{PPh}_3$ ) and  $[(\text{C}_5\text{H}_5)(\text{CO})\text{FeH}]_2[(\mu\text{-C}_6\text{H}_5)_2\text{PCH}_2\text{CH}_2\text{P}(\text{C}_6\text{H}_5)_2]$  complexes, insertion of cyano- and dicyano-acetylenes into Fe-H bonds in (M. Carion, M. Etienne, J.E. Guerchais, R. Kergoat, M.K. Kubicki), (327) 393
- $(\eta^5\text{-C}_5\text{H}_5)\text{Fe}[\eta^5\text{-C}_5\text{H}_4\text{CCO}_3(\text{CO})_9]$  and  $(\eta^5\text{-C}_5\text{H}_5)\text{Fe}[\eta^5\text{-C}_5\text{H}_4\text{CCO}_3(\eta^5\text{-C}_5\text{H}_5)_3\text{CH}]$ , crystal and electronic structures of (S.B. Colbran, L.R. Hanton, B.H. Robinson, W.T. Robinson, J. Simpson), (330) 415
- $[\text{C}_5\text{H}_5\text{Fe}(\text{CO})\text{L}(\text{EMe}_2)]^+$  ( $\text{E} = \text{S}$ ,  $\text{Se}$ ,  $\text{Te}$ ), synthesis and reactivity of (N. Kuhn, H. Schumann, E. Zauder), (327) 17
- $(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})(\text{PPh}_3)\text{COR}$  ( $\text{R} = \text{CH}_3$ ,  $\text{CH}_2\text{SiMe}_3$ , and  $\text{CH}_2\text{SiMe}_2\text{Ph}$ ), thermal decarbonylation of (K.H. Pannell, J.R. Rice), (341) 415
- $[(\eta^5\text{-C}_5\text{H}_4\text{Me})\text{Fe}(\text{CO})(\text{L})\text{I}]$  complexes,  $^{13}\text{C}$  NMR spectra of (L. Carlton, P. Johnston, N.J. Coville), (339) 339
- $\text{C}_5\text{Me}_3\text{MC}_5\text{Me}_4\text{CHAr}^+$  ( $\text{M} = \text{Ru}$ ,  $\text{Os}$ ), synthesis and NMR study of; comparison with Fe-containing analogues of (M.I. Rybinskaya, A.Z. Kreindlin, S.S. Fadeeva, P.V. Petrovskii), (345) 341
- $[(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2\text{I}]$ , catalysed reactions with group 15 donor ligands of (N.J. Coville, E.A. Darling, A.W. Hearn, P. Johnston), (328) 375
- $\eta^4$ -Complexes *endo*-1-chloro-2,5-diphenylsilacyclopentadiene, reactions with lithium reagents of; crystal structure of dicarbonylphenyl( $\eta^4$ -*exo*-1-methyl-1-oxy-2,5-diphenylsilacyclopentadiene) carbeneiron (F.H. Carré, R.J.P. Corriu, C. Guérin, B.J.L. Henner, W.W.C. Wong Chi Man), (336) C1
- 18-Crown-6 potassium  $[\eta^4\text{-(1,4-diphenylbutadienylene)triacarbonyliron}]\text{trifluorosilicate}$ , synthesis, dynamic behaviour and structure of (F.H. Carré, R.J.P. Corriu, C. Guérin, B.J.L. Henner, W.W.C. Wong Chi Man), (347) C1
- Cycloaddition of tetracyanoethene to Mn, Fe and Ni complexes, hydration of a W complex; X-ray structures of  $\text{Fe}\{\text{C}[\text{C}(\text{CN})_2]\text{-CPh}=\text{C}(\text{CN})_2\}(\text{CO})_2(\eta\text{-C}_5\text{H}_5)$  and  $\text{Ni}\{\text{C}[\text{C}[\text{C}(\text{CN})_2]\text{CPh}=\text{C}(\text{CN})_2\}4\text{-PPh}_3(\eta\text{-C}_5\text{H}_5)$  (M.I. Bruce, D.N. Duffy, M.J. Liddell, M.R. Snow, E.R.T. Tickink), (335) 365
- Cycloheptatrienyl-bridged heterobimetallic complexes, synthesis and reactivity of  $(\mu\text{-C}_7\text{H}_7)\text{-Fe}(\text{CO})_3\text{Ir}(\text{CO})_2$  (F. Edelmann, J. Takats), (344) 351
- Cycloheptatrienylvinylidene-iron, -ruthenium and -osmium complexes, preparation and properties of (M.I. Bruce, M.G. Humphrey, G.A. Koutsantonis, M.J. Liddell), (326) 247
- $\eta^4$ -Cyclohexadienetricarbonyliron substituted compounds, mechanism of formation by isomerisation of 4-vinyl-cyclohexene derivatives of (J. Rodriguez, P. Brun, B. Waegell), (333) C25
- (4*S*,5*S*)-*trans*-4-(Cyclopentadiene-1-methyl)-5-diphenylphosphine-2,2-dimethyl-1,3-dioxolane and *trans*- $[\text{Fe}\{\eta\text{-C}_5\text{H}_4\text{I}_4\text{CH}_2[\text{CHOC}(\text{CH}_3)_2\text{-OCH}]\text{CH}_2\text{PPh}_2\}_2]$ , synthesis of (M.L.H. Green, N.M. Walker), (344) 379
- Cyclopentadienyldicarbonyliodoiron-diisopropylamine system, photoreaction with pyrrole and indole of (J. Zakrzewski), (327) C41
- Cyclopentadienyliron complexed substituted benzenes hindered at the *ortho* position, nucleophilic additions to (C.H. Zhang, R.L. Chowdhury, A. Piórko, C.C. Lee, R.G. Sutherland), (346) 67
- Cyclopentadienyliron complexes of substituted benzenes, product distributions in addition of hydride ion to (R.G. Sutherland, C.H. Zhang, R.L. Chowdhury, A. Piórko, C.C. Lee), (333) 367
- Cyclopentadienyliron complexes used in nucleophilic substitution reactions of chloro- and nitro-arenes and synthesis of substituted arenes by demetallation (A.S. Abd-El-Aziz,

- C.C. Lee, A. Piórko, R.G. Sutherland), (348) 95
- Cyclopentadienyliron, synthesis and reactions of chelated carbene-olefin complex of (D.L. Reger, S.A. Klaeren), (342) 77
- Cyclopentadienyllithium and alkyltrichlorosilanes, preparation of bridged trinuclear complexes from (M.E. Wright, V.W. Day), (329) 43
- Decacarbonyltriiron bridging phosphine complexes, alkyne insertion into (K. Knoll, G. Huttner, L. Zsolnai, O. Orama), (327) 379
- Dialkylaminotrimethylsilylacetylenes, reactions with metal carbonyls of (R.B. King, R.M. Murray, R.E. Davis, P.K. Ross), (330) 115
- Di- and poly-nuclear transition metal complexes as catalysts for metal carbonyl-substitution reactions; role of supported metals and metal oxides as catalyst promoters (M.O. Alberts, N.J. Coville, E. Singleton), (326) 229
- (1Z,3Z)-1,4-Dibromobutadiene, (1Z,3Z)-1-bromo-4-lithiobutadiene and (1Z, 3Z)-1,4-dithiobutadiene, synthesis of; structure of (1Z,3Z)-( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)Fe(CO)<sub>2</sub>CH=CHCH=CHBr (R. Ferede, M. Noble, A.W. Cordes, N.T. Allison, J. Lay), (339) 1
- Dicarbonylcyclopentadienyletheneiron cation, [C<sub>5</sub>H<sub>5</sub>Fe(CO)<sub>2</sub>(C<sub>2</sub>H<sub>4</sub>)<sup>+</sup>, carbon basicity scale based on (S. Chapman, L.A.P. Kane-Maguire, R. Kanitz), (329) C11
- Dichloro[N,N-dimethyl-1-[1',2-bis(diphenylphosphino)ferrocenyl]ethylamine]palladium(II), crystal structure of (Tamio Hayashi, M. Kumada, T. Higuchi, K. Hirotsu), (334) 195
- Di- $\eta$ -cyclopentadienyldicarbonyliron(*p*-tolyl)tin(IV) bromide, structural study of (Z.-T. Wang, H.-K. Wang, X.-Y. Liu, X.-K. Yao, H.-G. Wang), (331) 263
- Di- $\eta^5$ -cyclopentadienyliron(II) derivatives, electronic structure of (A.M. Al-Saeed, E.A. Seddon, K.R. Seddon, A.A. Shimran, S. Tompkins, M.C. Grossel, J.P. Knychiala), (347) C25
- (Diene)Fe(CO)<sub>2</sub>PR<sub>3</sub> and [(dienyl)Fe(CO)<sub>2</sub>PR<sub>3</sub>]X complexes, altered reactivity towards electrophiles and nucleophiles of (J.A.S. Howell, M.-C. Tirvengadam, G. Walton), (338) 217
- Dienetricarbonyliron complexes, Friedel-Crafts chemistry of, acetylation of 1-silylated and 1,4-disubstituted dienes (M. Franck-Neumann, M. Sedrati, A. Abdali), (339) C9
- Dienylmetal compounds, synthesis and reactivity of [C<sub>5</sub>H<sub>5</sub>Fe(SMe<sub>2</sub>)<sub>3</sub>]PF<sub>6</sub> (N. Kuhn, E. Zauder), (340) C1
- Diiron cationic  $\mu$ - $\eta^2$ -(C,O)-enolate complexes, metal-exchange reactions of (M. Akita, M. Terada, Y. Moro-oka), (345) C9
- Diiron cationic  $\mu$ -vinylcarbyne complexes, addition of nucleophiles to; synthesis of functionalized diiron  $\mu$ -alkenylidene complexes (C.P. Casey, M.S. Konings, S.R. Marder), (345) 125
- Dimethylaminomethylferrocene, organometallic derivatives of (L.I. Troitskaya, V.I. Sokolov), (328) 169
- Dimethyl cycloocta-2,5,7-triene-1,4-dicarboxylate and a tricarbonyliron complex therefrom, valence tautomers of (R.C. Kerber, H. Müller), (329) 357
- (2,4-Dimethylpentadienyl)iron dicarbonyl dimer, solid state structure of (R.W. Gedridge, A.T. Patton, R.D. Ernst, H. Ma), (331) 73
- Dithioesters, S=C(Me)SEt and S=C(Ph)SMe, carbonyl insertion into a C-S bond and complex dimerisation during reactions with carbonyliron complexes of (G.J. Kruger, A. van A. Lombard, H.G. Raubenheimer), (331) 247
- Doubly charged sandwich compounds in the gas phase, charge separation (coulomb explosion) processes of; evidence for junction of two C<sub>5</sub>H<sub>5</sub> units (T. Drewello, C.B. Lebrilla, H. Schwarz, T. Ast), (339) 333
- Enantioselective hydrosilylation, complexes with free donor groups as co-catalysts for (H. Brunner, H. Fisch), (335) 15
- Ethylidenediiron bridged complex, reaction with tetracyanoethylene of; synthesis and crystal structure of  $\mu$ -3,4,4-tricyanobuta-1,3-dienylidene complex [(C<sub>5</sub>H<sub>5</sub>)Fe(CO)]<sub>2</sub>( $\mu$ -CO)[ $\mu$ -C=CH(NC)C=C(CN)<sub>2</sub>] (M. Etienne, L. Toupet), (344) C19
- Et<sub>2</sub>NP-bridged carbonyliron clusters, synthesis and reactions of (K. Knoll, G. Huttner, K. Evertz), (333) 97
- (Fe<sub>2</sub>( $\eta$ -C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>(CO)<sub>4-n</sub>(CNMe)<sub>n</sub>) complexes, reactions with silver(I) salts of; crystal structure of [Fe( $\eta$ -C<sub>5</sub>H<sub>5</sub>)(CO)<sub>2</sub>(CNMe)]BF<sub>4</sub> (B. Callan, A.R. Manning, F.S. Stephens), (331) 357
- [Fe<sub>2</sub>(CO)<sub>6</sub>(bipy)(P(n-Bu)<sub>3</sub>)]<sub>2</sub>, low temperature photochemistry of; stabilisation of intermediate photoproduct in decomposition of (H.K. van Dijk, D.J. Stufkens, A. Oskam), (340) 227
- [Fe(CO)<sub>3</sub>(1-5)- $\eta$ -C<sub>6</sub>H<sub>7</sub>]<sup>+</sup>, extended nucleophilicity scale for nucleophilic addition to (T. Ghazy, L.A.P. Kane-Maguire), (338) 47
- [Fe(CO)( $\eta^4$ -C<sub>4</sub>Ph<sub>3</sub>OMe)(NO)(PPh<sub>3</sub>)]<sup>+</sup>[BF<sub>4</sub>]<sup>-</sup>, a cationic  $\eta^4$ -cyclobutadieneiron complex, formation of (U. Behrens, K.-J. Jens, J. Kopf, T. Valeri, E. Weiss), (348) 379
- [Fe<sub>3</sub>(CO)<sub>11</sub>(RCN)] derivatives, synthesis and properties of; crystal and molecular structure of [Fe<sub>3</sub>(CO)<sub>11</sub>(NCC<sub>6</sub>H<sub>4</sub>-2-Me)] (C.J. Cardin,

- D.J. Cardin, N.B. Kelly, G.A. Lawless, M.B. Power), (341) 447
- cis-* and *trans*-Fe(CyNC)<sub>4</sub>(SPh)<sub>2</sub>, bis-thiolate precursors of (CyNC)<sub>4</sub>Fe(SPh)<sub>2</sub>Mo(CO)<sub>4</sub>, synthesis of (L.D. Rosenhein, J.W. McDonald), (345) 143
- cis*-FeH<sub>2</sub>[P(CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>PMe<sub>2</sub>)<sub>3</sub>], synthesis and reactions of (M. Antberg, K.M. Frosin, L. Dahlenburg), (338) 319
- Fe(PH<sub>3</sub>)<sub>4</sub>(N<sub>2</sub>), ab initio calculations between iron(0) and dinitrogen on (M. Rosi, A. Sgamellotti, F. Tarantelli, C. Floriani), (348) C27
- Ferrocene; Annual Survey covering the year 1986 (G. Marr, B.W. Rockett), (343) 79
- Ferrocene, Friedel-Crafts alkylations with unsaturated lactones of; reactions caused by the β-ferrocenylcarbenium ion (M. Sališová, Š. Toma, E. Solčániová), (327) 77
- Ferrocene, ligand exchange with methyl- and ethyl-substituted naphthalenes of (W. Billig, J. Wendt, D. Patt, E. Gresch, H. Singer), (338) 227
- Ferrocene polymer-supported derivatives, catalytic hydrosilylation of olefins by supported palladium and platinum complexes (W.R. Cullen, N.F. Han), (333) 269
- [10]Ferrocenophanedioxime with bridging heteroatoms and its nickel(II) complex, synthesis of (M. Ertas, V. Ahsen, A. Gül, Ö. Bekároğlu), (335) 105
- Ferrocenyl- and nonamethylferrocenyl-carbinols, intramolecular hydrogen bonds in and conformations of (E.S. Shubina, L.M. Epstein, T.V. Timofeeva, Yu.T. Struchkov, A.Z. Kreindlin, S.S. Fadeeva, M.I. Rybinskaya), (346) 59
- Ferrocenylchalcogenides, synthesis of (M. Herberhold, P. Leitner), (336) 153
- N*-Ferrocenyl-2-hydroxybenzylideneimine-heterobimetallic complexes, synthesis of (M. Ertas, V. Ahsen, A. Gürek, Ö. Bekároğlu), (336) 183
- 4-(Ferrocenylhydroxyphenylmethyl)-4-butanolide, crystal and molecular structure of (Yu.T. Struchkov, A.S. Batsanov, Š. Toma, M. Sališová), (329) 375
- Ferrocenylmethylthiosuccinic acids, preparation and application to resolution of tertiary ferrocenylcarbinols of (R. Dabard, B. Mistekiewicz, H. Patin, J. Wasielewski), (328) 185
- Ferrocenylpentacarbonylmanganese, Mn(CO)<sub>5</sub>-Fc, synthesis and reactivity of (M. Herberhold, H. Kniesel), (334) 347
- Ferrocenylphospholes, preparation and chemistry of (E. Deschamps, F. Mathey), (332) 141
- Ferrodithiocarboxylic acid, synthesis of (A. Mayr, H. Stolzenberg, W.P. Fehlhammer), (338) 223
- Fe<sub>2</sub>Te<sub>2</sub>M(CO)<sub>6</sub>(PPh<sub>3</sub>)<sub>2</sub> (M = Ni, Pd, Pt), new route from Fe<sub>3</sub>Te<sub>2</sub>(CO)<sub>9</sub> and M(PPh<sub>3</sub>)<sub>4</sub> to (P. Mathur, I.J. Mavunkal), (350) 251
- Fischer-Tropsch reaction, models for formation of oxygenates in (I.M. Saez, P.M. Maitlis), (334) C14
- Group 14-iron bonds containing complexes, photochemical diastereoselective synthesis of (B. Rouida, M. Pankowski, W. Chodkiewicz, G. Jaouen), (342) C10
- Hetero-dinuclear azulene complexes, preparation and characterisation of (S. Töfke, U. Behrens), (338) 29
- Iron atom discrimination by carbon in ligand fragmentation around a Fe-Fe bond; crystal structure of [μ-η<sup>3</sup>-RCH<sub>2</sub>OC(S)SMeFe<sub>2</sub>(CO)<sub>5</sub>-P(OMe)<sub>3</sub>] (A. Darchen, E.K. Lahdi, D. Grandjean, A. Mousser, H. Patin), (342) C15
- Iron-cobalt trinuclear mixed cluster bicapped with sulphur, structural determination of (Y. Wakatsuki, H. Yamazaki, G. Cheng), (347) 151
- Iron-functionalised diphosphiranes, (C<sub>5</sub>Me<sub>5</sub>)-(CO)<sub>2</sub>MPCH<sub>2</sub>P-2,4,6-t-Bu<sub>3</sub>C<sub>6</sub>H<sub>2</sub> (M = Fe, Ru), preparation by reactions of diphosphenyl complexes with Me<sub>2</sub>S(O)=CH<sub>2</sub> (L. Weber, E. Lücke), (327) C63
- Iron group metal 30-electron triple-decker complexes with cyclopentadienyl ligands, synthesis of; X-ray structure of [(η-C<sub>5</sub>H<sub>5</sub>)Ru(μ, η-C<sub>5</sub>Me<sub>5</sub>)Ru(η-C<sub>5</sub>Me<sub>5</sub>)]PF<sub>6</sub> (A.R. Kudinov, M.I. Rybinskaya, Yu.T. Struchkov, A.I. Yanovskii, P.V. Petrovskii), (336) 187
- Iron-molybdenum and iron-tungsten sulphido clusters containing hydrazido(2-) ligands; synthesis and X-ray crystal and molecular structure of [{Fe(CO)<sub>3</sub>(μ<sub>3</sub>-S)}<sub>2</sub>Mo(NN-Me<sub>2</sub>)<sub>2</sub>(PPh<sub>3</sub>)](Fe-Fe) · CH<sub>2</sub>Cl<sub>2</sub> (P.T. Bishop, J.R. Dilworth, S. Morton, J.A. Zubieta), (341) 373
- Iron-promoted coupling of homohyostrophene (T.J. Chow, M.-F. Ding), (344) 357
- Isocyanide iron(II) compounds, synthesis of coordinated carbon monoxide from; crystal structure of [Fe(dppe)(CO)(CN-*p*-tol)(*p*-tolN=C-N-*p*-tol-C=N-*p*-tol)] (V. Riera, J. Ruiz, A. Tiripicchio, M. Tiripicchio Camellini), (327) C5
- Isocyanidoferrocene derivatives, preparation, complexation and redox properties of (T. El-Shihi, F. Sigmüller, R. Herrmann, M.F.N.N. Carvalho, A.J.L. Pombeiro) (335) 239
- Keteneiminehexacarbonyldiiron, reactions with phosphanes of (T. Sielisch, U. Behrens), (327) 85

- Lithium redox-responsive ferrocene bis-tertiary amide derivatives (P.D. Beer, H. Sikanyika, C. Blackburn, J.F. McAleer), (350) C15
- Macrocyclic thioether synthesis and monoalkylation of dithioles with  $[\text{Fe}^{\text{II}}(\text{CO})_2]$  fragments as templates; X-ray structure of dibenzo-18-crown-S6 (D. Sellmann, P. Frank, F. Knoch), (339) 345
- Mechanism of organometallic migration reactions, configuration mixing approach (A.J. Shusterman, I. Tamir, A. Pross), (340) 203
- Mercaptide-chelated porphyrins, axial ligation control by conformation and environmental effects in; synthetic compounds for cytochrome P-450 (F. Niedercorn, H. Ledon, I. Tkatchenko), (328) C7
- 6-Methoxycyclohexadienyliron complexes, access to synthetic equivalents of cyclohexadiene dications (P.W. Howard, G.R. Stephenson, S.C. Taylor), (339) C5
- 7-Methylenecycloheptatrienetricarbonyliron complexes, reaction with tetracyanoethene and subsequent isomerisation of the initial products of (D. Cunningham, N. Hallinan, G. Moran, P. McArdle), (333) 85
- $\mu$ -Methyleneiron complexes, reduction of bridged carbonyl groups as a route to (G. Ortaggi, R. Paollesse), (346) 219
- (Methylsorbate)-, (sorbaldehyde)- and (1-methoxycyclohexadiene)-dicarbonyl((+)-neomenthyltriphenylphosphine)iron, diastereoisomer separation and absolute configuration of (J.A.S. Howell, M.C. Tirvengadam, A.D. Squibb, G. Walton, P. McArdle, D. Cunningham), (347) C5
- $\text{M}[\text{Fe}_2(\text{CO})_8]_2$  (M = Si, Ge, Sn), improved synthesis of; X-ray crystal structure of  $\text{Si}[\text{Fe}_2(\text{CO})_8]_2$  (S.G. Anema, G.C. Barris, K.M. Mackay, B.K. Nicholson), (350) 207
- Mono- and bi-dentate xanthate complexes,  $\eta^5\text{-C}_5\text{R}_5\text{Fe}(\text{CO})(\eta^1\text{-SC}(\text{S})\text{OEt})\text{L}$  and  $\eta^5\text{-C}_5\text{R}_5\text{-Fe}(\eta^2\text{-S}_2\text{COEt})\text{L}$  (R = H, Me; L =  $\text{PBU}_3$ ,  $\text{PPh}_3$ ,  $\text{P}(\text{OEt})_3$ ,  $\text{P}(\text{OPh})_3$ ), synthesis, characterisation and electrochemistry of (M. Morán, I. Cuadrado, J.R. Masaguer, J. Losada), (335) 255
- Monof[tris(trimethylsilyl)cyclopentadienyl]iron complexes, formation and reactions of (J. Okuda), (333) C41
- Nonacarbonyltriiron clusters containing (RP)-(RCCR) groups, topoisomerisation and rearrangements of (K. Knoll, G. Huttner, L. Zsolnai), (332) 175
- Nonamethylferrocenyl- and ferrocenyl-carbinols, IR spectra and X-ray single crystal study of hydrogen bonds and structure of (E.S. Shibuna, L.M. Epstein, A.T. Yanovsky, T.V. Timofeeva, Yu.T. Struchkov, A.Z. Kreindlin, S.S. Fadeeva, M.I. Rybinskaya), (345) 313
- Octakis(1-lithio-2-methoxybenzene) ·  $N,N,N',N'$ -tetramethylethylenediamine, crystal structure of (S. Harder, J. Boersma, L. Brandsma, J.A. Kanters), (339) 7
- Organoiron chemistry; Annual Survey covering the year 1986 (R.C. Kerber), (343) 1
- Organoiron complexes containing selenium atom bridges, structure of (C. Hecht, E. Herdtweck, J. Rohrmann, W.A. Herrmann, W. Beck, P. Fritz), (330) 389
- Organoiron sulphanes,  $(\mu\text{-S}_x)[\text{FeCp}(\text{CO})_2]_2$  ( $x = 3, 4$ ), reactions of; synthesis of cyclopentadienyldicarbonyliron *S*-bonded monothiocarboxylates,  $\text{FeCp}(\text{CO})_2(\text{SCOR})$  (M.A. El-Hinnawi, A.M. Al-Ajlouni), (332) 321
- Organometallic aryl cations, reactions with aryloxy anions, route to substituted diphenyl ethers (F. Hossner, M. Voyle), (347) 365
- Palladium tetrafluoroborate complexes of 1,1'-bis[(alkyl- or aryl)-thio]- and 1,1'-bis(diphenylphosphino)-ferrocenes; bond formation between Fe and Pd in (M. Sato, M. Sekino, S. Akabori), (344) C31
- Pentacarbonyliron catalysed selective reduction of aryl iodides under mild conditions (J.-J. Brunet, M. Taillefer), (348) C5
- Pentacyanonitrosylferrate(2 - ) ion, reactions with carbanions of pentane-2,4-dione and 3-methylpentane-2,4-dione of (A.R. Butler, A.M. Calsy, C. Glidewell), (341) 439
- Phosphaalkynetri- and tetra-metallic complexes; crystal and molecular structure of  $[\text{Fe}_2\text{Pt}(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)(\text{CO})_6(\text{Me}_3\text{CCP})]$  (S.I. Al-Resayes, P.B. Hitchcock, M.F. Meidine, J.F. Nixon), (341) 457
- Phosphine-bridged decacarbonyltriiron clusters, synthesis and reactivity of (K. Knoll, G. Huttner, T. Fässler, L. Zsolnai), (327) 255
- Phosphinegold(I) derivatives of metal-rich metal-laborane  $\text{HFe}_4(\text{CO})_{12}\text{BH}_2$ , phosphine exchange involving cation and cluster-bound phosphine ligands (K.S. Harpp, C.E. Housecroft), (340) 389
- Phosphorus-substituted butadiene systems, complexation of (R. Appel, B. Niemann, W. Schuhn, N. Siabalis), (347) 299
- Photogenerated iron catalyst applied in oxidation of furfural with  $\text{H}_2\text{O}_2$  (F. Moulines, J. Ruiz, D. Astruc), (340) C13
- $[(\text{PPh}_3)_2\text{PdFe}(\text{SC}_5\text{H}_4)_2] \cdot 0.5\text{C}_6\text{H}_5\text{CH}_3$ , unusual heterobinuclear complex containing a weak Fe-Pd bond, structure of (M. Cowie, R.S. Dickson), (326) 269
- RP-bridged carbonyliron clusters, negative ion chemical ionisation and electronic ionisation mass spectra of (K. Knoll, G. Huttner), (329) 369
- (RP) $\text{Fe}_3(\text{CO})_9(\text{R}'\text{CCR}'')$  clusters, EHT model calculations for isomerisation processes of (G.

- Huttner, K. Knoll, T. Fässler, H. Berke), (340) 223
- [RSFe<sub>2</sub>(CO)<sub>6</sub>]<sub>2</sub>S, preparation and structural characterisation of; route to Fe-S clusters containing an S atom coordinated to four metal atoms (L.-C. Song, M. Kadiata, J.-T. Wang, R.-J. Wang, H.-G. Wang), (340) 239
- Ru(diene)<sub>2</sub>P(OMe)<sub>3</sub> complexes, synthesis of; formation of η<sup>3</sup>:η<sup>3</sup>-octadienediyl or η<sup>4</sup>-octatriene ligands upon phosphite addition to M(dimethylbutadiene)<sub>2</sub>CO (Me = Fe, Ru) (D.N. Cox, R. Roulet), (342) 87
- Silyl-substituted trihydrido-iron complexes, FeH<sub>3</sub>(CO)(Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)SiR<sub>3</sub> (M. Knorr, S. Gilbert, U. Schuhert), (347) C17
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- 3-Spiro[5]ferrocenophane-1,5-diones, synthesis from direct condensation of diacetylferrocene and cycloalkanones of (J. Mirek, S. Rachwal, T. Górecki, B. Kawalek, P. Milart, E. Szneler), (344) 363
- Stereoselective synthesis of α-hydroxycarboxylic acids from a cyclopentadienylcarbonyliron complex (S.G. Davies, M. Wills), (328) C29
- Sulphur and selenium containing heterodisubstituted ferrocenes, synthesis of; formation of 1,1'-dithiol- and 1,1'-diselenol-ferrocenes (R. Broussier, A. Ahdulla, B. Gautheron), (332) 165
- Sulphuryl chloride, reactions with [Fe<sub>2</sub>(η-C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>(CO)<sub>4</sub>]<sub>n</sub>(CNMe)<sub>n</sub> (n = 0, 1, 2, 4) and related complexes; structure of [Fe(η<sup>5</sup>-C<sub>5</sub>H<sub>7</sub>)(CO)<sub>3</sub>][FeCl<sub>4</sub>] (A.R. Manning, G. McNally, D. Cunningham, P. McArdle, J.M. Simmie), (338) 383
- (*meso*-Tetraarylporphyrin) chlorate complexes, synthesis, stereochemistry and oxidation of σ-vinyl-iron(III) complexes from (J.-P. Battioni, D. Dupré, D. Mansuy), (328) 173
- Tetracarbonyliron incorporation into complexes containing bis-μ-phosphido-supported Mo≡Mo functions (E.P. Kyba, M.C. Kerby, R.P. Kashyap, K.L. Hassett, R.E. Davis), (346) C19
- Tetrafluoroferrol, (CO)<sub>3</sub>Fe $\overline{\text{CF=CF=CF=CF}}$ (CO)<sub>3</sub>, preparation and characterisation of (D. Lentz, H. Michael), (346) C37
- Tetrahedral and butterfly M<sub>2</sub>E<sub>2</sub> clusters, structure and electron counting of; MO analysis of (L<sub>n</sub>M)<sub>2</sub>(μ-X)<sub>2</sub> (X = P, PR, PM<sup>+</sup>L<sub>s</sub>) complexes (J.-F. Halet, J.-Y. Saillard), (327) 365
- 1,1'-(1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7,16-diyl)dicarbonylferrocene dihydrate, crystal structure of (P.D. Beer, C.D. Bush, T.A. Hamor), (339) 133
- Thioacyliron dinuclear complexes, structure and reactions of (W. Ziegler, H. Umland, U. Behrens), (344) 235
- Thiobis(1-butylphosphido)hexacarbonyldiiron, Fe<sub>2</sub>(CO)<sub>6</sub>(Bu<sup>t</sup>P)<sub>2</sub>S<sub>x</sub> (x = 2,3), synthesis and characterisation of (M.A. El-Hinnawi, E.J. Wucherer, R.L. De, H. Vahrenkamp), (329) 381
- Thioether-thiolate iron, molybdenum and ruthenium complexes, structure, stereoisomerism and reactivity of (D. Sellmann, G. Binker, M. Moll, E. Herdtweck), (327) 403
- Tin(IV) halides, reactions with [Fe<sub>2</sub>(η-C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>(CO)<sub>4</sub>]<sub>n</sub>(CNMe)<sub>n</sub> (n = 1, 2) (P. Donegan, A.R. Manning), (336) 115
- To tilt or not to tilt? The dilemma of μ-C<sub>3</sub>R<sub>3</sub> ligands in binuclear complexes (E.D. Jemmis, B.V. Prasad), (347) 401
- Transition-metal substituted carboxylic acids, one-pot synthesis of (M. Akita, N. Kakinuma, Y. Moro-oka), (348) 91
- 2-Trialkylsilylbutadienetri-carbonyliron complexes, Friedel-Crafts reactions of (M. Franck-Neumann, M. Sedrati, M. Mokhi), (326) 389
- 2,4,6-Tri-*t*-butyldiphosphaallene, ArP=C=PAR (Ar = 2,4,6-*t*-Bu<sub>3</sub>C<sub>6</sub>H<sub>2</sub>), hydrogen modes migration in reactions with [W(CO)<sub>5</sub>(THF)] and [Fe<sub>2</sub>(CO)<sub>12</sub>] of: crystal structure of [Fe<sub>2</sub>(CO)<sub>6</sub>(ArP=CHPCH<sub>2</sub>(CMC<sub>2</sub>)C<sub>6</sub>H<sub>2</sub>-*t*-Bu<sub>2</sub>)] (C.A. Akpan, P.B. Hitchcock, J.F. Nixon, M. Yoshifujii, T. Niitsu, N. Inamoto), (338) C35
- Tricarbonyl(2,4-cycloheptadienonium)iron tetrafluoroborate, synthesis and absolute configuration of (N. Morita, T. Asao, H. Sotokawa, M. Hatano, A. Tajiri), (339) C1
- Tricarbonyl(cycloheptadienyl)iron(II) cation, steric and electronic influences on addition rate of pyridines to (T.I. Odiaka), (345) 135
- Tricarbonylcycloheptatrienoneiron, pressure and solvent effects on the reaction rate with tetracyanoethene (N. Hallinan, P. McArdle, J. Burgess, P. Guardado), (333) 77
- Tricarbonyliron coordinated cyclic polyolefins, kinetics and stereochemistry of pericyclic [2,2]-sigmahaptotropic rearrangement in (Z. Goldschmidt, H.E. Gottlieb), (329) 391
- Tricyclopentadienyldinitrosyltricobalt and tricyclopentadienylnitrosyldicobaltiron clusters, preparation of (J. Müller, G. Manzoni de Oliveira, H. Sonn), (340) C15
- Trimethylphosphine complexes of iron(III) tetraphenylporphyrin; <sup>1</sup>H NMR the electronic effect in paramagnetic haems (G. Simonneaux, P. Sodano), (349) C11
- Triphosphorus analogues of ferrocene, η<sup>5</sup>- and η<sup>5</sup>-η<sup>1</sup>-coordination in; crystal structure of [Fe(η<sup>5</sup>-C<sub>5</sub>H<sub>5</sub>)(η<sup>5</sup>-C<sub>2</sub>R<sub>2</sub>P<sub>3</sub>)W(CO)<sub>3</sub>] (R =

- Bu<sup>1</sup>) (R. Bartsch, P.B. Hitchcock, J.F. Nixon), (340) C37
- ( $\eta^4$ -Tropone)tricarbonyliron, reactions with 4-phenyltriazoline-3,5-dione, sigmahaptotropic rearrangements involving nitrogen migration (Z. Goldschmidt, H.E. Gottlieb, A. Almadhoun), (326) 405
- ( $\mu_3$ - $\eta^2$ -Vinylidene)( $\mu$ -CO)nonacarbonyltriiron complexes, synthesis of (D. Seyferth, J.B. Hoke, M. Cowie, A.D. Hunter), (346) 91
- Vinyl-, allyl- and alkynyl-siloles, coordination chemistry of; synthesis and structure of  $\eta^4$ ,  $\eta^2$ -allyl- and 1-vinyl-2,5-diphenylsilylcyclopentadiene complexes (F. Carré, R.J.P. Corriu, C. Guerin, B.J.L. Henner, B. Kolani, W.W.C. Wong Chi Man), (328) 15

## Lanthanides

- Paramagnetism in organolanthanide complexes (Review) (W.J. Evans, M.A. Hozbor), (326) 299

## Lanthanum

- Tricyclopentadienyllanthanides/ sodium hydrides reduction and isomerisation of olefins with (C. Qian, Y. Ge, D. Deng, Y. Gu, C. Zhang), (344) 175

## Lanthanum

- Pentamethylcyclopentadienylcyclooctatetraenescandium, -yttrium and -lanthanum, synthesis and UPS studies of (P. Bruin, M. Booiij, J.H. Teuben, A. Oskam), (350) 17

## Lead

- Allylic and vinylic silanes, germanes, stannanes and plumbanes, reactivity towards  $S_H2'$  or  $S_H2$  substitution by carbon- or heteroatom-centered free radicals of (J.P. Light II, M. Ridenour, L. Beard, J.W. Hershberger), (326) 17
- Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359
- Bivalent group 14 metal amides and alkyls, addition reactions of organic halides of acid anhydrides to (M.F. Lappert, M.C. Misra, M. Onyszchuk, R.S. Rowe, P.P. Power, M.J. Slade), (330) 31

- Dihalogeno(organylthio)alane, preparation and properties of (G.G. Hoffmann), (335) 143
- Diphenylbis(isothiocyanato)bis(hexamethylphosphoramide)-tin(IV) and -lead(IV), crystal and molecular structures of (M. Onyszchuk, I. Wharf, M. Simard, A.L. Beauchamp), (326) 25
- Group 14 free radicals derived from hydroxynaphthoquinones, ESR studies on (I.M. Ahmed, A. Hudson, A. Alberti), (333) 9
- Hydroxyanthraquinones-group 14 adducts and chrysazin-phosphorus adducts, ESR studies of (B.M. Ahmed, A. Hudson, A. Alberti), (350) 9
- Monomeric and oligomeric carbodiimides with polysilane and siloxane fragments, synthesis of (G.A. Razuvaev, A.S. Gordetsov, A.P. Kozina, T.N. Brevnova, V.V. Semenov, S.E. Skobeleva, N.A. Boxer, Yu.I. Dergunov), (327) 303
- Phenyl- and benzyl-group 14 element complexes, hyperconjugation in (A.N. Egorochkin, G.A. Razuvaev, M.A. Lopatin), (344) 49
- Stereochemically active lone pairs of electrons in group 14 compounds; crystal structure of  $\{\eta^5\text{-C}_5\text{H}_5\text{Co}[\text{P}(\text{OC}_2\text{H}_5)_2\text{O}]_3\}_2\text{M}^{\text{II}}$  (M = Sn, Pb) (E.M. Holt, W. Kläui, J.J. Zuckerman), (335) 29

## Lithium

- Acetylenic and vinylic organolithium reagents, reactions with triethoxycarbenium tetrafluoroborate of; preparation of  $\alpha$ -acetylenic and  $\alpha$ -ethylenic triethyl orthocarboxylates of (G. Picotin, Ph. Migniac), (328) 249
- Acetylenic ketones, efficient method for synthesis of (H.D. Verkrujssse, Y.A. Heus-Kloos, L. Brandsma), (338) 289
- Alkali(diphosphaallyl)ferrate, synthesis and reactions of (R. Appel, W. Schuhn), (329) 179
- $\beta$ -Alkoxy monohalogenated carbenoids,  $\text{C}_6\text{H}_5\text{-CH}(\text{OSiMe}_3)\text{CHXLi}$ , formation and stability of (R. Tarhouni, B. Kirschleger, J. Villiéras), (346) C1
- Alkylolithium and Grignard reagent addition to tetracarbonyliron complexes of  $\alpha$ , $\beta$ -unsaturated esters (D. Rakshit, S.E. Thomas), (333) C3
- Alkylolithium compounds in hydrocarbon solvents, <sup>13</sup>C NMR chemical shift substituent parameters for (R.D. Thomas, M.T. Clarke, T.C. Young), (328) 239
- Alkylolithium/potassium *t*-pentoxide systems, interaction with alkoxides of and lithium-potassium exchange in (L. Lochmann, J. Trekoval), (326) 1

- Alkyluranium(III) complexes, ( $\eta^5\text{-C}_5\text{H}_5$ )<sub>3</sub>URLi, ligand exchange reactions of (M. Foyentin, G. Folcher, M. Ephritikhine), (335) 201
- Allylic lithium reagents with allyl groups partly incorporated into carbocyclic rings, preparation of (C.G. Screttas, I.C. Smonou), (342) 143
- $\mu$ -Amido ligand formation by carbanion addition or catalytic hydration of  $\mu$ -nitrosyl ligands (J. Müller, G. Manzoni de Oliveira, J. Pickardt), (329) 241
- Aminomethyltributyltin compounds, formation from stannylation of immonium salts with tributylstannylmagnesium chloride of; regioselective route to  $\beta$ -aminoalcohols with (B. Elissondo, J.-B. Verlhac, J.-P. Quintard, M. Pereyre), (339) 267
- (Arene)tricarbonylchromium(0) complexes, preparation, structure and reactions of; crystal structure of tricarbonyl[(8,9,11,12,13,14- $\eta$ )methyl-1,2,3,4-tetrahydronaphthalene]chromium(0) (R.C. Cambie, G.R. Clark, S.R. Gallagher, P.S. Rutledge, M.J. Stone, P.D. Woodgate), (342) 315
- Arylhydrogermyllithiums, synthesis and application of (A. Castel, P. Rivière, J. Satgé, Y.-H. Ko), (342) C1
- Aryllithiums, synthesis of diarylalkylcarbinols and derivatives via CO insertion into (A.A. Vitale, F. Doctorovich, N.S. Nudelman), (332) 9
- (Benzamidinato)uranium(IV) chloride, precursor for organoactinide complexes (M. Wedler, H.W. Roesky, F. Edelmann), (345) C1
- Bis(diphenylphosphino)methanide ion, stabilization by bridging octadienyldirhenium of (R. Dominguez, T.J. Lynch, F. Wang), (338) C7
- Bis( $\mu$ -phenylphosphidolithium)bis(tricarbonyliron) ( $\mu$ -PhPLi)<sub>2</sub>Fe<sub>2</sub>(CO)<sub>6</sub>, reactions with organic halides of; anionic rearrangement of a chelating diphosphido ligand (D. Seyferth, T.G. Wood and R.S. Henderson), (336) 163
- 1,1-Bis(trimethylsilyloxy)-1,3-butadiene and trimethylsilyl 4-trimethylsilyl-2-buten-2-olate, preparation and reactions with benzaldehyde of (M. Bellassoued, R. Ennigrou, M. Gaudemar), (338) 149
- 2,3-Bis(trimethylsilyl)-1,3-butadiene, stereospecific 1,4-polymerisation of (Y.-X. Ding, W.P. Weber), (341) 267
- n*-Bu(C<sub>5</sub>H<sub>5</sub>N)Li · 2C<sub>5</sub>H<sub>5</sub>N, isolation, characterisation and solution structures of (D.R. Armstrong, R.E. Mulvey, D. Barr, R. Snaith, D. Reed), (350) 191
- 1-(But-3-enyl)-2,3,4,5-tetramethylcyclopentadienyl-iron and -cobalt complexes, synthesis of (J. Okuda, K.H. Zimmermann), (344) C1
- Carbenechromium complexes, solvent, chelation and concentration effects on benzannulation reaction with acetylenes of (K.S. Chan, G.A. Peterson, W.D. Wulff), (334) 9
- Carbophilic vs. thiophilic attack in reactions of metallated aromates and heteroaromates with carbon disulphide (H.D. Verkruijse, L. Brandsma), (332) 95
- CH<sub>2</sub>CH<sub>2</sub>(R)CHSi=CHCH<sub>2</sub>Bu-t (R = H, Me), formation and cyclo-addition reactions with *t*-butyllithium of (N. Auner), (336) 83
- (COD)<sub>2</sub>M<sub>2</sub>( $\mu$ -R)<sub>2</sub>, reactions with organolithium reagents under formation of (COD)<sub>2</sub>M<sub>2</sub>R<sub>4</sub>-Li<sub>2</sub> (M = Rh, Ir) of; crystal structure of (COD)<sub>2</sub>Rh<sub>2</sub>(CH<sub>2</sub>SiMe<sub>3</sub>)<sub>4</sub>Li<sub>2</sub> and (COD)-Rh(CH<sub>2</sub>SiMe<sub>3</sub>)<sub>2</sub>Li(Me<sub>2</sub>NCH<sub>2</sub>CH<sub>2</sub>NMe<sub>2</sub>) (M.A. Kulzick, R.A. Andersen, E.L. Muetterties, V.W. Day), (336) 221
- trans*-[CpWMe(CHO)(CO)<sub>2</sub>]<sup>-</sup> and *trans*-[CpWH(COMe)(CO)<sub>2</sub>]<sup>-</sup>, formation from CpWMe(CO)<sub>3</sub> and LiEt<sub>3</sub>BH of (J.T. Gauntlett, B.E. Mann, M.J. Winter, S. Woodward), (342) C5
- Cyclopentadienyl- and pentamethylcyclopentadienyl-vinylnickel compounds, formation of ethylene complexes by insertion into the vinyl-Ni bonds from (H. Lehmkuhl, T. Keil), (342) C38
- Cyclopentadienyllithium and alkyltrichlorosilanes, preparation of bridged trinuclear complexes from (M.E. Wright, V.W. Day), (329) 43
- Cyclopentadienyl-lithium, and -sodium ion pairs in THF and hexamethylphosphoric triamide, IR spectra of (O.G. Garkusha, I.A. Garbuzova, B.V. Lokshin, G.K. Borisov), (336) 13
- Cyclopropenylphosphaalkenes, educts for synthesis of stable 2-*H*-phosphole (F. Zurmühlen, M. Regitz), (332) C1
- (1Z,3Z)-1,4-Dibromobutadiene, (1Z,3Z)-1-bromo-4-lithiobutadiene and (1Z,3Z)-1,4-dilithiobutadiene, synthesis of; structure of (1Z,3Z)-( $\eta^5\text{-C}_5\text{H}_5$ )Fe(CO)<sub>2</sub>CH=CHCH=CHBr (R. Ferede, M. Noble, A.W. Cordes, N.T. Allison, J. Lay), (339) 1
- Dichlorobis(2,4,6-tri-*t*-butylphenyl)stannane, formation and isomeric structures of (M. Weidenbruch, K. Schäfers, S. Pohl, W. Saak, K. Peters, H.G. von Schnering), (346) 171
- Dicyclopentadienyllutetium alkoxides, thiolates and selenolates, preparation of; crystal structures of (C<sub>5</sub>Me<sub>5</sub>)<sub>2</sub>Lu( $\mu$ -S<sup>t</sup>C<sub>4</sub>H<sub>9</sub>)<sub>2</sub>Li(THF)<sub>2</sub> and (C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>Lu( $\mu$ -SeC<sub>6</sub>H<sub>5</sub>)<sub>2</sub>Li(THF)<sub>2</sub> (H. Schumann, I. Albrecht, M. Gallagher, E. Hahn, C. Muchmore, J. Pickardt), (349) 103
- Dilithioacetylene formation instead of 1,2-dilithioethane in the reaction of ethylene with



- lithium, an amendment (A. Maercker, B. Grebe), (334) C21
- 1,3-Dilithiopropanes: dimethylbis( $\alpha$ -lithiobenzyl)-silane and -germane, synthesis and applications of (O.S. Akkerman, F. Bickelhaupt), (338) 159
- N,C*-Dilithiosilylamines, preparation and reactions of (S.A. Burns, R.J.P. Corriu, V. Huynh, J.J.E. Moreau), (333) 281
- 2,6-Dimethoxyphenyllithium, crystal and molecular structure of (H. Dietrich, W. Mahdi, W. Storck), (349) 1
- Dimethyl cycloocta-2,5,7-triene-1,4-dicarboxylate and tricarbonyliron complex therefrom, valence tautomers of (R.C. Kerber, H. Müller), (329) 357
- N,N*-Dimethyl-*O*-(quinolyl-5, -6, -7 and -8) carbamates, metallation of (A. Godard, Y. Robin, G. Queguiner), (336) 1
- 2,3-Dimethyltrisopropylsilyloxybenzenetricarbonylchromium, conformation and regioselective lithiation of (J. Levisalles, F. Rose-Munch, E. Rose, A. Semra, Y. Jeannin, F. Robert), (328) 109
- Ethynyltrisopropoxytitanium reactions with pyrimidinones (F. Rise, D. Grace, K. Undheim), (338) 341
- Ferrocenylphospholes, preparation and chemistry of (E. Deschamps, F. Mathey), (332) 141
- 2-Fluoro-2-alkenoic acids, synthesis by treatment with *n*-butyllithium and Horner reaction of (P. Coutrot, C. Grison, R. Sauvêtre), (332) 1
- Fluorovinylolithium reagents, nucleophilic addition reactions in the presence of  $\text{BF}_3 \cdot \text{Et}_2\text{O}$  of (T. Dubuffet, R. Sauvêtre, J.-F. Normant), (341) 11
- Group 1 tetrameric and hexameric aggregates, applications of point charge and HSE force field models to (R.J. Bushby, H.L. Steel), (336) C25
- Hexameric lithium dimethylnaphthylsilanoate,  $[\text{LiOSiNpMe}_2]_6$ , crystal and molecular structure of (T.A. Bazhenova, R.M. Lobkovskaya, R.P. Shibaeva, A.E. Shilov, A.K. Shilova), (330) 9
- $\alpha$ -Lithiated-*O,O*-diethyltrimethylchloromethylphosphonate, preparation and properties of (M.-P. Teulade, P. Savignac), (338) 295
- Lithiation of  $\alpha,\beta$ -epoxyalkylsilanes and related  $\alpha$ -hetero-substituted epoxides, synthetic and mechanistic aspects of (J.J. Eisch, J.E. Galle), (341) 293
- Lithiation of 2-methylbenzoxazol, organometallic derivatives containing a tridentate ligand (S. Kersch, B. Wrackmeyer), (332) 25
- Metallation of linalol with strong bases and alkylation at C(8) and C(6) (T. Cuvigny, M. Julia, C. Rolando), (344) 9
- Methyl- and trimethyl-substituted vinylsilanes and disilanes, reactions with *t*-butyllithium of (N. Auner), (336) 59
- Mono[tris(trimethylsilyl)cyclopentadienyl]iron complexes, formation and reactions of (J. Okuda), (333) C41
- $\eta^6$ -Naphthalenetricarbonylchromium, lithiation of (E.P. Kündig, C. Grivet, S. Spichiger), (332) C13
- Octakis(1-lithio-2-methoxybenzene) · *N,N,N',N'*-tetramethylethylenediamine, crystal structure of (S. Harder, J. Boersma, L. Brandsma, J.A. Kanters), (339) 7
- Organolithium etherate complexes,  $[\text{Li}(\text{Et}_2\text{O})_2(\text{CPh}_3)]$  and  $[\{\text{Li}(\text{Et}_2\text{O})(2,4,6(\text{CHMe}_2)_3\text{C}_6\text{H}_2)_2\}]_2$ , isolation and X-ray structures of (R.A. Bartlett, H.V.R. Dias, P.P. Power), (341) 1
- Organolithium unusual dimer,  $\{(\text{Me}_2\text{NCH}_2\text{CH}_2\text{NMe}_2)\text{Li}[(\text{PMe}_2)\text{CH}(\text{SiMe}_3)]_2\}_2$ , structure of (H.N. Karsch, B. Deubelly, J. Riede, G. Müller), (342) C29
- Organo-silicon or -boron halides, kinetically and thermodynamically controlled interaction with acylphosphine-lithium salts of (I.F. Lutsenko, V.L. Foss, Yu.A. Veits, E.G. Neganova, A.A. Borisenko), (333) C45
- Palladium-catalysed or -promoted reductive C-C coupling, effects of phosphines and carbon ligands on (E.-I. Negishi, Tamotsu Takahashi, K. Akiyoshi), (334) 181
- 1-Phenyl-3-biphenyl-2-azaallyl-lithium and -sodium, ion pairing and kinetics of *cis,trans* to *trans,trans* isomerisation in (R.N. Young), (338) 139
- Polycyclic alumina-, lithia-, magnesia-, and sodia-silazanes with intra- and inter-molecular bonds (M. Veith, W. Frank, F. Töllner, H. Lange), (326) 315
- Polyfluorotriphenylenes derived from fluoroaromatic lithium reagents; crystal and molecular structure of hexadecafluoro-1-phenyltriphenylene (C.A. Beaumont, J. Bowen Jones, D.S. Brown, A.G. Massey, J. Watkin), (344) 1
- Pyridinyl-disiloxanes and their bis-*N*-oxides, synthesis and characterisation of (M. Zeldin, J.-M. Xu, C.-X. Tian), (326) 341
- Sulphur and selenium containing heterodisubstituted ferrocenes, synthesis of; formation of 1,1'-dithiol- and 1,1'-diselenol-ferrocenes (R. Broussier, A. Abdulla, B. Gautheron), (332) 165
- $(\mu_3\text{-Te})[(\eta^5\text{-C}_5\text{H}_5)\text{Mn}(\text{CO})_2]_3$ , electrophilicity of the trigonal planar coordinated tellurium atom in (W.A. Herrmann, C. Hecht, E. Herdtweck), (331) 309
- Toluene-soluble 1,2-organobis(phenylphosphido)dilithium crystal compounds, mono-

- meric 1,2-C<sub>6</sub>H<sub>4</sub>(PPh)<sub>2</sub>[Li(TMEDA)]<sub>2</sub> and the dimeric [(PhPCH<sub>2</sub>CH<sub>2</sub>PPh){Li(THF)<sub>2</sub>}]<sub>2</sub> (D.M. Anderson, P.B. Hitchcock, M.F. Lappert, W.-P. Leung, J.A. Zora), (333) C13
- Tricarbonyl(methylbenzo[*b*]thiophene)chromium complexes, synthesis and lithiation of (J.L. Davidson, H. Patel, P.N. Preston), (336) C44
- Trimethylsilyl-substituted cyclopentadienylindium(I) compounds, synthesis and properties (P. Jutzi, W. Leffers, G. Müller), (334) C24
- Tris(trimethylsilyl)methylsilicon compounds, reactions with organolithium reagents of (D.B. Azarian, C. Eaborn, P.D. Lickiss), (330) 1
- ## Lutetium
- ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>Lu( $\mu_2$ -H)AlH<sub>3</sub> · NEt<sub>3</sub> monomer with a monodentate alumohydride group, crystal and molecular structure of (S.Ya. Knjazhanski, B.M. Bulychev, V.K. Belsky, G.L. Soloveichik), (327) 173
- Dicyclopentadienyllutetium alkoxides, thiolates and selenolates, preparation of; crystal structures of (C<sub>5</sub>Me<sub>5</sub>)<sub>2</sub>Lu( $\mu$ -S<sup>-</sup>C<sub>4</sub>H<sub>9</sub>)<sub>2</sub>Li(THF)<sub>2</sub> and (C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>Lu( $\mu$ -SeC<sub>6</sub>H<sub>5</sub>)<sub>2</sub>Li(THF)<sub>2</sub>. (H. Schumann, I. Albrecht, M. Gallagher, E. Hahn, C. Muchmore, J. Pickardt), (349) 103
- Tricyclopentadienyllanthanides/sodium hydride, reduction and isomerisation of olefins with (C. Qian, Y. Ge, D. Deng, Y. Gu, C. Zhang), (344) 175
- ## Magnesium
- 2-(2-Alkenyl)thiazolidines, regioselective synthesis from thiazolines and allylic Grignard reagents of (J. Laduranty, F. Barbot, L. Miginiac), (335) 283
- Alkylolithium and Grignard reagent addition to tetracarboxyliron complexes of  $\alpha,\beta$ -unsaturated esters (D. Rakshit, S.E. Thomas), (333) C3
- Allyl and benzyl ether cleavage by activated magnesium (E. Bartmann), (332) 19
- Aminomethyltributyltin compounds, formation from stannylation of ammonium salts with tributylstannylmagnesium chloride of; regioselective route to  $\beta$ -aminoalcohols with (B. Elissondo, J.-B. Verlhac, J.-P. Quintard, M. Pereyre), (339) 267
- Arenetricarbonylchromium, reactions with Grignard reagent, *n*-BuMgBr, of (S. Top, G. Jaouen), (336) 143
- (*E*)- $\beta$ -Bromostyrene and 1-phenylethylmagnesium chloride, asymmetric Grignard cross-coupling reaction between (C. Döbler, H.J. Kreuzfeld), (344) 249
- (*E*)- $\beta$ -Bromostyrene and 1-phenylethylmagnesium chloride, asymmetric Grignard cross-coupling reaction between (H.-J. Kreuzfeld, C. Döbler, H.-P. Abicht), (336) 287
- 1-(But-3-enyl)-2,3,4,5-tetramethylcyclopentadienyl-iron and -cobalt complexes, synthesis of (J. Okuda, K.H. Zimmermann), (344) C1
- Cp<sub>2</sub>TiCl<sub>2</sub>/Mg/BrCH<sub>2</sub>CH<sub>2</sub>Br system, isomerisation of terminal alkenes by (S.A. Rao, M. Periasamy), (342) 15
- Dialkylmagnesium, reactions with CO of (P. Sobota, M. Nowak), (340) 1
- Grignard reagent composition in THF, influence of MgCl<sub>2</sub> on (P. Sobota, B. Duda), (332) 239
- Magnesium iodide in diethyl ether and tetrahydrofuran, structural study of (A. Ericson, I. Persson), (326) 151
- Mechanism of organometallic migration reactions, configuration mixing approach (A.J. Shusterman, I. Tamir, A. Pross), (340) 203
- [Mg(anthracene)(THF)<sub>3</sub>] and [Mg(triphenylmethyl)Br(OEt<sub>2</sub>)<sub>2</sub>], crystal structures of (L.M. Engelhardt, S. Harvey, C.L. Raston, A.H. White), (341) 39
- Molybdena- and tungsta-cyclobutanes and -cyclobutabenzenes, synthesis of (H.J.R. de Boer, B.J.J. van de Heisteeg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (346) 197
- Monoalkylaminomethylation of organometals (M = Al, Mg, Zn) with *N*-alkyl-*N*-trimethylsilylalkoxymethylamines (G. Courtois, L. Miginiac), (340) 127
- Olefin-coordinated platina(II)cyclobutane, synthesis and conversion into diphosphine-platina(II)cyclobutanes of (H.J.R. de Boer, O.S. Akkerman, F. Bickelhaupt), (336) 447
- Organometallic compounds, primary aminomethylation via *N,N*-bis(trimethylsilyl)methylthiomethylamine of (L. Fiocca, K. Fiorenza, G. Reginato, A. Ricci, P. Dembeck, G. Seconi), (341) C23
- Organosilicon derivatives of cyclic and high polymeric phosphazenes (H.R. Allcock, D.J. Brennan), (341) 231
- Phenylcoppermagnesium reagent prepared from 2PhMgBr + CuI, reactions with organic halides of (M.T. Rahman, S.K. Nahar), (329) 133
- Polycyclic alumina-, lithia-, magnesia-, and sodia-silazanes with intra- and inter-molecular bonds (M. Veith, W. Frank, F. Töllner, H. Lange), (326) 315
- Tolane-titanocene complex, isolation, spectral characterisation and reactivity of (V.B. Shur, V.V. Burlakov, M.E. Vol'pin), (347) 77

$\alpha$ -Unsaturated organozinc and alkynyl-organo-magnesium compounds, regioselective synthesis of 2-substituted pyridine derivatives from *N*-alkoxycarboxylpyridinium salts of (A. Al-Arnaout, G. Courtois, L. Miginiac), (333) 139

## Manganese

Acetylene complexes as precursors for carbene and nitrile ligands, molecular structures of  $C_5H_4Me(CO)_2Mn[C(Me)NH_2]$ ,  $C_5Me_5(CO)_2Mn[C(Me)NH_2]$ ,  $C_5Me_5(CO)_2Mn[C(Me)NMe_2]$  and  $C_5Me_5(CO)_2MnNCMe$  (H.G. Alt, H.E. Engelhardt, E. Steinlein, R.D. Rogers), (344) 321

$\eta^2$ -Aldehyde-metal complexes,  $(CO)_2(PEt_3)_2FeRCHO$  (R = H, Ph), synthesis of (R. Birk, H. Berke, H.-U. Hund, K. Evertz, G. Huttner, L. Zsolnai), (342) 67

Arsinothiadiimido eight-membered heterocycle, *t*-BuAs(NSN)<sub>2</sub>As-*t*-Bu, carbonylmetal complexes of (M. Herberhold, K. Schamel), (346) 13

Benzenethiolato- and *N*-phthalimido-metal carbonyl complexes, synthesis of (P.M. Treichel, P.C. Nakagaki, K.J. Haller), (327) 327

*cis*- and *trans*-Bis(diphenylphosphinomethane)-dicarbonylmanganese cations, crystal structures and their reactions with nucleophiles of (G.A. Carriedo, J.B. Parra Soto, V. Riera, M.L. Valin, D. Moreiras, X. Solans), (326) 201

Bis[tetracarbonyldiphenylphosphidomanganese(0)], crystal and molecular structure of (H. Matsuda, T. Taga, K. Machida, T. Kawamura), (331) 239

$C_5H_5MnL_2HSiR_3$  complexes, MO analysis of the MnSiH three-centre interaction in (H. Rabaã, J.-Y. Saillard, U. Schubert), (330) 397

Crystalline inorganic and organometallic complexes, estimation of standard enthalpies of formation of (A.R. Dias, J.A. Martinho Simões, C. Teixeira, C. Airoidi, A.P. Chagas), (335) 71

Cycloaddition of tetracyanoethene to Mn, Fe and Ni complexes, hydration of a W complex; X-ray structures of  $Fe\{C[=C(CN)_2]CPh=C(CN)_2\}(CO)_2(\eta-C_5H_5)$  and  $Ni\{C[=C(CN)_2]CPh=C(CN)_2\}(PPh_3)(\eta-C_5H_5)$  (M.I. Bruce, D.N. Duffy, M.J. Liddell, M.R. Snow, E.R.T. Tiekink), (335) 365

Cyclopentadienyldicarbonyl-manganese and -rhenium acetylene complexes, unusual reactions with  $Br_2$ , HCl,  $CF_3COOH$  and ClNO of (H.G. Alt, H.E. Engelhardt), (346) 211

Cyclopentadienyllithium and alkyltrichlorosilanes, preparation of bridged trinuclear complexes from (M.E. Wright, V.W. Day), (329) 43

Decacarbonylmanganeserhenium, matrix isolation and time-resolved infrared spectroscopic study of selective loss of CO in the photochemistry of (S. Firth, P.M. Hodges, M. Poliakov, J.J. Turner, M.J. Therien), (331) 347

1-(Diisopropylamino)borole as ligand in transition metal complexes; crystal and molecular structures of *cis*- $Cr(CO)_2(C_4H_4BNPr_2^i)_2$  and  $Mn(CO)(C_4H_4BNPr_2^i)_2$  (G.E. Herberich, B. Hessner, H. Ohst, I.A. Raap), (348) 305

Dimethylmanganese(III) cationic complexes having 1,2-bis(dimethylphosphine)ethane ligands, preparation of and  $\alpha$ -hydrogen elimination from (S. Komiyama, M. Kaneda), (340) C8

Dimethyl(tris(trimethylsilyl)methyl)silanolato-tantalum(V), -chromium(III) and -manganese(II), formation of (H. Blanchard, M.B. Hursthouse, A.C. Sullivan), (341) 367

Ferrocenylpentacarbonylmanganese,  $Mn(CO)_5Fc$ , synthesis and reactivity of (M. Herberhold, H. Kniessel), (334) 347

Heterometallic di- and tri-nuclear complexes with bridging thiocarbonyl and methylthiocarbonyl ligands; crystal and molecular structure of  $C_5H_5(PMe_3)(\mu-CO)[\mu-CSMn(CO)_2C_5H_5]Mn(CO)C_5H_5$  (H. Werner, O. Kolb, P. Thometzek), (347) 137

*ortho*-Manganation of *N*-acyl heteroaromatics, benzamides and substituted benzaldehydes; crystal structure of ( $\eta^2$ -*O*,*C*-1-acetyl-2-indoyl)tetracarbonylmanganese (N.P. Robinson, L. Main, B.K. Nicholson), (349) 209

*ortho*-Manganation of substituted acetophenones and heteroaromatic methyl ketones; crystal structures of cyclometallated acetylthiophene derivatives from (J.M. Cooney, L.H.P. Gommans, L. Main, B.K. Nicholson), (349) 197

Manganese and rhenium acetylene complexes, synthesis and characterisation of (H.G. Alt, H.E. Engelhardt), (342) 235

Manganese(I) cationic carbonyls, isomerisation with *N*-donor chelate ligands promoted by reduction of (F.J. García Alonso, V. Riera, M.L. Valin, D. Moreiras, M. Vivanco, X. Solans), (326) C71

Manganese(0) 17-electron radicals, formation and reactivity of (D.J. Kuchynka, C. Amatore, J.K. Kochi), (328) 133

Manganese, rhenium, chromium, molybdenum and tungsten binuclear carbonyls with double hydrogen bridges, MO calculations of (B.

- Jęzowska-Trzebiatowska, B. Nissen-Sobocińska), (342) 215
- Methylcyclopentadienyldicarbonylmanganese mono- and di-nuclear complexes of cyanopyridine and terephthalic acid dinitrile, coordination behaviour and electronic structure in (R. Gross, W. Kaim), (333) 347
- 1-Methylphenylimidazolemanganese(I) cyclometallated complexes, preparation and IR and  $^1\text{H}$  NMR spectra of (A. Suárez, J.M. Vila, M.T. Pereira, E. Gayoso, M. Gayoso), (335) 359
- Monohydrido-bridged carbonyl complexes of early transition metals containing  $\eta^5\text{-C}_5\text{H}_5\text{Nb}(\text{CO})_3$  moiety (P. Oltmanns, D. Rehder), (345) 87
- Neutral and cationic carbonylmanganese-tetramethylthiourea complexes; crystal structure of *cis*- $\{\text{Mn}(\text{CO})_4(\text{SC}[\text{N}(\text{CH}_3)_2]_2)\text{ClO}_4$  (C. Carriedo, M.V. Sanchez, G.A. Carriedo, V. Riera, X. Solans, M.L. Valin), (331) 13
- Optically active phospholanes derived from tartaric acid (H. Brunner, R. Sievi), (328) 71
- Orthomanganates aryl ketones, transmetallation by mercuric chloride of; synthesis of *ortho*-acyl-substituted arylmercury(II) compounds (J.M. Cooney, L.H.P. Goman, L. Main, B.K. Nicholson), (336) 293
- Pentacarbonyl-rhenate and -manganate nucleophilic addition to  $\pi$ -bonded dienes, cyclo-dienes, trimethylmethane, cycloheptatrienyl and alkyne ligands (H.-J. Müller, W. Beck), (330) C13
- Phosphane addition to acetylene ligands; synthesis and characterisation of  $\text{Cp}'(\text{CO})_2\text{Mn}(\text{HC-CHPR}_3)$  and  $\text{Cp}'(\text{CO})_2\text{Mn}[\text{C}(\text{PR}_3)\text{CH}_2]$  ( $\text{Cp}' = \text{C}_5\text{H}_5, \text{C}_5\text{H}_4\text{Me}, \text{C}_5\text{Me}_5$ ) (H.G. Alt, H.E. Engelhardt, E. Steinlein), (344) 227
- Phosphinoethylsilyl chelate ligands in manganese complexes containing Mn,H,Si three-centred bond (U. Schubert, K. Bahr, J. Müller), (327) 357
- Polymethylcyclopentadienylcarbonyl-transition metal complexes, mass spectra of  $\text{R}_n\text{-C}_5\text{H}_{5-n}\text{Mn}(\text{CO})_3$  ( $\text{R} = \text{CH}_3, n = 0-5; \text{R} = \text{t-C}(\text{CH}_3)_3, n = 1$ ) (I.R. Lyatifov, G.I. Gulieva, E.I. Mysov, V.N. Babin, R.B. Materikova), (326) 89
- Stibinidene complexes, oxidative addition of thioles to (A. Lombard, G. Huttner, K. Evertz), (350) 243
- $(\mu_3\text{-Te})[(\eta^5\text{-C}_5\text{H}_5)\text{Mn}(\text{CO})_2]_3$ , electrophilicity of the trigonal planar coordinated tellurium atom in (W.A. Herrmann, C. Hecht, E. Herdtweck), (331) 309
- (2,2,6,6-Tetramethylpiperidyl-1-oxyl)tricarbo-nylvanadium, -manganese and -cobalt electron-deficient complexes,  $^{51}\text{V}, ^{55}\text{Mn}$  and  $^{59}\text{Co}$  NMR investigations of (D. Rehder, P. Jaitner), (329) 377
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands,  $^{125}\text{Te}$  and  $^{77}\text{Se}$  NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Transition metal substituted carboxylic acids, one-pot synthesis of (M. Akita, N. Kakinuma, Y. Koro-oka), (348) 91

## Mercury

- Alkylmercury halide fragmentation and structure of  $\text{C}_2\text{H}_4\text{HgX}^+$  ion in the gas phase (D.V. Zagorevskii, M.S. Mikkladze, Yu.S. Nekrasov, N.I. Rayevsky, Yu.N. Sukharev, Yu.A. Borisov, S.Yu. Sil'vestrova, R.D. Rakhimov, A.I. Gren', A.C. Mazepa, O.S. Timofeev), (348) 285
- 4-Amino-5-mercapto-3-trifluoromethyl-1,2,4-triazole complexes with monoorganomercury and diorganothallium; crystal structure of dimethyl(4-amino-5-mercapto-3-trifluoromethyl-1,2,4-triazolato)thallium(III) (Y.P. Mascarenhas, I. Vencato, M.C. Carrascal, J.M. Varela, J.S. Casas, J. Sordo), (344) 137
- (2-Amino-5-nitrophenyl)platinum(II) complexes, synthesis and reactivity of (J. Vicente, J.A. Abad, F. Teruel, J. Garcia), (345) 233
- Biphenylene radical cation, mercuration of (J.L. Courtneidge, A.G. Davies, D.C. McGuchan, S.N. Yazdi), (341) 63
- Bis(2,4,6-trichlorophenoxy)methylmercury, synthesis and crystal and molecular structure of (G.B. Deacon, B.M. Gatehouse, S.C. Ney), (348) 141
- Boron, Annual Survey covering the year 1980 (W.H. Ilisley), (343) 1
- Cyclometallated transition metal complexes, formation by metal exchange in organomercury complexes of (E.C. Constable, T.A. Leese), (335) 293
- Dihexyn-4-ylzinc, intramolecular interaction between zinc atom and  $\text{C}\equiv\text{C}$  in (E. Okninska, K.B. Starowiejski), (347) 1
- Dimethylaminomethylferrocene, organometallic derivatives of (L.I. Troitskaya, V.I. Sokolov), (328) 169
- Dimethyl(chloroalkyl)alkenylsilanes, aminomercuration-demercuration as a route to azasilacycloalkanes of (M.G. Voronkov, S.V. Kirpichenko, A.T. Abrosimova, A.I. Albanov, V.V. Keiko, V.I. Lavrentyev), (326) 159
- Germylmercurate complexes, reactivity of (L.V. Pankratov, I.M. Penyagina, L.N. Zakharov,

- M.N. Bochkarev, G.A. Razuvaev, Yu.K. Grishin, Yu.A. Ustyniyuk, Yu.T. Struchkov), (335) 313
- Hinging towards metal of substituted allyls; synthesis and molecular structure of  $[(\eta\text{-}1\text{-EtOOCCH}_2\text{H}_4)\text{Pd}(\text{tmeda})\text{BF}_4]$  at 185 K and  $[(\eta\text{-}1\text{-EtOOCCH}_2\text{H}_4)\text{PdCl}]_2$  at 291 K (D.P. Grant, N.W. Murrall, A.J. Welch), (333) 403
- Mercury, annual survey covering the year 1980 (W.H. Ilseley) (337) 1
- Molybdenum-mercury bonds and substituted cyclopentadienyl ligands containing complexes,  $[(\text{C}_5\text{H}_5\text{-}_n\text{R}_n)(\text{CO})_3\text{Mo}]\text{HgX}_{2-x}$  (R = Me,  $n = 0, 1, 4, 5$ ; R = Ph,  $n = 4$ ; X = Cl, Br, I;  $x = 1, 2$ )  $^{95}\text{Mo}$  and  $^{199}\text{Hg}$  NMR of (M.M. Kubicki, J.Y. Le Gall, R. Pichon, J.Y. Salaun, M. Cano, J.A. Campo), (348) 349
- Orthomanganated aryl ketones, transmetallation by mercuric chloride of; synthesis of *ortho*-acyl-substituted arylmercury(II) compounds (J.M. Cooney, L.H.P. Gommans, L. Main, B.K. Nicholson), (336) 293
- Pentacarbonylchromium complexes,  $\text{Cr}(\text{CO})_5\text{-PRH}_2$  (R = Ph, cyclohexyl), reactions with mercury(II) and silver(I) compounds of (D. Obendorf, P. Peringer, N. Müller, H. Falk), (326) 375
- Pentafluorophenyl group distortion in metal complexes, limitations of rigid-body refinement (P.G. Jones), (345) 405
- Pentamethylcyclopentadienylmercuric chloride, formation and structure of (A. Razavi, M.D. Rausch, H.G. Alt), (329) 281
- Phenyl- and benzyl-group 14 element complexes, hyperconjugation in (A.N. Egorochkin, G.A. Razuvaev, M.A. Lopatin), (344) 49
- Tetracarbonyl 2-carboxypicolinato- and 2-carboxyquinolato-tungsten(0) anionic complexes, reactions with mercury(II) derivatives of (J.A. Campo, M. Cano, M.F. Perpiñan, A.E. Sánchez-Peláez), (345) 299
- Tetrakis(methylmercurio)methane,  $\text{C}(\text{HgCH}_3)_4$ , and tetrakis(aminemercurio)methane cation,  $[\text{C}(\text{HgNH}_3)_4]^{4+}$ , isoelectronic species, vibrational spectra and force fields of (R. Neufert, D.K. Breiting, J. Mink), (339) 23
- Zinc, cadmium and mercury alkyls and amides, bond structures in; thermolysis of Zn-C, M-N (M = Zn, Cd, Hg) bonds (I.E. Gümrükcüoğlu, J. Jeffery, M.F. Lappert, J.B. Pedley, A.K. Rai), (341) 53
- Alkenylzirconocene agostic complexes, formation by 'abnormal' hydrozirconation of alkynes of (G. Erker, R. Zwettler, C. Krüger, R. Schlund, I. Hyla-Kryspin, R. Gleiter), (346) C15
- Alkyl- and aryl-mono- $\eta^5$ -cyclopentadienylphosphine-iron, -cobalt and -nickel compounds, preparation of (F. Scott, S. Cronjé, H.G. Raubenheimer), (326) C40
- Alkyluranium(III) complexes,  $(\eta^5\text{-C}_5\text{H}_5)_3\text{URLi}$ , ligand exchange reactions of (M. Foyentin, G. Folcher, M. Ephritikhine), (335) 201
- Arene-chromium and -iron complexes, transannular substituent effects in (V.V. Litvak, P.P. Kun, V.D. Shteingarts), (348) 219
- Arenetricarbonylchromium, reactions with Grignard reagent, *n*-BuMgBr, of (S. Top, G. Jaouen), (336) 143
- Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359
- Bis(ferrocenylamino)glyoxime and its nickel complex, synthesis of (M. Ertaş, V. Ahsen, A. Gül, Ö. Bekaroğlu), (333) 383
- Bis( $\eta^5$ -indenyl)dycarbonyl-titanium and -zirconium, formation, and crystal and molecular structures of (M.D. Rausch, K.J. Moriarty, J.L. Atwood, W.E. Hunter, E. Samuel), (327) 39
- Bis(pentadienyl)-iron, -ruthenium and -osmium compounds, synthetic, structural and PE spectroscopic studies on; the role of the heavy metal in (L. Stahl, H. Ma, R.D. Ernst, I. Hyla-Kryspin, R. Gleiter, M.L. Ziegler), (326) 257
- Bis(pentamethylcyclopentadienyl)titanium complexes stepwise Ti-Cl, Ti-CH<sub>3</sub> and Ti-C<sub>6</sub>H<sub>5</sub> bond dissociation enthalpies in (A.R. Dias, M.S. Salema, J.A.M. Simões, J.W. Pattiasina, J.H. Teuben), (346) C4
- Bis-porphyrin-ferrocene, synthesis and electrochemistry of (P.D. Beer, S.S. Kurek), (336) C17
- Bis(trimethylsilylcyclopentadienyl)niobium, synthesis and reactivity towards cumulene ligands of (A. Antiñolo, S. Garcia-Lledó, J. Martínez de Ilarduya, A. Otero), (335) 85
- ( $\eta^5$ -Borole)( $\eta^4$ -1,5-cyclooctadiene)-nickel, -palladium and -platinum complexes, preparation and reactions of (G.E. Herberich, M. Negele), (350) 81
- 1-(But-3-enyl)-2,3,4,5-tetramethylcyclopentadienyl-iron and -cobalt complexes, synthesis of (J. Okuda, K.H. Zimmermann), (344) C1
- t*-Butylphosphaacetylene, ring formation with  $\pi$ -areneiron complexes of (M. Driess, D. Hu,

## Metalloenes

- 1-Acetoxy-1-ferrocenylethane,  $\alpha$ -alkylation of carbonyl compounds by reactions with (M.T. Reetz, M. Sauerwald), (328) 155

- H. Pritzkow, H. Schäufele, U. Zenneck, M. Regitz, W. Rösch), (334) C35
- ( $\eta^5\text{-C}_5\text{H}_5$ )<sub>2</sub>Ti( $\mu_2\text{-H}$ )<sub>2</sub>Al(Cl)( $\mu_2\text{-H}$ )<sub>2</sub>Ti( $\eta^5\text{-C}_5\text{-H}_5$ )<sub>2</sub>, catalyst-precursor for hydrogenation in the [( $\eta^5\text{-C}_5\text{H}_5$ )<sub>2</sub>TiCl]<sub>2</sub> · LiAlH<sub>4</sub> system, molecular structure and physico-chemical properties of (A.I. Sizov, I.V. Molodnitskaya, B.M. Bulychev, E.V. Evdokimova, G.L. Soloveichik, A.I. Gusev, E.B. Chuklanova, V.I. Andrianov), (335) 323
- C<sub>5</sub>Me<sub>5</sub>MCC<sub>5</sub>Me<sub>5</sub>MC<sub>5</sub>Me<sub>4</sub>CHAr<sup>+</sup> (M = Ru, Os), synthesis and NMR study of; comparison with Fe-containing analogues of (M.I. Rybinskaya, A.Z. Kreindlin, S.S. Fadeeva, P.V. Petrovskii), (345) 341
- [Cp<sub>2</sub>Ti( $\mu\text{-OCOC}\equiv\text{COCO}$ )]<sub>2</sub> and [Cp<sub>2</sub>Ti( $\mu\text{-OCOC}\equiv\text{COCO}$ )]<sub>4</sub> · 5Y (Y = CHCl<sub>2</sub> or C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>), formation and structures of (T. Gütthner, U. Thewalt), (350) 235
- $\eta^5\text{-Cyclooctadienyl-}\eta^2\text{-cyclopentadienylcobalt}$  and related cations, kinetics and mechanism of addition of tertiary phosphines and phosphites to (L.A.P. Kane-Maguire, P.A. Moucher, A. Salzer), (347) 383
- (4*S*,5*S*)-*trans*-4-(Cyclopentadiene-1-methyl)-5-diphenylphosphine-2,2-dimethyl-1,3-dioxolane and *trans*-[Fe( $\eta\text{-C}_5\text{H}_4\text{CH}_2$ )[CHOC(CH<sub>3</sub>)<sub>2</sub>OCH]CH<sub>2</sub>PPh<sub>2</sub>]<sub>2</sub>, synthesis of (M.L.H. Green, N.M. Walker), (344) 379
- Cyclopentadienyl- and pentamethylcyclopentadienyl-vinylnickel compounds, formation of ethylene complexes by insertion into the vinyl-Ni bonds from (H. Lehmkuhl, T. Keil), (342) C38
- ( $\eta^5\text{-Cyclopentadienyl}$ )dicarbonylnitrosylchromium, <sup>1</sup>H and <sup>13</sup>C NMR study of carbonium ion stabilisation by (M.D. Rausch, D.J. Kowalski, E.A. Mintz), (342) 201
- Cyclopentadienyliron complexes of substituted benzenes, product distributions in addition of hydride ion to (R.G. Sutherland, C.H. Zhang, R.L. Chowdhury, A. Piórko, C.C. Lee), (333) 367
- Cyclopentadienylthallium(I) compounds with bulky cyclopentadienyl ligands, preparation and characterisation of (H. Schumann, C. Janiak, H. Khani), (330) 347
- Diarylzirconocene complexes, formation of metallacyclic phosphallyl-type products by thermally induced reactions with CH<sub>3</sub>CH=PPh<sub>3</sub> from (G. Erker, P. Czisch, R. Benn, A. Ruffínska, R. Mynott), (328) 101
- Dibenzenechromium(0) alkyl-substituted derivatives, electronic absorption spectra in the vapour phase of (G.A. Domrachev, S.Yu. Ketkov, G.A. Razuvaev), (328) 341
- Dibenzenechromium(0) complexes, geometric and optical isomers of (H. Brunner, J. Ernst, T. Wischert, U. Thewalt), (328) 331
- Dichloro[*N,N*-dimethyl-1[1',2-bis(diphenylphosphino)ferrocenyl]ethylamine]palladium(II), crystal structure of (Tamio Hayashi, M. Kumada, T. Higuchi, K. Hirotsu), (334) 195
- Dicyclopentadienylethylenetitanium, Cp<sub>2</sub>TiC<sub>2</sub>H<sub>4</sub>; formation and reactivity of; crystal structure of (Cp<sub>2</sub>TiEt)<sub>2</sub>O (H.G. Alt, K.-H. Schwind, M.D. Rausch, U. Thewalt), (349) C7
- Di- $\eta^5\text{-cyclopentadienyliron(II)}$  derivatives, electronic structure of (A.M. Al-Saeed, E.A. Seddon, K.R. Seddon, A.A. Shimran, S. Tompkins, M.C. Grossel, J.P. Knychala), (347) C25
- Di- $\eta^5\text{-cyclopentadienylniobium}$  binuclear and mononuclear complexes; crystal and molecular structure of [Cp<sub>2</sub>NbH<sub>2</sub>]<sup>-</sup>[Na · benzo-15-crown-5]<sup>+</sup> (D.A. Lemenovskii, I.E. Nifant'ev, I.F. Urazowski, E.G. Perevalova, T.V. Timofeeva, Yu.L. Slovokhotov, Yu.T. Struchkov), (342) 31
- Dicyclopentadienylniobium species containing iminoacyl groups, synthesis of (J.M. Martinez de Ilarduya, A. Otero, P. Royo), (340) 187
- Dicyclopentadienyltitanium(IV)-containing cationic complexes, structure of a nitrile ligated complex (K. Berhalter, U. Thewalt), (332) 123
- Dicyclopentadienyltitanium(IV)-phenoxo complexes, preparation from aqueous solutions of (K. Döppert), (333) C1
- Dicyclopentadienyl-yttrium and -aluminium hydrido-chloride complexes; crystal and molecular structures of [( $\eta^5\text{-C}_5\text{H}_5$ )<sub>2</sub>Y( $\eta^2\text{-Cl}$ )( $\mu_3\text{-H}$ )Y( $\eta^5\text{-C}_5\text{H}_5$ )<sub>2</sub>]( $\mu_2\text{-H}$ )<sub>2</sub>AlH · NEt<sub>3</sub> · C<sub>6</sub>H<sub>6</sub> (A.B. Erofeev, B.M. Bulychev, V.K. Belf'skii, G.L. Soloveichik), (335) 189
- Dimethylaminomethylferrocene, organometallic derivatives of (L.I. Troitskaya, V.I. Sokolov), (328) 169
- Dinuclear cyclooctatetraenemetal complexes, results of synthesis attempts of; molecular dynamics of (CpCr)<sub>2</sub>- $\mu\text{-C}_8\text{H}_8$  and CpCrC<sub>8</sub>H<sub>8</sub> (J. Heck, G. Rist), (342) 45
- Doubly charged sandwich compounds in the gas phase, charge separation (coulomb explosion) processes of; evidence for junction of two C<sub>5</sub>H<sub>5</sub> units (T. Drewello, C.B. Lebrilla, H. Schwarz, T. Ast), (339) 333
- Ethylenebis(tetrahydroindenyl)-titanium and -zirconium dichlorides, diastereomeric derivatisation and enantiomer separation of (A. Schäfer, E. Karl, L. Zsolnai, G. Huttner, H.-H. Brintzinger), (328) 87
- Ethylenebis(tetrahydroindenyl)-titanium and -zirconium dichlorides, X-ray structures of

- (S. Collins, B.A. Kuntz, N.J. Taylor, D.G. Ward), (342) 21
- Ferrocene; Annual Survey covering the year 1986 (G. Marr, B.W. Rockett), (343) 79
- Ferrocene, Friedel-Crafts alkylations with unsaturated lactones of; reactions caused by the  $\beta$ -ferrocenylcarbenium ion (M. Sališová, Š. Toma, E. Solčániová), (327) 77
- Ferrocene, ligand exchange with methyl- and ethyl-substituted naphthalenes of (W. Billig, J. Wendt, D. Patt, E. Gresch, H. Singer), (338) 227
- Ferrocene polymer-supported derivatives, catalytic hydrosilylation of olefins by supported palladium and platinum complexes (W.R. Cullen, N.F. Han), (333) 269
- [10]Ferrocenophanedioxime with bridging heteroatoms and its nickel(II) complex, synthesis of (M. Ertas, V. Ahsen, A. Gül, Ö. Bekároğlu), (335) 105
- Ferrocenyl- and nonamethylferrocenyl-carbinols, intramolecular hydrogen bonds in and conformations of (E.S. Shubina, L.M. Epstein, T.B. Timofeeva, Yu.T. Struchkov, A.Z. Kreindlin, S.S. Fadeeva, M.I. Rybinskaya), (346) 59
- Ferrocenylchalcogenides, synthesis of (M. Herberhold, P. Leitner), (336) 153
- N*-Ferrocenyl-2-hydroxybenzylideneimine-heterobimetallic complexes, synthesis of (M. Ertas, V. Ahsen, A. Gürek, Ö. Bekároğlu), (336) 183.
- 4-(Ferrocenylhydroxyphenylmethyl)-4-butanolide, crystal and molecular structure of (Yu.T. Struchkov, A.S. Batsanov, Š. Toma, M. Sališová), (329) 375
- Ferrocenylmethylthiosuccinic acids, preparation and application to resolution of tertiary ferrocenylcarbinols of (R. Dabard, B. Mistekiewicz, H. Patin, J. Wasielewski), (328) 185
- Ferrocenylpentacarbonylmanganese,  $Mn(CO)_5$ -Fc, synthesis and reactivity of (M. Herberhold, H. Kniessel), (334) 347
- Ferrocenylphospholes, preparation and chemistry of (E. Deschamps, F. Mathey), (332) 141
- Group 4 metallocene-substituted ylides, synthesis and reactions with ketones of (G. Erker, P. Czisch), (334) 91
- Iron group metal 30-electron triple-decker complexes with cyclopentadienyl ligands, synthesis of; X-ray structure of  $[(\eta-C_6H_5)_3Ru(\mu, \eta-C_5Me_5)Ru(\eta-C_5Me_5)]PF_6$  (A.R. Kudinov, M.I. Rybinskaya, Yu.T. Struchkov, A.I. Yanovskii, P.V. Petrovskii), (336) 187
- Iron(0) interaction with  $CO_2$ , COS and  $CS_2$ , ab initio calculations on  $Fe(CO)_2(PH_3)_2(\eta^2-CO_2)$ ,  $Fe(CO)_2(PH_3)_2(\eta^2-COS)$ ,  $Fe(CO)_2$  ( $PH_3$ ) $_2(\eta^2-CS_2)$  and  $Fe(PH_3)_4(\eta^2-CO_2)$  (M. Rosi, A. Sgamellotti, F. Tarantelli, C. Floriani), (332) 153
- Isocyanidoferrocene derivatives, preparation, complexation and redox properties of (T. El-Shihi, F. Sigmüller, R. Herrmann, M.F.N.N. Carvalho, A.J.L. Pombeira), (335) 239
- Lithium redox-responsive ferrocene bis-tertiary amide derivatives (P.D. Beer, H. Sikanyika, C. Blackburn, J.F. McAleer), (350) C15
- Molybdena- and tungstena-cyclobutanes and -cyclobutabenzenes, synthesis of (H.J.R. de Boer, B.J.J. van de Heisteeg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (346) 197
- Molybdenocene dihydrocarbyls, preparation and characterisation of (A.R. Dias, M.H. Garcia, A.M. Martins, C.I. Pinheiro, C.C. Romão, L.F. Veiros), (327) C59
- Mono- and bi-dentate xanthate complexes,  $\eta^5-C_5R_5Fe(CO)(\eta^1-SC(S)OEt)L$  and  $\eta^5-C_5R_5Fe(\eta^2-S_2COEt)L$  (R = H, Me; L =  $PBu_3$ ,  $PPh_3$ ,  $P(OEt)_3$ ,  $P(OPh)_3$ ), synthesis, characterisation and electrochemistry of (M. Morán, I. Cuadrado, J.R. Masaguer, J. Losada), (355) 255
- Nickel complexes with  $P_x$  ligands (O.J. Scherer, T. Dave, J. Braun, G. Wolmershäuser), (350) C20
- Nonamethylferrocenyl- and ferrocenyl-carbinols, IR spectra and X-ray single crystal study of hydrogen bonds and structure of (E.S. Shubina, L.M. Epstein, A.T. Yanovsky, T.V. Timofeeva, Yu.T. Struchkov, A.Z. Kreindlin, S.S. Fadeeva, M.I. Rybinskaya), (345) 313.
- Palladium tetrafluoroborate complexes of 1,1'-bis(alkyl- or aryl)-thio- and 1,1'-bis(diphenylphosphino)-ferrocenes; bond formation between Fe and Pd in (M. Sato, M. Sekino, S. Akabori), (344) C31
- Paramagnetic metallocenes bearing Me,  $Me_3E$  (E = C, Si, Ge, Sn) substituents, syntheses and  $^1H/^{13}C$  NMR studies of (F.H. Köhler, W.A. Geike), (328) 35
- Pentamethylcyclopentadienylcyclooctatetraene-sandium, -yttrium and -lanthanum, synthesis and UPS studies of (P. Bruin, M. Booij, J.H. Teuben, A. Oskam), (350) 17
- Permethyltrocene methyl tetrahydrofuranate, formation and molecular structure of (K.H. den Haan, J.L. de Boer, J.H. Teuben, W.J.J. Smeets, A.L. Spek), (327) 31
- Phenylgermanes, oligomerisation by catalytic dehydrocoupling of (C. Aitken, J.F. Harrod, A. Malek, E. Samuel), (349) 285
- Photogenerated iron catalyst applied in oxidation of furfural with  $H_2O_2$  (F. Moulines, J. Ruiz, D. Astruc), (340) C13
- 3-Spiro[5]ferrocenophane-1,5-diones, synthesis

- from direct condensation of diacetylferrocene and cycloalkanones of (J. Mirek, S. Rachwal, T. Górecki, B. Kawalek, P. Milart, E. Szneler), (344) 363
- Sulphur and selenium containing heterodisubstituted ferrocenes, synthesis of; formation of 1,1'-dithiol- and 1,1'-diselenol-ferrocenes (R. Broussier, A. Abdulla, B. Gautheron), (332) 165
- Tetrachlorodimethoxycyclopentadiene and nickelocene-dimethyl acetylenedicarboxylate adduct, Diels-Alder reaction between, crystal structure of the products (M.A. Battiste, B.G. Griggs Jr., D. Sackett, J.M. Coxon, P.J. Steel), (330) 437
- 1,1'-(1,4,10,13-Tetraoxa-7,16-diazacyclooctadecane-7,16-diyldicarbonyl)ferrocene dihydrate, crystal structure of (P.D. Beer, C.D. Bush, T.A. Hamor), (339) 133
- Titanocene chloro(ethyl)aluminates, influence on properties by methyl-substituted cyclopentadienyl ligands in (K. Mach, V. Varga), (347) 85
- Titanocenyl-substituted dimethyl ether, open-chain molecular structure of (G. Erker, R. Schlund, C. Krüger), (338) C4
- Tolane-titanocene complex, isolation, spectral characterisation and reactivity of (V.B. Shur, V.V. Burlakov, M.E. Vol'pin), (347) 77
- Triphosphorus analogues of ferrocene,  $\eta^5$ - and  $\eta^5$ - $\eta^1$ -coordination in; crystal structure of  $[\text{Fe}(\eta^5\text{-C}_5\text{H}_5)(\eta^5\text{-C}_2\text{R}_2\text{P}_3)\text{W}(\text{CO})_5]$  (R = Bu<sup>1</sup>) (R. Bartsch, P.B. Hitchcock, J.F. Nixon), (340) C37
- Vanadocene isocyanate and isothiocyanate complexes, synthesis and properties of (G.A. Razuvaev, A.S. Gordetsov, V.N. Latsyaeva, S.C. Zimina, S.E. Skobeleva, N.P. Makarenko, V.K. Cherkasov, V.P. Mar'in, Yu.I. Dergunov), (329) 327
- Vanadocene, reactions with aliphatic halides of (R. Sustmann, G. Kopp), (347) 325
- Vanadocene, reactions with benzyl bromide of (R. Sustman, G. Kopp), (347) 313
- Zirconoxycarbene complex,  $\text{Cp}_2\text{Zr}(\text{C}_6\text{H}_4)(\text{OC}=\text{C})\text{Co}(\text{CO})(\eta\text{-C}_5\text{H}_4\text{X})$ , molecular structure and equilibration with  $(\eta\text{-C}_5\text{H}_4\text{X})\text{Co}(\text{CO})_2/\text{Cp}_2\text{Zr}(\text{butadiene})$  of (G. Erker, R. Lecht, C. Krüger, Y.-H. Tsay, H. Bönne-mann), (326) C75
- Breeze, A. Ricalton, M.W. Whiteley), (327) C29
- Alkoxy(triphenylsilyl)carbene complexes,  $(\text{CO})_5\text{-MC}(\text{OR})\text{SiPh}_3$  (M = Cr, Mo, W), thermal fragmentation pattern of (U. Schubert, H. Hörnig), (336) 307
- Alkyne- and phosphalkyne-metal carbonyl complexes, difference in coordination chemistry of; synthesis, crystal and molecular structures of  $[\text{Mo}_2(\text{CO})_4(\eta^5\text{-C}_5\text{H}_5)_2\text{-}(\text{Bu}^1\text{CP})\text{Fe}(\text{CO})_4]$  and  $[\text{Mo}_2(\text{CO})_4(\eta^5\text{-C}_5\text{H}_5)_2(\text{Bu}^1\text{CP})\text{W}(\text{CO})_5]$  (P.B. Hitchcock, M.F. Meidine, J.F. Nixon), (333) 337
- $\sigma$ -Alkyne organometallic compounds, synthesis catalysed by copper(I) iodide in triethylamine of (D. Villemin, E. Schigeke), (346) C24
- Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167
- Arsinothiadiimido eight-membered heterocycle,  $t\text{-BuAs}(\text{NSN})_2\text{As-t-Bu}$ , carbonylmetal complexes of (M. Herberhold, K. Schamel), (346) 13
- Aryldiisocyanide-chromium, -molybdenum and -tungsten zero-valent polymers, synthesis and characterization of (I. Feinstein-Jaffe, S.E. Maisuls), (350) 57
- $\eta^6$ -Arylphosphinemolybdenum(0) electron rich complexes as ligands in group 6 carbonylmetal complexes (R.L. Luck, R.H. Morris), (347) 349
- Benzenethiolato- and *N*-phthalimido-metal carbonyl complexes, synthesis of (P.M. Treichel, P.C. Nakagaki, K.J. Haller), (327) 327
- Binuclear transition metal complexes with mixed bridged, characterisation of the bridges on MO calculations of (B. Jeżowska-Trzebiatowska, B. Nissen-Sobocińska), (342) 353
- 1,3-Bis(diphenylphosphino)propanedecarbonyldi-chromium, -molybdenum and -tungsten singly bridging complexes, synthesis and decomposition of (T.S.A. Hor), (340) 51
- 1,2-Bis(di-*p*-tolylphosphino)ethane-group 6 metal carbonyls, preparation and vibrational spectra of (P.N. Kapoor, P. Mercykuty), (339) 97
- Bis(pentacarbonylmolybdenum) complexes, synthesis and NMR spectroscopic characterisation of; structure of  $(\text{CO})_5\text{Mo}(\mu\text{-Ph}_2\text{POP}(\text{OCH}_2\text{CMe}_2\text{CH}_2\text{O}))\text{Mo}(\text{CO})_5$  (G.M. Gray, W. Watt), (349) 149
- Bis(triphenylphosphine)iminium(tetracarbonylnitrosylchromium), synthesis, characterisation and reactivity of (D.R. Mantell, W.L. Gladfelter), (347) 333
- $(\mu^5\text{-Borole})$ -chromium, -tungsten and -molybdenum complexes, synthesis via borole ammonia adducts of; crystal and molecular

## Molybdenum

Acetonitrile derivatives of cycloheptatrienylmolybdenum and -tungsten complexes, formation and synthetic applications of (R.



- structure of tetracarbonyl [ $\eta^5$ -(1-phenylborole)]-chromium and -molybdenum (G.E. Herberich, B. Hessner, M. Negele, J.A.K. Howard), (336) 29
- trans*-Br(CO)<sub>2</sub>L<sub>2</sub>WCNEt<sub>2</sub> (L<sub>2</sub> = 2,2'-bipyridyl-1,10-phenanthroline), structure of the reaction product with [(CO)<sub>5</sub>MEPh<sub>2</sub>]<sup>-</sup> (M = Cr, Mo, W; E = P, As, Sb) (A.C. Filippou, E.O. Fischer, H.G. Alt, U. Thewalt), (326) 59
- $\eta^3$ -*trans*-Butadienylmolybdenum complexes, crystal structure of [Mo(2,2'-bipyridine)-(CO)<sub>2</sub>- $\eta^3$ -CH<sub>2</sub>=C(CONHMe)=C=CH<sub>2</sub>-(O<sub>2</sub>CC<sub>3</sub>F<sub>7</sub>)] (B.J. Brisdon, A.G.W. Hodson, M.F. Mahon, K.C. Molloy), (344) C8
- Carbenometal chelates, stable reactive intermediates in cycloaddition reactions (K.H. Dötzt, M. Popall, G. Müller), (334) 57
- arbonyl(cyclopentadienyl)(trimethylphosphine)-tolylcarbyne-molybdenum and -tungsten complexes, reactions of (F.R. Kreissl, W. Uedelhoven, D. Neugebauer), (344) C27
- Carbonyl-molybdenum and -rhenium cationic complexes, with *N*-heterocycles and tetra-thiafulvalene, preparation of (M. Appel, W. Sacher, W. Beck), (333) 237
- [ $\eta^5$ -C<sub>5</sub>H<sub>4</sub>CHO]M(CO)<sub>3</sub><sup>-</sup> anions (M = Mo, W), reactivity towards carboxylic acid chlorides of (S. Töfke, U. Behrens), (331) 229
- Chromium, molybdenum and tungsten organometallic polymeric networks with aryldiisocyanide ligands (I. Feinstein-Jaffe, S.E. Maisuls), (326) C97
- Chromium, tungsten and iron isocyanide complexes, addition reactions to heteroallenes of (E. Bär, W.P. Fehlhammer, W. Weigand, W. Beck), (347) 101
- (C<sub>5</sub>Me<sub>5</sub>)<sub>2</sub>Mo<sub>2</sub>P<sub>x</sub>S<sub>y</sub> complexes (x = 2, 4; y = 5 - x), P/S ligands in (H. Brunner, U. Klement W. Meier, J. Wachter, O. Serhadle, M.L. Ziegler), (335) 33
- (C<sub>5</sub>R<sub>5</sub>)<sub>2</sub>M<sub>2</sub>(CO)<sub>4</sub> (R = H, Me; M = Cr, Mo, W), reactivity of the M≡M bonds towards condensed chalcogenide vapours of (K. Endrich, E. Guggolz, O. Serhadle, M.L. Ziegler, R.P. Korswagen), (349) 323
- Crystalline inorganic and organometallic complexes, estimation of standard enthalpies of formation of (A.R. Dias, J.A. Martinho Simões, C. Teixeira, C. Airoidi, A.P. Chagas), (335) 71
- C=S-functionalised compounds, coordination chemistry of; dithioesters as  $\eta^1$ ,  $\eta^2$ , and  $\eta^3$  ligands in transition metal complexes of (W.A. Schenk, D. Rüb, C. Burschka), (328) 287
- Cycloheptatriene(dicarbonyl)[ethoxy(aryl)carbene]-molybdenum and -chromium and bicycloheptadiene(tricarbonyl)[ethoxy(aryl)carbene]molybdenum complexes, synthesis, spectra and structure of (J. Chen, J. Yin, G. Lei, W. Xu, M. Shao, Z. Zhang, Y. Tang), (329) 69
- $\eta^3$ -Cycloheptatrienyl-molybdenum and -tungsten complexes with bisphosphine or diamine ligands, spectroscopic investigation of structure and fluxionality of; synthesis of [W(CO)<sub>2</sub>{Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>n</sub>PPh<sub>2</sub>}{ $\eta^3$ -C<sub>9</sub>H<sub>7</sub>(CN)<sub>4</sub>}] (n = 1 or 2) (R.A. Brown, S. Endud, J. Friend, J.M. Hill, M.W. Whiteley), (339) 283
- Cyclopentadienyldicarbonyl(triphenylphosphine)formylmolybdenum, ( $\eta^5$ -C<sub>5</sub>Me<sub>5</sub>)-(CO)<sub>2</sub>(PPh<sub>3</sub>)<sub>3</sub>MoCHO, synthesis, characterisation and reactivity of (A. Asdar, C. Lapinte), (327) C33
- Diaminodiphosphene and aminophosphinidene complexes, synthesis and characterisation of (J. Borm, G. Huttner, L. Zsolnai, K. Evertz, H. Berke), (327) 223
- Di- and poly-nuclear transition metal complexes as catalysts for metal carbonyl-substitution reactions; role of supported metals and metal oxides as catalyst promoters (M.O. Alberts, N.J. Coville, E. Singleton), (326) 229
- 2,3-Dicarbomethoxy-7-oxabicyclo[2.2.1]heptadiene, reactions with carbonylmolybdenums of (C.-H. Sun, T.J. Chow), (333) C21
- cis*-Dicarbonylbis( $\eta^4$ -1,1,3,4-tetramethylsilole)-molybdenum and related complexes, crystal structure and dynamic stereochemistry of (F. Carré, E. Colomer, R.J.P. Corriu, M. Lheureux, A. Cavé), (331) 29
- Dicarbonylcarbyne-molybdenum and -tungsten stabilised by tridentate oxygen ligands (W. Kläui, H. Hamers), (345) 287
- Dicyclopentadienyl-1,3-diaryltriazenido-molybdenum complexes, preparation and electrochemical behaviour of (M.A.M. Qeirós, J.E.J. Simão, A.R. Dias), (329) 85
- Di- $\eta^5$ -cyclopentadienylthiophenolatoamine-molybdenum(IV) hexafluorophosphate solvate, [Mo( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>(NH<sub>3</sub>)(SC<sub>6</sub>H<sub>5</sub>)]-[PF<sub>6</sub>]<sup>-</sup>(CH<sub>3</sub>)<sub>2</sub>CO, X-ray crystal structure of (M.J. Calhorda, M.A.A.F. de C.T. Carrondo, M.H. Garcia, M.B. Hursthouse), (342) 209
- Di- $\eta^5$ -cyclopentadienyl-tungsten(IV) and -molybdenum(IV) crown ether complexes, synthesis and electrochemistry of (E. Fu, M.L.H. Green, V.J. Lowe, S.R. Marder), (341) C39
- 1,1-Dimethylindene, spirocyclopropane-1,1-iudene and spirocyclopropane-9,9-fluorene, reactions with L<sub>3</sub>M(CO)<sub>3</sub> (L = NH<sub>3</sub>, Py; M = Cr, Mo, W) of (N.A. Ustynyuk, L.N.

- Novikova, V.E. Zvorykin, D.N. Kravtsov, Yu. Ustyniuk), (338) 19
- Dioxodimesitylmolybdenum(VI) complex, formation of a dihydropyridine dimer from CO and pyridine mediated by (R. Lai, S. Le Bot, R. Faure), (336) C5
- Ditropylmolybdenum complexes by sodium reduction of  $[\text{Mo}(\text{CO})_3(\eta\text{-C}_7\text{H}_7)](\text{BF}_4)$ ; X-ray crystal structure of the ditropyl complex  $\{[\text{Mo}(\text{CO})_3]_2(\eta^6, \eta^6\text{-C}_{14}\text{H}_{14})\}$  (H. Adams, N.A. Bailey, D.G. Willett, M.J. Winter), (333) 61
- Enantioselective hydrosilylation, complexes with free donor groups as co-catalysts for (H. Brunner, H. Fisch), (335) 15
- cis*- and *trans*- $\text{Fe}(\text{CyNC})_4(\text{SPh})_2$ , bis-thiolate precursors of  $(\text{CyNC})_4\text{Fe}(\text{SPh})_2\text{Mo}(\text{CO})_4$ , synthesis of (L.D. Rosenhein, J.W. McDonald), (345) 143
- Group 6 metal tricarbenyls with ligating  $\alpha$ -diimine and triethyl phosphite, convenient synthesis and characterisation of (T.S.A. Hor, S.R.B. Rus), (348) 343
- Hetero-dinuclear azulene complexes, preparation and characterisation of (S. Töfke, U. Behrens), (338) 29
- Hexacarbonylbis( $\eta^5$ -methylcyclopentadienyl)dimolybdenum, photochemical reactions with conjugated dienes of (C.G. Kreiter, G. Wendt, J. Kaub), (346) 35
- Hexacarbonylmolybdenum, thermolysis with homohypostrophene of (T.J. Chow, M.-F. Ding), (329) 217
- (Hydridotris(3,5-dimethylpyrazol-1-yl)borato)tricarboxylmolybdenum, heat- and air-stable 17-electron radical and its sulphur-bridged dimer, formation of (K.-B. Shiu, L.-Y. Lee), (348) 357
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, preparation and reactive behaviour of (R.A. Fischer, W.A. Herrmann), (330) 377
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, synthesis of (R.A. Fischer, H.-J. Kneuper, W.A. Herrmann), (330) 365
- Iron-molybdenum and iron-tungsten sulphido clusters containing hydrazido(2-) ligands; synthesis and X-ray crystal and molecular structure of  $\{[\text{Fe}(\text{CO})_3(\mu_3\text{-S})]_2\text{Mo}(\text{NNMe}_2)_2(\text{PPh}_3)](\text{Fe-Fe}) \cdot \text{CH}_2\text{Cl}_2$  (P.T. Bishop, J.R. Dilworth, S. Morton, J.A. Zubieta), (341) 373
- Isonitrile-functionalised polymer supports as versatile ligands toward metal centres (B. Corain, M. Basato, P. Main, M. Zecca, R. De Pieri, R. Arshady), (326) C43
- Manganese, rhenium, chromium, molybdenum and tungsten binuclear carbonyls with double hydrogen bridges, MO calculations of (B. Jeżowska-Trzebiatowska, B. Nissen-Sobocińska), (342) 215
- $\text{M}(\text{C}_5\text{H}_5)_2\text{L}$  complexes ( $\text{M} = \text{Mo}, \text{W}, \text{Ti}$ ;  $\text{L} = \text{C}_6\text{H}_4\text{O}_2, \text{C}_{10}\text{H}_6\text{O}_2, \text{C}_{14}\text{H}_8\text{O}_2$ ), enthalpies of formation of (M.A.V. Ribeiro da Silva, M.D.M.C. Ribeiro da Silva, A.R. Dias), (345) 105
- $[\text{M}(\text{CO})_4\{(\text{Ph}_2\text{P})_2\text{C}=\text{CH}_2\}]$  ( $\text{M} = \text{W}, \text{Mo}, \text{Cr}$ ), conjugate additions of functionalised carbanions to the vinylidene groups of (A.M. Her-ring, S.H. Koskimies, B.L. Shaw), (338) 13
- Metal acylium mixed clusters, chemical and spectroscopic study of (M.F. D'Agostino, M. Mlekuz, M.J. McGlinchey), (345) 371
- Metallacyclic alkenyl ketone substituted complexes,  $(\eta^5\text{-C}_5\text{Me}_5)(\text{CO})_2\text{M}[\text{R}^1\text{C}=\text{CR}^2\text{C}(\text{OMe})]$  ( $\text{Me} = \text{Cr}, \text{Mo}, \text{W}$ ;  $\text{R}^1, \text{R}^2 = \text{H}, \text{Me}, \text{Ph}$ ), reactions with NO or ClNO of (H.G. Alt, U. Freytag, M. Herberhold, H.I. Hayen), (336) 361
- Metallacyclic pentamethylcyclopentadienyl-alkenylketone complexes of chromium, molybdenum and tungsten, competition of electronic and steric influence of substituents of; molecular structure of  $\text{C}_5\text{Me}_5(\text{CO})_2\text{Cr}[\text{HC}=\text{CPhC}(\text{OMe})]$  (H.G. Alt, G.S. Herrmann, H.E. Engelhardt, R.D. Rogers), (331) 329
- Metallophosphonium complexes derived from related cyclic and acyclic aminohalophosphines, synthesis and structure of (L.H. Hutchins, H.-U. Reisacher, G.L. Wood, E.N. Duesler, R.T. Paine), (335) 229
- (1,2,7- $\eta^3$ -2-Methylbenzyl)( $\eta^5$ -cyclopentadienyl)-(dicarbonyl)molybdenum, mechanism of fluxionality of (B.E. Mann, S.D. Shaw), (326) C13
- $[\text{Ml}_2(\text{CO})(\text{NCMe})_2]$  ( $\text{M} = \text{Mo}, \text{W}$ ), reactions with one equivalent of pyridine or substituted pyridines of, formation of  $[\text{Ml}_2(\text{CO})_3(\text{NCMe})\text{L}]$  and  $[\text{M}(\mu\text{-I})(\text{CO})_3\text{L}]_2$  (P.K. Baker, S.G. Fraser), (329) 209
- <sup>95</sup>Mo shielding, NMR spectrochemical series based on (M. Hughes, J. Mason, G.J. Leigh, R.L. Richards), (341) 381
- $[\text{MoBr}_2(\text{CO})_2(\text{PPh}_3)_2]$ , reactions with N- and P-donor ligands of; crystal structure of  $[\text{MoBr}_2(\text{CO})_2(\text{dppm})(\text{PPh}_3)] \cdot 0.4\text{CHCl}_3$  (F.J. Arnaiz, G. Garcia, C. Foces Foces, F.H. Cano, M. Martinez-Ripoll), (332) 299
- $[\text{Mo}_2(\eta\text{-C}_5\text{H}_5)_2(\text{CO})_4(\mu\text{-Ph}_2\text{PCH}_2\text{PPh}_2)]$ , preparation and reactions of; crystal structure of  $[\text{Mo}_2(\eta\text{-C}_5\text{H}_5)_2(\text{CO})_4(\mu\text{-H})(\mu\text{-Ph}_2\text{PCH}_2\text{-PPh}_2)]_2[\text{Mo}_6\text{O}_{19}] \cdot 4\text{C}_4\text{H}_8\text{O}$  (V. Riera, M.A.

- Ruiz, F. Villafaña, Y. Jeannin, C. Bois), (345) C4
- trans*-[Mo(CO)<sub>5</sub>(R<sub>2</sub>PNHCH<sub>2</sub>CH<sub>2</sub>N=CHC<sub>6</sub>H<sub>4</sub>-*o*-O)]<sub>2</sub>M (M = Co, Ni, Cu) complexes, synthesis and characterisation of; crystal structure of *trans*-[Mo(CO)<sub>5</sub>(Ph<sub>2</sub>PNHCH<sub>2</sub>CH<sub>2</sub>N=CHC<sub>6</sub>H<sub>4</sub>-*o*-O)]<sub>2</sub>Ni · 2Et<sub>2</sub>O (G.M. Gray, N. Takada, A.L. Zell, H. Einspahr), (342) 339
- [MoH<sub>4</sub>(Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)<sub>2</sub>], rapid binding and activation of small molecules in the presence of HBF<sub>4</sub> · OEt<sub>2</sub> by; crystal structure of the phenylacetylene product *trans*-[MoF(η<sup>2</sup>-PhC≡CH)(Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)<sub>2</sub>]BF<sub>4</sub> (R. Ellis, R.A. Henderson, A. Hills, D.L. Hughes), (333) C6
- Molybdena- and tungstena-cyclobutanes and -cyclobutabenzenes, synthesis of (H.J.R. de Boer, B.J.J. van de Heistee, G. Schat, O.S. Akkerman, F. Bickelhaupt), (346) 197
- Molybdenocene dihydrocarbyls, preparation and characterisation of (A.R. Dias, M.H. Garcia, A.M. Martins, C.I. Pinheiro, C.C. Romão, L.F. Veiros), (327) C59
- Molybdenum-mercury bonds and substituted cyclopentadienyl ligands containing complexes, [(C<sub>5</sub>H<sub>5</sub>-*n*R<sub>n</sub>)(CO)<sub>3</sub>Mo]HgX<sub>2-x</sub> (R = Me, *n* = 0, 1, 4, 5; R = Ph, *n* = 4; X = Cl, Br, I; *x* = 1, 2) <sup>95</sup>Mo and <sup>199</sup>Hg NMR of (M.M. Kubicki, J.Y. Le Gall, R. Pichon, J.Y. Salaun, M. Cano, J.A. Campo), (348) 349
- Monohydrido-bridged carbonyl complexes of early transition metals containing η<sup>5</sup>-C<sub>5</sub>H<sub>5</sub>Nb(CO)<sub>3</sub> moiety (P. Oltmanns, D. Rehder), (345) 87
- NEt<sub>4</sub>[(η<sup>5</sup>-C<sub>5</sub>H<sub>5</sub>)Mo(CO)<sub>2</sub>Se<sub>2</sub>], synthesis and crystal structure of (J. Adel, F. Weller, K. Dehnicke), (347) 343
- Organo-molybdenum and -tungsten complexes containing bismuth, synthesis of (W. Clegg, N.A. Compton, R.J. Errington, N.C. Norman), (335) C1
- Pentaalkylcyclopentadienyl(carbonyl)(nitrosyl)-(olefin)molybdenum complexes, preparation and chirality of (K.H. Dötz, C. Lyon, J. Rott), (345) 117
- Pentacarbonyl-rhenate and -manganate nucleophilic addition to π-bonded dienes, cyclodienes, trimethylmethane, cycloheptatrienyl and alkyne ligands (H.-J. Müller, W. Beck), (330) C13
- (Pentamethylcyclopentadienyl)molybdenum cationic complexes, improved synthesis and characterisation of (A. Asdar, M.-J. Tudoret, C. Lapinte), (349) 353
- Pentamethylcyclopentadienyloxo-molybdenum(VI) and -tungsten(VI) complexes, preparation, characterisation and isolation of (J.W. Faller, Y. Ma), (340) 59
- Pentamethylcyclopentadienyloxomolybdenum sulphides, preparation and reactivity of (H. Brunner, H. Kauermann, J. Pfauntsch, J. Wachter, J.H. Enemark, C.G. Young), (331) 45
- Phenylphosphinidene-capped ruthenium cluster with a *closo*-octahedral Ru<sub>4</sub>P<sub>2</sub> framework, conversion to a *closo*-trigonal prismatic skeleton by addition of CO and protons to (J.S. Field, R.J. Haines, U. Honrath, D.N. Smit), (329) C25
- Phosphanetricarbonyl-molybdenum and -tungsten complexes of bidiazine, synthesis and spectra of (B. Olbrich-Deussner, W. Kaim), (340) 71
- Phosphorus-substituted butadiene systems, complexation of (R. Appel, B. Niemann, W. Schuhn, N. Siabalis), (347) 299
- Reduced metal oxides, molecular model for reductive cleavage of CO to carbide and oxide on (M.H. Chisholm), (334) 77
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Tetra- and hexa-carbonyldicyclopentadienyldimolybdenum, comparative studies of photochemical and thermal reactivity of; their Mo-Mo and Mo≡Mo bonds towards nitrite and nitrate (K. Isobe, S. Kimura, Y. Nakamura), (331) 221
- Tetracarbonyl-chromium, -molybdenum and -tungsten complexes containing secondary and tertiary phosphines (R.L. Keiter, M.J. Madigan), (331) 341
- Tetracarbonyl-chromium, -molybdenum and -tungsten complexes of dithioethers, steric influences on sulphur inversion barriers in (E.W. Abel, I. Moss, K.G. Orrell, C. Šik), (326) 187
- Tetracarbonyliron incorporation into complexes containing bis-μ-phosphido-supported Mo≡Mo functions (E.P. Kyba, M.C. Kerby, R.P. Kashyap, K.L. Hassett, R.E. Davis), (346) C19
- Tetramethyl(alkyl- and alkenyl)cyclopentadienylmolybdenum complexes, preparation of (K.H. Dötz, J. Rott), (338) C11
- To tilt or not to tilt? The dilemma of μ-C<sub>3</sub>R<sub>3</sub> ligands in binuclear complexes (E.D. Jemmis, B.V. Prasad), (347) 401
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands, <sup>125</sup>Te and <sup>77</sup>Se NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Transition metal substituted carboxylic acids, one-pot synthesis of (M. Akita, N. Kakinuma, Y. Koro-oka), (348) 91

- Tricarbonyl-chromium, -molybdenum and -tungsten complexes containing bipyridyl and a unidentate diphosphine; facile synthesis via trimethylamine *N*-oxide-induced decarbonylations (T.S.A. Hor, S.-M. Chee), (331) 23
- Tricarbonylmethyl- $\eta^5$ -pentamethylcyclopentadienyl-molybdenum, photoreaction with 1,3-butadiene of (C.G. Kreiter, G. Wendt, W.S. Sheldrick), (333) 47
- Trimethylphosphane and hydridocarbonyl half-sandwich chromium, molybdenum and tungsten complexes, preparation and properties of (H.G. Alt, H.E. Engelhardt, W. Kläui, A. Müller), (331) 317
- Trimolybdenum 46-electron cluster containing localized monoprotonated Mo=Mo, photochemical synthesis and structural characterisation of (C.P. Gibson, A.D. Rae, D.R. Tomchick, L.F. Dahl), (340) C23
- Triphenylarsine derivatives of cyclopentadienyl-carbonylmolybdenum compounds, formation of (J.A. Clark, M. Kilner), (347) 107
- Vinyl-, allyl- and alkynyl-siloles, coordination chemistry of; synthesis and structure of  $\eta^4$ ,  $\eta^2$ -allyl- and 1-vinyl-2,5-diphenylsilyl-cyclopentadiene complexes (F. Carré, R.J.P. Corriu, C. Guerin, B.J.L. Henner, B. Kolani, W.W.C. Wong Chi Man), (328) 15
- [W<sub>2</sub>(C≡CCO<sub>2</sub>Me)<sub>2</sub>(Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)<sub>2</sub>], crystal structure of (A. Hills, D.L. Hughes, N. Kashef, R.L. Richards, M.A.N.D.A. Lemos, A.J.L. Pombeiro), (350) C4
- $\mu$ -*p*-Xylene- $\alpha$ ,  $\alpha'$ -diylidmolybdenum(II) complex, synthesis and photochemical behaviour of (K. Isobe, S. Tero-Kubota, H. Tanaka, Y. Nakamura, S. Okeya, K. Saito), (329) C21
- Neodymium**
- Tricyclopentadienyllanthanides/ sodium hydride, reduction and isomerisation of olefins with (C. Qian, Y. Ge, D. Deng, Y. Gu, C. Zhang), (344) 175
- Nickel**
- Acetonitrile/trialkylphosphane/nickel(0), selective cooligomerisation of hexyne(-3) under catalysis of; structure of a nickel(0) complex with side-on bonded acetonitrile (D. Walther, H. Schönberg, E. Dinjus, J. Sieler), (334) 377
- Acetylenenickel(0) complexes, structural comparison of (U. Rosenthal, H. Görls), (348) 135
- Acetyltris(trimethylphosphine)nickel cation; synthesis carbonylation reactions, and crystal and molecular structure of {(Ni(PMe<sub>3</sub>)<sub>4</sub>)BF<sub>4</sub> · Ni<sub>4</sub>(CO)<sub>6</sub>(PMe<sub>3</sub>)<sub>4</sub>} (M. Bochmann, I. Hawkins, M.B. Hursthouse, R.L. Short), (332) 361
- Alkali metal- $\mu_3$ -hydridotetraethenedinickel(0) complexes, formation and properties of (K.R. Pörschke, G. Wilke), (349) 257
- Alkyl- and aryl-mono- $\eta^5$ -cyclopentadienylphosphine-iron, -cobalt and -nickel compounds, preparation of (F. Scott, S. Cronjé, H.G. Raubenheimer), (326) C40
- Alkyltrimethylphosphinenickel complexes, reactions with isocyanides and alkynes of (M. Bochmann, I. Hawkins, M.P. Sloan), (332) 371
- $\eta^3$ -Allylbis(ligand)nickel(II) tetrafluoroborates, catalysis for stereospecific butadiene polymerisation (R. Taube, J.-P. Gehrke), (328) 393
- $\eta^3$ -Allylbis(triphenylphosphite)nickel(II) complexes, anionic coordination and its influence on the catalytic activity for stereospecific polymerisation of butadienes of (R. Taube, J.-P. Gehrke), (327) 419
- ( $\eta^3$ -Allyl)nickel functionalised complexes, preparation, structure and intermolecular C-C coupling of (H. Hoberg, G. Heger, C. Krüger, Y.-H. Tsay), (348) 261
- Amidohydrocarbylnickel derivatives, mechanistic studies on carbonylation of (M.D. Fryzuk, P.A. MacNeil, S.J. Rettig), (332) 345
- Aminodiphosphinite ligands prepared with nickel catalysts, characterisation and applications of (A. Bendayan, H. Masotti, G. Peiffer, C. Siv, R. Faure), (326) 289
- Arsinothiadimidate eight-membered heterocycle, t-BuAs(NSN)<sub>2</sub>As-t-Bu, carbonylmetal complexes of (M. Herberhold, K. Schamel), (346) 13
- $\sigma$ -Arylnickel complex, ArNiX(PPh<sub>3</sub>)<sub>2</sub>, electrochemical synthesis of aryl acetic and propionic esters via (J.C. Folest, J. Périchon, J.F. Fauvarque, A. Jutand), (342) 259
- 2,2'-Bipyridine-nickel zerovalent complex, catalyst for electrochemical homocoupling of *ortho*-substituted halides and heterocoupling with *meta*- and *para*-substituted halides (G. Meyer, Y. Rollin, J. Perichon), (333) 263
- Bis(ferrocenylamino)glyoxime and its nickel complex, synthesis of (M. Ertas, V. Ahsen, A. Gül, Ö. Bekaroğlu), (333) 383
- ( $\eta^5$ -Borole)( $\eta^4$ -1,5-cyclooctadiene)-nickel, -palladium and -platinum complexes, preparation and reactions of (G.E. Herberich, M. Negele), (350) 81
- (*E*)- $\beta$ -Bromostyrene and 1-phenylethylmagnesium chloride, asymmetric Grignard cross-

- coupling reaction between (C. Döbler, H.J. Kreuzfeld), (344) 249
- Cobalt-nickel carbide bimetallic clusters; synthesis and crystal structure of the dianions  $[\text{Co}_2\text{Ni}_{10}(\text{CO})_{20}\text{C}]^{2-}$  and  $[\text{Co}_3\text{Ni}_9(\text{CO})_{20}\text{C}]^{2-}$  (A. Ceriotti, R. Della Pergola, G. Longoni, M. Manassero, N. Masciocchi, M. Sansoni), (330) 237
- Cycloaddition of tetracyanoethene to Mn, Fe and Ni complexes, hydration of a W complex; X-ray structures of  $\text{Fe}\{\text{C}=\text{C}(\text{CN})_2\}\text{CPh}=\text{C}(\text{CN})_2\}$  and  $\text{Ni}\{\text{C}=\text{C}(\text{CN})_2\}\text{CPh}=\text{C}(\text{CN})_2\}$  ( $\text{PPh}_3$ )( $\eta\text{-C}_5\text{H}_5$ ) (M.I. Bruce, D.N. Duffy, M.J. Liddell, M.R. Snow, E.R.T. Tiekink), (335) 365
- Cyclopentadienyl- and pentamethylcyclopentadienyl-vinylnickel compounds, formation of ethylene complexes by insertion into the vinyl-Ni bonds from (H. Lehmkuhl, T. Keil), (342) C38
- Doubly charged sandwich compounds in the gas phase, charge separation (coulomb explosion) processes of; evidence for junction of two  $\text{C}_5\text{H}_5$  units (T. Drewello, C.B. Lebrilla, H. Schwarz, T. Ast), (339) 333
- Enolates derived from diethyl malonate and ethyl cyanoacetate, allylation of (E. Alvarez, T. Cuvigny, M. Julia), (339) 199
- [10]Ferrocenophanedioxime with bridging heteroatoms and its nickel(II) complex, synthesis of (M. Ertas, V. Ahsen, A. Gül, Ö. Bekaroğlu), (335) 105
- $\text{Fe}_2\text{Te}_2\text{M}(\text{CO})_6(\text{PPh}_3)_2$  (M = Ni, Pd, Pt), new route from  $\text{Fe}_3\text{Te}_2(\text{CO})_9$  and  $\text{M}(\text{PPh}_3)_4$  to (P. Mathur, I.J. Mavunkal), (350) 251
- Isonitrile-functionalised polymer supports as versatile ligands toward metal centres (B. Corain, M. Basato, P. Main, M. Zecca, R. De Pieri, R. Arshady), (326) C43
- Metal acylum mixed clusters, chemical and spectroscopic study of (M.F. D'Agostino, M. Mlekuz, M.J. McGlinchey), (345) 371
- Metallacyclobutane-nickel and -palladium complexes, preparation and properties of (A. Miyashita, M. Ohyoshi, H. Shitara, H. Nohira), (338) 103
- trans*- $[\text{Mo}(\text{CO})_5(\text{R}_2\text{PNHCH}_2\text{CH}_2\text{N}=\text{CHC}_6\text{H}_4\text{-}o\text{-O})]_2\text{M}$  (M = Co, Ni, Cu) complexes, synthesis and characterisation of; crystal structure of *trans*- $[\text{Mo}(\text{CO})_5(\text{Ph}_2\text{PNHCH}_2\text{CH}_2\text{N}=\text{CHC}_6\text{H}_4\text{-}o\text{-O})]_2\text{Ni} \cdot 2\text{Et}_2\text{O}$  (G.M. Gray, N. Takada, A.L. Zell, H. Einspahr), (342) 339
- Nickel(0) catalysed formation of carbocyclic amides from  $\alpha,\omega$ -dienes and phenyl isocyanate (E. Hernandez, H. Hoberg), (328) 403
- Nickel(0) catalysed synthesis of crotonic acid anilide from propene and phenyl isocyanate (H. Hoberg, K. Sümmerrmann, E. Hernandez, C. Ruppin, D. Guhl), (344) C35
- Nickel complexes in the presence of zinc, condensation of organic bromides with vinyl compounds catalysed by (S.A. Lebedev, V.S. Lopatina, E.S. Petrov, I.P. Beletskaya), (344) 253
- Nickel complexes with  $\text{P}_x$  ligands (O.J. Scherer, T. Dave, J. Braun, G. Wolmershäuser), (350) C20
- Nickel halide reduction by magnesium, catalysation of cyclotrimerisation of alkynes by (P. Alphonse, F. Moyon, P. Mazerolles), (345) 209
- Nickel(0) induced and catalysed CC coupling of styrene with  $\alpha,\omega$ -diisocyanates (H. Hoberg, E. Hernandez, D. Guhl), (339) 213
- Nickel(0)-induced CC coupling between  $\text{CO}_2$  and 1,3-butadiene to  $\text{C}_9$ -mono- and  $\text{C}_{18}$ -dicarboxylic acids (H. Hoberg, Y. Peres, A. Milchereit, S. Gross), (345) C17
- Nickel on graphite used as coupling reagent for benzyl chloride (P. Marceau, F. Beguin, G. Guillaumet), (342) 137
- Nickel, palladium and platinum, Annual Survey covering the year 1981 (P.A. Chaloner), (337) 431
- Nickel polymerisation catalysts, reactions with CO of (U. Klabunde, T.H. Tulip, D.C. Roe, S.D. Ittel), (334) 141
- Nickel(0) systems, stoichiometric and catalytic CC coupling of 1,3-butadiene with phenyl isocyanate in (E. Hernandez, H. Hoberg), (327) 429
- Organonickel complexes, reactions with activated alkynes of; crystal structure of *trans*- $[\text{NiBr}(\text{C}(\text{COOMe})=\text{C}(\text{COOMe})(3,5\text{-Cl}_2\text{C}_6\text{-H}_3))(\text{PPh}_3)_2]$  (J. Hernández, G. Muller, M. Rocamora, X. Solans, M. Aguiló), (345) 383
- Paramagnetic metallocenes bearing Me,  $\text{Me}_3\text{E}$  (E = C, Si, Ge, Sn) substituents, syntheses and  $^1\text{H}/^{13}\text{C}$  NMR studies of (F.H. Köhler, W.A. Geike), (328) 35
- Pentafluorophenyl group distortion in metal complexes, limitations of rigid-body refinement (P.G. Jones), (345) 405
- Phosphane trifunctional ligands in cyclopentadienylnickel complexes, coordination of (N. Kuhn, M. Winter, E. Zimmer), (344) 401
- Phosphine-substituted and phosphido-bridged metal clusters in homogeneous catalysis; behaviour of  $\text{CpNiM}_3(\mu\text{-H})_3(\text{CO})_{9-n}\text{-L}_n$ ,  $\text{M}_3(\text{CO})_{12-n}\text{L}_n$  (M = Ru, Os) and related complexes in hydrogenation-isomerisation of

- 1,4-pentadiene (M. Castiglioni, R. Giordano, E. Sappa), (342) 111
- Phosphine-substituted and phosphido-bridged metal clusters in homogeneous catalysis; synthesis and reactivity of  $\text{CpNiM}_3(\mu\text{-H})_3(\text{CO})_{9-n}\text{L}_n$  and  $\text{M}_3(\text{CO})_{12-n}\text{L}_n$  (M = Ru, Os) (M. Castiglioni, R. Giordano, E. Sappa), (342) 97
- Phosphorus-substituted butadiene systems, complexation of (R. Appel, B. Niemann, W. Schuhn, N. Siabalis), (347) 299
- Polymer-supported 2,2'-dipyridylmethane, catalytic activity of transition metal complexes in hydrogenations and oligomerisations (C. Moberg, L. Rákos), (335) 125
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Tetrachlorodimethoxycyclopentadiene and nickelocene-dimethyl acetylenedicarboxylate adduct. Diels-Alder reaction between, crystal structure of the products (M.A. Battiste, B.G. Griggs Jr., D. Sackett, J.M. Coxon, P.J. Steel), (330) 437
- Tetrakis(trimethylphosphine)nickel(0), preparation and spectra of (A.G. Avent, F.G.N. Cloke, J.P. Day, E.A. Seddon, K.R. Seddon, S.M. Smedley), (341) 535
- To tilt or not to tilt? The dilemma of  $\mu\text{-C}_3\text{R}_3$  ligands in binuclear complexes (E.D. Jemmis, B.V. Prasad), (347) 401
- Transition metal complexes of bis(3-bis(3-trifluoromethylphenyl)phosphinomethyl)phenyl ether, formation and spectra of (P.N. Kapoor), (341) 363
- Transmetalation of a binuclear complex of nickel(0); synthesis and structure of  $[\text{NiAu}(\text{CNMe})_2(\text{dppm})_2]\text{Cl}$  (H.P. Kim, P.E. Fanwick, C.P. Kubiak), (346) C39
- Tricarbonylbis[bis(diphenylphosphine)methanickel]binuclear complex,  $\text{Ni}_2(\mu\text{-dpm})_2(\mu\text{-CO})(\text{CO})_2$ , formation and molecular structure of (Z.-Z. Zhang, H.-K. Wang, H.-G. Wang, R.-J. Wang, W.-J. Zhao, L.-M. Yang), (347) 269
- Tricarbonyl(trichlorostibine)nickel(0),  $\text{Ni}(\text{CO})_3\text{-SbCl}_3$ , force constant calculations for (H.G.M. Edwards, V. Fawcett, B.M.Y. Ip), (347) 391
- Niobium**
- Alkoxo- and (alkoxo)(amido)(imido)niobium(V) compounds, preparation and structures of; crystal structure of  $[\text{NbCl}(\mu\text{-OMe})[\text{N}(\text{SiMe}_3)_2][\text{NSiMe}_3]]_2$  (A. Antiñolo, A. Otero, F. Urbanos, S. Garcia-Blanco, S. Martinez-Carrera, J. Sanz-Aparicio), (350) 25
- Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167
- Bis(trimethylsilylcyclopentadienyl)dichloroniobium, electrogeneration of the anionic  $\text{Nb}^{\text{V}}$  complex of (H. Nabaoui, A. Fakhr, Y. Mugnier, A. Antiñolo, M. Fajardo, A. Otero, P. Royo), (338) C17
- Bis(trimethylsilylcyclopentadienyl)niobium, synthesis and reactivity towards cumulene ligands of (A. Antiñolo, S. Garcia-Lledó, J. Martínez de Ilarduya, A. Otero), (335) 85
- Carbonyldi-( $\eta$ -cyclopentadienyl)hydridoniobium, insertion reactions of activated acetylenes into (G.E. Herberich, H. Mayer), (347) 93
- Di- $\eta^5$ -cyclopentadienylniobium binuclear and mononuclear complexes; crystal and molecular structure of  $[\text{Cp}_2\text{NbH}_2]^-[\text{Na} \cdot \text{benzo-15-crown-5}]^+$  (D.A. Lemenovskii, I.E. Nifant'ev, I.F. Urazowski, E.G. Perevalova, T.V. Timofeeva, Yu.L. Slovokhotov, Yu.T. Struchkov), (342) 31
- Dicyclopentadienylniobium species containing iminoacyl groups, synthesis of (J.M. Martínez de Ilarduya, A. Otero, P. Royo), (340) 187
- Heterocumulene insertion into M-H bonds of  $(\text{C}_5\text{H}_5)_2\text{M}(\text{L})\text{H}$  (M = Nb, Ta; L = CO,  $\text{PMe}_2\text{Ph}$ ) (J.-F. Leboeuf, J.-C. Leblanc, C. Moise), (335) 331
- Hexacarbonyl-group 5 metal derivatives, reactions with 9,10-phenanthrenequinone of (F. Calderazzo, G. Pampaloni), (330) 47
- Monocyclopentadienylalkoxoniobium(V) derivatives, preparation and structural study of; crystal structure of  $\{[\text{Nb}(\eta^5\text{-C}_5\text{H}_4\text{SiMe}_3)\text{Cl}]_2(\mu\text{-CO})(\mu\text{-OOC}_6\text{H}_4)_2\}$ , (F.A. Jalón, A. Otero, P. Royo, J.M. Fernández-G., M.J. Rosales, R.A. Toscano), (331) C1
- Monocyclopentadienylniobium(III) complexes, reactions with  $\alpha$ -diketones of; crystal structure of the phosphonium salt  $[\text{P}\{\text{C}(\text{OH})\text{Me-C}(\text{O})\text{Me}\}_2\text{Ph}]\text{Cl}$  (F.A. Jalón, P. Gómez-Sal, A. Otero, P. Royo, S. Garcia-Blanco, S. Martínez-Carrera), (332) 289
- Monohydrido-bridged carbonyl complexes of early transition metals containing  $\eta^5\text{-C}_5\text{H}_5\text{Nb}(\text{CO})_3$  moiety (P. Oltmanns, D. Rehder), (345) 87
- Niobium(III) anionic complexes, catalysis of electrochemical reduction of benzyl chloride and formation of C-C bonds by (A. Fakhr, Y. Mugnier, E. Laviron, J. Mofidi), (346) C49
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in

(Yu.L. Slovokhotov, Yu.T. Struchkov), (333)  
217

## Osmium

- Allyl cationic complexes from trinuclear carbonyl clusters of iron, ruthenium and osmium, synthesis of (V.V. Krivykh, T. Asunta, O.V. Gusev, M.I. Rybinskaya), (338) 55
- Bis(pentadienyl)-iron, -ruthenium and -osmium compounds, synthetic, structural and PE spectroscopic studies on; the role of the heavy metal in (L. Stahl, H. Ma, R.D. Ernst, I. Hyla-Kryspin, R. Gleiter, M.L. Ziegler), (326) 257
- t*-Butyl isocyanide and homoleptic cations  $[M(CNCMe_3)_6]^{n+}$  ( $M = Re, n = 1; M = Ru, Os, n = 2$ ), as their hexafluorophosphate salts, vibrational spectra of (D.A. Edwards, S.M. Tetrick, R.A. Walton), (349) 383
- Carbonylosmium hydrido clusters containing interstitial tetrahedral and octahedral hydrido ligands, spin lattice relaxation measurements in (S.R. Drake, B.F.G. Johnson, J. Lewis), (346) 105
- Carbonylosmium mixed metal clusters, fluxionality in (S.R. Drake, B.F.G. Johnson, J. Lewis), (340) C31
- Chalcocarbonyl complexes,  $OsCl_2(CO)(CE)(PPh_3)_2$  ( $E = S, Se, Te$ ), synthesis and structure of (G.R. Clark, K. Marsden, C.E.F. Rickard, W.R. Roper, L.J. Wright), (338) 393
- $C_5Me_5MC_5Me_4CHAR^+$  ( $M = Ru, Os$ ), synthesis and NMR study of; comparison with Fe-containing analogues of (M.I. Rybinskaya, A.Z. Kreindlin, S.S. Fadeeva, P.V. Petrovskii), (345) 341
- Cycloheptatrienylvinylidene-iron, -ruthenium and -osmium complexes, preparation and properties of (M.I. Bruce, M.G. Humphrey, G.A. Koutsantonis, M.J. Liddell), (326) 247
- p*-Cymene-osmium(II) and -osmium(0) complexes as aromatic ligands, synthesis of (H. Werner, K. Zenkert), (345) 151
- Design of a thin layer, infrared-transparent electrochemical cell and its use in the study of cluster species (M.H. Barley, C.E. Anson, B.F.G. Johnson, J. Lewis), (339) 151
- Dimethylarsino-bridged triosmium clusters, synthesis of; X-ray crystal structures of  $[Os_3H(CO)_{11}(\mu-AsMe_2)]$  and  $[Os_3(\mu-H)_2(CO)_8(\mu-AsMe_2)_2]$  (K. Guldner, B.F.G. Johnson, J. Lewis, S.M. Owen, P.R. Raithby), (341) C45
- Dodecarbonyl-triruthenium and -triosmium group 15 ligand-substituted derivatives; X-ray structures of undeca-, deca- and nona-carbonyl complexes derived from (M.I. Bruce, M.J. Liddell, C.A. Hughes, B.W. Skelton, A.H. White, and in part J.M. Patrick, O. bin Shawkataly), (347) 157, 181, 207
- Iron group metal 30-electron triple-decker complexes with cyclopentadienyl ligands, synthesis of; X-ray structure of  $[(\eta-C_5H_5)Ru(\mu, \eta-C_5Me_5)Ru(\eta-C_5Me_5)]PF_6$  (A.R. Kudinov, M.I. Rybinskaya, Yu.T. Struchkov, A.I. Yanovskii, P.V. Petrovskii), (336) 187
- Mixed clusters of bismuth with osmium and ruthenium, preparation and characterisation of; crystal and molecular structures of  $Os_3(\mu-H)_3(CO)_9(\mu_3-Bi)$ ,  $Os_4(CO)_{12}(\mu_4-Bi)_2$ ,  $Ru_3(\mu-H)_3(CO)_9(\mu_3-Bi)$ , and  $Ru_4(CO)_{12}(\mu_4-Bi)_2$  (H.G. Ang, C.M. Hay, B.F.G. Johnson, J. Lewis, P.R. Raithby, A.J. Whittton), (330) C5
- $Os_3(CO)_8(C_2Ph_2)_2$ , electronic structure of; deformation of a trimetal framework by acetylene ligands (C.E. Housecroft, S.M. Owen), (339) 139
- $Os_3(CO)_9(\mu_2-H)_2(\mu_3-C \equiv \overline{C}CH_2CH_2CH_2)$ , crystal structure of (A.S. Batsanov, V.G. Andrianov, Yu.T. Struchkov, A.A. Koridze, O.A. Kizas, N.E. Kolobova), (329) 401
- $Os_3H(CO)_9(L)(\mu-\eta^2-C \equiv CPh)$  ( $L = CO, PMe_2Ph$ ) clusters, intramolecular rearrangement of the bridging  $\sigma, \pi$ -acetylide ligand in; crystal structure of  $Os_3H(CO)_9(PMe_2Ph)(\mu-\eta^2-C \equiv CPh)$  (A.A. Koridze, O.A. Kizas, P.V. Petrovskii, N.E. Kolobova, Yu.T. Struchkov, A.I. Yanovsky), (338) 81
- $[Os(N)(CH_2SiMe_3)_4][N-n-Bu_4]$ , kinetic investigation of reaction with methyl iodide of (P.A. Shapley, Z.Y. Own), (335) 269
- Pentahydridoocetacarbonylrheniumtriosmium disordered complex, elucidation of molecular structure from crystal structure of (M.R. Churchill, J.C. Fettinger, F.J. Hollander, R.A. Lashewycz-Rubycz), (340) 367
- Phosphine-ruthenium, -osmium and -iridium complexes as precursors of terminal phosphido complexes, crystal structure of  $[Os(\mu_2-PH_2)Cl(CO)(PPh_3)_2]_2 \cdot (C_2H_2Cl_4)_4$  (D.S. Bohle, G.R. Clark, C.E.F. Rickard, W.R. Roper, M.J. Taylor), (348) 385
- Phosphine-substituted and phosphido-bridged metal clusters in homogeneous catalysis; behaviour of  $CpNiM_3(\mu-H)_3(CO)_{9-n}L_n$ ,  $M_3(CO)_{12-n}L_n$  ( $M = Ru, Os$ ) and related complexes in hydrogenation-isomerisation of 1,4-pentadiene (M. Castiglioni, R. Giordano, E. Sappa), (342) 111
- Phosphine-substituted and phosphido-bridged metal clusters in homogeneous catalysis; synthesis and reactivity of  $CpNiM_3(\mu-H)_3(CO)_{9-n}L_n$  and  $M_3(CO)_{12-n}L_n$  ( $M = Ru,$

- Os) (M. Castiglioni, R. Giordano, E. Sappa), (342) 97
- Ruthenium thioetene mono- and di-nuclear complexes, preparation and properties of (K. Seitz, U. Behrens), (345) 351
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Tetrahedral ruthenium-osmium carbonyl hydrides,  $[H_2RuOs_3(CO)_{13}]$  and  $[Ph_4As][H_3RuOs_3(CO)_{12}]$ , X-ray structure determination of; examination of bent semi-bridging metal-carbonyl bonding in (A.L. Rheingold, B.C. Gates, J.P. Scott, J.R. Budge), (331) 81
- Triosmium clusters bridging diphosphine ligands,  $Ph_2P(CH_2)_nPPH_2$  ( $n = 1-4$ ), protonation and hydrogenation of (A.J. Deeming, S.E. Kabir), (340) 359
- Triosmium clusters containing diphosphine and triphosphine ligands (A.J. Deeming, S. Donova-Mtunzi, S.E. Kabir), (333) 253
- Triosmium-platinum 60-electron tetrahedral cluster containing CO bridging Os-Os edge,  $Os_3Pt(\mu-H)_2(\mu-CO)(CO)_6(C_8H_{12})$ , synthesis and X-ray structure of (P. Ewing, L.J. Farugia), (347) C31
- Tris(alkyne)triosmium cluster with an open structure; crystal structure of  $[Os_3(CO)_8(Me_2C_2)_3]$  (B.F.G. Johnson, R. Khattar, J. Lewis, P.R. Raithby), (335) C17
- ## Palladium
- Acetylacetonato( $\pi$ -allyl)palladium optically active complex, stereochemistry and mechanism of ligand-coupling reaction of (T. Hayashi, A. Yamamoto, Y. Ito), (338) 261
- Acetylenic ketones, efficient method for synthesis of (H.D. Verkrujisse, Y.A. Heus-Kloos, L. Brandsma), (338) 289
- $\mu$ -Alkylidene-palladium complex, formation of malonate by double CO insertion into (B. Denise, D. Navarre, H. Rudler), (326) C83
- $\eta^3$ -Allyl(aryl)palladium complexes, reductive elimination promoted by allyl halides of (H. Kurosawa, M. Emoto, Y. Kawasaki), (346) 137
- $\eta^3$ -Allylpalladium complexes; mechanism of amination of an exploratory kinetic study (A. Vitagliano, B. Åkermark) (349) C22
- $\eta^3$ -Allylpalladium complexes, mechanisms of nucleophilic addition to and influence of ligands on rates and regiochemistry (B. Åkermark, K. Zetterberg, S. Hansson, B. Krakenberger, A. Vitagliano), (335) 133
- Aryl- and vinyl-tellurium compounds, carbonylation with CO in the presence of palladium(II) salts of (K. Ohe, H. Takahashi, S. Uemura, N. Sugita), (326) 35
- Aryltellurium trihalides, palladium(II)/CO-mediated biaryl formation from (H. Takahashi, K. Ohe, S. Uemura, N. Sugita), (350) 227
- Bis- $\eta^3$ -allylpalladium, reaction with cyano olefins of, reductive coupling of allyl groups in the presence of triphenylphosphine (R. Bertani, A. Bertoni, G. Carturan, R. Camprostrini), (349) 263
- Bis(diphenylphosphino)methane-palladium and -platinum complexes, reactivity towards anionic carbonylmetal hydrides of (P. Braunstein, B. Oswald), (328) 229
- Bis{(2-vinylphenyl)diphenylphosphine}palladium(0), addition of organic halides to; X-ray structure of the chelate  $\sigma$ -alkylpalladium(II) complex  $Pd\{o-CH(CH_3)C_6H_4PPh_2\}((E)-o-Ph_2PC_6H_4CH=CHC_6H_5)$  (M.A. Bennett, P.N. Kapoor), (336) 257
- ( $\eta^5$ -Borole)( $\eta^4$ -1,5-cyclooctadiene)-nickel, -palladium and -platinum complexes, preparation and reactions of (G.E. Herberich, M. Negele), (350) 81
- (*E*)- $\beta$ -Bromostyrene and 1-phenylethylmagnesium chloride, asymmetric Grignard cross-coupling reaction between (C. Döbler, H.J. Kreuzfeld), (344) 249
- Carbon sulphide and carbon selenide containing dinuclear platinum and palladium complexes with  $M(\mu-E)M'(CE')$  and  $M(\mu-CEE')M'$  structural units ( $M, M' = Pd, Pt; E, E' = S, Se$ ) (H. Werner, M. Ebner, H. Otto), (350) 257
- Carbonylphosphine palladium-tin clusters, synthesis of; X-ray diffraction study of the  $Pd_3Sn(acac)_4(CO)_2(PPh_3)_3$  cluster (V.V. Bashilov, V.I. Sokolov, Yu.L. Slovokhotov, Yu.T. Struchkov, E.G. Mednikov, N.K. Eremlenko), (327) 285
- Catalytic carbopalladation of  $\omega$ -methylenebicyclo[*n*.1.0]alkanes (W.A. Donaldson, C.A. Brodt), (330) C33
- Cocyclotetramerisation of two alkynes with palladacyclopentadiene as catalyst, formation of a cyclooctatetraene (H. tom Dieck, C. Munz, C. Müller), (326) C1
- Crown ether-modified phosphines, synthesis, properties and use as ligands in transition metal catalysts of (T. Okano, M. Iwahara, H. Konishi, J. Kiji), (346) 267
- Cyclometallated transition metal complexes, formation by metal exchange in organomercury complexes of (E.C. Constable, T.A. Leese), (335) 293



- Cyclopalladated compounds,  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectral assignments of (P.J. Steel, G.B. Caygill), (327) 101
- Cyclopalladation of benzylidenebenzylamines (P.W. Clark, S.F. Dyke, G. Smith, C.H.L. Kennard), (330) 447
- Cyclopalladation of phenyl pyrazoles; crystal structure of acetylacetonato[2-(3-methyl-5-phenylpyrazol-1-yl)phenyl- $C^1, N^{2'}$ ]palladium(II) (G.B. Caygill, P.J. Steel), (327) 115
- 2,6-Diallylpyridine (DAP) complexes of iridium(I), ruthenium(II), palladium(II), synthesis of; crystal structures of  $[\text{RuCl}_2(\text{PPh}_3)(\text{DAP})]$  and  $[\text{PdCl}_2(\text{DAP})_2]$  (G. Vasapollo, C.F. Nobile, M. Latronico, M. Lanfranchi, M.A. Pelinghelli), (336) 429
- trans*-Diarylbis(diethylphenylphosphine)palladium(II) complexes with aryl iodides, mechanisms of reactions giving biaryls of (F. Ozawa, T. Hidaka, T. Yamamoto, A. Yamamoto), (330) 253
- Dichloro(*N,N*-dimethyl-1-[1',2-bis(diphenylphosphine)ferrocenyl]ethylamine]palladium(II), crystal structure of (Tamio Hayashi, M. Kumada, T. Higuchi, K. Hirotsu), (334) 195
- cis*-Dichloro(enamine)(amine)platinum(II) complexes, synthesis and reactivity of (S.L. Doran, D.B. Brown, C.W. Allen), (340) 111
- Ferrocene polymer-supported derivatives, catalytic hydrosilylation of olefins by supported palladium and platinum complexes (W.R. Cullen, N.F. Han), (333) 269
- $\text{Fe}_2\text{Te}_2\text{M}(\text{CO})_6(\text{PPh}_3)_2$  ( $\text{M} = \text{Ni}, \text{Pd}, \text{Pt}$ ), new route from  $\text{Fe}_3\text{Te}_2(\text{CO})_9$  and  $\text{M}(\text{PPh}_3)_4$  to (P. Mathur, I.J. Mavunkal), (350) 251
- Fluorodienes and fluorostyrenes, palladium-catalysed preparation and reactivity of (F. Tellier, R. Sauvêtre, J.F. Normant, Y. Dromzee, Y. Jeannin), (331) 281
- Fluoroenynes, prepared by palladium-catalysed cross coupling reactions from alkynylzinc or fluorovinylzinc compounds (F. Tellier, R. Sauvêtre, J.-F. Normant), (328) 1
- Hinging towards metal of substituted allyls; synthesis and molecular structure of  $[(\eta\text{-}1\text{-EtOCC}_3\text{H}_4)\text{Pd}(\text{tmeda})\text{BF}_4]$  at 185 K and  $[(\eta\text{-}1\text{-EtOCC}_3\text{H}_4)\text{PdCl}]_2$  at 291 K (D.P. Grant, N.W. Murrall, A.J. Welch), (333) 403
- Imino(2-pyridyl)methylpalladium(II) compounds, coordination properties of; preparation and thermal rearrangement of binuclear adducts with  $\text{Pd}^{\text{II}}$  and  $\text{Pt}^{\text{II}}$  chlorides (R. Bertani, A. Berton, F. Di Bianca, B. Crociani), (348) 411
- Isonitrile-functionalised polymer supports as versatile ligands toward metal centres (B. Corain, M. Basato, P. Main, M. Zecca, R. De Pieri, R. Arshady), (326) C43
- Metal cyanides, *trans*- $(\text{R}_3\text{P})_2\text{M}(\text{CN})_2$  ( $\text{M} = \text{Pd}, \text{Pt}$ ;  $\text{R} = \text{Et}, \text{Ph}$ ), reactions with 1,3-dioxolenium tetrafluoroborate of (W. Weigand, W. Beck), (338) 113
- Metallacyclobutane-nickel and -palladium complexes, preparation and properties of (A. Miyashita, M. Ohyoshi, H. Shitara, H. Nohira), (338) 103
- Methyl- and dimethyl-palladium(II) and trimethylpalladium(IV) complexes, synthetic routes to; crystal structure of  $[\text{MePd}(2,2'\text{-dipyridyl})(\gamma\text{-picoline})\text{BF}_4]$  (P.K. Byers, A.J. Canty, B.W. Skelton, A.H. White), (336) C55
- Nickel-catalysed cooligomerisation of 2-*t*-butyl-1,3-butadiene with butadiene (T. Bartik, P. Heimbach, T. Himmler, R. Mynott), (348) C37
- Nickel, palladium and platinum, Annual Survey covering the year 1981 (P.A. Chaloner), (337) 431
- Oxidative addition of O-H bond to metal centre; synthesis and crystal structure of *trans*-(PhO)(H)Pd(PCy<sub>3</sub>)<sub>2</sub>·PhOH (D. Braga, P. Sabatino, C. Di Bugno, P. Leoni, M. Pasquali), (334) C46
- Palladium acetate, reaction with tropone and tropilidene derivatives in benzene of (K. Saito), (338) 265
- Palladium(II) and palladium(IV) complexes as intermediates in catalytic C-C bond formation (M. Catellani, G.P. Chiusoli), (346) C27
- Palladium-catalysed allylic alkylation of carbonucleophiles with allylic borates or allylic alcohols and boron oxide under neutral conditions (X. Lu, X. Jiang, X. Tao), (344) 109
- Palladium(0)-catalysed carbonylation of alkenyl- and aryl-borates and boronic acids with CO (T. Ohe, K. Ohe, S. Uemura, N. Sugita), (344) C5
- Palladium-catalysed *N,N'*-disubstituted urea synthesis by oxidative carbonylation of amines under CO and O<sub>2</sub> at atmospheric pressure (P. Giannoccaro), (336) 271
- Palladium-catalysed furan-annulation reaction of 2-alkynyl carbonates or 2-(1-alkynyl)oxiranes, with  $\beta$ -keto esters (I. Minami, M. Yuhara, H. Watanabe, J. Tsuji), (334) 225
- Palladium-catalysed or -promoted reductive C-C coupling, effects of phosphines and carbon ligands on (E.-I. Negishi, Tamotsu Takahashi, K. Akiyoshi), (334) 181
- Palladium-catalysed stoichiometric hydroxidation of conjugated dienes (J.-E. Nyström, B. Söderberg, B. Åkermark, J.E. Bäckvall), (334) 169
- Palladium-catalysed synthesis of silyl-substituted enynes (M. Ishikawa, J. Ohshita, Y. Ito, A. Minato), (346) C58

- Palladium catalysed synthesis of substituted phenylethylpentamethyldisilanes and phenylethynylheptamethyltrisilanes (K.A. Horn, R.B. Grossman, A.A. Whitenack), (332) 271
- Palladium(II) catalyst for oxygenation of terminal olefins with molecular oxygen (T. Hosokawa, Tsukasa Takahashi, T. Ohta, S.-I. Murahashi), (334) C5
- Palladium(II) chloride, orthometallation reactions of benzyldieneamines by (M.C. Navarro-Ranninger, A. Alvarez-Valdés, M.J. Camazón, J. Román, R. Lozano), (331) 107
- "Palladium complexes-KF/alumina" catalysed exchange of allylic groups of esters with phenol (J. Muzart, J.-P. Genêt, A. Denis), (326) C23
- Palladium complexes with *N,N'*-di- $\beta$ -tolyl-formamidine, -triazene or -formamidine ligands; insertion of  $\text{CNC}_6\text{H}_4\text{Me-}p$ ,  $\text{CS}_2$  or  $\text{CO}_2$  into a Pd-N bond (R. Usón, J. Forniés, P. Espinet, E. Lalinde), (334) 399
- Palladium(II) oxidizing potential, heterocyclic synthesis by use of (*Review*) (Y. Tamar, Z. Yoshida), (334) 213
- Palladium tetrafluoroborate complexes of 1,1'-bis[(alkyl- or aryl-)thio]-1,1'-bis(diphenylphosphino)-ferrocenes; bond formation between Fe and Pd in (M. Sato, M. Sekino, S. Akabori), (344) C31
- trans*-Pd(COPh)(CONMe<sub>2</sub>)(PMe<sub>3</sub>)<sub>2</sub>, model intermediate in catalytic double carbonylation of aryl halides with amines to give  $\alpha$ -keto amides, preparation and reductive elimination behaviour of (F. Ozawa, L. Huang, A. Yamamoto), (334) C9
- cis*-[Pd<sub>4</sub>( $\mu$ -X)<sub>4</sub>{ $\mu$ -C(C<sub>6</sub>F<sub>5</sub>)=NMe}<sub>4</sub> (X = Cl, Br, I), reactivity towards neutral bidentate ligands of (R. Usón, J. Forniés, P. Espinet, E. Lalinde), (349) 269
- Pentafluorophenyl group distortion in metal complexes, limitations of rigid-body refinement (P.G. Jones), (345) 405
- Perhalophenylpalladium(II) complexes containing keto-stabilised phosphorus ylides of the type  $\text{Ph}_2\text{P}(\text{CH}_2)_n\text{PPh}_2\text{CHC}(\text{O})\text{R}$  (R. Usón, J. Forniés, R. Navarro, A.M. Ortega), (334) 389
- Platinum(II) and palladium(II) complexes, catalytic activity in *cis-trans* isomerisations of alkenes of (R. Ponec, R. Řeřicha), (341) 549
- Polymer-supported 2,2'-dipyridylmethane, catalytic activity of transition metal complexes in hydrogenations and oligomerisations (C. Moberg, L. Rákos), (335) 125
- [(PPh<sub>3</sub>)<sub>3</sub>PdFe(SC<sub>6</sub>H<sub>4</sub>)<sub>2</sub>] · 0.5C<sub>6</sub>H<sub>5</sub>CH<sub>3</sub>, unusual heterobinuclear complex containing a weak Fe-Pd bond, structure of (M. Cowie, R.S. Dickson), (326) 269
- Rhodium(III) and palladium(II) complexes as catalysts for oxidation reactions of 2-methyl-3-buten-2-ol (F. Derdar, J. Martín, C. Martín, J.-M. Brégault, J. Mercier), (338) C21
- Rhodium(III) and palladium(II) complexes with heteropolyacids as oxidative catalysts of  $\alpha$ -olefins (B.E. Ali, J.-M. Brégault, J. Martin), (327) C9
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Sulphur ylide-palladium complexes, synthesis and reactions of (M.C. Cheng, S.M. Peng, I.J.B. Lin, B.H.H. Meng, C.H. Liu), (327) 275
- To tilt or not to tilt? The dilemma of  $\mu$ -C<sub>3</sub>R<sub>3</sub> ligands in binuclear complexes (E.D. Jemmis, B.V. Prasad), (347) 401
- 1-(*p*-Toluenesulphonyl)-2-propene and 1-(trimethylsilyl)-1-(*p*-toluenesulphonyl)-2-propene, palladium-catalysed allylic oxidation of (J. Muzart, J.-P. Pete, A. Riahi), (331) 113
- Transition metal complexes of bis{3-[bis(3-trifluoromethylphenyl)phosphinomethyl]phenyl} ether, formation and spectra of (P.N. Kapoor), (341) 363
- Trimethoxysilylpropylcyclopentadiene, Diels-Alder reactions of; synthesis of a silica-supported 4,5-dicyanonorborene palladium complex (J.A. Adeleke, B.L. Booth), (339) 223
- Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient catalysts for fluoride synthesis via carbonylation of organic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205

## Phosphorus

- Acetonitrile/trialkylphosphane/nickel(0), selective cooligomerisation of hexyne(-3) under catalysis of; structure of a nickel(0) complex with side-on bonded acetonitrile (D. Walther, H. Schönberg, E. Dinjus, J. Sieler), (334) 377
- Acetylene-dicarbonylbis(trimethylphosphine)-iron fragments, coordination and chemistry of (R. Birk, U. Grössmann, H.-U. Hund, H. Berke), (345) 321.
- $\mu_3$ - $\eta^1$ -Acetylide bridging ligands in tetranuclear copper(I) complexes, coordination mode of; crystal structure of [Cu( $\mu_3$ - $\eta^1$ -C $\equiv$ CPh)(Ph<sub>2</sub>Ppy-P)]<sub>4</sub> (E. Lastra, M.P. Gamasa, J. Gimeno, X. Solans), (346) 277
- Acetyltris(trimethylphosphine)nickel cation; synthesis carbonylation reactions, and crystal and molecular structure of {[Ni(PMe<sub>3</sub>)<sub>4</sub>]BF<sub>4</sub>

- Ni<sub>4</sub>(CO)<sub>6</sub>(PMe<sub>3</sub>)<sub>4</sub>] (M. Bochmann, I. Hawkins, M.B. Hursthouse, R.L. Short), (332) 361
- Acyliron complex, CpFe(CO)(PPh<sub>3</sub>)(COCH<sub>2</sub>-CHCHCOOCOCHCHRCH=CH), synthesis, characterization and molecular structure of (G.-H. Lee, S.-M. Peng, S.-F. Lush, R.-S. Liu), (349) 219
- η<sup>2</sup>-Aldehyde-metal complexes, (CO)<sub>2</sub>(PEt<sub>3</sub>)<sub>2</sub>-FeRCHO (R = H, Ph), synthesis of (R. Birk, H. Berke, H.-U. Hund, K. Evertz, G. Huttner, L. Zsolnai), (342) 67
- Alkali metal-μ<sub>3</sub>-hydridotetraethenedinickel(0) complexes, formation and properties of (K.R. Pörschke, G. Wilke), (349) 257
- Alkali(diphosphaallyl)ferrate, synthesis and reactions of (R. Appel, W. Schuhn), (329) 179
- Alkenylruthenium complexes, [Ru(CO)Cl(R'C=CHR)(PPh<sub>3</sub>)<sub>2</sub>], insertion reactions with dimethyl acetylenedicarboxylate of; crystal structure of [Ru(CO)Cl(MeOCC=C(CO<sub>2</sub>Me)CH=CHMe<sub>3</sub>)(PPh<sub>3</sub>)<sub>2</sub>] (M.R. Torres, A. Vegas, A. Santos, J. Ros), (326) 413
- Alkyl- and aryl-mono-η<sup>5</sup>-cyclopentadienylphosphine-iron, -cobalt and -nickel compounds, preparation of (F. Scott, S. Cronjé, H.G. Raubenheimer), (326) C40
- Alkyl-, aryl- and *cis*-dihydrido-iridium complexes with P(CH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)<sub>3</sub>, excellent precursors for activation of hydrocarbon C-H bonds (C. Bianchini, M. Peruzzini, F. Zanobini), (326) C79
- Alkyltrimethylphosphinenickel complexes, reactions with isocyanides and alkynes of (M. Bochmann, I. Hawkins, M.P. Sloan), (332) 371
- Alkyne- and phosphalkyne-metal carbonyl complexes, difference in coordination chemistry of; synthesis, crystal and molecular structures of [Mo<sub>2</sub>(CO)<sub>4</sub>(η<sup>5</sup>-C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>-(Bu<sup>+</sup>CP)Fe(CO)<sub>4</sub>] and [Mo<sub>2</sub>(CO)<sub>4</sub>(η<sup>5</sup>-C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>(Bu<sup>+</sup>CP)W(CO)<sub>5</sub>] (P.B. Hitchcock, M.F. Meidine, J.F. Nixon), (333) 337
- σ-Alkynylmanganese ligands, preparation, crystal structure and reactivity of {[Co<sub>2</sub>(CO)<sub>6</sub>][μ-PhCCMn(CO)<sub>4</sub>(P(cyclo-C<sub>6</sub>H<sub>11</sub>))]} (G.A. Carriedo, D. Miguel, V. Riera), (342) 373
- Alkynyltungsten(IV) asymmetric complexes; crystal structure of PPh<sub>4</sub>[WCl<sub>5</sub>(HC≡CPh)]·CH<sub>2</sub>Cl<sub>2</sub> (M. Kersting, K. Dehnicke, D. Fenske), (346) 201
- η<sup>3</sup>-Allylbis(ligand)nickel(II) tetrafluoroborates, catalysis for stereospecific butadiene polymerisation (R. Taube, J.-P. Gehrke), (328) 393
- η<sup>3</sup>-Allylbis(triphenylphosphite)nickel(II) complexes, anionic coordination and its influence on the catalytic activity for stereospecific polymerisation of butadienes of (R. Taube, J.-P. Gehrke), (327) 419
- η<sup>3</sup>-Allyl-PtP(C<sub>6</sub>H<sub>5</sub>)<sub>3</sub>Cl, gas-phase ion-molecule reaction with SnCl<sub>2</sub> of (M. Grassi, A. Musco, B. Pelli, P. Traldi), (349) 277
- Aminodiphosphinite ligands prepared with nickel catalysts, characterisation and applications of (A. Bendayan, H. Masotti, G. Peiffer, C. Siv, R. Faure), (326) 289
- η<sup>6</sup>-Arylphosphinemolybdenum(0) electron rich complexes as ligands in group 6 carbonyl-metal complexes (R.L. Luck, R.H. Morris), (347) 349
- [AuX<sub>3</sub>(ylide)] and *trans*-[Au(C<sub>6</sub>F<sub>5</sub>)X<sub>2</sub>(ylide)] (X = halide or pseudohalide) neutral complexes, synthesis and reactivity of; X-ray structure of (R. Usón, A. Laguna, M. Laguna, M.C. Gimeno, A. de Pablo, P.G. Jones, K. Meyer-Bäse, C.F. Erdbrügger), (336) 461
- Benzeneiron labile complexes, crystal structure of *cis*- and *trans*-FeH(CO)<sub>2</sub>(PPh<sub>3</sub>)<sub>2</sub> (M.J. Begley, S.G. Puntambekar, A.H. Wright), (329) C7
- Bis-η<sup>3</sup>-allylpalladium, reaction with cyano olefins of, reductive coupling of allyl groups in the presence of triphenylphosphine (R. Bertani, A. Berton, G. Carturan, R. Camprostrini), (349) 263
- Bis(dimethylphosphino)methanenonacarbonyltriruthenium clusters, C-H and P-C bond cleavages in; molecular structure of [Ru<sub>3</sub>(CO)<sub>9</sub>(μ-H)(μ<sub>3</sub>-η<sup>3</sup>-Me<sub>2</sub>PCHPMe<sub>2</sub>)] (L. Manojlović-Muir, D.A. Brandes, R.J. Puddephatt), (332) 201
- Bis(diphenylphosphineethane)(pentamethylcyclopentadienyl)iron complexes, direct and specific sonochemically assisted preparation of (C. Roger, P. Marseille, C. Salus, J.-R. Hamon, C. Lapinte), (336) C13
- Bis(diphenylphosphineethyl)hydridoiron cation, {FeH(Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)<sub>2</sub>}<sup>+</sup>, electrochemical metal-hydride bond cleavage at (M.A.N.D.A. Lemos, A.J.L. Pombeiro), (332) C17
- [Bis(diphenylphosphino)ethane]tricarbonyliron(0), crystal and molecular structure of (L.P. Battaglia, D. Delledonne, M. Nardelli, C. Pelizzi, G. Predieri, G.P. Chiusoli), (330) 101
- cis*- and *trans*-Bis(diphenylphosphinomethane)dicarbonylmanganese cations, crystal structures and their reactions with nucleophiles of (G.A. Carriedo, J.B. Parra Soto, V. Riera, M.L. Valín, D. Moreiras, X. Solans), (326) 201
- Bis(diphenylphosphino)methane-palladium and -platinum complexes, reactivity towards

- anionic carbonylmetal hydrides of (P. Braunstein, B. Oswald), (329) 229
- Bis(diphenylphosphino)methanide ion, stabilization by bridging octadienylirhenium of (R. Dominguez, T.J. Lynch, F. Wang), (338) C7
- 1,3-Bis(diphenylphosphino)propanedecarboxonyldi-chromium, -molybdenum and -tungsten singly bridging complexes, synthesis and decomposition of (T.S.A. Hor), (340) 51
- 1,2-Bis(di-*p*-tolylphosphino)ethane-group 6 metal carbonyls, preparation and vibrational spectra of (P.N. Kapoor, P. Mercykutty), (339) 97
- Bis(pentacarbonylmolybdenum) complexes, synthesis and NMR spectroscopic characterisation of; structure of  $(\text{CO})_5\text{Mo}(\mu\text{-Ph}_2\text{POP}(\text{OCH}_2\text{CMe}_2\text{CH}_2\text{O}))\text{Mo}(\text{CO})_5$  (G.M. Gray, W. Watt), (349) 149
- cis*-Bis(phenyl)bis(ligand)platinum(II) *E, Z*-atropisomeric compounds, synthesis and isolation of (R. Baumgärtner, G. Schmidtberg, H.-A. Brune), (345) 221
- cis*- and *trans*-Bis(phenyl)bis(phosphane)-platinum(II) complexes, UV spectroscopic investigations of (H. Palkovits, U. Ziegler, G. Schmidtberg, H.A. Brune), (338) 119
- Bis( $\mu$ -phenylphosphidolithium)bis(tricarbonyliron) ( $\mu\text{-PhPLi}$ ) $_2\text{Fe}_2(\text{CO})_6$ , reactions with organic halides of; anionic rearrangement of a chelating diphosphido ligand (D. Seyferth, T.G. Wood and R.S. Henderson), (336) 163
- cis*-Bis(phenyl)platinum(II) substituted compounds, *E, Z* atropisomerisation in; synthesis and NMR characterisation of *cis*-(2-alkoxy-6-methoxyphenyl)(2-methylphenyl)bis-(tri-phenylphosphine)platinum(II) (R. Baumgärtner, G. Laube, G. Schmidtberg, H.A. Brune), (332) 221
- N, N*-Bis(phosphinomethyl)- and *N*-phosphinomethyl-*N*-thiomethyl- $\alpha$ -amino unsymmetrically-substituted acids, synthesis of (K. Kellner, W. Hanke), (326) C9
- Bis[tetracarbonyldiphenylphosphidomanganese(0)], crystal and molecular structure of (H. Matsuda, T. Taga, K. Machida, T. Kawamura), (331) 239
- Bis(triphenylphosphine)decacarbonyltriruthenium, crystal structure of (T. Chin-Choy, N.L. Keder, G.D. Stucky, P.C. Ford), (346) 225
- Bis(2-vinylphenyl)diphenylphosphine) palladium(0), addition of organic halides to; X-ray structure of the chelate  $\sigma$ -alkylpalladium(II) complex  $\text{PdI}\{\sigma\text{-CH}(\text{CH}_3)\text{C}_6\text{H}_4\text{P-Ph}_2\}\{(\text{E})\text{-}o\text{-Ph}_2\text{PC}_6\text{H}_4=\text{CHC}_6\text{H}_5\}$  (M.A. Bennett, P.N. Kapoor), (336) 257
- trans*-Br(CO) $_2\text{L}_2\text{WCNEt}_2$  ( $\text{L}_2 = 2,2'$ -bipyridyl-1,10-phenanthroline), structure of the reaction product with  $[(\text{CO})_5\text{MEPh}_2]$  ( $\text{M} = \text{Cr}$ , Mo, W;  $\text{E} = \text{P, As, Sb}$ ) (A.C. Filippou, E.O. Fischer, H.G. Alt, U. Thewalt), (326) 59
- t*-Butylphosphaacetylene, ring formation with  $\pi$ -areneiron complexes of (M. Driess, D. Hu, H. Pritzkow, H. Schäufele, U. Zenneck, M. Regitz, W. Rösch), (334) C35
- Carbon monoxide replacement by trimethylphosphite, detection of motions of ancillary bridging ligands during (A. Darchen, E.K. Lhadi, H. Patin), (327) C37
- Carbon sulphide and carbon selenide containing dinuclear platinum and palladium complexes with  $\text{M}(\mu\text{-E})\text{M}'(\text{CE}')$  and  $\text{M}(\mu\text{-CEE}')\text{M}'$  structural units ( $\text{M, M}' = \text{Pd, Pt}$ ;  $\text{E, E}' = \text{S, Se}$ ) (H. Werner, M. Ebner, H. Otto), (350) 257
- Carbonyl(cyclopentadienyl)(trimethylphosphine)tolylcarbyne-molybdenum and -tungsten complexes, reactions of (F.R. Kreissl, W. Uedelhoven, D. Neugebauer), (344) C27
- Carbonylhydridotris(triphenylphosphine)rhodium(I),  $\text{RhH}(\text{CO})(\text{PPh}_3)_3$ , and phosphinomethylzirconium as catalytic system for hydroformylation of 1-hexene (R. Choukroun, D. Gervais, P. Kalck, F. Senocq), (335) C9
- Carbonyliron trinuclear derivatives from reactions of disodium octacarbonyldiferrate with (dialkylamino)dichlorophosphines (R.B. King, G.S. Chorgade), (341) 407
- Carbonylosmium mixed metal clusters, fluxionality in (S.R. Drake, B.F.G. Johnson, J. Lewis), (340) C31
- Carbonylphosphine palladium-tin clusters, synthesis of; X-ray diffraction study of the  $\text{Pd}_3\text{Sn}(\text{acac})_4(\text{CO})_2(\text{PPh}_3)_3$  cluster (V.V. Bashilov, V.I. Sokolov, Yu.L. Slovokhotov, Yu.T. Struchkov, E.G. Mednikov, N.K. Eremenko), (327) 285
- Carbonyltungsten binuclear compounds bridged by hydride and bidentate phosphine ligands, synthesis of (J.T. Lin, Y.M. Shiao), (334) C31
- $\text{C}_2\{\text{Au}[\text{P}(\text{C}_6\text{H}_4\text{R}-3)]_3\}_2 \cdot n\text{C}_6\text{H}_6$  ( $\text{R} = \text{H}$ ,  $n = 2$ ;  $\text{R} = \text{Me}$ ,  $n = 0, 1$ ), crystal structures of (M.I. Bruce, K.R. Grundy, M.J. Liddell, M.R. Snow, E.R.T. Tiekink), (344) C49
- Chalcocarbonylchromium complexes, arene displacement by tertiary phosphorus ligands in (A.A. Ismail, I.S. Butler), (346) 185
- $(\text{C}_5\text{H}_5)(\text{CO})\text{LFeH}$  ( $\text{L} = \text{CO, PPh}_3$ ) and  $[(\text{C}_5\text{H}_5)(\text{CO})\text{FeH}]_2\{(\mu\text{-}(\text{C}_6\text{H}_5)_2\text{PCH}_2\text{CH}_2\text{P}(\text{C}_6\text{H}_5)_2)\}$  complexes, insertion of cyano- and dicyanoacetylenes into Fe-H bonds in (M. Cariou, M. Etienne, J.E. Guerschais, R. Kergoat, M.K. Kubicki), (327) 393
- $[(\text{C}_5\text{H}_5\text{Co})_2(\mu\text{-PMe}_2)_2(\mu\text{-H})]^+$ , dinuclear complexes with alkynes of; crystal structure of  $[(\text{C}_5\text{H}_5\text{Co})_2(\mu\text{-PMe}_2)(\mu\text{-}\eta^4\text{-Me}_2\text{PC}(\text{CO}_2\text{Me}))]$

- $=\text{CHC}(\text{OMe}=\text{O})\text{BF}_4$  (R. Zolk, H. Werner), (331) 95
- $(\eta^5\text{-C}_5\text{H}_5\text{Co})_2(\mu\text{-PPh}_2)_2\text{B}_2\text{H}_5$ , preparation and characterisation of; evidence for multicentre cluster bonding (J. Feilong, T.P. Fehlner, A.L. Rheingold), (348) C22
- $[(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})_2\text{I}]$ , catalysed reactions with group 15 donor ligands of (N.J. Coville, E.A. Darling, A.W. Hearn, P. Johnston), (328) 375
- $[\text{C}_5\text{H}_5\text{Fe}(\text{CO})\text{L}(\text{EMe}_2)]^+$  (E = S, Se, Te), synthesis and reactivity of (N. Kuhn, H. Schumann, E. Zauder), (327) 17
- $(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{CO})(\text{PPh}_3)\text{COR}$  (R =  $\text{CH}_3$ ,  $\text{CH}_2\text{SiMe}_3$ , and  $\text{CH}_2\text{SiMe}_2\text{Ph}$ ), thermal decarbonylation of (K.H. Pannell, J.R. Rice), (341) 415
- Chiral bicyclic *O,N*-bis(diphenylphosphino)-aminoalkanols as ligands for enantioselective metal complex hydrogenation catalysts (C. Döbler, H.-J. Kreuzfeld, H. Pracejus), (344) 89
- Chloromethylsilanes,  $\text{CFCl}_2$  derivatives of (R. Josten, I. Ruppert), (329) 313
- $[(\eta^5\text{-C}_5\text{H}_4\text{Me})\text{Fe}(\text{CO})(\text{L})\text{I}]$  complexes,  $^{13}\text{C}$  NMR spectra of (L. Carlton, P. Johnston, N.J. Coville), (339) 339
- $\text{C}_5\text{H}_5\text{Rh}(\text{C}=\text{CHR})(\text{PPr}_3)_i$ , reactivity towards diazomethanes, sulphur, selenium and tellurium of; formation of unstable chalcogenoketenes in coordinated transition metals (J. Wolf, R. Zolk, U. Schubert, H. Werner), (340) 161
- Chromium, tungsten and iron isocyanide complexes, addition reactions to heteroalenes of (E. Bär, W.P. Fehlhammer, W. Weigand, W. Beck), (347) 101
- $(\text{C}_5\text{Me}_5)_2\text{Mo}_2\text{P}_x\text{S}_y$  complexes ( $x = 2, 4$ ;  $y = 5 - x$ ), P/S ligands in (H. Brunner, U. Klement, W. Meier, J. Wachter, O. Serhadle, M.L. Ziegler), (335) 339
- $[\text{Co}_x\text{Rh}_{4-x}(\text{CO})_{12}]$  ( $x = 3, 2$ ), ligand substitution with tertiary phosphines or phosphites in; X-ray structure of  $[\text{Co}_2\text{Rh}_2(\text{CO})_{11}(\text{PPh}_3)]$  (M. Bojczuk, B.T. Heaton, S. Johnson, C.A. Ghilardi, A. Orlandini), (341) 473
- $[\text{Cp}_2\text{Co}_4(\text{CO})_4(\mu\text{-CO})(\text{CF}_3\text{C}_2\text{CF}_3)]$ , reactions with phosphine and isocyanide ligands of; characterisation and electrochemistry of the mono- and di-substituted derivatives (F.V. Pétillon, R. Rumin, J. Talarmin), (346) 111
- $\text{Cp}(\text{CO})\text{CoPt}(\text{PPh}_3)_2(\mu\text{-CH}_2)$  and  $\text{Cp}_2\text{Co}_2\text{Pt}(\text{PPh}_3)_2(\mu\text{-CO})_2$ , synthesis from reaction of  $\text{Pt}(\text{PPh}_3)_2(\text{C}_2\text{H}_4)$  with  $[\text{CpCo}(\text{CO})]_2(\mu\text{-CH}_2)$ , synthesis of (P.D. Macklin, C.A. Mirkin, N. Viswanathan, G.D. Williams, G.L. Geoffroy, A.L. Rheingold), (334) 117
- Crown ether-modified phosphines, synthesis, properties and use as ligands in transition metal catalysts of (T. Okano, M. Iwahara, H. Konishi, J. Kiji), (346) 267
- C=S-functionalised compounds, coordination chemistry of; dithioesters as  $\eta^1$ ,  $\eta^2$ , and  $\eta^3$  ligands in transition metal complexes of (W.A. Schenk, D. Rüb, C. Burschka), (328) 287
- C=S-functionalised compounds, reactions and  $\eta^1$ -,  $\eta^2$ -, and  $\eta^3$ -dithioester complexes of (W.A. Schenk, D. Rüb, C. Burschka), (328) 305
- $\text{CS}_2\text{W}$  complexes, activated addition of alkynes to and formation of tetrahedral methylidyne-dicobaltungsten with (W.A. Schenk, D. Kuemmerle, C. Burschka), (349) 183
- $\text{CS}_2\text{W}$  complexes, electrophilic and nucleophilic attack on (W.A. Schenk, D. Kuemmerle, T. Schwietzke), (349) 163
- $[\text{Cu}_2\text{Ru}_4(\mu_3\text{-H})_2(\text{CO})_{12}\text{L}_2]$  (L = phosphine) clusters in solution, NMR investigation of stereochemical non-rigidity in metal framework in (P.J. McCarthy, I.D. Salter, V. Šik), (344) 411
- $\sigma$ -Cyclobutyl-platinum bond formation by intramolecular activation of a cyclobutylphosphine; synthesis and structure of  $[\text{Pt}(\text{P}(\text{t-Bu})_2\text{CH}_2\text{CHCH}_2\text{CH}_2\text{CH})_2](\mu\text{-Br})_2$  (B.L. Simms, J.A. Ibers), (330) 279
- $\eta^3$ -Cycloheptatrienyl-molybdenum and -tungsten complexes with bisphosphine or diamine ligands, spectroscopic investigation of structure and fluxionality of; synthesis of  $[\text{W}(\text{CO})_2(\text{Ph}_3\text{P}(\text{CH}_2)_n\text{PPh})\{\eta^3\text{-C}_7\text{H}_7(\text{CN}_4)\}(\eta = 1 \text{ or } 2)]$  (R.A. Brown, S. Endud, J. Friend, J.M. Hill, M.W. Whiteley), (339) 283
- $\eta^5$ -Cyclooctadienyl- $\eta^5$ -cyclopentadienylcobalt and related cations, kinetics and mechanism of addition of tertiary phosphines and phosphites to (L.A.P. Kane-Maguire, P.A. Mouncher, A. Salzer), (347) 383
- (4*S*,5*S*)-*trans*-4-(Cyclopentadiene-1-methyl)-5-diphenylphosphine-2,2-dimethyl-1,3-dioxolane and *trans*- $[\text{Fe}\{\eta\text{-C}_5\text{H}_4\text{CH}_2[\text{CHOC}(\text{CH}_3)_2\text{OCH}]\text{CH}_2\text{PPh}_2\}_2]$ , synthesis of (M.L.H. Green, N.M. Walker), (344) 379
- Cyclopentadienylation of pentafulvenes with stannyl- and nitrosyl-carbonylvandium complexes (D. Rehder, D. Wenke), (348) 205
- Cyclopentadienyl(olefin)(triosopropylphosphine)iridium and cyclopentadienyl(bis-olefin)iridium, preparation and reactions of (M. Dziallas, A. Höhn, H. Werner), (330) 207
- Cyclopentadienylruthenium(II) complexes, cleavage of aromatic and vinylic C-H bonds by (H. Lehmkühl, M. Bellenbaum, J. Grundke), (330) C23

- Cyclopentadienylruthenium complexes with cyclooctadiene ligands,  $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{31}\text{P}$  studies of; X-ray structure of  $[(\eta^5\text{-C}_5\text{H}_5)\text{Ru}(\eta^4\text{-C}_8\text{H}_8)(\text{P}(\text{OCH}_3)_3)_3]\text{PF}_6$  (A.M. McNair, T.P. Gill, K.R. Mann), (326) 99
- Cyclopentadienylruthenium complexes with sulphur donor ligands; comparative study of reactivity of  $\text{Ru}(\eta\text{-RC}_5\text{H}_4)\text{Cl}(\text{L})_2$  ( $\text{R} = \text{H}$ ,  $\text{CH}_3$ ,  $\text{CH}_3\text{CO}$ ;  $\text{L} = \text{CO}$ ,  $\text{Ph}_2\text{PCH}_2\text{CH}_2\text{-PPh}_2/2$ ,  $\text{P}(\text{CH}_2\text{CH}_2\text{CN})_3$ ) towards anionic (S-S) donor ligands (A. Gutiérrez Alonso, L. Ballister Reventós), (338) 249
- Cyclopropenylphosphaalkenes, educts for synthesis of stable 2*H*-phosphole (F. Zurmühlen, M. Regitz), (332) C1
- Cyclopropyl-substituted  $\eta^1$ - and  $\eta^2$ -ketylungsten compounds, electronic structure and binding in carbonyl ( $\eta^5$ -cyclopentadienyl)-( $\eta^2$ -cyclopropylketylenyl)(trimethylphosphine)-tungsten (W.J. Sieber, M. Wolfruber, N. Hoa Tran-Huy, H.R. Schmidt, H. Heiss, P. Hofmann, F.R. Kreissl), (340) 341
- p*-Cymene-osmium(II) and -osmium(0) complexes as aromatic ligands, synthesis of (H. Werner, K. Zenkert), (345) 151
- Decacarbonylnitrosyltriruthenate, reactivity of; synthesis and characterisation of  $[\text{Ru}(\text{CO})_3\text{-}(\text{NO})]^-$  (R.E. Stevens, D.E. Fjare, W.L. Gladfelder), (347) 373
- Decacarbonyltriion bridging phosphine complexes, alkyne insertion into (K. Knoll, G. Huttner, L. Zsolnai, O. Orama), (327) 379
- Diaminodiphosphene and aminophosphinidene complexes, synthesis and characterisation of (J. Borm, G. Huttner, L. Zsolnai, K. Evertz, H. Berke), (327) 223
- Di- and tri-organotin(IV) diethyldithiophosphinates, synthesis and characterisation of; crystal and molecular structure of bis(diethyldithiophosphinato)dimethyltin(IV),  $\text{Me}_2\text{Sn}(\text{S}_2\text{PEt}_2)_2$  (C. Silvestru, I. Haiduc, S. Klima, U. Thewalt, M. Gielen, J.J. Zuckerman), (327) 181
- Di- and tri-organotin(IV) diphenyldithiophosphinates, preparation and characterisation of (C. Silvestru, F. Iliès, I. Haiduc, M. Gielen, J.J. Zuckerman), (330) 315
- trans*-Diarylbis(diethylphenylphosphine)palladium(II) complexes with aryl iodides, mechanisms of reactions giving biaryls of (F. Ozawa, T. Hidaka, T. Yamamoto, A. Yamamoto), (330) 253
- Diarylzirconocene complexes, formation of metallacyclic phosphaallyl-type products by thermally induced reactions with  $\text{CH}_3\text{CH}=\text{PPh}_3$  from (G. Erker, P. Csisch, R. Benn, A. Ruffínska, R. Mynott), (328) 101
- Di-*t*-butylbenzoquinonetricarbonyltriphenylphosphinerhenium radical,  $\text{dtbq}^-\text{Re}(\text{CO})_3\text{PPh}_3$ , structure of (C.P. Cheng, S.R. Wang, J.C. Lin, S.-L. Wang), (349) 375
- Di-*t*-butylcyclopentadienyl-group 15 compounds, synthesis, structure and fluxional behaviour of (S.T. Abu-Orabi, P. Jutzi), (347) 307
- Di-*t*-butyldibenzoplatinol compounds, mechanism of photochemical biphenyl elimination from (R. Hohenadel, H.-A. Brune), (350) 101
- Dicarbonyl( $\eta^5$ -cyclopentadienyl)tolylycarbyne-tungsten, reaction with dimethylchlorophosphine; CC coupling of (M. Wolfruber, F.R. Kreissl), (349) C4
- Dicarbonylnitrosyl-(5-diphenylphosphinouracyl)cobalt(-I)·methanol(1/2), synthesis and X-ray structure of (J. Ellermann, E. Köck, H. Zimmermann, M. Gomm), (345) 167
- Dichloro[*N,N*-dimethyl-1-[1',2'-bis(diphenylphosphine)ferrocenyl]ethylamine]palladium(II), crystal structure of (Tamio Hayashi, M. Kumada, T. Higuchi, K. Hirotsu), (334) 195
- Dicyclooctadienyldirhodium dialkyl-bridged complexes, reactions with Lewis bases and further reactions with aromatic hydrocarbons of (M.A. Kulzick, R.T. Price, R.A. Andersen, E.L. Muetterties), (333) 105
- Dicyclopentadienylbis(trimethylphosphine)-titanium and -zirconium complexes, reactions with acetylenes of (H.G. Alt, H.E. Engelhardt, M.D. Rausch, L. Kool), (329) 61
- (Diene) $\text{Fe}(\text{CO})_2\text{PR}_3$  and  $\{(\text{dienyl})\text{Fe}(\text{CO})_2\text{-PR}_3\}\text{X}$  complexes, altered reactivity towards electrophiles and nucleophiles of (J.A.S. Howell, M.-C. Tirvengadam, G. Walton), (338) 217
- Diethylaminocarbonyl tungsten complexes, synthesis of thermally stable, cationic complexes (A.C. Filippou, E.O. Fischer, H.G. Alt), (340) 331
- Diethylaminocarbonyl tungsten complexes, reductive elimination of halogeno ligands with  $\text{PMe}_3$  from (A.C. Filippou, E.O. Fischer, H.G. Alt), (344) 215
- (*o*-Dimethylaminomethyl)phenyl- and (*o*-diphenylphosphinomethyl)phenyl-stannylpentacarbonyl tungsten complexes, synthesis and structures of (H.-P. Abicht, K. Jurkschat, A. Tzschach, K. Peters, E.-M. Peters, H.G. von Schnering), (326) 357
- Dimethylmanganese(III) cationic complexes having 1,2-bis(dimethylphosphine)ethane ligands, preparation of and  $\alpha$ -hydrogen elimination from (S. Komiyama, M. Kaneda), (340) C8
- Dioxanylmethyl-diorganylphosphanes, selectivity in hydrocarbonylation of methanol under

- formation of acetaldehyde and acetic acid (E. Lindner, A. Sickinger, P. Wegner), (349) 75
- Diphenylphosphido-bridged tetracarbonylruthenium-tricarbonylcobalt, reaction with bis(diphenylphosphino)methane of; synthesis and crystal structures of heterobimetallic (Ru-Co) compounds with chelating and bridging dpmm ligands (S. Guesmi, P.H. Dixneuf, N.J. Taylor, A.J. Carty), (328) 193
- (Diphenylphosphine)nonacarbonylhydridotritruthenium. (H)Ru<sub>3</sub>(CO)<sub>9</sub>(μ-PPh<sub>2</sub>), P-C bond activation, hydrogen migration and acetylene interconversion with Ph<sub>2</sub>PC≡CR in; X-ray structure of Ru<sub>3</sub>(CO)<sub>9</sub>(μ-PPh<sub>2</sub>)<sub>2</sub>(μ<sub>3</sub>-η<sup>2</sup>-HC≡CPh) (F. van Gestel, S.A. MacLaughlin, M. Lynch, A.J. Carty, E. Sappa, A. Tiripicchio, M. Tiripicchio Camellini), (326) C65
- Diphenyltrimethylsilyl-amine, -phosphine, -arsine, and -stibine, UV photoelectron spectroscopy of (G. Distefano, L. Zanathy, L. Szepes, H.J. Breunig), (338) 181
- Diphosphazane-bridged derivatives of nonacarbonyliruthenium, umpolung behaviour of protonic acids containing coordinated anions with (J.S. Field, R.J. Haines, E. Minshall, C.N. Sampson, J. Sundermeyer), (327) C18
- Di-rhodium(I) and tri-rhodium(I) complexes with bridging bis(dimethylphosphinomethyl)methylphosphine, preparation and crystal structure of (A.L. Balch, D.E. Oram), (349) 245
- Dithiophosphate rhodium(III) complex formation from [(η<sup>5</sup>-C<sub>5</sub>Me<sub>5</sub>)(η<sup>1</sup>-PSPPh<sub>2</sub>)RhPh<sub>2</sub>PS]; crystal structure of [(η<sup>5</sup>-C<sub>5</sub>Me<sub>5</sub>)(η<sup>1</sup>-PSPPh<sub>2</sub>)RhPh<sub>2</sub>SPS] (M.T. Pinnilos, M.P. Jaraúta, D. Carmona, L.A. Oro, M.C. Apreada, C. Foces-Foces, F.H. Cano), (345) C13
- Dodecacarbonyltetrarhodium, comparison of face-capping vs. fragmentation with triphos, MeC(CH<sub>2</sub>PPh<sub>2</sub>)<sub>3</sub>, and tripod, HC(PPh<sub>2</sub>)<sub>3</sub> of; crystal structure of [(triphos)Rh(μ-CO)<sub>2</sub>Rh(triphos)] (C. Allevi, M. Golding, B.T. Heaton, C.A. Ghilardi, S. Midollini, A. Orlandini), (326) C19
- Dodecacarbonyl-triruthenium and -triosmium group 15 ligand-substituted derivatives; X-ray structures of undeca-, deca- and nonacarbonyl complexes derived from (M.I. Bruce, M.J. Liddell, C.A. Hughes, B.W. Skelton, A.H. White, and in part J.M. Patrick, O. bin Shawkataly), (347) 157, 181, 207
- Ethenylbis(triphenylphosphine)platinum, Pt(PPh<sub>3</sub>)<sub>2</sub>(C<sub>2</sub>H<sub>4</sub>), reactions with monofluoroacetylene and dichloroacetylene of; crystal structure of Pt(PPh<sub>3</sub>)<sub>2</sub>(Cl)(C≡CCl) (K. Sünkell), (348) C12
- Ether-phosphane-iridium complexes, synthesis and behaviour towards hydrogen of (E. Lindner, S. Meyer), (339) 193
- Ether-phosphane-ruthenium(II) cationic complexes, potential catalysts for homogeneous hydration of aldehydes (E. Lindner, U. Schober, M. Stängle), (331) C13
- Et<sub>2</sub>NP-bridged carbonyliron clusters, synthesis and reactions of (K. Knoll, G. Huttner, K. Evertz), (333) 97
- [Fe<sub>2</sub>(CO)<sub>6</sub>(bipy)(P(n-Bu)<sub>3</sub>)], low temperature photochemistry of; stabilisation of intermediate photoproduct in decomposition of (H.K. van Dijk, D.J. Stufkens, A. Oskam), (340) 227
- [Fe(η<sup>4</sup>-C<sub>4</sub>Ph<sub>3</sub>OMe)(NO)(PPh<sub>3</sub>)](BF<sub>4</sub>), a cationic η<sup>4</sup>-cyclobutadieneiron complex, formation of (U. Behrens, K.-J. Jens, J. Kopf, T. Valeri, E. Weiss), (348) 379
- [Fe<sub>3</sub>(CO)<sub>11</sub>RCN] derivatives, synthesis and properties of; crystal and molecular structure of [Fe<sub>3</sub>(CO)<sub>11</sub>(NCC<sub>6</sub>H<sub>4</sub>-2-Me)] (C.J. Cardin, D.J. Cardin, N.B. Kelly, G.A. Lawless, M.B. Power), (341) 447
- cis-FeH<sub>2</sub>[P(CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>PMe<sub>2</sub>)<sub>3</sub>], synthesis and reactions of (M. Antberg, K.-M. Frosin, L. Dahlenburg), (338) 319
- Ferrocenylpentacarbonylmanganese, Mn(CO)<sub>5</sub>-Fc, synthesis and reactivity of (M. Herberhold, H. Kiesel), (334) 347
- Ferrocenylphospholes, preparation and chemistry of (E. Deschamps, F. Mathey), (332) 141
- Fe<sub>2</sub>Te<sub>2</sub>M(CO)<sub>6</sub>(PPh<sub>3</sub>)<sub>2</sub> (M = Ni, Pd, Pt), new route from Fe<sub>2</sub>Te<sub>2</sub>(CO)<sub>9</sub> and M(PPh<sub>3</sub>)<sub>4</sub> to (P. Mathur, I.J. Mavunkal), (350) 251
- (Fluorenyl)-Cr(CO)<sub>2</sub>L anions (L = CO, F(OPh)<sub>3</sub>, PPh<sub>3</sub>, P(n-Bu)<sub>3</sub>), influence of metal basicity on the η<sup>6</sup> ⇌ η<sup>5</sup> haptotropic equilibrium of (A. Cecon, A. Gambaro, A. Venzo, V. Lucchini, T.E. Bitterwolf, J. Shade), (327) 55
- Fluorenyl(triphenylphosphine)gold(I), synthesis and structure of (Yu.T. Struchkov, Yu.L. Slovokhotov, D.N. Kravtsov, T.V. Baukova, E.G. Perevalova, K.J. Grandberg), (338) 269
- Fluorine-containing halomethane phosphonate and methylenebisphosphonate esters, synthesis of (G.M. Blackburn, G.E. Taylor), (348) 55
- Functionalised diphosphine as (P-N)-binucleating ligand; X-ray structure of [(RhCl(BTPE))<sub>2</sub>][RhCl<sub>4</sub>(BTPE)]<sub>2</sub> · xCHCl<sub>3</sub> (BTPE = (C<sub>7</sub>H<sub>4</sub>NS)<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>P(C<sub>7</sub>H<sub>4</sub>NS)<sub>2</sub>) (M.F.M. Al-Dulaymji, P.B. Hitchcock, R.L. Richards), (338) C31
- Group 14-iron bonds containing complexes, photochemical diastereoselective synthesis of (B. Rouda, M. Pankowski, W. Chodkiewicz, G. Jaouen), (342) C10
- Heterocumulene insertion into M-H bonds of (C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>M(L)H (M = Nb, Ta; L = CO,

- $\text{PMe}_2\text{Ph}$ ) (J.-F. Leboeuf, J.-C. Leblanc, C. Moise), (335) 331
- Heterometallic di- and tri-nuclear complexes with bridging thiocarbonyl and methylthiocarbonyne ligands; crystal and molecular structure of  $\text{C}_5\text{H}_5(\text{PMe}_3)(\mu\text{-CO})[\mu\text{-CSMn}(\text{CO})_2\text{C}_5\text{H}_5]\text{-Mn}(\text{CO})\text{C}_5\text{H}_5$**  (H. Werner, O. Kolb, P. Thometzek), (347) 137
- Homo- and hetero-nuclear vinyl- and vinylidene-bridged dinuclear complexes** (H. Werner, J. Wolf, G. Müller, C. Krüger), (324) 381
- $[\text{HRu}_3(\text{C}\equiv\text{CBu}^1)(\text{CO})_7(\text{Ph}_2\text{PCH}_2\text{PPh}_2)]$ , crystal structure and fluxionality of (G. Predieri, A. Tiripicchio, C. Vignali, E. Sappa), (342) C33
- Hydridotantalum seven-coordinate complexes,  $[\text{Ta}(\text{H})(\text{CO})_{6-n}(\text{oligophos})]$ , preparation and dynamics of** (D. Rehder, M. Fornalcy, P. Oltmans), (331) 207
- Hydrochalcogenide and hydride-hydrochalcogenide complexes of rhodium with the tripodal tetraphosphine, tris(2-diphenylphosphinoethyl)phosphine** (M. Di Vaira, P. Stopponi, M. Peruzzini), (333) C53
- Hydroxyallylolefinrhodium cationic complexes with intramolecular O-H $\rightleftharpoons$ Rh bonds; formation of  $\{[\text{Cp}^*\text{Rh}(\eta^{2-3}\text{-C}_7\text{H}_6\text{-3-R-3-Cr}^1\text{=OH})]_2\text{-F}_2\text{POO}\} + \text{PF}_6^-$  dimers** (I.T. Chizhevsky, N.V. Rastova, N.E. Kolobova, P.V. Petrovskii, E.I. Fedin, L.E. Vinogradova, L.A. Leites, A.I. Yanovsky, Yu. T. Struchkov), (339) 165
- $[\text{Ir}(\text{cod})(\eta^2\text{-o-HalC}_6\text{H}_4\text{PPh}_2)]\text{SbF}_6$  (Hal = Br, Cl), structural and chemical studies of halocarbon chelation in (M.J. Burk, R.H. Crabtree, E.M. Holt), (341) 495
- Iridium-initiated C-C coupling of malonodinitrile with  $\text{CS}_2$ ; synthesis and crystal structure of  $[\text{H}_2\text{Ir}(\text{PPhMe}_2)_4]^+[\text{HS}(\text{S})\text{-CC}(\text{CN})_2]^-$**  (A. Behr, W. Keim, W. Kipshagen, D. Vogt, E. Herdtweck, W.A. Herrmann), (344) C15
- Ir(OMe)(CO)(PPh<sub>3</sub>)<sub>2</sub>(SO)<sub>4</sub>**, synthesis, characterisation and disordered crystal structure of (J.C. Fettinger, M.R. Churchill, K.A. Bernard, J.D. Atwood), (340) 377
- Iron atom discrimination by carbon in ligand fragmentation around a Fe-Fe bond; crystal structure of  $[\mu\text{-}\eta^3\text{-RCH}_2\text{OC}(\text{S})\text{MFe}_2(\text{CO})_5\text{-P}(\text{OMe})_3]$**  (A. Darchen, E.K. Lahdi, D. Grandjean, A. Mousser, H. Patin), (342) C15
- Iron-functionalised diphosphiranes,  $(\text{C}_5\text{Me}_5)(\text{CO})_2\text{MPCH}_2\text{P-2,4,6-t-Bu}_3\text{C}_6\text{H}_2$  (M = Fe, Ru), preparation by reactions of diphosphanyl complexes with  $\text{Me}_2\text{S}(\text{O})=\text{CH}_2$**  (L. Weber, E. Lücke), (327) C63
- Iron(0) interaction with  $\text{CO}_2$ , COS and  $\text{CS}_2$ , ab initio calculations on  $\text{Fe}(\text{CO})_2(\text{PH}_3)_2(\eta^2\text{-CO}_2)$ ,  $\text{Fe}(\text{CO})_2(\text{PH}_3)_2(\eta^2\text{-COS})$ ,  $\text{Fe}(\text{CO})_2(\text{PH}_3)_2(\eta^2\text{-CS}_2)$  and  $\text{Fe}(\text{PH}_3)_4(\eta^2\text{-CO}_2)$** , (M. Rosi, A. Sgamellotti, F. Tarantelli, C. Floriani), (332) 153
- Iron-molybdenum and iron-tungsten sulphido clusters containing hydrazido(2-) ligands; synthesis and X-ray crystal and molecular structure of  $[\{\text{Fe}(\text{CO})_3(\mu_3\text{-S})\}_2\text{Mo}(\text{NN-Me}_2)_2(\text{PPh}_3)](\text{Fe-Fe})\cdot\text{CH}_2\text{Cl}_2$**  (P.T. Bishop, J.R. Dilworth, S. Morton, J.A. Zubieta), (341) 373
- Isocyanomethylenephosphorane, [3 + 2] cycloaddition reactions with heteroallenes of (W.P. Fehlhammer, G. Zinner, M. Bakola-Christianopoulou), (331) 193**
- Keteneiminehexacarbonyldiiron, reactions with phosphanes of (T. Sielisch, U. Behrens), (327) 85**
- Keto-stabilised phosphorus ylide gold(I) and gold(III) complexes** (J. Vicente, M.T. Chicote, I. Saura-Llamas, J. Turpin, J. Fernandez-Baeza), (333) 129
- $\alpha$ -Lithiated *O,O*-diethyltrimethylchloromethylphosphonate, preparation and properties of (M.-P. Teulade, P. Savignac), (338) 295
- $[\text{M}(\text{CO})_4(\text{Ph}_2\text{P})_2\text{C}=\text{CH}_2]$  (M = W, Mo, Cr), conjugate additions of functionalised carbanions to the vinylidene groups of (A.M. Herring, S.H. Koskimies, B.L. Shaw), (338) 13
- $\{[\mu\text{-}(\text{Me}_3\text{Si})\text{C}(\text{PMe}_2)_2\text{Ge}_4\text{Cl}_2]^+[\text{GeCl}_3]^-$ , dispirocyclic cationic germylene complex with bent Ge chain (H.H. Karsch, B. Deubelly, J. Riede, G. Müller), (336) C37
- Metal cyanides, *trans*-(R<sub>3</sub>P)<sub>2</sub>M(CN)<sub>2</sub> (M = Pd, Pt; R = Et, Ph), reactions with 1,3-dioxolenium tetrafluoroborate of (W. Weigand, W. Beck), (338) 113**
- Metallophosphonium complexes derived from related cyclic and acyclic aminohalophosphines, synthesis and structure of (L.H. Hutchins, H.-U. Reisacher, G.L. Wood, E.N. Duesler, R.T. Paine), (335) 229**
- Methanolhydrocarbonylation, synthesis, properties and chemistry of multidentate alkoxyethylphosphanes and their behaviour as directing ligands for (E. Lindner, S. Meyer, P. Wegner, B. Karle, A. Sickinger, B. Steger), (335) 59**
- Methylidynephosphane, (HC $\equiv$ P) cycloaddition reagent for 1,3-dipoles (E.P.O. Fuchs, M. Hermesdorf, W. Schnurr, W. Rösch, H. Heydt, M. Regitz, P. Binger), (338) 329**
- (Methylsorbate)- (sorbaldehyde)- and (1-methoxycyclohexadiene)-dicarbonyl(+)-neomenthyltriphenylphosphine)iron, diastereoisomer separation and absolute configuration of**



- (J.A.S. Howell, M.C. Tirvengadam, A.D. Squibb, G. Walton, P. McArdle, D. Cunningham), (347) C5
- Methyltin trihalides and tin tetrahalides, *cis*- and *trans*-influences in octahedral complexes with tertiary phosphines of (O.A. Reutov, C.S. Petrosyan, N.S. Yashina, E.I. Gefel), (341) C31
- Mixed metal cluster compounds,  $[M_2Ru_4(\mu-CO)_{10}(PPh_3)_2]$  ( $M = Cu, Ag, Au$ ), synthesis and structural characterisation of; X-ray crystal structures of  $[M_2Ru_4(\mu-CO)_3(CO)_{10}(PPh_3)_2]$  ( $M = Cu, Ag$ ) (S.S.D. Brown, I.D. Salter, T. Adatia, M. McPartlin), (332) C6
- <sup>95</sup>Mo shielding, NMR spectrochemical series based on (M. Hughes, J. Mason, G.J. Leigh, R.L. Richards), (341) 381
- $[MoBr_2(CO)_2(PPh_3)_2]$ , reactions with N- and P-donor ligands of; crystal structure of  $[MoBr_2(CO)_2(dppm)(PPh_3)] \cdot 0.4CHCl_3$  (F.J. Arnaiz, G. Garcia, C. Foces Foces, F.H. Cano, M. Martinez-Ripoll), (332) 299
- $[Mo_2(\eta-C_5H_5)_2(CO)_4(\eta-Ph_2PCH_2PPh_2)]$ , preparation and reactions of; crystal structure of  $[Mo_2(\eta-C_5H_5)_2(CO)_4(\mu-H)(\mu-Ph_2PCH_2PPh_2)]_2[Mo_6O_{19}] \cdot 4C_4H_8O$  (V. Riera, M.A. Ruiz, F. Villafañá, Y. Jeannin, C. Bois), (345) C4
- $[MoH_4(Ph_2PCH_2CH_2PPh_2)_2]$ , rapid binding and activation of small molecules in the presence of  $HBF_4 \cdot OEt_2$  by; crystal structure of the phenylacetylene product *trans*- $[MoF(\eta^2-PhC\equiv CH)(Ph_2PCH_2CH_2PPh_2)_2]BF_4$  (R. Ellis, R.A. Henderson, A. Hills, D.L. Hughes), (333) C6
- Mono- and bi-dentate xanthate complexes,  $\eta^5-C_5R_5Fe(CO)(\eta^1-SC(S)OEt)L$  and  $\eta^5-C_5R_5Fe(\eta^2-S_2COEt)L$  ( $R = H, Me; L = PBu_3, PPh_3, P(OEt)_3, P(OPh)_3$ ), synthesis, characterisation and electrochemistry of (M. Morán, I. Cuadrado, J.R. Masaguer, J. Losada), (335) 255
- Mono- and di-hydrido-bridged platinum(II)-tungsten(IV) complexes; X-ray crystal structure of  $[Cp_2W(\mu-H)_2PtPh(PEt_3)] [BPh_4]$  and  $[Cp_2(H)W(\mu-H)PtPh(PEt_3)_2] [BPh_4]$  (A. Albinati, R. Naegeli, A. Togni, L.M. Venanzi), (330) 85
- Mono-, bis- and tris-trimethylphosphane-substituted diethylaminocarbyne-tungsten complexes (A.C. Filippou, E.O. Fischer, J. Okuda), (339) 309
- Monocyclopentadienylniobium(III) complexes, reactions with  $\alpha$ -diketones of; crystal structure of the phosphonium salt  $[P\{C(OH)MeC(O)Me\}Me_2Ph]Cl$  (F.A. Jalón, P. Gómez-Sal, A. Otero, P. Royo, S. García-Blanco, S. Martínez-Carrera), (332) 289
- Monocyclopentadienyltitanium dichloride complexes containing trimethylphosphine and isonitrile ligands, formation and properties of; molecular structure of  $(\eta^5-C_5H_5)_2TiCl_2(PMe_3)_2$  (A. Razavi, D.T. Mallin, O. Day, M.D. Rausch, H.G. Alt), (333) C48
- Monofluoromethylene bisphosphonic acid, simple synthesis of (D.W. Hutchinson, D.M. Thornton), (340) 93
- Monohydrido-bridged carbonyl complexes of early transition metals containing  $\eta^5-C_5H_5Nb(CO)_3$  moiety (P. Oltmanns, D. Rehder), (345) 87
- Nickel(0) catalysed formation of carbocyclic amides from  $\alpha, \omega$ -dienes and phenyl isocyanate (E. Hernandez, H. Hoberg), (328) 403
- Nickel(0) catalysed synthesis of crotonic acid anilide from propene and phenyl isocyanate (H. Hoberg, K. Sümmerrmann, E. Hernandez, C. Rupp, D. Guhl), (344) C35
- Nickel complexes with  $P_x$  ligands (O.J. Scherer, T. Dave, J. Braun, G. Wolmershäuser), (350) C20
- Nickel(0) induced and catalysed CC coupling of styrene with  $\alpha, \omega$ -diisocyanates (H. Hoberg, E. Hernandez, D. Guhl), (339) 213
- Nickel(0) systems, stoichiometric and catalytic CC coupling of 1,3-butadiene with phenyl isocyanate in (E. Hernandez, H. Hoberg), (327) 429
- $\mu$ -Nitridobis(triphenylphosphonium) cation,  $[PPN]^+$ , economical small scale synthesis of (F.J. Lalor, S. Chaona), (344) 163
- Nitrium triflate salts, reactions with *trans*- $[IrCl(CO)(PPh_3)_2]$  of (M. Barber, B.L. Booth, P.J. Bowers, L. Tetler), (328) C25
- Nonacarbonyltriiron clusters containing (RP)-(RCCR) groups as tripledecker complexes (K. Knoll, T. Fässler, G. Huttner), (332) 309
- Nonacarbonyltriiron clusters containing (RP)-(RCCR) groups, topoisomerisation and rearrangements of (K. Knoll, G. Huttner, L. Zsolnai), (332) 175
- (Norbornadiene)tris(trimethylphosphine)cobalt(I)tetraphenylborate complex,  $[Co(\eta^4-C_7H_8)(PMe_3)_3]BPh_4$ , crystal and molecular structure of (M. Dartiguenave, L.C. Ananias de Carvalho, Y. Dartiguenave, F. Bélangier-Gariépy, M. Simard, A.L. Beauchamp), (326) 139
- Olefin-coordinated platina(II)cyclobutane, synthesis and conversion into diphosphine-platina(II)cyclobutanes of (H.J.R. de Boer, O.S. Akkerman, F. Bickelhaupt), (336) 447
- Optically active monodentate phosphines pre-

- pared from  $\alpha$ -pinanes and D-mannit under enantioselective catalysis (H. Brunner, H. Leyerer), (334) 369
- Optically active phospholanes derived from tartaric acid (H. Brunner, R. Sievi), (328) 71
- Organogermanium and organotin adducts with triphenylphosphine oxide and hexamethylphosphoramide (J.N. Spencer, S.M. Coley, J.C. Otter, A. Grushow, B.G. Enders, W.L. Nachlis, C.H. Yoder), (346) 161
- Organolithium unusual dimer,  $\{(\text{Me}_2\text{NCH}_2\text{-CH}_2\text{NMe}_2)\text{Li}[(\text{PMe}_2)\text{CH}(\text{SiMe}_3)]\}_2$ , structure of (H.H. Karsch, B. Deubelly, J. Riede, G. Müller), (342) C29
- Organonickel complexes, reactions with activated alkynes of; crystal structure of *trans*- $[\text{NiBr}(\text{C}(\text{COOMe})=\text{C}(\text{COOMe})(3,5\text{-Cl}_2\text{C}_6\text{-H}_3))(\text{PPh}_3)_2]$  (J. Hernández, G. Muller, M. Rocamora, X. Solans, M. Aguiló), (345) 383
- Organosilicon derivatives of cyclic and high polymeric phosphazenes (H.R. Allcock, D.J. Brennan), (341) 231
- Organo-silicon or -boron halides, kinetically and thermodynamically controlled interaction with acylphosphine-lithium salts of (I.F. Lutsenko, V.L. Foss, Yu.A. Veits, E.G. Neganova, A.A. Borisenko), (333) C45
- Organotin-containing phosphines, formation of (T.N. Mitchell, H.-J. Belt), (345) C28
- 1,3,2-Oxazaphosphorinanes in rhodium(I) complexes (E.E. Nifant'ev, A.T. Teleshev, T.A. Shikovets, A.R. Bekker, A.N. Chernega, M. Yu. Antipin, Yu.T. Struchkov), (336) 237
- Oxo-phosphonato-rhenium complexes, formation from  $[\text{ReOCl}_3(\text{PPh}_3)_2]$  and methyl phosphites of; crystal structure of  $[\text{ReOCl}(\text{OMe})\{\text{P}(\text{O})(\text{OMe})_2\}(\text{PPh}_3)_2]$  (M.F.N.N. Carvalho, A.J.L. Pombeiro, D.L. Hughes, R.L. Richards), (335) C23
- Palladium-catalysed or -promoted reductive C-C coupling, effects of phosphines and carbon ligands on (E.-I. Negishi, Tamotsu Takahashi, K. Akiyoshi), (334) 181
- Palladium catalysed synthesis of substituted phenylethylpentamethyldisilanes and phenylethynylheptamethyltrisilanes (M.A. Horn, R.B. Grossman, A.A. Whitenack), (332) 271
- Pentacarbonyl-chromium and -tungsten complexes, structural isomers of cyclic adducts of perfluoro-2-phosphapropene and isoprene as ligands in (J. Grobe, D. Le Van, W. Meyring, B. Krebs, M. Dartmann), (340) 143
- Pentacarbonylchromium complex of 2-(pentafluoroethyl)-3-fluoro-3-(trifluoromethyl)-2-phosphabicyclo[2.2.1]hept-5-ene, synthesis and molecular structure of (J. Grobe, J. Szameitat, M. Möller), (344) 61
- Pentacarbonylchromium complexes,  $\text{Cr}(\text{CO})_5\text{-PRH}_2$  (R = Ph, cyclohexyl), reactions with mercury(II) and silver(I) compounds of (D. Obendorf, P. Peringer, N. Müller, H. Falk), (326) 375
- Pentacarbonyl-5-phenyl-5-phospha-2,8-dithia-1-stannabicyclo[3.3.0<sup>1,5</sup>]octanechromium(0)·pyridine, crystal structure of (K. Jurkschat, A. Tzschach, J. Meunier-Piret, M. Van Meerssche), (349) 143
- Pentacarbonyl-rhenate and -manganate nucleophilic addition to  $\pi$ -bonded dienes, cyclo-dienes, trimethylmethane, cycloheptatrienyl and alkyne ligands (H.-J. Müller, W. Beck), (330) C13
- Pentachlorotantalum reduction in pure trimethylphosphine; synthesis of compounds containing Ta- $\eta^2$ -CHPMe<sub>2</sub>; crystal structure of  $[\text{Ta}(\eta^2\text{-CHPMe}_2)(\eta\text{-C}_4\text{H}_6)(\text{PMe}_3)_2\text{Cl}]$  (M.L.H. Green, P.M. Hare, J.A. Bandy), (330) 61
- Pentamethylcyclopentadienyl- and tributylphenyl-substituted diphosphenes and phospharsenes, synthesis of (P. Jutzi, U. Meyer), (326) C6
- Pentamethylcyclopentadienyl-substituted diphosphenes and phospharsenes (P. Jutzi, U. Meyer), (333) C18
- (Pentamethylcyclopentadienyl)molybdenum cationic complexes, improved synthesis and characterisation of (A. Asdar, M.-J. Tudoret, C. Lapinte), (349) 353
- Pentamethylcyclopentadienylrhodium(II) di-bridged complexes, protonation and subsequent reactions of the  $\mu$ -hydridodirrhodium cation,  $\{(\text{C}_5\text{Me}_5\text{Rh})_2(\mu\text{-PMe}_2)_2(\mu\text{-H})\}^+$  (B. Klingert, H. Werner), (333) 119
- (Pentamethylcyclopentadienyl)tetrachlororhenium(V), dehalogenation leading to lower oxidation state rhenium complexes of (W.A. Herrmann, R.A. Fischer, E. Herdtweck), (329) C1
- Per-coordinated boron- or phosphorus-containing compounds, structure and acidity of (L. Lamandé, D. Boyer, A. Munoz), (329) 1
- Perhalophenylpalladium(II) complexes containing keto-stabilised phosphorus ylides of the type  $\text{Ph}_2\text{P}(\text{CH}_2)_n\text{PPh}_2\text{CHC}(\text{O})\text{R}$  (R. Usón, J. Forniés, R. Navarro, A.M. Ortega), (334) 389
- Peroxorhodium phosphino complexes, reactions with methylene active compounds of; formation of hydroperoxorhodium complexes (A. Morvillo, M. Bressan), (332) 337
- $[(\text{Phen})(\text{Ph}_3\text{P})\text{Cu}(\text{O}_2\text{COH})]$ , C-C coupling of activated alkanes with  $\text{CO}_2$  by (G. La Monica, M.A. Angaroni, G.A. Ardizzoia), (348) 279

- Phenyl- and benzyl-group 14 element complexes, hyperconjugation in (A.N. Egorochkin, G.A. Razuvaev, M.A. Lopatin), (344) 49
- $\mu, \mu'$ -1,2-Phenylenediimine-(*N, N'*)-dicarbonylbis(triphenylphosphine)diruthenium (*Ru-Ru*), triple-bonded Ru-Ru compound, preparation and crystal structure of (A. Anillo, V. Riera, R. Obeso-Rosete, M. Font-Altaba, X. Solans), (327) C43
- o*-Phenylenediphosphine derivatives, unexpected redox behaviour during cyclisation reactions of (K. Issleib, H. Schmidt, E. Leissring), (330) 17
- Phenylphosphinidene-capped ruthenium cluster with a *closo*-octahedral Ru<sub>4</sub>P<sub>2</sub> framework, conversion to a *closo*-trigonal prismatic skeleton by addition of CO and protons to (J.S. Field, R.J. Haines, U. Honrath, D.N. Smit), (329) C25
- Phosphaalkynetri- and tetra-metallic complexes; crystal and molecular structure of [Fe<sub>2</sub>Pt(Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)(CO)<sub>6</sub>(Me<sub>3</sub>CCP)] (S.I. Al-Resayes, P.B. Hitchcock, M.F. Meidine, J.F. Nixon), (341) 457
- Phosphane addition to acetylene ligands; synthesis and characterisation of Cp'(CO)<sub>2</sub>Mn(HC-CHPR<sub>3</sub>) and Cp'(CO)<sub>2</sub>Mn[C(PR<sub>3</sub>)CH<sub>2</sub>] (Cp' = C<sub>5</sub>H<sub>5</sub>, C<sub>5</sub>H<sub>4</sub>Me, C<sub>5</sub>Me<sub>5</sub>) (H.G. Alt, H.E. Engelhardt, E. Steinlein), (344) 227
- Phosphane-germylene spirocyclic complexes [XC(PMe<sub>2</sub>)<sub>2</sub>]<sub>2</sub>Ge (X = PMe<sub>2</sub>, SiMe<sub>3</sub>), preparation, structure and dynamic behaviour of (H.H. Karsch, B. Deubelly, G. Hanika, J. Riede, G. Müller), (344) 153
- Phosphane trifunctional ligands in cyclopentadienylnickel complexes, coordination of (N. Kuhn, M. Winter, E. Zimmer), (344) 401
- Phosphanes and arsanes, reactions with diselenium complexes of (L.-R. Frank, K. Evertz, L. Zsolnai, G. Huttner), (335) 179
- Phosphanetricarbonyl-molybdenum and -tungsten complexes of bidiazine, synthesis and spectra of (B. Olbrich-Deussner, W. Kaim), (340) 71
- Phosphazene chemistry, isomerisations and tautomerism in (*Review*) (R.A. Shaw), (341) 357
- Phosphine-bridged decacarbonyltriiron clusters, synthesis and reactivity of (K. Knoll, G. Huttner, T. Fässler, L. Zsolnai), (327) 255
- Phosphine-ligand stabilisation by P-complexation with pentacarbonyltungsten (F. Mercier, F. Mathey, C. Afion-Akpan, J.F. Nixon), (348) 361
- Phosphine-substituted and phosphido-bridged metal clusters in homogeneous catalysis; behaviour of CpNiM<sub>3</sub>( $\mu$ -H)<sub>3</sub>(CO)<sub>9-n</sub>L<sub>n</sub>, M<sub>3</sub>(CO)<sub>12-n</sub>L<sub>n</sub> (M = Ru, Os) and related complexes in hydrogenation-isomerisation of 1,4-pentadiene (M. Castiglioni, R. Giordano, E. Sappa), (342) 111
- Phosphine-substituted and phosphido-bridged metal clusters in homogeneous catalysis; synthesis and reactivity of CpNiM<sub>3</sub>( $\mu$ -H)<sub>3</sub>(CO)<sub>9-n</sub>L<sub>n</sub> and M<sub>3</sub>(CO)<sub>12-n</sub>L<sub>n</sub> (M = Ru, Os) (M. Castiglioni, R. Giordano, E. Sappa), (342) 97
- (Phosphine)pentacarbonyltungsten, reactions of and formation of primary and secondary phosphines in coordination sphere of tungsten from (F. Nief, F. Mercier, F. Mathey), (328) 349
- Phosphinerhodium "in situ" catalysis, hydroformylation of methyl methacrylate via (K. Prókai-Tátrai, S. Törös, B. Heil), (332) 331
- Phosphine-ruthenium, -osmium and -iridium complexes as precursors of terminal phosphido complexes, crystal structure of [Os( $\mu$ -PH<sub>2</sub>)Cl(CO)(PPh<sub>3</sub>)<sub>2</sub>]<sub>2</sub> · (C<sub>2</sub>H<sub>2</sub>Cl<sub>4</sub>)<sub>4</sub> (D.S. Bohle, G.R. Clark, C.E.F. Rickard, W.R. Roper, M.J. Taylor), (348) 385
- Phosphinoethylsilyl chelate ligands in manganese complexes containing Mn,H,Si three-centred bond (U. Schubert, K. Bahr, J. Müller), (327) 357
- Phosphorus-substituted butadiene systems, complexation of (R. Appel, B. Niemann, W. Schuhn, N. Siabalis), (347) 299
- (Ph<sub>3</sub>P)<sub>2</sub>Co(CH<sub>2</sub>=CHCH<sub>2</sub>CH<sub>2</sub>CHO), 17-electron intermediate in paramagnetic cobalt(0) catalysis of 4-pentenal intramolecular hydroacylation (M.G. Vinogradov, A.B. Tuzikov, G.I. Nikishin, B.N. Shelimov, V.B. Kazansky), (348) 123
- Ph<sub>2</sub>Te(S<sub>2</sub>P(OEt)<sub>2</sub>)<sub>2</sub> and two modifications of Ph<sub>2</sub>Te(S<sub>2</sub>CNEt<sub>2</sub>)<sub>2</sub>, crystal structures of (D. Dakternieks, R. Di Giacomo, R.W. Gable, B.F. Hoskins), (349) 305
- Platinum and rhodium complexes with diphenylphosphino(methylthio)methane as a monodentate, chelated or bridging ligand, preparation of (G.K. Anderson, R. Kumar), (342) 263
- Platinum  $\eta^2$ -bonded nitroso complexes, reactivity of; crystal structure of Pt(PPh<sub>3</sub>)<sub>2</sub>(PhNO) (M. Pizotti, F. Porta, S. Cenini, F. Demartin, N. Masciocchi), (330) 265
- Platinum  $\pi$ -olefin complex formed by intramolecular activation of a cyclopropylphosphine, *cis*-PtX<sub>2</sub>(P(*t*-Bu)<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>CH=CHCH<sub>3</sub>) (X = Cl, Br), synthesis and structure of (B.L. Simms, J.A. Ibers), (327) 125
- Platinum-silver clusters, synthesis and crystal structure of [Pt<sub>3</sub>Ag( $\mu$ -CO)<sub>3</sub>(PPh<sub>3</sub>)<sub>5</sub>]ClO<sub>4</sub> ·

- 2H<sub>2</sub>O (S. Bhaduri, K. Sharma, P.G. Jones, C.G. Erdbrügger), (326) C46
- Platinum(II)/SnCl<sub>2</sub> catalysis, mechanism of hydroformylation of olefins; reactivity of alkyl complexes containing chelating diphosphines (A. Scrivanti, C. Botteghi, L. Toniolo, A. Berton), (344) 261
- [(PPh<sub>3</sub>)PdFe(SC<sub>5</sub>H<sub>4</sub>)<sub>2</sub>] · 0.5C<sub>6</sub>H<sub>5</sub>CH<sub>3</sub>, unusual heterobinuclear complex containing a weak Fe-Pd bond, structure of (M. Cowie, R.S. Dickson), (326) 269
- [Pt<sub>3</sub>Au(μ<sub>2</sub>-CO)<sub>3</sub>(PPh<sub>3</sub>)<sub>5</sub>]NO<sub>3</sub>, synthesis and structural characterisation of (J.J. Bour, R.P.F. Kanters, P.P.J. Schlebos, W. Bos, W.P. Bosman, H. Behm, P.T. Beurskens, J.J. Steggerda), (329) 405
- [Pt(C≡CH)<sub>2</sub>(Ph<sub>2</sub>PCH<sub>2</sub>PPh<sub>2</sub>-P)<sub>2</sub>], synthesis and formation of heterobimetallic Pt-Ag, Pt-Au, Pt-Rh, Pt-Ir, and Pt-W derivatives of (S.W. Carr, P.G. Pringle, B.L. Shaw), (341) 543
- trans*-PtCl<sub>2</sub>(P(*t*-Bu)<sub>2</sub>CH<sub>2</sub>CHCH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub>, synthesis and structure of (B.L. Simms, J.A. Ibers), (327) 137
- PtCl(SnCl<sub>3</sub>)[(-)-(2*S*,4*S*)-2,4-bis(diphenylphosphino)pentane]-catalysed enantioselective hydroformylation reaction, temperature dependence of asymmetric induction in (L. Kollár, J. Bakos, I. Tóth, B. Heil), (350) 277
- (η-Pyrrolyl)bis(triphenylphosphine)rhenium complexes, regioselective elaboration of η-pyrrolyl ligands in, formation of 2,5-diphenylpyrrole and some of its *N*-derivatives (J. Zakrzewski), (333) 71
- [RhCl(COD)]<sub>2</sub>/bis(diphenylphosphineethyl)tetramethyldisiloxane, spectrophotometry of the reactivity with hydrosilylation reaction substrates of (W. Duczmal, B. Marciniak, W. Urbaniak), (327) 295
- [Rh(CO)<sub>3</sub>P-*i*-Pr<sub>3</sub>]<sub>2</sub>, homonuclear disproportionation induced by nitrogen bases of, existence of homonuclear ion pair [Rh(CO)(P-*i*-Pr<sub>3</sub>)<sub>2</sub>(amine)]<sup>+</sup> [Rh(CO)<sub>4</sub>]<sup>-</sup> (E. Watanabe, Y. Shimada, K. Wada, T. Onoda), (344) C45
- Rhodium(III) and palladium(II) complexes with heteropolyacids as oxidative catalysts of octenes (B.E. Ali, J.-M. Brégeault, J. Martin), (327) C9
- Rhodium(I) and rhodium(II) complexes containing alkynes, alkynyls and vinylidenes as ligands; crystal structure of [C<sub>5</sub>H<sub>5</sub>Rh(=C=CHPh)(PPr-*i*,<sub>3</sub>)] (H. Werner, J. Wolf, F.J. Garcia Alonso, M.L. Ziegler, O. Serhadli), (336) 397
- Rhodium(I) species in activation of C-H bonds in acetylene and terminal alkynes; crystal structure of *cis*-(ethynyl)hydride [(NP<sub>3</sub>)-Rh(H)(C≡CH)]BPPh<sub>4</sub> · 1.5C<sub>4</sub>H<sub>8</sub>O (NP<sub>3</sub> = N(CH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)<sub>3</sub>) (C. Bianchini, C. Mealli, M. Peruzzini, F. Vizza, F. Zanobini), (346) C53
- RP-bridged carbonyliron clusters, negative ion chemical ionisation and electronic ionisation mass spectra of (K. Knoll, G. Huttner), (329) 369
- (RP)Fe<sub>3</sub>(CO)<sub>9</sub>(R'CCR'') clusters, EHT model calculations for isomerisation processes of (G. Huttner, K. Knoll, T. Fässler, H. Berke), (340) 223
- Ru-C(sp<sup>2</sup>) bond lengths, effect of chelation on; X-ray structures of Ru(C<sub>6</sub>H<sub>4</sub>PPh<sub>2</sub>)(PPh<sub>3</sub>)(η-C<sub>5</sub>H<sub>5</sub>) · 0.5CH<sub>2</sub>Cl<sub>2</sub> and Ru{C(=CMePh)CH(PPh<sub>2</sub>)CH<sub>2</sub>PPh<sub>2</sub>}(η-C<sub>5</sub>H<sub>5</sub>) (M.I. Bruce, M.P. Cifuentes, M.G. Humphrey, E. Poczman, M.R. Snow, E.R.T. Tiekink), (338) 237
- Ru{(Z)-C(CO<sub>2</sub>Me)=CH(CO<sub>2</sub>Me)}(CO)(PPh<sub>3</sub>)(η-C<sub>5</sub>H<sub>5</sub>) · 0.5EtOH, Ru{(E)-C(CO<sub>2</sub>Me)=CH(CO<sub>2</sub>Me)}(dpppe)(η-C<sub>5</sub>H<sub>5</sub>) and Ru{C(CO<sub>2</sub>Me)=C(CO<sub>2</sub>Me)C(CO<sub>2</sub>Me)=CH(CO<sub>2</sub>Me)}(PPh<sub>3</sub>)(η-C<sub>5</sub>H<sub>5</sub>), X-ray structures of (M.I. Bruce, A. Catlow, M.G. Humphrey, G.A. Koutsantonis, M.R. Snow, E.R.T. Tiekink), (338) 59
- Ru(diene)<sub>2</sub>P(OMe)<sub>3</sub> complexes, synthesis of; formation of η<sup>3</sup>:η<sup>3</sup>-octadienediyl or η<sup>4</sup>-octatriene ligands upon phosphite addition to M(dimethylbutadiene)<sub>2</sub>CO (M = Fe, Ru) (D.N. Cox, R. Roulet), (342) 87
- [Ru(SC<sub>6</sub>F<sub>5</sub>)<sub>2</sub>{P(C<sub>6</sub>H<sub>5</sub>)<sub>2</sub>(H<sub>4</sub>C<sub>6</sub>H-2)}<sub>2</sub>], preparation and X-ray structure of (R.-M. Catala, D. Cruz-Garriz, P. Terreros, H. Torrens, A. Hills, D.L. Hughes, R.L. Richards), (328) C40
- Ruthenium(0) compounds, substituted ketene elimination from acid chlorides induced by (S. Singh, M.C. Baird), (338) 255
- Ruthenium thioketene mono- and di-nuclear complexes, preparation and properties of (K. Seitz, U. Behrens), (345) 351
- Samarium(II)-mediated reaction of allylic phosphate esters with carbonyl compounds, new method for "Umpolung" of allylic phosphates (S. Araki, M. Hatano, H. Ito, Y. Butsugan), (333) 329
- Silver(I) complexes with carbonyl-stabilised phosphorus ylides; crystal structures of [Ag{CH(PPh<sub>3</sub>)C(O)R}<sub>2</sub>]<sup>+</sup> derivatives (J. Vicente, M.T. Chicote, J. Fernandez-Baeza, J. Martin, I. Saura-Llamas, J. Turpin, P.G. Jones), (331) 409
- Silyl- and germyl-ketenes, reaction with silyldiazomethanes of (G.S. Zaitseva, I.F. Lutsenko, A.V. Kisin, Yu.T. Baukov, J. Lorberth), (345) 253
- Silyl-substituted trihydrido-iron complexes, FeH<sub>3</sub>(CO)(Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)SiR<sub>3</sub> (M. Knorr, S. Gilbert, U. Schubert), (347) C17
- Silylphosphanes of the type PSi<sub>3</sub>Me<sub>9-x</sub>(SiMe<sub>3</sub>)<sub>x</sub>

- ( $x = 1-6$ ), formation and  $^{31}\text{P}$  and  $^{29}\text{Si}$  NMR of (K. Hassler), (348) 33
- Silylphosphanes of the type  $\text{PSi}_3\text{Me}_{9-x}(\text{SiMe}_3)_x$  ( $x = 1-6$ ), infrared and Raman spectra of (K. Hassler), (348) 41
- $\text{SiR}_3$  and  $\text{PR}_3$ , behaviour towards substitution of  $\eta^3$ -allyl ligands of; preparation of  $\text{Co}(\text{CO})_2(\text{PR}_3)_2\text{SiR}_3$  from  $(\eta^3\text{-C}_3\text{H}_5)\text{Co}(\text{CO})_2\text{PR}_3$  (U. Schubert, J. Müller), (340) 101
- (Tertiary phosphine)gold(I) substituted imidazoles or pyrazolones, reactions with acidic reagents of; crystal structure of 1-methyl-2-(cyclohexylphosphinegoldthiolato)imidazole · 2benzimidazole (F. Bonati, A. Burini, B.R. Pietroni, E. Giorgini, B. Bovio), (344) 119
- Tetracarbonyl-chromium, -molybdenum and -tungsten complexes containing secondary and tertiary phosphines (R.L. Keiter, M.J. Madigan), (331) 341
- Tetrahedral and butterfly  $\text{M}_2\text{E}_2$  clusters, structure and electron counting of; MO analysis of  $(\text{L}_n\text{M})_2(\mu\text{-X})_2$  ( $\text{X} = \text{P}, \text{PR}, \text{PM}'\text{L}_5$ ) complexes (J.-F. Halet, J.-Y. Saillard), (327) 365
- Tetrakis( $\mu$ -pyrophosphito)diplatinum(II) tetra-anion, thermal and photochemical addition of alkyl and aryl halides to (D.M. Roundhill, M.K. Dickson, S.J. Atherton), (335) 413
- Tetrakis(triphenylphosphine)dihydridoruthenium,  $\text{RuH}_2(\text{PPh}_3)_4$ , catalysis of selective synthesis of  $\alpha$ -methylene- $\beta$ -hydroxyalkanones by (I. Matsuda, M. Shibata, S. Sato), (340) C5
- Tetrakis(trimethylphosphine)nickel(0), preparation and spectra of (A.G. Avent, F.G.N. Cloke, J.P. Day, E.A. Seddon, K.R. Seddon, S.M. Smedley), (341) 535
- Tetranuclear chromium complex formed by fluoride abstraction from hexafluorophosphate; synthesis and structure of  $[(\eta^5\text{-Me}_5\text{C}_5)_4\text{Cr}(\mu\text{-F})_2\text{Cl}_2]\text{PF}_6$  (B.J. Thomas, J.F. Mitchell, K.H. Theopold, J.A. Leary) (348) 333
- Thioacyliron dinuclear complexes, structure and reactions of (W. Ziegler, H. Umland, U. Behrens), (344) 235
- Titanated phosphonoacetates, reagents for stereoconvergent Knoevenagel condensations, structural study of (M.T. Reetz, M. von Itzstein), (334) 85
- Toluene-soluble 1,2-organobis(phenylphosphido)dilithium crystal compounds, monomeric  $1,2\text{-C}_6\text{H}_4(\text{PPh})_2[\text{Li}(\text{TMEDA})]_2$  and the dimeric  $[(\text{PhPCH}_2\text{CH}_2\text{PPh})\{\text{Li}(\text{THF})_2\}]_2$  (D.M. Anderson, P.B. Hitchcock, M.F. Lapert, W.-P. Leung, J.A. Zora), (333) C13
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands,  $^{125}\text{Te}$  and  $^{77}\text{Se}$  NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Transition metal complexes of bis[3-[bis(3-trifluoromethylphenyl)phosphinomethyl]phenyl] ether, formation and spectra of (P.N. Kapoor), (341) 363
- Transition metal mediated homologation of  $\text{BH}_3 \cdot \text{THF}$ : synthesis and crystal structure of  $[\text{WH}_3(\text{PMe}_2)_3\text{B}_3\text{H}_8]$  (P.D. Grevenik, J.B. Leach, M.L.H. Green, N.M. Walker), (345) C31
- Transmetalation of a binuclear complex of nickel(0); synthesis and structure of  $[\text{NiAu}(\text{CNMe}_2)(\text{dppm})_2]\text{Cl}$  (H.P. Kim, P.E. Fanwick, C.P. Kubiak), (346) C39
- Trialkyl-gallium and -indium adducts of tetramethyldiphosphine, synthesis of (H.D. Hodes, A.D. Berry), (336) 299
- 2,4,6-Tri-*t*-butyldiphosphaallene,  $\text{ArP}=\text{C}=\text{PAR}$  ( $\text{Ar} = 2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2$ ), hydrogen modes migration in reactions with  $[\text{W}(\text{CO})_5(\text{THF})]$  and  $[\text{Fe}_3(\text{CO})_{12}]$  of; crystal structure of  $[\text{Fe}_2(\text{CO})_6(\text{ArP}=\text{CHPCH}_2(\text{CMe}_2)_2\text{C}_6\text{H}_2\text{-}t\text{-Bu}_2)]$  (C.A. Akpan, P.B. Hitchcock, J.F. Nixon, M. Yoshifuji, T. Niitsu, N. Inamoto), (338) C35
- Tricarbonylbis[bis(diphenylphosphine)methanickel] binuclear complex,  $\text{Ni}_2(\mu\text{-dpm})_2(\mu\text{-CO})(\text{CO})_2$ , formation and molecular structure of (Z.-Z. Zhang, H.-K. Wang, H.-G. Wang, R.-J. Wang, W.-J. Zhao, L.-M. Yang), (347) 269
- Tricarbonyl-chromium, -molybdenum and -tungsten complexes containing bipyridyl and a unidentate diphosphine; facile synthesis via trimethylamine *N*-oxide-induced decarbonylations (T.S.A. Hor, S.-M. Chee), (331) 23
- Tricarbonylcyclopentadienylmethylthiolatotungsten(II), reactions with mono- and di-cyanoacetylenes of, formation of phosphorus ylide  $[(\text{C}_5\text{H}_5)\text{X}(\text{CO})_2\text{W}(\text{CH}(\text{P}(\text{C}_6\text{H}_5)_3)\text{C}(\text{CN})\text{SCH}_3)]$ ; crystal structure of  $[(\text{C}_5\text{H}_5)(\text{CO})_2(\text{P}(\text{C}_6\text{H}_5)_3)\text{W}(\text{C}(\text{O})\text{C}(\text{CN})=\text{CHSCH}_3) \cdot \text{CH}_2\text{-Cl}_2]$  (M.M. Kubicki, R. Kergoat, H. Scordia, L.C. Gomes de Lima, J.E. Guerschais, P. L'Haridon), (340) 41
- Trimesitylphosphine, cyclometallation of (E.C. Aleya, J. Malito), (340) 119
- Trimethylphosphane and hydridocarbonyl half-sandwich chromium, molybdenum and tungsten complexes, preparation and properties of (H.G. Alt, H.E. Engelhardt, W. Kläui, A. Müller), (331) 317
- Trimethylphosphine complexes of iron(III) tetraphenylporphyrin;  $^1\text{H}$  NMR the electronic effect in paramagnetic haems (G. Simonneaux, P. Sodano), (349) C11
- Triosmium clusters bridging diphosphine ligands,  $\text{Ph}_2\text{P}(\text{CH}_2)_n\text{PPh}_2$  ( $n = 1-4$ ), protonation and hydrogenation of (A.J. Deeming, S.E. Kabir), (340) 359

- Triosmium clusters containing diphosphine and triphosphine ligands (A.J. Deeming, S. Donova-Mtunzi, S.E. Kabir), (333) 253
- (Triphenylphosphine)gold(I) enolate and homoenolate complexes, preparation and crystal structures of (Y. Ito, M. Inouye, M. Sugimoto, M. Murakami), (342) C41
- Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient catalysts for fluoride synthesis via carbonylation of organic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205
- Triphosphorus analogues of ferrocene,  $\eta^5$ - and  $\eta^2$ - $\eta^1$ -coordination in; crystal structure of  $[\text{Fe}(\eta^5\text{-C}_5\text{H}_5)(\eta^2\text{-C}_2\text{R}_2\text{P}_3)\text{W}(\text{CO})_5]$  (R = Bu<sup>1</sup>) (R. Bartsch, P.B. Hitchcock, J.F. Nixon), (340) C37
- Triruthenium dodecacarbonyl, reaction with bis(dimethylphosphino)methane, bis(diphenylphosphino)methane and bis(diphenylphosphino)ethylamine under photochemical conditions of (D.W. Engel, K.G. Moodley, L. Subramony, R.J. Haines), (349) 393
- Tris(trimethyltin) tetrathiophosphate ( $\text{Me}_3\text{SnS}$ )<sub>3</sub>-PS, preparation, vibrational spectra and crystal structure of (A.-F. Shihada, F. Weller), (342) 177
- Tris(triphenylphosphine)ruthenium polyhydride complexes, catalysis of hydrogenation of benzophenone by (D.E. Linn, Jr., J. Halpern), (330) 155
- Tungsten (0)-carbon and tungsten (0)-hydrogen bonds, insertion reactions with CO, CO<sub>2</sub> or activated acetylenes of (P. Kundel, H. Berke), (339) 297
- Vaska's compound, *trans*-IrCl(CO)(PPh<sub>3</sub>)<sub>2</sub>, X-ray study including resolution of the CO/Cl disorder problem of (M.R. Churchill, J.C. Fettinger, L.A. Buttrey, M.D. Barkan, J.S. Thompson), (340) 257
- Vinylidene complex, C<sub>5</sub>H<sub>5</sub>Rh(=C=CHR)(PPr-<sub>1</sub>)<sub>3</sub>, protonation and stepwise rearrangement to vinyl- and  $\alpha$ -halogenoalkyl-rhodium compounds of (J. Wolf, H. Werner), (336) 413
- Vinylidene-metal complexes from norbornadiene, isolation of a metalla-cyclic compound as intermediate (M. Dziallas, H. Werner), (333) C29
- $[\text{WH}_2(\text{C}\equiv\text{CCO}_2\text{Me})_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)_2]$ , crystal structure of (A. Hills, D.L. Hughes, N. Kashef, R.L. Richards, M.A.N.D.A. Lemos, A.J.L. Pombeiro), (350) C4
- $\eta^3$ -Allyl-group 10 metal complexes as key intermediates, molecular basis of catalytic reactions with (Review) (H. Kurosawa), (334) 243
- $\eta^3$ -Allyl-PtP(C<sub>6</sub>H<sub>5</sub>)<sub>3</sub>Cl, gas-phase ion-molecule reaction with SnCl<sub>2</sub> of (M. Grassi, A. Musco, B. Pelli, P. Traldi), (349) 277
- (2-Amino-5-nitrophenyl)platinum(II) complexes, synthesis and reactivity of (J. Vicente, J.A. Abad, F. Teruel, J. Garcia), (345) 233
- 9,9-( $\eta^2$ -2,2'-Bipyridine)-2,7-di(*t*-butyl)dibenzoplatinol, (C<sub>30</sub>H<sub>32</sub>N<sub>2</sub>Pt), crystal and molecular structure of (T. Debaerdemaeker, R. Hohenadel, H.-A. Brune), (350) 109
- Bis(diphenylphosphino)methane-palladium and -platinum complexes, reactivity towards anionic carbonylmetal hydrides of (P. Braunschtein, B. Oswald), (328) 229
- cis*-Bis(phenyl)bis(ligand)platinum(II) *E, Z*-atropisomeric compounds, synthesis and isolation of (R. Baumgärtner, G. Schmidtberg, H.-A. Brune), (345) 221
- cis*- and *trans*-Bis(phenyl)bis(phosphane)platinum(II) complexes, UV spectroscopic investigations of (H. Palkovits, U. Ziegler, G. Schmidtberg, H.A. Brune), (338) 119
- cis*-Bis(phenyl)platinum(II) substituted compounds, *E, Z* atropisomerisation in; synthesis and NMR characterisation of *cis*-(2-alkoxy-6-methoxyphenyl)(2-methylphenyl)bis(triphenylphosphine)platinum(II) (R. Baumgärtner, G. Laube, G. Schmidtberg, H.A. Brune), (332) 221
- cis*-Bis(phenyl)platinum(II) substituted compounds, *E, Z* atropisomerisation in; synthesis of (1,2,5,6- $\eta^4$ -cycloocta-1,5-diene)bis(2-methoxymethyl-6-methylphenyl)platinum(II) (R. Baumgärtner, H.A. Brune), (332) 379
- Bis(trifluoromethyl)platinum(II) complexes, oxidative addition with *N*-donor ligands to (T.G. Appleton, R.D. Berry, J.R. Hall, D.W. Neale), (342) 399
- ( $\eta^5$ -Borole)( $\eta^4$ -1,5-cyclooctadiene)-nickel, -palladium and -platinum complexes, preparation and reactions of (G.E. Herberich, M. Negele), (350) 81
- Carbon sulphide and carbon selenide containing dinuclear platinum and palladium complexes with  $\text{M}(\mu\text{-E})\text{M}'(\text{CE}')_2$  and  $\text{M}(\mu\text{-CEE}')\text{M}'$  structural units (M, M' = Pd, Pt; E, E' = S, Se) (H. Werner, M. Ebner, H. Otto), (350) 257
- 2-Carboxylato-3,4,5,6-tetrafluorophenyl(*O, C*)-platinum(II) complexes, preparations and structures of (D. Anastasiou, G.B. Deacon, B.M. Gatehouse), (329) 267
- Chloro(2-alkoxynaphth-1-yl){2,3,5,6- $\eta^4$ -bicyclo-[2.2.1]hepta-2,5-diene}platinum(II), synthesis and structure of (T. Debaerdemaeker, C. Weiseman, H.-A. Brune), (350) 91

## Platinum

- $\sigma$ -Alkyne organometallic compounds, synthesis catalysed by copper(I) iodide in triethylamine of (D. Villemin, E. Schigeko), (346) C24

- Cluster compounds with cylindrical topologies, theoretical analysis of (L. Zhenyang, D.M.P. Mingos), (339) 367
- $\text{Cp}(\text{CO})\text{CoPt}(\text{PPh}_3)_2(\mu\text{-CH}_2)$  and  $\text{Cp}_2\text{Co}_2\text{Pt}(\text{PPh}_3)_2(\mu\text{-CO})_2$ , synthesis from reaction of  $\text{Pt}(\text{PPh}_3)_2(\text{C}_2\text{H}_4)$  with  $[\text{CpCo}(\text{CO})]_2(\mu\text{-CH}_2)$ , synthesis of (P.D. Macklin, C.A. Mirkin, N. Viswanathan, G.D. Williams, G.L. Geoffroy, A.L. Rheingold), (334) 117
- $\sigma$ -Cyclobutyl-platinum bond formation by intramolecular activation of a cyclobutylphosphine; synthesis and structure of  $[\text{Pt}(\text{P}(\text{t-Bu})_2\text{CH}_2\text{CHCH}_2\text{CH}_2\text{CH})]_2(\mu\text{-Br})_2$  (B.L. Simms, J.A. Ibers), (330) 279
- 2,6-Diallylpyridine (DAP) complexes of iridium(I), ruthenium(II), palladium(II), synthesis of; crystal structures of  $\text{RuCl}_2(\text{PPh}_3)(\text{DAP})$  and  $\text{PdCl}_2(\text{DAP})_2$  (G. Vasapollo, C.F. Nobile, M. Latronico, M. Lanfranchi, M.A. Pellinghelli), (336) 429
- Di-*t*-butyldibenzoplatinol compounds, mechanism of photochemical biphenyl elimination from (R. Hohenadel, H.-A. Brune), (350) 101
- cis*-Dichloro(enamine)(amine)platinum(II) complexes, synthesis and reactivity of (S.L. Doran, D.B. Brown, C.W. Allen), (340) 111
- Dimethylplatinum(II) unsymmetrically substituted complexes, preparation of (D.L. Thorn, J.C. Calabrese), (342) 269
- Ethenylbis(triphenylphosphine)platinum,  $\text{Pt}(\text{PPh}_3)_2(\text{C}_2\text{H}_4)$ , reactions with monofluoroacetylene and dichloroacetylene of; crystal structure of  $\text{Pt}(\text{PPh}_3)_2(\text{Cl})(\text{C}=\text{CCl})$  (K. Sünkel), (348) C12
- Ferrocene polymer-supported derivatives, catalytic hydrosilylation of olefins by supported palladium and platinum complexes (W.R. Cullen, N.F. Han), (333) 269
- $\text{Fe}_2\text{Te}_2\text{M}(\text{CO})_6(\text{PPh}_3)_2$  (M = Ni, Pd, Pt), new route from  $\text{Fe}_3\text{Te}_2(\text{CO})_9$  and  $\text{M}(\text{PPh}_3)_4$  to (P. Mathur, I.J. Mavunkal), (350) 251
- Imino(2-pyridyl)methylpalladium(II) compounds, coordination properties of; preparation and thermal rearrangement of binuclear adducts with  $\text{Pd}^{\text{II}}$  and  $\text{Pt}^{\text{II}}$  chlorides (R. Bertani, A. Berton, F. Di Bianca, B. Crociani), (348) 411
- Metal cluster formation by condensation of electron-deficient metal centres; X-ray structures of  $(\eta\text{-C}_5\text{H}_5)_2\text{Rh}_4(\text{CO})_4\text{Cl}_2(\text{CF}_3\text{C}_2\text{CF}_3)$  and  $(\eta\text{-C}_5\text{H}_5)_4\text{Rh}_4\text{Pt}(\text{CO})_2(\text{CF}_3\text{C}_2\text{CF}_3)_2$  (R.S. Dickson, G.D. Fallon, M.J. Liddell, B.W. Skelton, A.H. White), (327) C51
- Metal cyanides, *trans*- $(\text{R}_3\text{P})_2\text{M}(\text{CN})_2$  (M = Pd, Pt; R = Et, Ph), reactions with 1,3-dioxolenium tetrafluoroborate of (W. Weigand, W. Beck), (338) 113
- Mono- and di-hydrido-bridged platinum(II)-tungsten(IV) complexes; X-ray crystal structure of  $[\text{Cp}_2\text{W}(\mu\text{-H})_2\text{PtPh}(\text{PEt}_3)][\text{BPh}_4]$  and  $[\text{Cp}_2(\text{H})\text{W}(\mu\text{-H})\text{PtP}(\text{PEt}_3)_2][\text{BPh}_4]$  (A. Albinati, R. Naegeli, A. Togni, L.M. Venanzi), (330) 85
- Nickel-catalysed cooligomerisation of 2-*t*-butyl-1,3-butadiene with butadiene (T. Bartik, P. Heimbach, T. Himmler, R. Mynott), (348) C37
- Nickel, palladium and platinum, Annual Survey covering the year 1981 (P.A. Chaloner), (337) 431
- C-Nitroso-platinum complexes,  $^{13}\text{C}$  NMR study of (A.S.F. Boyd, G. Browne, G.B. Gowenlock, P. McKenna), (345) 217
- Olefin-coordinated platinum(II) cyclobutane, synthesis and conversion into diphosphine-platinum(II) cyclobutanes of (H.J.R. de Boer, O.S. Akkerman, F. Bickelhaupt), (336) 447
- Pentafluorophenyl group distortion in metal complexes, limitations of rigid-body refinement (P.G. Jones), (345) 405
- Platinum(II) and palladium(II) complexes, catalytic activity in *cis-trans* isomerisations of alkenes of (R. Ponc, R. Reřicha), (341) 549
- Platinum and rhodium complexes with diphenylphosphino(methylthio)methane as a monodentate, chelated or bridging ligand, preparation of (G.K. Anderson, R. Kumar), (342) 263
- Platinum  $\eta^2$ -bonded nitroso complexes, reactivity of; crystal structure of  $\text{Pt}(\text{PPh}_3)_2(\text{PhNO})$  (M. Pizotti, F. Porta, S. Cenini, F. Demartin, N. Masciocchi), (330) 265
- Platinum-carbon sterically hindered  $\sigma$ -bonds, determination of activation energies for *E/Z* isomerisation around (R. Baumgärtner, H.-A. Brune), (350) 115
- Platinum complex catalysed carbonylative cross-coupling of alkyl iodides with sodium tetraphenylborate; synthesis of alkyl phenyl ketones (T. Kondo, Y. Tsuji, Y. Watanabe), (345) 397
- Platinum(II) complexes with asymmetric olefin ligands, preparation, circular dichroism and substitution reactions of (K. Saito, K. Kashiwabara), (330) 291
- Platinum(IV) derivatives of macrocyclic thioethers, preparation and dynamic behaviour of (E.W. Abel, P.D. Beer, I. Moss, K.G. Orrell, V. Šik, P.A. Bates, M.B. Hursthouse), (341) 559
- Platinum  $\pi$ -olefin complex formed by intramolecular activation of a cyclopropylphosphine, *cis*- $\text{PtX}_2(\text{P}(\text{t-Bu})_2\text{CH}_2\text{CH}_2\text{CH}=\text{CHCH}_3)$  (X

- = Cl, Br), synthesis and structure of (B.L. Simms, J.A. Ibers), (327) 125
- Platinum-silver clusters, synthesis and crystal structure of  $[\text{Pt}_3\text{Ag}(\mu\text{-CO})_3(\text{PPh}_3)_5]\text{ClO}_4 \cdot 2\text{H}_2\text{O}$  (S. Bhaduri, K. Sharma, P.G. Jones, C.G. Erdbrügger), (326) C46
- Platinum(II)/ $\text{SnCl}_2$  catalysis, mechanism of hydroformylation of olefins; reactivity of alkyl complexes containing chelating diphosphines (A. Scrivanti, C. Botteghi, L. Toniolo, A. Berton), (344) 261
- $[\text{Pt}_3\text{Au}(\mu_2\text{-CO})_3(\text{PPh}_3)_5]\text{NO}_3$ , synthesis and structural characterisation of (J.J. Bour, R.P.F. Kanters, P.P.J. Schlebos, W. Bos, W.P. Bosman, H. Behm, P.T. Beurskens, J.J. Steggerda), (329) 405
- $[\text{Pt}(\text{C}\equiv\text{CH})_2(\text{Ph}_2\text{PCH}_2\text{PPh}_2\text{-}P)_2]$ , synthesis and formation of heterobimetallic Pt-Ag, Pt-Au, Pt-Rh, Pt-Ir, and Pt-W derivatives of (S.W. Carr, P.G. Pringle, B.L. Shaw), (341) 543
- trans*- $\text{PtCl}_2(\text{P}(\text{t-Bu})_2\text{CH}_2\text{CHCH}_2\text{CH}_2\text{CH}_2)_2$ , synthesis and structure of (B.L. Simms, J.A. Ibers), (327) 137
- $\text{PtCl}(\text{SnCl}_3)[(-)-(2S,4S)-2,4\text{-bis}(\text{diphenylphosphino})\text{pentane}]$ -catalysed enantioselective hydroformylation reaction, temperature dependence of asymmetric induction in (L. Kollár, J. Bakos, I. Tóth, B. Heil), (350) 277
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Tetrakis( $\mu$ -pyrophosphito)diplatinum(II) tetra-anion, thermal and photochemical addition of alkyl and aryl halides to (D.M. Roundhill, M.K. Dickson, S.J. Atherton), (335) 413
- Tetrakis(trimethyl- $\mu$ -S, S, N-thiocyanatoplatinum),  $\{[\text{Pt}(\text{CH}_3)_3\text{SCN}]_4\}$ , crystal structure of (B. Vance), (336) 441
- Tetramethyl(2,2'-bipyridine)platinum(IV), photochemistry of (J.E. Hux, R.J. Puddephatt), (346) C31
- To tilt or not to tilt? The dilemma of  $\mu\text{-C}_3\text{R}_3$  ligands in binuclear complexes (E.D. Jemmis, B.V. Prasad), (347) 401
- Transition metal complexes of bis{3-[bis(3-trifluoromethylphenyl)phosphinomethyl]phenyl} ether, formation and spectra of (P.N. Kapoor), (341) 363
- Trimesitylphosphine, cyclometallation of (E.C. Alyea, J. Malito), (340) 119
- Triosmium-platinum 60-electron tetrahedral cluster containing CO bridging Os-Os edge,  $\text{Os}_3\text{Pt}(\mu\text{-H})_2(\mu\text{-CO})(\text{CO})_9(\text{C}_8\text{H}_{12})$ , synthesis and X-ray structure of (P. Ewing, L.J. Farugia), (347) C31
- Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient catalysts for fluoride synthesis via carbonylation of organic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205
- Tris(pentachlorophenyl)platinate(II) and dichloromonopentachlorophenyl platinate(II) complexes,  $[\text{NBu}_4][\text{Pt}(\text{C}_6\text{Cl}_5)_3\text{L}]$  and  $[\text{NBu}_4][\text{PtCl}_2(\text{C}_6\text{Cl}_5)_2\text{L}]$ , synthesis of (R. Usón, J. Fornies, M. Tomás, I. Ara, B. Menjón), (336) 129
- Unsaturated esters, asymmetric hydroformylation with  $\text{PtCl}(\text{SnCl}_3)[(R,R)\text{-DIOP}]$  as catalyst of (L. Kollár, G. Consiglio, P. Pino), (330) 305

## Potassium

- Alkyl lithium/potassium t-pentoxide systems, interaction with alkoxides of and lithium potassium exchange in (L. Lochmann, J. Trekoval), (326) 1
- Lithium t-butylaminofluorosilanes, bicyclic molecules with two- and four-coordinated lithium (D. Stalke, U. Klingebiel, G.M. Sheldrick), (344) 37
- Metallation of linalol with strong bases and alkylation at C(8) and C(6) (T. Cuvigny, M. Julia, C. Rolando), (344) 9

## Praseodymium

- Tricyclopentadienyllanthanides/sodium hydride, reduction and isomerisation of olefins with (C. Qian, Y. Ge, D. Deng, Y. Gu, C. Zhang), (344) 175

## Rhenium

- $\eta^2$ -Aldehyde-metal complexes,  $(\text{CO})_2(\text{PEt}_3)_2\text{-FeRCHO}$  (R = H, Ph), synthesis of (R. Birk, H. Berke, H.-U. Hund, K. Evertz, G. Huttner, L. Zsolnai), (342) 67
- Alkene-carbene complexes of tungsten, chromium and rhenium containing a six-membered ring, synthesis and structure of (C. Alvarez-Toledano, A. Parlier, M. Rudler, J.C. Daran, C. Knobler, Y. Jeannin), (328) 357
- Arsinothiadiimido eight-membered heterocycle, t-BuAs(NSN)<sub>2</sub>As-t-Bu, carbonylmetal complexes of (M. Herberhold, K. Schamel), (346) 13
- Bis(diphenylphosphino)methanide ion, stabilisation by bridging octadienyldirhenium of (R. Dominguez, T.J. Lynch, F. Wang), (338) C7
- t-Butyl isocyanide and homoleptic cations  $[\text{M}(\text{CNMe}_3)_6]^{n+}$  (M = Re, n = 1; M = Ru,



- Os,  $n = 2$ ), as their hexafluorophosphate salts, vibrational spectra of (D.A. Edwards, S.M. Tetrick, R.A. Walton), (349) 383
- Carbonyl-molybdenum and -rhenium cationic complexes, with *N*-heterocycles and tetra-thiafulvalene, preparation of (M. Appel, W. Sacher, W. Beck), (333) 237
- Carbonylrhenium, improved synthesis of (L.S. Crocker, G.L. Gould, D.M. Heinekey), (342) 243
- $(\text{CH}_3)_n\text{C}_5\text{H}_{5-n}\text{Re}(\text{CO})_3$  homologues ( $n = 0-5$ ),  $^{17}\text{O}$ ,  $^{13}\text{C}$ ,  $^1\text{H}$  NMR and IR spectroscopic investigations of (I.R. Lyatifov, G.I. Gulieva, V.N. Babin, R.B. Materikova, P.V. Petrovskii, E.I. Fedin), (326) 93
- $[(\eta\text{-C}_5\text{H}_5)(\text{CO})_2\text{FeC}(\text{S})\text{M}(\text{Ln})]$  ( $\text{MLn} = \text{Fe}(\eta\text{-C}_5\text{H}_5)(\text{CO})_2$ ,  $\text{Re}(\text{CO})_5$ ), reactions with organic electrophiles of (L. Busetto, S. Bordoni, V. Zanotti), (339) 125
- cis*-( $\text{CO})_4(\text{SnPh}_3)\text{Re}[\text{C}(\text{OEt})\text{NR}_2]$  ( $\text{R} = i\text{-Pr}$ , cyclohexyl), behaviour toward Lewis acids of (A.C. Filippou, E.O. Fischer, H.G. Alt), (330) 325
- Cyclopentadienyldicarbonyl-manganese and -rhenium acetylene complexes, unusual reactions with  $\text{Br}_2$ ,  $\text{HCl}$ ,  $\text{CF}_3\text{COOH}$  and  $\text{ClNO}$  of (H.G. Alt, H.E. Engelhardt), (346) 211
- Decacarbonylmanganeserhenium, matrix isolation and time-resolved infrared spectroscopic study of selective loss of CO in the photochemistry of (S. Firth, P.M. Hodges, M. Poliakov, J.J. Turner, M.J. Therien), (331) 347
- Di-*t*-butylbenzoquinonetricarbonyltriphenylphosphinerhenium radical,  $\text{dtbq}^-\text{Re}(\text{CO})_3\text{PPh}_3$ , structure of (C.P. Cheng, S.R. Wang, J.C. Lin, S.-L. Wang), (349) 375
- Di- $\eta$ -cyclopentadienylhydridorhenium, insertion reactions with mono-substituted acetylenes of (G.E. Herberich, W. Barlage), (331) 63
- Halogenotricarbonylrhenium(I) complexes of sterically hindered dithioethers, synthesis and dynamic behaviour of (E.W. Abel, R. Corben, I. Moss, K.G. Orrell, N.R. Richardson, V. Šik), (344) 343
- Hydridocarbonylrhenium clusters, reactions with unsaturated organic molecules of; crystal structure of  $[\text{NEt}_4][\text{Re}_3(\mu\text{-H})_3(\eta\text{-OCHMe}_2)(\text{CO})_{10}]$  (T. Beringhelli, G. d'Alfonso, M. Freni, G. Ciani, M. Moret, A. Sironi), (339) 323
- Manganese and rhenium acetylene complexes, synthesis and characterisation of (H.G. Alt, H.E. Engelhardt), (342) 235
- Manganese, rhenium, chromium, molybdenum and tungsten binuclear carbonyls with double hydrogen bridges, MO calculations of (B. Jeżowska-Trzebiatowska, B. Nissen-Sobocińska), (342) 215
- Octacarbonyl[bis(diphenylarsenido)]dirhenium,  $\text{Re}_2(\text{CO})_8[\mu\text{-As}(\text{C}_6\text{H}_5)_2]_2$ , synthesis and molecular structure of (A.-J. DiMaio, S.J. Geib, A.L. Rheingold), (335) 97
- Organorhenium(V) and organovanadium(V) sulphur-containing oxides, preparation of (J. Kulpe, E. Herdtweck, G. Weichselbaumer, W.A. Herrmann), (348) 369
- Organorhenium oxides,  $^{17}\text{O}$  NMR investigations of (H.-J. Kneuper, P. Härter, W.A. Herrmann), 353
- Oxo-phosphonato-rhenium complexes, formation from  $[\text{ReOCl}_3(\text{PPh}_3)_2]$  and methyl phosphites of; crystal structure of  $[\text{ReOCl}(\text{OMe})\{\text{P}(\text{O})(\text{OMe})_2(\text{PPh}_3)_2\}]$  (M.F.N.N. Carvalho, A.J.L. Pombeiro, D.L. Hughes, R.L. Richards), (335) C23
- Pentacarbonyl(isocyanido)rhenium(I) cationic complexes, properties and reactions with nucleophiles of (P. Steil, U. Nagel, W. Beck), (339) 111
- Pentacarbonyl-rhenate and -manganate nucleophilic addition to  $\pi$ -bonded dienes, cyclo-dienes, trimethylmethane, cycloheptatrienyl and alkyne ligands (H.-J. Müller, W. Beck), (330) C13
- Pentahyridododecacarbonylrheniumtriosmium disordered complex, elucidation of molecular structure from crystal structure of (M.R. Churchill, J.C. Fettingner, F.J. Hollander, R.A. Lashewycz-Rubycz), (340) 367
- (Pentamethylcyclopentadienyl)tetrachlororhenium(V), dehalogenation leading to lower oxidation state rhenium complexes of (W.A. Herrmann, R.A. Fischer, E. Herdtweck), (329) C1
- Polymethylcyclopentadienylcarbonyl-transition metal complexes, mass spectra of  $\text{R}_n\text{C}_5\text{H}_{5-n}\text{Re}(\text{CO})_3$  ( $\text{R} = \text{CH}_3$ ,  $n = 0-5$ ;  $\text{R} = \text{t-C}(\text{CH}_3)_3$ ,  $n = 1$ ) (I.R. Lyatifov, G.I. Gulieva, E.K. Mysov, V.N. Babin, R.B. Materikova), (326) 83
- $(\eta\text{-Pyrrolyl})\text{bis}(\text{triphenylphosphine})\text{rhenium}$  complexes, regioselective elaboration of  $\eta$ -pyrrolyl ligands in, formation of 2,5-diphenylpyrrole and some of its *N*-derivatives (J. Zakrzewski), (333) 71
- $(\eta^5\text{-Pyrrolyl})\text{-transition metal complex}$ , 1,2- and 1,2,5-substituted pyrroles from (J. Zakrzewski), (326) C17
- Ruthenium-rhenium bimetallic homogeneous catalysts, hydrogenation of; effects of rhenium carbonyl as promotor for ethylene glycol formation (M. Tanaka, Y. Kiso, K. Saeki), (329) 99

- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands,  $^{125}\text{Te}$  and  $^{77}\text{Se}$  NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Trimolybdenum 46-electron cluster containing localized monoprotonated  $\text{Mo}=\text{Mo}$ , photochemical synthesis and structural characterisation of (C.P. Gibson, A.D. Rae, D.R. Tomchick, L.F. Dahl), (340) C23
- Triphenyltin-substituted carbenerhenium mononuclear complexes, *cis*-(CO) $_4$ (SnPh $_3$ )Re[C(OEt)R], preparation and characterisation of (A.C. Filippou, E.O. Fischer, G. Müller, H.G. Alt), (329) 223
- Ziegler-type systems, activation of C-C bonds in alkanes and cycloalkanes by (M.E. Vol'pin, I.S. Akhrem, S.V. Reznichenko, V.V. Grushin), (334) 109
- ## Rhodium
- 2-Acylnorbornadienerhodium complexes, structure, reactivity and nature of the hydrogen bond in cationic products from *O*-protonation of (I.T. Chizhevsky, N.V. Rastova, N.E. Klobova, P.V. Petrovskii, L.E. Vinogradova), (335) 109
- $\eta^6$ -Arene-rhodium(III) and -iridium(III) complexes, [(Me $_2$ SiC $_6$ H $_5$ ) $_4$ M $_2$ H $_2$ ] (M = Rh, Ir), synthesis and structure determination of (M.-J. Fernandez, M.A. Esteruelas, L.A. Oro, J. Ruiz, A.J. Smith, P.M. Maitlis), (330) 179
- Bis(pentamethylcyclopentadienylcarbonyl-cobalt) and -rhodium complexes, stepwise formation of dinuclear chalcogenic complexes with elemental sulphur, selenium or tellurium from (H. Brunner, N. Janietz, W. Meier, J. Wachter, E. Herdtweck, W.A. Herrmann, O. Serhadli, M.L. Ziegler), (347) 237
- Carbonyl cluster compounds with close-packed metallic arrangements, MO analysis of (D.M.P. Mingos, L. Zhenyang), (341) 523
- Carbonylhydridotris(triphenylphosphine)rhodium(I), RhH(CO)(PPh $_3$ ) $_3$ , and phosphinomethylzirconium as catalytic system for hydroformylation of 1-hexene (R. Choukroun, D. Gervais, P. Kalck, F. Senocq), (335) C9
- Carbonylrhodium-catalysed synthesis of  $\alpha,\beta$ -unsaturated ethyl ketones by cross-hydrocarbonylation of acetylenes and ethylene with CO and H $_2$  (P. Hong, T. Mise, H. Yamazaki), (334) 129
- Chiral bicyclic *O,N*-bis(diphenylphosphino)-aminoalkanol as ligands for enantioselective metal complex hydrogenation catalysts (C. Döbler, H.-J. Kreuzfeld, H. Pracejus), (344) 89
- C $_5$ H $_5$ Rh( $\text{C}=\text{CHR}$ )(PPr $_3$ -i), reactivity towards diazomethanes, sulphur, selenium and tellurium of; formation of unstable chalcogenoketenes in coordinated transition metals (J. Wolf, R. Zolk, U. Schubert, H. Werner), (340) 161
- ( $\eta$ -C $_5$ H $_5$ ) $_2$ Rh $_2$ (CO)(CF $_3$ C $_2$ CF $_3$ ), addition of terminal alkynes to; formation of bridging carbonylcyclobutenyl intermediates ( $\eta$ -C $_5$ H $_5$ ) $_2$ Rh $_2$ ( $\mu$ -CO){ $\eta^1,\eta^3$ -C $_4$ (CF $_3$ ) $_2$ HR} and their conversion to binuclear metal-ladiene complexes (R.S. Dickson, F.I. McLure, R.J. Nesbit), (349) 413
- Cluster compounds with cylindrical topologies, theoretical analysis of (L. Zhenyang, D.M.P. Mingos), (339) 367
- (COD) $_2$ M $_2$ ( $\mu$ -R) $_2$ , reactions with organolithium reagents under formation of (COD) $_2$ M $_2$ R $_4$ -Li $_2$  (M = Rh, Ir) of; crystal structure of (COD) $_2$ Rh $_2$ (CH $_2$ SiMe $_3$ ) $_4$ Li $_2$  and (COD)-Rh(CH $_2$ SiMe $_3$ ) $_2$ Li(Me $_2$ NCH $_2$ CH $_2$ NMe $_2$ ) (M.A. Kulzick, R.A. Andersen, E.L. Muetterties, V.W. Day), (336) 221
- [Co $_x$ Rh $_{4-x}$ (CO) $_{12}$ ] ( $x = 3, 2$ ), ligand substitution with tertiary phosphines or phosphites in; X-ray structure of [Co $_2$ Rh $_2$ (CO) $_{11}$ (PPh $_3$ )] (M. Bojczuk, B.T. Heaton, S. Johnson, C.A. Ghilardi, A. Orlandini), (341) 473
- Crown ether-modified phosphines, synthesis, properties and use as ligands in transition metal catalysts of (T. Okano, M. Iwahara, H. Konishi, J. Kiji), (346) 267
- (Cyclooctadiene)(imine)rhodium(I) complexes containing multi-dentate ligands, preparation and characterisation of (H. Brunner, H. Fisch), (335) 1
- Cyclooctadiene- and phenanthroline-rhodium complexes as catalysts in asymmetric transfer hydrogenation of acetophenone (S. Gladiali, G. Chelucci, G. Chessa, G. Delogu, F. Soccolini), (327) C15
- Dialkylaminotrimethylsilylacetylenes, reactions with metal carbonyls of (R.B. King, R.M. Murray, R.E. Davis, P.K. Ross), (330) 115
- Dicarboalkoxy(di- $\mu$ -methylene)bis(pentamethylcyclopentadienylrhodium), alkyl acrylates from a three-carbon coupling reaction of (I.M. Saez, D.G. Andrews, P.M. Maitlis), (334) C17
- Dichlorotetracarbonyldirrhodium(I), kinetic study on oxidation by hydrogen peroxide of (J.R. Chipperfield, M. Shana'a, D.E. Webster), (341) 511

- 1,4-Dicyanobutene-bridged binuclear rhodium(I) complexes and their catalytic activities (H.-K. Park, I.B. Kim, C.S. Chin), (326) 431
- 4,5-Dicyano-1,2,3-triazole-rhodium complexes, preparation, properties and reactions of (M.T. Pinillos, A. Elduque, L.A. Oro), (338) 411
- Dicyclooctadienyldirrhodium dialkyl-bridged complexes, reactions with Lewis basis and further reactions with aromatic hydrocarbons of (M.A. Kulzick, R.T. Price, R.A. Andersen, E.L. Muettterties), (333) 105
- Di-rhodium(I) and tri-rhodium(I) complexes with bridging bis(dimethylphosphinomethyl)methylphosphine, preparation and crystal structure of (A.L. Balch, D.E. Oram), (349) 245
- Dithiophosphate rhodium(III) complex formation from  $[(\eta^5\text{-C}_5\text{Me}_5)(\eta^1\text{-PSPPh}_2)\text{RhPh}_2\text{PS}]$ ; crystal structure of  $[(\eta^5\text{-C}_5\text{Me}_5)(\eta^1\text{-PSPPh}_2)\text{RhPh}_2\text{SPS}]$  (M.T. Pinillos, M.P. Jarautz, D. Carmona, L.A. Oro, M.C. Aprea, C. Foces-Foces, F.H. Cano), (345) C13
- Dodecacarbonyltetra-cobalt, -rhodium and -iridium complexes, containing bridging CO ligands, M-M bond length shortening effects in (D. Braga, F. Grepioni), (336) C9
- Dodecacarbonyltetrahodium, comparison of face-capping vs. fragmentation with triphos,  $\text{MeC}(\text{CH}_2\text{PPh}_2)_3$  and tripod,  $\text{HC}(\text{PPh}_2)_3$  of; crystal structure of  $[(\text{triphos})\text{Rh}(\mu\text{-CO})_2\text{Rh}(\text{triphos})]$  (C. Allevi, M. Golding, B.T. Heaton, C.A. Ghilardi, S. Midollini, A. Orlandini), (326) C19
- Fischer-Tropsch reaction, models for formation of oxygenates in (I.M. Saez, P.M. Maitlis), (334) C14
- Functionalised diphosphine as (P-N)-binucleating ligand; X-ray structure of  $\{[\text{RhCl}(\text{BTPE})_2]_2[\text{RhCl}_4(\text{BTPE})_2] \cdot x\text{HCl}\}$  (BTPE =  $(\text{C}_7\text{H}_4\text{NS})_2\text{PCH}_2\text{CH}_2\text{P}(\text{C}_7\text{H}_4\text{NS})_2$ ) (M.F.M. Al-Dulaymmy, P.B. Hitchcock, R.L. Richards), (338) C31
- Hetero-dinuclear azulene complexes, preparation and characterisation of (S. Töfke, U. Behrens), (338) 29
- Heterometallic di- and tri-nuclear complexes with bridging thiocarbonyl and methylthiocarbonyl ligands; crystal and molecular structure of  $\text{C}_5\text{H}_5(\text{PMe}_2)(\mu\text{-CO})[\mu\text{-CSMn}(\text{CO})_2\text{C}_5\text{H}_5]\text{-Mn}(\text{CO})\text{C}_5\text{H}_5$  (H. Werner, O. Kolb, P. Thometzek), (347) 137
- Homo- and hetero-nuclear vinyl- and vinylidene-bridged dinuclear complexes (H. Werner, J. Wolf, G. Müller, C. Krüger), (342) 381
- cis*-Hydride(ethoxycarbonyl) intermediate in homogeneous decarbonylation of ethyl formate at rhodium through C-H bond cleavage (C. Bianchini, M. Peruzzini, F. Vizza, F. Zanobini), (348) C9
- Hydrochalcogenide and hydride-hydrochalcogenide complexes of rhodium with the tripod tetraphosphine, tris(2-diphenylphosphinoethyl)phosphine (M. Di Vaira, P. Stopponi, M. Peruzzini), (333) C53
- Hydroxallylolefin rhodium cationic complexes with intramolecular O-H $\equiv$ Rh bonds; formation of  $\{[\text{CpRh}(\eta^{2,3}\text{-C}_7\text{H}_6\text{-3-R-2-CR}^1\text{=OH})_2\text{F}_2\text{POO}]^+\text{PF}_6^-\}$  dimers (I.T. Chizhevsky, N.V. Rastova, N.E. Kolobova, P.V. Petrovskii, E.I. Fedin, L.E. Vinogradova, L.A. Leites, A.I. Yanovsky, Yu. T. Struchkov), (339) 165
- $[\text{Ir}(\text{cod})(\eta^2\text{-o-HalC}_6\text{H}_4\text{PPh}_2)]\text{SbF}_6$  (Hal = Br, Cl), structural and chemical studies of halocarbon chelation in (M.J. Burk, R.H. Crabtree, E.M. Holt), (341) 495
- Isonitrile-functionalised polymer supports as versatile ligands toward metal centres (B. Corain, M. Basato, P. Main, M. Zecca, R. De Pieri, R. Arshady), (326) C43
- Metal cluster formation by condensation of electron-deficient metal centres; X-ray structures of  $(\eta\text{-C}_5\text{H}_5)_2\text{Rh}_4(\text{CO})_4\text{Cl}_2(\text{CF}_3\text{C}_2\text{CF}_3)$  and  $(\eta\text{-C}_5\text{H}_5)_4\text{Rh}_4\text{Pt}(\text{CO})_2(\text{CF}_3\text{C}_2\text{CF}_3)_2$  (R.S. Dickson, G.D. Fallon, M.J. Liddell, B.W. Skelton, A.H. White), (327) C51
- Methyl- and aryl-(carbonyl)(iodo)pentamethylcyclopentadienylnrhodium complexes, direct formation of ketones by reaction with organic iodides of (F.P. Fanizzi, G.J. Sunley, P.M. Maitlis), (330) C31
- Methyl(phenyl)rhodium carbonyl complexes, promotion by organic halides of acetophenone formation from (G.J. Sunley, F.P. Fanizzi, I.M. Saez, P.M. Maitlis), (330) C27
- Monocarbonylrhodium(I) complexes with S-S donor ligands, reactions with  $\text{I}_2$  and  $\text{CH}_3\text{I}$  of (J.V. Heras, E. Pinilla, P. Ovejero), (332) 213
- Optically active monodentate phosphines prepared from  $\alpha$ -pinanes and D-mannit under enantioselective catalysis (H. Brunner, H. Leyerer), (334) 369
- Optically active phospholanes derived from tartaric acid (H. Brunner, R. Sievi), (328) 71
- 1,3,2-Oxazaphosphorinanes in rhodium(I) complexes (E.E. Nifant'ev, A.T. Teshelev, T.A. Shikovets, A.R. Bekker, A.N. Chernega, M.Yu. Antipin, Yu.T. Struchkov), (336) 237
- Pentadienyl-iridium(III) and -rhodium(III) complexes synthesis and characterization of (C.-C. Chen, R.-S. Liu), (336) 249
- Pentamethylcyclopentadienylnrhodium(II) di-bridged complexes, protonation and subsequent reactions of the  $\mu$ -hydridodirrhodium

- cation,  $[(C_5Me_5Rh)_2(\mu-PMe_2)_2(\mu-H)]^+$  (B. Klingert, H. Werner), (333) 119
- Peroxorhodium phosphine complexes, reactions with methylene active compounds of; formation of hydroperoxorhodium complexes (A. Morvillo, M. Bressan), (332) 337
- Phosphineorhodium "in situ" catalysis, hydroformylation of methyl methacrylate via (K. Prókai-Tátrai, S. Törös, B. Heil), (332) 331
- Platinum and rhodium complexes with diphenylphosphino(methylthio)methane as a monodentate, chelated or bridging ligand, preparation of (G.K. Anderson, R. Kumar), (342) 263
- $[Pt(\equiv CH)_2(Ph_2PCH_2PPh_2-P)_2]$ , synthesis and formation of heterobimetallic Pt-Ag, Pt-Au, Pt-Rh, Pt-Ir, and Pt-W derivatives of (S.W. Carr, P.G. Pringle, B.L. Shaw), (341) 543
- $[RhCl(COD)]_2$ /bis(diphenylphosphineethyl)tetramethyldisiloxane, spectrophotometry of the reactivity with hydrosilylation reaction substrates of (W. Duczmal, B. Marciniak, W. Urbaniak), (327) 295
- $[Rh(CO)_3P-i-Pr_3]_2$ , homonuclear disproportionation induced by nitrogen bases of, existence of homonuclear ion pair  $[Rh(CO)(P-i-Pr_3)_2(amine)]^+ [Rh(CO)_4]^-$  (E. Watanabe, Y. Shimada, K. Wada, T. Onoda), (344) C45
- Rhodium(III) and palladium(II) complexes as catalysts for oxidation reactions of 2-methyl-3-buten-2-ol (F. Derdar, J. Martin, C. Martin, J.-M. Brégault, J. Mercier), (338) C21
- Rhodium(I) and rhodium(III) complexes containing alkynes, alkynyls and vinylidenes as ligands; crystal structure of  $[C_5H_5Rh(=C=CHPh)(PPr-i_3)]$  (H. Werner, J. Wolf, F.J. Garcia Alonso, M.L. Ziegler, O. Serhadli), (336) 397
- Rhodium(III) and palladium(II) complexes with heteropolyacids as oxidative catalysts of octenes (B.E. Ali, J.-M. Brégault, J. Martin), (326) C9
- Rhodium binuclear compounds bridged by bifunctional 2-mercaptothiazolate anion (M. Cowie, T. Sielisch), (348) 241
- Rhodium-catalysed formation of (*E*)- and (*Z*)- $\beta$ -deuterostyrene and  $\beta$ , $\beta$ -dideuterostyrene via selective  $\beta$ -hydride elimination from the branched alkylrhodium intermediate (R. Lazaroni, R. Settambolo, A. Raffaelli, S. Pucci, G. Vitulli), (339) 357
- Rhodium-catalysed oxidation of organic compounds with *t*-butyl hydroperoxide (P. Müller, H. Idmoumaz), (345) 187
- Rhodium(III) cyclometallated Schiff's base complexes derived from 2-benzylidene-3-methylpyridines, synthesis, structure and NMR spectra of; crystal structure of  $[RhHI(2-(3-nitrobenzylidene)-3-methylpyridine)(PPh_3)_2]$  (A. Albinati, C. Arz, P.S. Pregosin), (335) 379
- Rhodium dihydride complexes  $[RhH_2(R-DAB)(PR'_3)_2]^+$ , reactions with the acetylenes  $CH_3OOC\equiv CCOOCH_2$  and  $HC\equiv CC_6H_5$  of; crystal structure of  $[RhC(CO_2CH_3)=C(CO_2CH_3)C(CO_2CH_3)=C(CO_2CH_3)(C_6H_{11}N=CHCH=NC_6H_{11})(PCH_3(C_6H_5)_2)H_2O]ClO_4$  (M. Iglesias, C. del Pino, J. Ros, S. Garcia Blanco, S.M. Carrera), (338) 89
- Rhodium(I) dimeric complex with bridging  $\sigma$ - and  $\pi$ -bonded 2,5-dimethylpyrrolido ligands, synthesis, structure and reactions of (K. Yünlü, F. Basolo, A.L. Rheingold), (330) 221
- Rhodium(I) dimers with salen as bridging ligand, reactivity of (A. Pasini, C. Caldirola, A. Colombo, M. Ghilotti), (345) 201
- Rhodium(I) hydride complex as catalyst in regiofined synthesis of  $\alpha$ -trimethylsilyl ketones (S. Sato, I. Matsuda, Y. Izumi), (344) 71
- Rhodium(II)-porphyrin perchlorate, activation and catalytic aldol condensation of ketones under neutral and mild conditions by (Y. Aoyama, Y. Tanaka, Y. Yoshida, H. Toi, H. Ogoshi), (329) 251
- Rhodium(I) species in activation of C-H bonds in acetylene and terminal alkynes; crystal structure of *cis*-(ethynyl)hydride  $[(NP_3)Rh(H)C\equiv CH]BPh_4 \cdot 1.5C_4H_8O$  ( $NP_3 = N(CH_2-CH_2PPh_2)_3$ ) (C. Bianchini, C. Mealli, M. Peruzzini, F. Vizza, F. Zanobini), (346) C53
- $Rh_2(\mu-SR)_2(CO)_4$  and  $Rh_2(\mu-SR)_2(CO)_2(PR'_3)_2$  complexes, easy preparation on a large scale of (P. Kalck, F. Senocq, M. Siani, A. Thorez), (350) 77
- Semiquinone-rhodium(I) complexes, EPR investigation of thermodynamics and kinetics of reversible metal-ligand electron transfer in (G.A. Abakumov, G.A. Razuvaev, V.I. Nevodchikov, V.K. Cherkasov), (341) 485
- N*-Thionitrosodimethylamine-rhodium(I), -rhodium(III) and -ruthenium(II) cationic complexes, preparation and reactions of (G. Tresoldi, S. Sergi, S. Lo Schiavo, P. Piraino), (328) 387
- Thiophosphinito-bridged rhodium complexes, preparation and properties of; crystal structure of  $[Rh_2(\mu-SPPH_2)_2(COD)_2]$  (M.T. Pinillos, M.P. Jarauta, L.A. Oro, A. Tiripicchio, M. Tiripicchio-Camellini), (339) 181
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands,  $^{125}Te$  and  $^{77}Se$  NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Triphenylphosphine-palladium, -platinum, -cobalt, and -rhodium complexes as efficient

- catlysts for fluoride synthesis via carbonylation of organic halides (T. Sakakura, M. Chaisupakitsin, Teruyuki Hayashi, M. Tanaka), (334) 205
- 1,2,3-Tris(methoxycarbonyl)cyclopentadienyl-rhodium complexes; crystal structure of  $\text{Rh}(\eta^4\text{-C}_5\text{H}_3(\text{CO}_2\text{Me})_3\text{-}1,4,5)(\eta^5\text{-C}_5\text{H}_2(\text{CO}_2\text{Me})_3\text{-}1,2,3)$  (M.I. Bruce, P.A. Humphrey, J.K. Walton, B.W. Skelton, A.H. White), (333) 393
- Tris(pyrazol-1-yl)methane-rhodium(I) and -iridium(I) complexes, crystal structure of  $[\text{Rh}(\text{COD})(\text{tpzm})][\text{RhCl}_2(\text{COD})] \cdot 3\text{CHCl}_3$  (M.A. Esteruelas, L.A. Oro, M.C. Apreda, C. Foces-Foces, F.H. Cano, R.M. Claramunt, C. Lopez, J. Elguero, M. Begtrup), (344) 93
- Tungsten-rhodium complexes with bridging alkylidyne groups, synthesis of (M.D. Bermudez, F.G.A. Stone), (347) 115
- Vinylidene complex,  $\text{C}_5\text{H}_5\text{Rh}(\text{C}=\text{CHR})(\text{PPri}_3)$ , protonation and stepwise rearrangement to vinyl- and  $\alpha$ -halogenoalkyl-rhodium compounds of (J. Wolf, H. Werner), (336) 413
- cis-fac* and *cis-mer* Water-soluble rhodium(III) dihydrides, formation and behaviour of (C. Larpent, H. Patin), (335) C13
- ## Ruthenium
- Alkenylruthenium complexes,  $[\text{Ru}(\text{CO})\text{Cl}(\text{R}'\text{C}=\text{CHR})(\text{PPh}_3)_2]$ , insertion reactions with dimethyl acetylenedicarboxylate of; crystal structure of  $[\text{Ru}(\text{CO})\text{Cl}(\text{MeOCC}=\text{C}(\text{CO}_2\text{Me})\text{CH}=\text{CHCMe}_3)(\text{PPh}_3)_2]$  (M.R. Torres, A. Vegas, A. Santos, J. Ros), (326) 413
- 1-Alkylbenzimidazoles as unique promoters for homogeneous ruthenium catalyst for direct ethylene glycol formation from synthesis gas (Y. Kiso, K. Saeki, T. Hayashi, M. Tanaka, Y. Matsunaga, M. Ishino, M. Tamura, T. Deguchi, S. Nakamura), (335) C27
- Alkynyl-iron and -ruthenium complexes, synthetic and electrochemical studies on (C. Bitton, M.W. Whitley), (336) 377
- Allyl cationic complexes from trinuclear carbonyl clusters of iron, ruthenium and osmium, synthesis of (V.V. Krivykh, T. Asunta, O.V. Gusev, M.I. Rybinskaya), (338) 55
- Aluminohydridoruthenium(II) complexes, preparation of (D.H. Lee, H. Suzuki, Y. Morooka), (330) C20
- $\nu^6$ -Arene- $\eta^5$ -cyclopentadienylruthenium complexes and related systems (Review) (R.M. Moriarty, U.S. Gill, Y.Y. Ku), (350) 157
- Bis(arylimido)triruthenium complexes, preparation and substitution reactions of; X-ray structure of  $\text{Ru}_3(\mu_3\text{-NPh})(\mu_3\text{-NC}_6\text{H}_4\text{F-}3\text{-}(\text{CO})_9$  and  $\text{Ru}_3(\mu_3\text{-NPh})_2(\text{CO})_8\text{L}$  (L =  $\text{CNC}_6\text{H}_3\text{Me}_2\text{-}2,6$  and  $\text{PPh}_3$ ) (M.I. Bruce, M.G. Humphrey, O. bin Shawkataly, M.R. Snow, E.R.T. Tiekink), (336) 199
- Bis(dimethylphosphino)methanonecarbonyltriruthenium clusters, C–H and P–C bond cleavages in; molecular structure of  $[\text{Ru}_3(\text{CO})_9(\mu\text{-H})(\mu_3\text{-}\eta^3\text{-Me}_2\text{PCHPMe}_2)]$  (L. Manojlović-Muir, D.A. Brandes, R.J. Puddephatt), (332) 201
- Bis(pentadienyl)-iron, -ruthenium and -osmium compounds, synthetic, structural and PE spectroscopic studies on; the role of the heavy metal in (L. Stahl, H. Ma, R.D. Ernst, I. Hyla-Kryspin, R. Gleiter, M.L. Ziegler), (326) 257
- Bis(trimethylsilyl)sulphur diimide, reactions with dodecatriruthenium of; X-ray analysis of  $\text{Ru}_2(\text{CO})_4[\mu\text{-Me}_3\text{Si-NSN-SiMe}_3]_2$  (A. Gieren, T. Hübner, J. Wu, M. Herberhold, W. Bühlmeyer), (329) 105
- Bis(triphenylphosphine)decacarbonyltriruthenium, crystal structure of (T. Chin-Choy, N.L. Keder, G.D. Stucky, P.C. Ford), (346) 225
- t*-Butyl isocyanide and homoleptic cations  $[\text{M}(\text{CNCMe}_3)_6]^{n+}$  (M = Re,  $n = 1$ ; M = Ru, Os,  $n = 2$ ), as their hexafluorophosphate salts, vibrational spectra of (D.A. Edwards, S.M. Tetrick, R.A. Walton), (349) 383
- $\text{C}_5\text{Me}_5\text{MC}_5\text{Me}_4\text{CHAr}^+$  (M = Ru, Os), synthesis and NMR study of; comparison with Fe-containing analogues of (M.I. Rybinskaya, A.Z. Kreindlin, S.S. Fadeeva, P.V. Petrovskii), (345) 341
- Cobalt–ruthenium systems as catalysts in hydrocarbonylation of linear and branched aliphatic  $\text{C}_2\text{–C}_4$  alcohols (G. Jenner), (346) 237
- $[\text{CoRu}_3(\mu\text{-CO})_2(\text{CO})_9(\mu_4\text{-}\eta^2\text{-C}_2\text{Ph}_2)]$  [PPN] cluster, synthesis and crystal structure of (O. Benali-Baitich, J.-C. Daran, Y. Jeannin), (344) 393
- $[\text{Cu}_2\text{Ru}_4(\mu_3\text{-H})_2(\text{CO})_{12}\text{L}_2]$  (L = phosphine) clusters in solution, NMR investigation of stereochemical non-rigidity in metal framework in (P.J. McCarthy, I.D. Salter, V. Šik), (344) 411
- Cycloheptatrienylvinylidene-iron, -ruthenium and -osmium complexes, preparation and properties of (M.I. Bruce, M.G. Humphrey, G.A. Koutsantonis, M.J. Liddell), (326) 247
- Cyclometallated transition metal complexes, formation by metal exchange in organomercury complexes of (E.C. Constable, T.A. Leese), (335) 293

- (Cyclooctadiene)(cyclooctatriene)ruthenium and its derivatives, organic synthesis catalysed by (*Review*) (T.-A. Mitsudo, Y. Hori, Y. Watanabe), (334) C157
- Cyclopentadienylruthenacyclopentatrienes, chemistry of; Co and RNC insertion reactions in  $[(\eta^5\text{-C}_5\text{H}_5)\text{Ru}(\text{C}_4\text{Ph}_2\text{H}_2)\text{Br}]$ ; crystal structure of  $[(\eta^5\text{-C}_5\text{H}_5)\text{Ru}(\eta^4\text{-C}_5\text{Ph}_2\text{H}_2\text{NBU-1})\text{Br}]$  (M.O. Albers, D.J.A. De Waal, D.C. Liles, D.J. Robinson, E. Singleton), (326) C29
- Cyclopentadienylruthenium(II) complexes, cleavage of aromatic and vinylic C-H bonds by (H. Lehmkuhl, M. Bellenbaum, J. Grundke), (330) C23
- Cyclopentadienylruthenium complexes with cyclooctadiene ligands,  $^1\text{H}$ ,  $^{13}\text{C}$  and  $^{31}\text{P}$  studies of; X-ray structure of  $[(\eta^5\text{-C}_5\text{H}_5)\text{Ru}(\eta^4\text{-C}_8\text{H}_8)(\text{P}(\text{OCH}_3)_3)]\text{PF}_6$  (A.M. McNair, T.P. Gill, K.R. Mann), (326) 99
- Cyclopentadienylruthenium complexes with sulphur donor ligands; comparative study of reactivity of  $\text{Ru}(\eta\text{-RC}_5\text{H}_4)\text{Cl}(\text{L})_2$  (R = H,  $\text{CH}_3$ ,  $\text{CH}_2\text{CO}$ ; L = CO,  $\text{Ph}_2\text{PCH}_2\text{CH}_2\text{-PPh}_2/2$ ,  $\text{P}(\text{CH}_2\text{CH}_2\text{CN})_3$ ) towards anionic (S-S) donor ligands (A. Gutiérrez Alonso, L. Ballister Reventós), (338) 249
- $(\eta^6\text{-Cyclophane})(\eta^6\text{-benzene})\text{ruthenium(II)}$  bis-tetrafluoroborate complexes and their geometry-dependent  $^{13}\text{C}$  NMR behaviour (T. Miura, T. Horishita, N. Mori), (333) 387
- Decacarbonylnitrosyltriruthenate, reactivity of; synthesis and characterisation of  $[\text{Ru}(\text{CO})_3(\text{NO})]^-$  (R.E. Stevens, D.E. Fjare, W.L. Gladfelter), (347) 373
- 2,6-Diallylpyridine (DAP) complexes of iridium(I), ruthenium(II), palladium(II), synthesis of; crystal structures of  $[\text{RuCl}_2(\text{PPh}_3)\text{-DAP}]$  and  $[\text{PdCl}_2(\text{DAP})_2]$  (G. Vasapollo, C.F. Nobile, M. Latronico, M. Lanfranchi, M.A. Pellinghelli), (336) 429
- 1,8-Diazabicyclo[5.4.0]undec-7-ene, intermediate ligand in selective CO substitution in a Ru-Co complex (R. Regragui, P. Dixneuf), (344) C11
- Diazadienecarbonyl-ruthenium(II) and -ruthenium(0) complexes, synthesis, photochemistry and electrochemistry of (W. Rohde, H. tom Dieck), (328) 209
- Diphenylphosphido-bridged tetracarbonylruthenium-tricarbonylcobalt, reaction with bis(diphenylphosphino)methane of; synthesis and crystal structures of heterobimetallic (Ru-Co) compounds with chelating and bridging dpmm ligands (S. Guesmi, P.H. Dixneuf, N.J. Taylor, A.J. Carty), (328) 193
- (Diphenylphosphine)nonacarbonylhydridoruthenium,  $(\text{H})\text{Ru}_3(\text{CO})_9(\mu\text{-PPh}_2)$ , P-C bond activation, hydrogen migration and acetylene interconversion with  $\text{Ph}_2\text{PC}\equiv\text{CR}$  in; X-ray structure of  $\text{Ru}_3(\text{CO})_9(\mu\text{-PPh}_2)_2(\mu_3\text{-}\eta^2\text{-HC}\equiv\text{CPh})$  (F. Van Gestel, S.A. MacLaughlin, M. Lynch, A.J. Carty, E. Sappa, A. Tiripicchio, M. Tiripicchio Camellini), (326) C65
- Diphosphazane-bridged derivatives of nonacarbonyliruthenium, umpolung behaviour of protonic acids containing coordinated anions with (J.S. Field, R.J. Haines, E. Minshall, C.N. Sampson, J. Sundermeyer), (327) C18
- Dodecacarbonyl-triruthenium and -triosmium group 15 ligand-substituted derivatives; X-ray structures of undeca-, deca- and nonacarbonyl complexes derived from (M.I. Bruce, M.J. Liddell, C.A. Hughes, B.W. Skelton, A.H. White, and in part J.M. Patrick, O. bin Shawkataly), (347) 157, 181, 207
- Dodecacarbonyltriruthenium-catalysed one-to-one addition of *N*-substituted formamides to olefins (Y. Tsuji, S. Yoshii, T. Ohsumi, T. Kondo, Y. Watanabe), (331) 379
- Ether-phosphane-ruthenium(II) cationic complexes, potential catalysts for homogeneous hydration of aldehydes (E. Lindner, U. Schöber, M. Stängle), (331) C13
- Hinging towards metal of substituted allyls; synthesis and molecular structure of  $[(\eta\text{-1-EtOCC}_3\text{H}_4)\text{Pd}(\text{tmeda})]\text{BF}_4$  at 185 K and  $[(\eta\text{-1-EtOCC}_3\text{H}_4)\text{PdCl}]\text{Cl}_2$  at 291 K (D.P. Grant, N.W. Murrall, A.J. Weleh), (333) 403
- Homogeneous bimetallic catalysis, selective synthesis of acetic acid from hydrogen and carbon monoxide by (H. Ono, M. Hashimoto, H. Fujiwara, E. Sugiyama, K. Yoshida), (331) 387
- $[\text{HRu}_3(\text{C}\equiv\text{CBu}^t)(\text{CO})_7(\text{Ph}_2\text{PCH}_2\text{PPh}_2)]$ , crystal structure and fluxionality of (G. Predieri, A. Tiripicchio, C. Vignali, E. Sappa), (342) C33
- Hydroxycarbonyl- and alkoxycarbonyl-ruthenium complexes, synthesis, isolation and reactions of (H. Suzuki, H. Omori, Y. Morooka), (327) C47
- Iron-functionalised diphosphiranes,  $(\text{C}_5\text{Me}_5)(\text{CO})_2\text{MPCH}_2\text{P-2,4,6-t-Bu}_3\text{C}_6\text{H}_2$  (M = Fe, Ru), preparation by reactions of diphosphanyl complexes with  $\text{Me}_2\text{S}(\text{O})=\text{CH}_2$  (L. Weber, E. Lücke), (327) C63
- Iron group metal 30-electron triple-decker complexes with cyclopentadienyl ligands, synthesis of; X-ray structure of  $[(\eta\text{-C}_6\text{H}_5)\text{-Ru}(\mu, \eta\text{-C}_5\text{Me}_5)\text{Ru}(\eta\text{-C}_5\text{Me}_5)]\text{PF}_6$  (A.R. Kudinov, M.I. Rybinskaya, Yu.T. Struchkov, A.I. Yanovskii, P.V. Petrovskii), (336) 187
- Isocyanideruthenium(II) complexes, photochemistry of (L.L. Costanzo, S. Giuffrida, G. De Guidi, G. Condorelli), (349) 235

- Isonitrile-functionalised polymer supports as versatile ligands toward metal centres (B. Corain, M. Basato, P. Main, M. Zecca, R. De Pieri, R. Arshady), (326) C43
- Mixed clusters of bismuth with osmium and ruthenium, preparation and characterisation of; crystal and molecular structures of  $\text{Os}_3(\mu\text{-H})_3(\text{CO})_9(\mu_3\text{-Bi})$ ,  $\text{Os}_4(\text{CO})_{12}(\mu_4\text{-Bi})_2$ ,  $\text{Ru}_3(\mu\text{-H})_3(\text{CO})_9(\mu_3\text{-Bi})$ , and  $\text{Ru}_4(\text{CO})_{12}(\mu_4\text{-Bi})_2$  (H.G. Ang, C.M. Hay, B.F.G. Johnson, J. Lewis, P.R. Raithby, A.J. Whittton), (330) C5
- Mixed metal cluster compounds,  $[\text{M}_2\text{Ru}_4(\mu\text{-CO})_{10}(\text{PPh}_3)_2]$  (M = Cu, Ag, Au), synthesis and structural characterisation of; X-ray crystal structures of  $[\text{M}_2\text{Ru}_4(\mu\text{-CO})_3(\text{CO})_{10}(\text{PPh}_3)_2]$  (M = Cu, Ag) (S.S.D. Brown, I.D. Salter, T. Adatia, M. McPartlin), (332) C6
- $\mu, \mu'$ -1,2-Phenylenediimine-(*N, N'*)-dicarbonylbis(triphenylphosphine)diruthenium(*Ru-Ru*), triple-bonded Ru-Ru compound, preparation and crystal structure of (A. Anillo, V. Riera, R. Obeso-Rosete, M. Font-Altava, X. Solans), (327) C43
- Phosphine-ruthenium, -osmium and -iridium complexes as precursors of terminal phosphido complexes, crystal structure of  $[\text{Os}(\mu\text{-PH}_2)\text{Cl}(\text{CO})(\text{PPh}_3)_2]_2 \cdot (\text{C}_2\text{H}_2\text{Cl}_4)_4$  (D.S. Bohle, G.R. Clark, C.E.F. Rickard, W.R. Roper, M.J. Taylor), (348) 385
- Phosphine-substituted and phosphido-bridged metal clusters in homogeneous catalysis; behaviour of  $\text{CpNiM}_3(\mu\text{-H})_3(\text{CO})_{9-n}\text{L}_n$ ,  $\text{M}_3(\text{CO})_{12-n}\text{L}_n$  (M = Ru, Os) and related complexes in hydrogenation-isomerisation of 1,4-pentadiene (M. Castiglioni, R. Giordano, E. Sappa), (342) 111
- Phosphine-substituted and phosphido-bridged metal clusters in homogeneous catalysis; synthesis and reactivity of  $\text{CpNiM}_3(\mu\text{-H})_3(\text{CO})_{9-n}\text{L}_n$  and  $\text{M}_3(\text{CO})_{12-n}\text{L}_n$  (M = Ru, Os) (M. Castiglioni, R. Giordano, E. Sappa), (342) 97
- Ru-C( $sp^2$ ) bond lengths, effect of chelation on; X-ray structures of  $\text{Ru}(\text{C}_6\text{H}_4\text{PPh}_2)(\text{PPh}_3)(\eta\text{-C}_5\text{H}_5) \cdot 0.5\text{CH}_2\text{Cl}_2$  and  $\text{Ru}\{\text{C}(\text{C}=\text{MePH})\text{CH}(\text{PPh}_2)\text{CH}_2\text{PPh}_2\}(\eta\text{-C}_5\text{H}_5)$  (M.I. Bruce, M.P. Cifuentes, M.G. Humphrey, E. Poczman, M.R. Snow, E.R.T. Tiekink), (338) 237
- $\text{Ru}\{(Z)\text{-C}(\text{CO}_2\text{Me})=\text{CH}(\text{CO}_2\text{Me})\}(\text{CO})(\text{PPh}_3)(\eta\text{-C}_5\text{H}_5) \cdot 0.5\text{EtOH}$ ,  $\text{Ru}\{(E)\text{-C}(\text{CO}_2\text{Me})=\text{CH}(\text{CO}_2\text{Me})\}(\text{dppe})(\eta\text{-C}_5\text{H}_5)$  and  $\text{Ru}\{\text{C}(\text{CO}_2\text{Me})=\text{C}(\text{CO}_2\text{Me})\text{C}(\text{CO}_2\text{Me})=\text{CH}(\text{CO}_2\text{Me})\}(\text{PPh}_3)(\eta\text{-C}_5\text{H}_5)$ , X-ray structures of (M.I. Bruce, A. Catlow, M.G. Humphrey, G.A. Koutsantonis, M.R. Snow, E.R.T. Tiekink), (338) 59
- $[\text{Ru}(\eta\text{-C}_6\text{H}_6)\text{Cl}(\text{O}_2\text{CCF}_3)]$ , reactions with  $\alpha$ -pyridone and related ligands of; X-ray crystal structure of  $[\text{Ru}(\eta\text{-C}_6\text{H}_6)\text{Cl}(\text{C}_6\text{H}_6\text{-NO})]$  (E.C. Morrison, C.A. Palmer, D.A. Tocher), (349) 405
- $\text{Ru}_3(\text{CO})_9\text{BH}_5$ ; preparation of, the metal-rich ruthenaborane a case of isomerisation involving *endo*-hydrogen migration (A.K. Chipperfield, C.E. Housecroft) (349) C17
- $\text{Ru}_4(\text{CO})_{12}(\text{C}_6\text{H}_6\text{O})$ , precatalyst for transfer hydrogenation of cyclohex-1-en-2-one, isolations and X-ray structure determination of (A. Basu, S. Bhaduri, K. Sharma, P.G. Jones), (328) C34
- $\text{Ru}(\text{diene})_2\text{P}(\text{OMe})_3$  complexes, synthesis of; formation of  $\eta^3:\eta^3$ -octadienediyl of  $\eta^4$ -octatriene ligands upon phosphite addition to  $\text{M}(\text{dimethylbutadiene})_2\text{CO}$  (M = Fe, Ru) (D.N. Cox, R. Roulet), (342) 87
- $[\text{Ru}(\text{SC}_6\text{F}_5)_2\{\text{P}(\text{C}_6\text{H}_5)_2(\text{H}_4\text{C}_6\text{H}_2)\}_2]$ , preparation and X-ray structure of (R.-M. Catala, D. Cruz-Garriz, P. Terreros, H. Torrens, A. Hills, D.L. Hughes, R.L. Richards), (328) C40
- Ruthenium-catalysed carbonylation of amines, solvent effects in; selective synthesis of dialkylformamides (G. Bitsi, G. Jenner), (330) 429
- Ruthenium catalysts, carbonylation of diols and their ethers and esters with; synthesis of lactones and hydroxyacid ethers and esters (G. Braca, G. Sbrana, A.M. Raspolli Galletti, S. Berti), (342) 245
- Ruthenium chiral complexes used in hydrogenation of  $\alpha, \beta$ -unsaturated ketones (V. Massonneau, P. Le Maux, G. Simonneaux), (327) 269
- Ruthenium(0) compounds, substituted ketene elimination from acid chlorides induced by (S. Singh, M.C. Baird), (338) 255
- Ruthenium-rhenium bimetallic homogeneous catalysts, hydrogenation of; effects of rhenium carbonyl as promotor for ethylene glycol formation (M. Tanaka, Y. Kiso, K. Saeki), (329) 99
- Ruthenium thioketene mono- and di-nuclear complexes, preparation and properties of (K. Seitz, U. Behrens), (345) 351
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Tetrahedral ruthenium-osmium carbonyl hydrides,  $[\text{H}_2\text{RuOs}_3(\text{CO})_{13}]$  and  $[\text{Ph}_4\text{As}][\text{H}_3\text{RuOs}_3(\text{CO})_{12}]$ , X-ray structure determination of; examination of bent semi-bridging metal-carbonyl bonding in (A.L. Rheingold, B.C. Gates, J.P. Scott, J.R. Budge), (331) 81

- Tetrakis(triphenylphosphine)dihydridoruthenium,  $\text{RuH}_2(\text{PPh}_3)_4$ , catalysis of selective synthesis of  $\alpha$ -methylene- $\beta$ -hydroxyalkanones by (I. Matsuda, M. Shibata, S. Sato), (340) C5
- N*-Thionitrosodimethylamine-rhodium(I), -rhodium(III) and -ruthenium(II) cationic complexes, preparation and reactions of (G. Tresoldi, S. Sergi, S. Lo Schiavo, P. Piraino), (328) 387
- Trimethylsilylmethyl-transition metal bond, unprecedented reaction mode of (K. Itoh, T. Fukahori), (349) 227
- Triruthenium cluster, double oxidative addition of C-H bonds on; synthesis and characterisation of  $\text{Ru}_3\{\mu\text{-H}_2, \eta^2, \mu_3\text{-C}(\text{OEt})=\text{C}(\text{H})\}\text{-}(\text{CO})_9$  and  $\text{Ru}_3\{\mu\text{-H}_2, \eta^2, \mu_3\text{-C}(\text{OEt})\text{N}(\text{Me})\text{-C}(\text{H})\}\text{-}(\text{CO})_9$  (C.M. Jensen, H.D. Kaesz), (330) 133
- Triruthenium dodecacarbonyl, reaction with bis(dimethylphosphino)methane, bis(diphenylphosphino)methane and bis(diphenylphosphino)ethylamine under photochemical conditions of (D.W. Engel, K.G. Moodley, L. Subramony, R.J. Haines), (349) 393
- Tris(triphenylphosphine)ruthenium polyhydride complexes, catalysis of hydrogenation of benzophenone by (D.E. Linn, Jr., J. Halpern), (330) 155

## Samarium

- Cyclooctetraenide derivatives of divalent samarium (A.L. Wayda, S. Cheng, I. Mukerji), (330) C17
- Dicyclopentadienylsamarium, evaluation as a reagent in organic synthesis (J.L. Namy, J. Collin, J. Zhang, H.B. Kagan), (328) 81
- $[\text{Li}(\text{dme})_3][(\text{C}_5\text{H}_5)_3\text{Sm}(\mu\text{-N}_3)]$ , synthesis and X-ray spectral analysis of (H. Schumann, C. Janiak, J. Pickardt), (349) 117
- Samarium(II)-mediated reaction of allylic phosphate esters with carbonyl compounds, new method for "Umpolung" of allylic phosphates (S. Araki, M. Hatano, H. Ito, Y. Butsugan), (333) 329
- Tricyclopentadienyllanthanides/sodium hydride, reduction and isomerisation of olefins with (C. Qian, Y. Ge, D. Deng, Y. Gu, C. Zhang), (344) 175

## Scandium

- Pentamethylcyclopentadienylcyclooctatetraenes-candium, -yttrium and -lanthanum, synthesis and UPS studies of (P. Bruin, M. Booij, J.H. Teuben, A. Oskam), (350) 17

## Selenium

- Allylic and vinylic silanes, germanes, stannanes and plumbanes, reactivity towards  $\text{S}_{14}2'$  or  $\text{S}_{14}2$  substitution by carbon- of heteroatom-centered free radicals of (J.P. Light II, M. Ridenour, L. Beard, J.W. Hershberger), (326) 17
- Aminoiminomethanesulphinic acid (thiourea dioxide) used under phase transfer conditions for generating organochalcogenate anions; synthesis of sulphides, selenides and tellurides (J.V. Comasseto, E.S. Lang, J.T.B. Ferreira, F. Simonelli, V.R. Correia), (334) 329
- Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167
- Bis(pentamethylcyclopentadienylcarbonyl-cobalt) and -rhodium) complexes, stepwise formation of dinuclear chalcogenic complexes with elemental sulphur, selenium or tellurium from (H. Brunner, N. Janietz, W. Meier, J. Wachter, E. Herdtweck, W.A. Herrmann, O. Serhadli, M.L. Ziegler), (347) 237
- Carbon sulphide and carbon selenide containing dinuclear platinum and palladium complexes with  $\text{M}(\mu\text{-E})\text{M}'(\text{CE}')$  and  $\text{M}(\mu\text{-CEE}')\text{M}'$  structural units (M,  $\text{M}' = \text{Pd}, \text{Pt}$ ; E,  $\text{E}' = \text{S}, \text{Se}$ ) (H. Werner, M. Ebner, H. Otto), (350) 257
- Chalco-carbonyl complexes,  $\text{OsCl}_2(\text{CO})(\text{CE})\text{-}(\text{PPh}_3)_2$  (E = S, Se, Te), synthesis and structures of (G.R. Clark, K. Marsden, C.E.F. Rickard, W.R. Roper, L.J. Wright), (338) 393
- Chalco-carbonylchromium complexes, arene displacement by tertiary phosphorus ligands in (A.A. Ismail, I.S. Butler), (346) 185
- $[\text{C}_5\text{H}_5\text{Fe}(\text{CO})\text{L}(\text{EMe}_2)]^+$  (E = S, Se, Te), synthesis and reactivity of (N. Kuhn, H. Schumann, E. Zauder), (327) 17
- $\text{C}_5\text{H}_5\text{Rh}(\text{C}=\text{CHR})(\text{PPr}_3)_i$ , reactivity towards diazomethanes, sulphur, selenium and tellurium of; formation of unstable chalcogenoketenes in coordinated transition metals (J. Wolf, R. Zolk, U. Schubert, H. Werner), (340) 161
- $(\text{C}_5\text{R}_5)_2\text{M}_2(\text{CO})_4$  (R = H, Me; M = Cr, Mo, W), reactivity of the  $\text{M}\equiv\text{M}$  bonds towards condensed chalcogenide vapours of (K. Endrich, E. Guggolz, O. Serhadli, M.L. Ziegler, R.P. Korswagen), (349) 323
- $[2 + 4]$ Cycloaddition with selenocarbonyldifluoride as dienophile of reactive  $\text{E}=\text{C}$  (*p-p*)  $\pi$ -systems (J. Grobe, D. Le Van, J. Welzel), (340) 153



- Cyclooctaselenadiazole, synthesis, decomposition pathway, and reaction with  $(\eta^5\text{-C}_5\text{H}_5)\text{Co}(\text{L})_2$  ( $\text{L} = \text{C}_2\text{H}_4, \text{PPh}_3$ ); crystal and molecular structures of  $[(\eta^5\text{-C}_5\text{H}_5)\text{Co}]_2(\mu_2\text{-}\eta^3, \eta^2\text{-C}_8\text{H}_6\text{Se})$  (J. Knebel, C.P. Morley, G. Wilke, C. Krüger, J.M. Wallis), (334) C39
- Dibenzochalcogeno-silones, transannular donor-acceptor interaction in; crystal and molecular structure of 13,13-diphenyl-8,13-dihydro-5*H*-dibenzo[*d, g*][1.2.6]dithiasilone (Yu.E. Ovchinnikov, V.E. Shklover, Yu.T. Struchkov, V.F. Traven', O.G. Rodin, V.I. Rokitskaya), (347) 33
- Dicyclopentadienyllutetium alkoxides, thiolates and selenolates, preparation of; crystal structures of  $(\text{C}_5\text{Me}_5)_2\text{Lu}(\mu\text{-S}^i\text{C}_4\text{H}_9)_2\text{Li}(\text{THF})_2$  and  $(\text{C}_5\text{H}_5)_2\text{Lu}(\mu\text{-SeC}_6\text{H}_5)_2\text{Li}(\text{THF})_2$ . (H. Schumann, I. Albrecht, M. Gallagher, E. Hahn, C. Muchmore, J. Pickardt), (349) 103
- Ferrocenylchalcogenides, synthesis of (M. Herberhold, P. Leitner), (336) 153
- Hydrochalcogenide and hydride-hydrochalcogenide complexes of rhodium with the tripodal tetraphosphine, tris(2-diphenylphosphinoethyl)phosphine) (M. Di Vaira, P. Stopponi, M. Peruzzini), (333) C53
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, preparation and reactive behaviour of (R.A. Fischer, W.A. Herrmann), (330) 377
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, synthesis of (R.A. Fischer, H.-J. Kneuper, W.A. Herrmann), (330) 365
- Methylation of aromatics with  $\text{Me}_3\text{S}^+$ ,  $\text{Me}_3\text{Se}^+$  and  $\text{Me}_3\text{Te}^+$  in superacid media (K. Laali, H.Y. Chen, R.J. Gerzina), (348) 199
- $\text{NEt}_4[(\eta^5\text{-C}_5\text{H}_5)\text{Mo}(\text{CO})_2\text{Se}_2]$ , synthesis and crystal structure of (J. Adel, F. Weller, K. Dahnicke), (347) 343
- Octacarbonyldicobalt-mediated and -catalysed carbonylation of diaryl diselenides and ditellurides to seleno and telluro esters (H. Takahashi, K. Ohe, S. Uemura, N. Sugita), (334) C43
- Organoiron complexes containing selenium atom bridges, structure of (C. Hecht, E. Herdtweck, J. Rohmann, W.A. Herrmann, W. Beck, P. Fritz), (330) 389
- Organylgermanium sesquichlorochalcogenides,  $(\text{RGe})_2\text{Y}_{3n-1}\text{Cl}_2$  ( $n = 1-3$ ;  $\text{Y} = \text{O}, \text{S}, \text{Se}$ ;  $\text{R} = \text{t-Bu}$ , mesityl), preparation and X-ray analysis of (H. Puff, K. Braun, S. Franken, T.R. Kök, W. Schuh), (335) 157
- Organylselenoacetylene and selenocyanate,  $^{77}\text{Se}$  and  $^{13}\text{C}$  NMR chemical shifts and  $^{77}\text{Se}\text{-}^{13}\text{C}$  coupling constants of (H. Poleschner, R. Radeglia, M. Kuprat, A.M. Richter, E. Fanghänel), (327) 7
- Pentacarbonylchromium(0) deprotonated sulphur donor complexes, reactions with carbon disulphide or carbon diselenide of (H.G. Raubenheimer, S. Lotz, G.J. Kruger, A.v.A. Lombard, J.C. Viljoen), (336) 349
- Phosphanes and arsanes, reactions with diselenium complexes of (L.-R. Frank, K. Evertz, L. Zsolnai, G. Huttner), (335) 179
- Selenium and tellurium heterocyclic compounds, charge transfer complexes from (K.Y. Abis, W.R. McWhinnie), (330) 337
- Sulphur and selenium containing heterodisubstituted ferrocenes, synthesis of; formation of 1,1'-dithiol- and 1,1'-diselenol-ferrocenes (R. Broussier, A. Abdulla, B. Gautheron), (332) 165
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands,  $^{125}\text{Te}$  and  $^{77}\text{Se}$  NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Transition metal coordinated selenoketones, kinetics and mechanism of reactions with 1-diethylamino-1-propyne of (H. Fischer, U. Gerbing, A. Tirilomis), (332) 105
- Transition metal coordinated thioaldehydes, selenoaldehydes and seleno ketones, kinetic investigations of (H. Fischer), (345) 65
- Tristannachalcogeno cyclic compounds, preparation and structures of (H. Puff, B. Breuer, W. Schuh, R. Sievers, R. Zimmer), (332) 279

## Silicon

- Alkali(diphosphaallyl)ferrate, synthesis and reactions of (R. Appel, W. Schuhn), (329) 179
- Alkenylzirconocene agostic complexes, formation by 'abnormal' hydrozirconation of alkynes of (G. Erker, R. Zwitter, C. Krüger, R. Schlund, I. Hyla-Kryspin, R. Gleiter), (346) C15
- Alkoxo- and (alkoxo)(amido)(imido)niobium(V) compounds, preparation and structures of; crystal structure of  $[\text{NbCl}(\mu\text{-OMe})\{\text{N}(\text{SiMe}_3)_2\}(\text{NSiMe}_3)]_2$  (A. Antiñolo, A. Otero, F. Urbanos, S. Garcia-Blanco, S. Martinez-Carrera, J. Sanz-Aparicio), (350) 25
- $\beta$ -Alkoxy monohalogenated carbenoids,  $\text{C}_6\text{H}_5\text{-CH}(\text{OSiMe}_3)\text{CHXLi}$ , formation and stability of (R. Tarhout, B. Kirschleger, J. Villieras), (346) C1
- Alkoxy(triphenylsilyl)carbene complexes,  $(\text{CO})_5\text{-MC}(\text{OR})\text{SiPh}_3$  ( $\text{M} = \text{Cr}, \text{Mo}, \text{W}$ ), thermal fragmentation pattern of (U. Schubert, H. Hörning), (336) 307

- Alkyl- and trimethylsilyl-furanes, UV photoelectron spectroscopy and quantum-mechanical study of (T. Veszprémi, L. Nyulászi, J. Nagy), (331) 175
- Alkyltriethoxysilanes, treatment with Amberlyst 15 cation-exchange resin in the presence of hexamethyldisiloxane (I. Hasegawa, S. Sakka), (340) 31
- Alkyluranium(III) complexes, ( $\eta^5\text{-C}_5\text{H}_5$ )<sub>3</sub>URLi, ligand exchange reactions of (M. Foyentin, G. Folcher, M. Ephritikhine), (335) 201
- Alkynyltungsten(IV) asymmetric complexes; crystal structure of  $\text{PPh}_4[\text{WCl}_5(\text{HC}\equiv\text{CPh})]\cdot\text{CH}_2\text{Cl}_2$  (M. Kersting, K. Dchnicke, D. Fenske), (346) 201
- Allyl-silicon bond cleavage in pentacoordinated silicon species (G. Cerveau, C. Chuit, R.J.P. Corriu, C. Reye), (328) C17
- Allylic and vinylic silanes, germanes, stannanes and plumbanes, reactivity towards  $S_{\text{H}}2'$  or  $S_{\text{H}}2$  substitution by carbon- or heteroatom-centered free radicals of (J.P. Light II, M. Ridenour, L. Beard, J.W. Hersherberger), (326) 17
- Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167
- $\pi$ -Areneiron, catalytic and stoichiometric reactions with alkynes of (A. Funhoff, H. Schäufele, U. Zenneck), (345) 331
- $\eta^6$ -Arene-rhodium(III) and -iridium(III) complexes,  $[(\text{Me}_2\text{SiC}_6\text{H}_5)_4\text{M}_2\text{H}_2]$  (M = Rh, Ir), synthesis and structure determination of (M.-J. Fernandez, M.A. Esteruelas, L.A. Oro, J. Ruiz, A.J. Smith, P.M. Maitlis), (330) 179
- Arenetricarbonylchromium complexes, stereoselective synthesis of, benzylic oxygen directing effects for 1-tetralol derivatives (S.G. Davies, C.L. Goodfellow), (340) 195
- Asymmetric ring-opening of cyclohexene oxide with trimethylsilyl azide in the presence of titanium isopropoxide/chiral ligand (M. Emziane, K.I. Sutwardoyo, D. Sinou), (346) C7
- (Benzamidinato)uranium(IV) chloride, precursor for organoactinide complexes (M. Wedler, H.W. Roesky, F. Edelmann), (345) C1
- Benzyltrimethylsilane, electrophilic substitution of (M. Bordeaux, P. Villeneuve, B. Bennetau, J. Dunoguès), (331) 169
- Bicyclotrisilanetrakis(disiloxane), preparation and X-ray crystal structure of (S.S. Al-Juaid, Y. Derouiche, P.B. Hitchcock, P.D. Lickiss), (341) 241
- $\beta$ -Binaphthyl-silane, -stannane and -borane asymmetric complexes, synthesis of (U.-M. Gross, M. Bartels, D. Kaufmann), (344) 277
- Bis(amino)stannylene, reaction with halogenoalkanes of (M. Veith, A. Müller), (342) 295
- Bis(2,6-di-*t*-butylaryloxy)silane sterically-hindered derivatives, synthesis of (S.D. Pastor, E.T. Hessel), (328) 263
- Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359
- Bis(organosilyl) amides containing dimethylsilyl and bis(dimethylsilyl)ethylene groups, structure of (M.S. Samples, C.H. Yoder), (332) 69
- Bis( $\mu$ -*S*-alkyl)hexacarbonyldiiron binuclear complexes, preparation by decarbonylation reactions of dithiocarbonates with nonacarbonyldiiron of (A. Lagadec, R. Dabard, A. Le Rouzic, H. Patin), (326) 381
- 1,1-Bis(trimethylsilyloxy)-1,3-butadiene and trimethylsilyl 4-trimethylsilyl-2-buten-2-olate, preparation and reactions with benzaldehyde of (M. Bellassoued, R. Ennigrou, M. Gaudemar), (338) 149
- 1,4-Bis(trimethylsilyl)-2-alkynes, synthesis of silylated conjugated dienes by 1,2-migration from (J. Pommet), (340) 273
- 2,3-Bis(trimethylsilyl)-1,3-butadiene, stereospecific 1,4-polymerisation of (Y.-X. Ding, W.P. Weber), (341) 267
- 1,4-Bis(trimethylsilyl)-1,3-butadiyne anion, trapping by double ate-complex formation with  $\text{AlR}_3$  of (W. Kaim), (339) 253
- Bis(trimethylsilylcyclopentadienyl)dichloroniobium, electrogeneration of the anionic  $\text{Nb}^{\text{V}}$  complex of (H. Nabaoui, A. Fakhr, Y. Mugnier, A. Antiñolo, M. Fajardo, A. Otero, P. Royo), (338) C17
- Bis(trimethylsilylcyclopentadienyl)niobium, synthesis and reactivity towards cumulene ligands of A. Antiñolo, S. Garcia-Lledó, J. Martinez de Ilarduya, A. Otero), (335) 85
- Bis(trimethylsilyl)diphenylgermane, kinetic spectroscopy of the  $\text{Ph}_2\text{Ge}$  group on laser flash photolysis of (S. Konieczny, S.J. Jacobs, J.K.B. Wilking, P.P. Gaspar), (341) C17
- Bis(trimethylsilyl)polyynes,  $\text{Me}_3\text{Si}(\text{C}\equiv\text{C})_n\text{SiMe}_3$  ( $n = 2, 3$ ), reactions with aryl azides and ethyl diazoacetate of (R.M. Bettison, P.B. Hitchcock, D.R.M. Walton), (341) 247
- Bis(trimethylsilyl)silyl radical, configuration of (R.A. Jackson, C.J. Rhodes), (336) 45
- Bis(trimethylsilyl)sulphur diimide, reactions with dodecatritium of; X-ray analysis of  $\text{Ru}_2(\text{CO})_4[\mu\text{-Me}_3\text{Si-NSN-SiMe}_3]_2$  (A. Gieren, T. Hübner, J. Wu, M. Herberhold, W. Bühlmeier), (329) 105
- N,N*-Bis(trimethylstannyl)di-*t*-butylfluorosilyl-

- amine, sterically fixated molecule (D. Stalke, U. Klingebiel, G.M. Sheldrick), (341) 119
- $\alpha$ -Bromo-,  $\alpha$ -chloro- and  $\alpha$ -trimethylsilyl-zinc ester enolates, Reformatsky-type Darzens and Peterson reactions of (A. Fürstner), (336) C33
- 1-(*p*-Bromophenyl)-4-*t*-butyl-1-methyl-1-silacyclohexane, conformationally stable complex, structure of; stereochemistry of halodesilylation (H. Sakurai, M. Murakami, K. Takeuchi, C. Kabuto), (341) 133
- Carbazolysilanes, preparation of (H. Appler), (350) 217
- $\text{CH}_2\text{CH}_2(\text{R})\text{CHSi}=\text{CHCH}_2\text{Bu-t}$  (R = H, Me), formation and cyclo-addition reactions with *t*-butyllithium of (N. Auner), (336) 83
- ( $\eta^5\text{-C}_5\text{H}_5$ )Fe(CO)(PPh<sub>3</sub>)COR (R = CH<sub>3</sub>, CH<sub>2</sub>-SiMe<sub>3</sub>, and CH<sub>2</sub>SiMe<sub>2</sub>Ph), thermal decarbonylation of (K.H. Pannell, J.R. Rice), (341) 415
- (*O*-Si)- and (*Cl*-Si)-Chloro[1-(1,1-dimethyl-2-acylhydrazonium)methyl]dimethylsilanes and (*O*-Si)-chloro[2-(1,1-dimethyl-2-acylhydrazino)methyl]dimethylsilanes, synthesis and NMR spectra of (I.D. Kalikhman, V.A. Pestunovich, B.A. Gostevskii, O.B. Bannikova, M.G. Voronkov), (338) 169
- Chloro[1-(1,1-dimethyl-2-trifluoroacetylhydrazonium)methyl]dimethylsilane(*O*-Si), synthesis and structure of (A.A. Macharashvili, V.E. Shklover, Yu.T. Struchkov, M.G. Voronkov, B.A. Gostevsky, I.D. Kalikhman, O.B. Bannikova, V.A. Petunovich), (340) 23
- (Chlorodiphenylsilyl)(methoxydimethylsilyl)-bis(trimethylsilyl)methane, conformation and enantiotopomerization of (A.G. Avent, P.D. Lickiss, A. Pidcock), (341) 281
- Chloromethylsilanes, CFC<sub>12</sub> derivatives of (R. Josten, I. Ruppert), (329) 313
- Chlorosiloxanes, mechanism of acidic catalysis of hydrolysis of (J. Brumme, U. Scheim, A. Porzel, K. Rühlmann, H. Grosse-Ruyken), (334) 277
- Chlorotrineophylstannane, chlorotris(dimethylphenylsilyl)methylstannane, trineophyl (1,2,4-triazol-1-yl)stannane hemihydrate and 2,5-dimethyl-2,5-diphenylhexane, molecular structures of (D. Schomburg, M. Link, H. Linoh, R. Tacke), (339) 69
- C<sub>5</sub>H<sub>5</sub>MnL<sub>2</sub>HSiR<sub>3</sub> complexes, MO analysis of the MnSiH three-centre interaction in (H. Rabaã, J.-Y. Saillard, U. Schubert), (330) 397
- Cocyclotetramerisation of two alkynes with palladacyclopentadiene as catalyst, formation of a cyclooctatetraene (H. tom Dieck, C. Munz, C. Müller), (326) C1
- $\eta^4$ -Complexes, *endo*-1-chloro-2,5-diphenylsilylcyclopentadiene, reactions with lithium reagents of; crystal structure of dicarbonylphenyl( $\eta^4$ -*exo*-1-methyl-1-oxy-2,5-diphenylsilylcyclopentadiene)carbeneiron (F.H. Carré, R.J.P. Corriu, C. Guerin, B.J.L. Henner, W.W.C. Wong Chi Man), (336) C1
- trans*-[CpWMe(CHO)(CO)<sub>2</sub>]<sup>-</sup> and *trans*-[CpWH(COMe)(CO)<sub>2</sub>]<sup>-</sup> formation from CpWMe(CO)<sub>3</sub> and LiEt<sub>3</sub>BH of (J.T. Gauntlett, B.E. Mann, M.J. Winter, S. Woodward), (342) C5
- 18-Crown-6 potassium [ $\eta^4$ -(1,4-diphenylbutadienylene)tricarbonyliron]trifluorosilicate, synthesis, dynamic behaviour and structure of (F.H. Carré, R.J.P. Corriu, C. Guérin, B.J.L. Henner, W.W.C. Wong Chi Man), (347) C1
- (Cyclooctadiene)(imine)rhodium(I) complexes containing multi-dentate ligands, preparation and characterisation of (H. Brunner, H. Fisch), (335) 1
- Cyclooctadienyllithium and alkyltrichlorosilanes, preparation of bridged trinuclear complexes from (M.E. Wright, V.W. Day), (329) 43
- Cyclopropenylphosphaalkenes, educts for synthesis of stable 2*H*-phosphole (F. Zurmühlen, M. Regitz), (332) C1
- Cyclotrisilanes and cyclotetrasilanes, preparation and characterisation of (M. Weidenbruch, K.-L. Thom, S. Pohl, W. Saak), (329) 151
- Dialkylaminotrimethylsilylacetylenes, reactions with metal carbonyls of (R.B. King, R.M. Murray, R.E. Davis, P.K. Ross), (330) 115
- Dibenzochalcogeno-silonines, transannular donor-acceptor interaction in; crystal and molecular structure of 13,13-diphenyl-8,13-dihydro-5*H*-dibenzo[*d, g*]1.2.6]dithiasilonine (Yu.E. Ovchinnikov, V.E. Shklover, Yu.T. Struchkov, V.F. Traven', O.G. Rodin, V.I. Rokitskaya), (347) 33
- 1,3-Dibora- and 1,3-borasilaindanes, synthesis by thermolysis of arylhalogen-boranes of (W. Schacht, D. Kaufmann), (331) 139
- Di-*t*-butylcyclopentadienyl-silanes, -stannanes and -germanes, synthesis, structure and fluxional behaviour of (S.T. Abu-Orabi, P. Jutzi), (329) 169
- cis*-Dicarbonylbis( $\eta^4$ -1,1,3,4-tetramethylolole)molybdenum and related complexes, crystal structure and dynamic stereochemistry of (F. Carré, E. Colomer, R.J.P. Corriu, M. Lheureux, A. Cavé), (331) 29
- Dicyclooctadienyl-dirhodium dialkyl-bridged complexes, reactions with Lewis bases and further reactions with aromatic hydrocarbons of (M.A. Kulzick, R.T. Price, R.A. Andersen, E.L. Muettterties), (333) 105

- Dienetricarbonyliron complexes, Friedel–Crafts chemistry of, acetylation of 1-silylated and 1,4-disubstituted dienes (M. Franck-Neumann, M. Sedrati, A. Abdali), (339) C9
- Dihalogeno(organylthio)alane, preparation and properties of (G.G. Hoffmann), (335) 143
- 1,4-Dihydroxyoctaphenyltetrasilane, a stable polysilane- $\alpha,\omega$ -diol, preparation and spectral properties of (L. Párkányi, H. Stüger, E. Hengge), (333) 187
- 1,3-Dilithiopropanes: dimethylbis( $\alpha$ -lithiobenzyl)-silane and -germane, synthesis and applications of (O.S. Akkerman, F. Bickelhaupt), (338) 159
- N,C*-Dilithiosilylamines, preparation and reactions of (S.A. Burns, R.J.P. Corriu, V. Huynh, J.J.E. Moreau), (333) 281
- Dimethyl(chloroalkyl)alkenylsilanes, aminomercuration-demercuration as a route to azasilacycloalkanes of (M.G. Voronkov, S.V. Kirpichenko, A.T. Abrosimova, A.I. Albanov, V.V. Keiko, V.I. Lavrentyev), (326) 159
- cis*-Dimethyl(chloro)stannyldiethylborylalkene, exchange reactions with organyltrimethylstannanes of (S. Kersch, B. Wrackmeyer), (338) 195
- 1,1-Dimethylpolyphenylcyclopentadienes, Diels–Alder reactions with maleic anhydride of (G.K. Henry, R. Shinimoto, Q. Zhou, W.P. Weber), (350) 3
- Dimethylsilanone and dimethylsilanone- $d_6$ , low temperature matrix stabilisation in the gas phase of (V.N. Khabashesku, Z.A. Kerzina, E.G. Baskir, A.K. Maltsev, O.M. Nefedov), (347) 277
- 2,3-Dimethyltriisopropylsilyloxybenzenetricarbonylchromium, conformation and regioselective lithiation of (J. Levisalles, F. Rose-Munch, E. Rose, A. Semra, Y. Jeannin, R. Robert), (328) 109
- Dimethyl(tris(trimethylsilyl)methyl)silanolato-tantalum(V), -chromium(III) and -manganese(II), formation of (H. Blanchard, M.B. Hursthouse, A.C. Sullivan), (341) 367
- Diphenyltrimethylsilyl-amine, -phosphine, -arsine, and -stibine, UV photoelectron spectroscopy of (G. Distefano, L. Zanathy, L. Szepes, H.J. Breunig), (338) 181
- $\mu$ -[Di- $\eta^6$ -phenyl(trimethylsilyl)methane][bis(tricarbonyl)chromium], synthesis and crystal structure of (N.H. Buttrus, C. Eaborn, M.E. Molla, P.B. Hitchcock, J.D. Smith), (344) 313
- Disiloxanes containing hydroxyalkyl groups, synthesis of (F. Braun, L. Willner, M. Hess, R. Kosfeld), (332) 63
- Dodecamethyl-2,3,5,6,7,8-hexasila-diarsa-, -distiba- and -dibismutha-bicyclo[2.2.2]octane, formation and identification of (K. Hassler, S. Seidl), (347) 27
- Enantioselective hydrosilylation, complexes with free donor groups as co-catalysts for (H. Brunner, H. Fisch), (335) 15
- Ferrocene polymer-supported derivatives, catalytic hydrosilylation of olefins by supported palladium and platinum complexes (W.R. Cullen, N.F. Han), (333) 269
- Group 14 free radicals derived from hydroxynaphthoquinones, ESR studies on (I.M. Ahmed, A. Hudson, A. Alberti), (333) 9
- Group 14–iron bonds containing complexes, photochemical diastereoselective synthesis of (B. Rouida, M. Pankowski, W. Chodkiewicz, G. Jaouen), (342) C10
- Halogenosilanes, reactions of acetals, orthoesters and their analogues with (*Review*) (R.S. Musavirov, E.P. Nedogrey, I.N. Syraeva, E.A. Kantor, D.L. Rakhmankulov), (350) 139
- Halosilanes, nucleophilic assisted racemisation of (A.R. Bassindale, J.C.-Y. Lau, P.G. Taylor), (341) 213
- Heteroarylhydrosilanes, reactions with dichlorocarbene under phase-transfer conditions of (E. Lukevics, R. Sturkovich, Yu. Goldberg, A. Gaukman), (345) 19
- Hexa-*t*-butyl-1,3-dimethyltrisilane, stereochemistry of (M. Weidenbruch, B. Flintjer, K. Kramer, K. Peters, H.G. von Schnering), (340) 13
- Hexacoordinate silicon neutral compounds, electrophilic cleavage reactions of C–Si bonds in diorgano(phthalocyaninato)silicon (K. Tamao, M. Akita, H. Kato, M. Kumada), (341) 165
- Hexameric lithium dimethylnaphthylsilanoate, [LiOSi $_n$ PMe $_2$ ] $_6$ , crystal and molecular structure of (T.A. Bazhenova, R.M. Lobkovskaya, R.P. Shibaeva, A.E. Shilov, A.K. Shilova), (330) 9
- Hexamethyldigermoxane, exchange reactions with trimethylsilyl azide of (Q. Zhou, W.P. Weber), (342) 291
- HO(SiPh $_2$ ) $_4$ OH and HO(SiPh $_2$ ) $_7$ OH, crystal and molecular structures of (Yu.E. Ovchinnikov, V.E. Shklover, Yu.T. Struchkov, V.V. Dement'ev, T.M. Frunze, B.A. Antipova), (335) 157
- Hydroxyanthraquinones-group 14 adducts and chrysazin-phosphorus adducts, ESR studies of (B.M. Ahmed, A. Hudson, A. Alberti), (350) 9
- Intramolecular interactions in compounds bearing Si–O–C–C–N or C–O–C–C–N fragments (E.I. Brodskaya, M.G. Voronkov, D.D. Toryashinova, V.P. Baryshok, G.V. Ratovski, D.D. Chuvashv. V.G. Efremov), (336) 49

- 1-(Iododimethylsilyl)piperidone-2, crystal and molecular structure of (A.A. Macharashvili, V.E. Shklover, Yu.T. Struchkov, Yu.I. Baukov, E.P. Kramarova, G.I. Oleneva), (327) 167
- Iodotrimethylsilane generation in situ applied as a route to 1,3-bis(trimethylsiloxy)-1,3-diene (O. Babot, P. Cazeau, F. Duboudin), (326) C57
- Linear polysilamethylenes, synthesis and characterisation of (E. Bacque, J.-P. Pillot, M. Birot, J. Dunoguès, G. Bourgeois), (346) 147
- $\alpha$ -Lithiated-*O,O*-diethyltrimethylchloromethylphosphonate, preparation and properties of (M.-P. Teulade, P. Savignac), (338) 295
- Lithiation of  $\alpha,\beta$ -epoxyalkylsilanes and related  $\alpha$ -hetero-substituted epoxides, synthetic and mechanistic aspects of (J.J. Eisch, J.E. Galle), (341) 293
- Lithiation of 2-methylbenzoxazol, organometallic derivatives containing a tridentate ligand (S. Kersch, B. Wrackmeyer), (332) 25
- Lithium *t*-butylaminofluorosilanes, bicyclic molecules with two- and four-coordinated lithium (D. Stalke, U. Klingebiel, G.M. Sheldrick), (344) 37
- $\{[\mu-(\text{Me}_3\text{Si})\text{C}(\text{PMe}_2)_2]_3\text{Ge}_2\text{Cl}_2\}^+ [\text{GeCl}_3]^-$ , dispirocyclic cationic germylene complex with bent Ge chain (H.H. Karsch, B. Deubelly, J. Riede, G. Müller), (336) C37
- $(\text{Me}_3\text{Si})_3\text{CSiH}(\text{C}_6\text{H}_4\text{Y-}p)\text{I}$  compounds, effects of substituents Y in reactions of; evidence against  $S_N2$ (intermediate) mechanism for methanolysis of  $(\text{Me}_3\text{Si})_3\text{CSiMe}_2\text{I}$  and  $(\text{Me}_3\text{Si})_3\text{CSiHPhI}$  (D.B. Azarian, C. Eaborn, P.D. Lickiss), (328) 355
- $(\text{Me}_3\text{Si})_2\text{C}(\text{SiMe}_2\text{OCOMe})(\text{SiMe}_2\text{Cl})$ , nature of anchimeric assistance by acetoxy group in solvolysis of (C. Eaborn, P.D. Lickiss, A.D. Taylor), (338) C27
- $(\text{Me}_3\text{Si})_2\text{C}(\text{SiMe}_2\text{OH})_2$  and derivatives, sterically hindered organosilicon diols, reactions of (C. Eaborn, P.D. Lickiss, A.D. Taylor), (340) 283
- Methoxypentamethyldisilane, mechanism of methyl loss from; anchimeric assistance vs. direct bond cleavage (T. Weiske, S. Akkök, H. Schwarz), (336) 105
- Methyl- and trimethyl-substituted vinylsilanes and disilanes, reactions with *t*-butyllithium of (N. Auner), (336) 59
- Methylidynephosphane,  $(\text{HC}\equiv\text{P})$ , cycloaddition reagent for 1,3-dipoles (E.P.O. Fuchs, M. Hermesdorf, W. Schnurr, W. Rösch, H. Heydt, M. Regitz, P. Binger), (338) 329
- 1-Methyl-1-silacyclobutane, efficient gas-phase polymer deposition of, IR laser photosensitized decomposition of (J. Pola, V. Chvalovský, E.A. Volnina, L.E. Guselnikov), (341) C13
- Methyltris(hexamethyldisilylamido)uranium, reactions of (A. Dormond, A. Aaliti, A. Elbouadili, C. Moise), (329) 187
- $\text{M}[\text{Fe}_2(\text{CO})_8]_2$  (M = Si, Ge, Sn), improved synthesis of; X-ray crystal structure of  $\text{Si}[\text{Fe}_2(\text{CO})_8]_2$  (S.G. Anema, G.C. Barris, K.M. Mackay, B.K. Nicholson), (350) 207
- Monoalkylaminomethylation of organometals (M = Al, Mg, Zn) with *N*-alkyl-*N*-trimethylsilylalkoxymethylamines (G. Courtois, L. Miginiac), (340) 127
- Monocyclopentadienylalkoxoniobium(V) derivatives, preparation and structural study of; crystal structure of  $\{[\text{Nb}(\eta^5\text{-C}_5\text{H}_4\text{SiMe}_3)\text{Cl}]_2(\mu\text{-CO})(\mu\text{-OOC}_6\text{H}_4)_2\}$  (F.A. Jalón, A. Otero, P. Royo, J.M. Fernández-G., M.J. Rosales, R.A. Toscano), (331) C1
- Monomeric and oligomeric carbodiimides with polysilane and siloxane fragments, synthesis of (G.A. Razuvaev, A.S. Gordetsov, A.P. Kozina, T.N. Brevnova, V.V. Semenov, S.E. Skobeleva, N.A. Boxer, Yu.I. Dergunov), (327) 303
- Mono- or di-silylated bicyclo[*n*.1.0]-alkanes and -alkenes, structural analysis by  $^{29}\text{Si}$  NMR of (M. Grignon-Dubois, M. Ahra, M. Laguerre), (348) 157
- Mono[tris(trimethylsilyl)cyclopentadienyl]iron complexes, formation and reactions of (J. Okuda), (333) C41
- $\text{Na}_6\{(\text{PhSiO}_{1.5})_{22}\text{Co}_3\text{O}_6\} \cdot 7\text{H}_2\text{O}$ , synthesis and crystal structure of (Yu.E. Ovchinnikov, V.E. Shklover, Yu.T. Struchkov, M.M. Levitsky, A.A. Zhdanov), (347) 253
- Nickel halide reduction by magnesium, catalysation of cyclotrimerisation of alcyne by (P. Alphonse, F. Moyon, P. Mazerolles), (345) 209
- trans-trans-trans*-Nonamethylhexasilaperhydrophenaline, formation and structure of (G. Fritz, H. Volk, M. Straub, H.G. von Schnering, K. Peters, E.-M. Peters), (341) 109
- Oligocyclic silanes, nature of bonds in (K. Hassler, F.K. Mitter, E. Hengge, C. Kratky, U.G. Wagner), (333) 291
- Oligoorganylsilsequioxanes, synthesis and properties of (T.N. Martynova, T.I. Chupakhina), (345) 11
- Optically active monodentate phosphines prepared from  $\alpha$ -pinanes and *D*-mannit under enantioselective catalysis (H. Brunner, H. Leyerer), (334) 369
- Organoaluminium compounds,  $^{27}\text{Al}$  NMR spectroscopic characterisation of (R. Benn, E.

- Janssen, H. Lehmkuhl, A. Ruffinska), (333) 155
- Organolithium unusual dimer,  $\{(Me_2NCH_2CH_2NMe_2)Li[(PMe_2)CH(SiMe_3)]\}_2$ , structure of (H.H. Karsch, B. Deubelly, J. Riede, G. Müller), (342) C29
- Organometallic compounds, primary aminomethylation via *N,N*-bis(trimethylsilyl)methylthiomethylamine of (L. FioCCA, K. Fiorenza, G. Reginato, A. Ricci, P. Dembeck, G. Seconi), (341) C23
- Organosilicon chemistry, simple technique for gas kinetic studies in (I.M.T. Davidson, G. Eaton, K.J. Hughes), (346) 17
- Organosilicon compounds, alkylation and acylation of aromatic substrates by (G.A. Artamkina, S.V. Kovalenko, I.P. Beletskaya, O.A. Reutov), (329) 139
- Organosilicon derivatives of cyclic and high polymeric phosphazenes (H.R. Allcock, D.J. Brennan), (341) 231
- Organo-silicon or -boron halides, kinetically and thermodynamically controlled interaction with acylphosphine-lithium salts of (I.F. Lutsenko, V.L. Foss, Yu.A. Veits, E.G. Neganova, A.A. Borisenko), (333) C45
- Organosilicon reaction mechanisms, gas-kinetic studies of (I.M.T. Davidson), (341) 255
- Organosilicon, silicon-carbon bond, annual survey 1985 (G.L. Larson) (337) 195
- Organotrifluorosilanes and diorganodifluorosilanes, nucleophilic cleavage of Si-C bond in (M.G. Voronkov, N.F. Chernov, E.M. Perlova), (341) 225
- N*-Organyl-*N*-methylsilylamidodialkylaluminum, preparation and properties of (G. Sonnek, M. Päch, H. Bredereck, L. Oswald), (329) 31
- $[Os(N)(CH_2SiMe_3)_4][N-n-Bu_4]$ , kinetic investigation of reaction with methyl iodide of (P.A. Shapley, Z.Y. Own), (335) 269
- Palladium-catalysed synthesis of silyl-substituted enynes (M. Ishikawa, J. Ohshita, Y. Ito, A. Minato), (346) C58
- Palladium catalysed synthesis of substituted phenylethynylpentamethyldisilanes and phenylethynylheptamethyltrisilanes (K.A. Horn, R.B. Grossman, A.A. Whitenack), (332) 271
- Paramagnetic metallocenes bearing Me, Me<sub>3</sub>E (E = C, Si, Ge, Sn) substituents, syntheses and <sup>1</sup>H/<sup>13</sup>C NMR studies of (F.H. Köhler, W.A. Geike), (328) 35
- Pentacoordinate silicon compound, regular and irregular exchange mechanisms in (G. Klebe), (332) 35
- Pentamethylcyclopentadienyl- and tributylphenyl-substituted diphosphenes and phospharsenes, synthesis of (P. Jutzi, U. Meyer), (326) C6
- (Pentamethylcyclopentadienyl)trimethylsilicon, effective reagent for transfer of C<sub>5</sub>Me<sub>5</sub> rings; route to monopentamethylcyclopentadienyl trihalides of group 4 elements (G.H. Llinás, M. Mena, F. Palacios, P. Royo, R. Serrano), (340) 37
- Pentamethyldisilyl radicals, dimethylsilylene as a product of self-reaction of? (J.A. Hawari, D. Griller, W.P. Weber, P.P. Gaspar), (326) 335
- Pentaphenyldisilane carboxylic acid and pentaphenyldisilanol, base-catalysed solvolysis in ethanol/water media of (O.W. Steward, J.L. Williams), (341) 199
- Phenyl- and benzyl-group 14 element complexes, hyperconjugation in (A.N. Egorochkin, G.A. Razuvaev, M.A. Lopatin), (344) 49
- o*-Phenylenediphosphine derivatives, unexpected redox behaviour during cyclisation reactions of (K. Issleib, H. Schmidt, E. Leissring), (330) 17
- Phenylgermanes, oligomerisation by catalytic dehydrocoupling of (C. Aitken, J.F. Harrod, A. Malek, E. Samuel), (349) 285
- 1-Phenylsilatranone, molecular structure of (L. Párkányi, P. Hencsei, G. Csonka, I. Kovács), (329) 305
- 1-Phenyl-2,8,9-triazasilatranone, crystal and molecular structure of (A.A. Macharashvili, V.E. Shklover, Yu.T. Struchkov, A. Lapsiņa, G. Zelčans, E. Lukevics), (349) 23
- $(PhMe_2Si)_3CSiMe_3N=N=(CMe)N=N$ , crystal structure and formation from  $(PhMe_2Si)_3CSiMe_2I$  of (A. Alvanipour, N.H. Butrus, C. Eaborn, P.B. Hitchcock, A.I. Mansour, A.K. Saxena), (349) 29
- Phosphane-germylene spirocyclic complexes  $[XC(PMe_2)_2]_2Ge$  (X = PMe<sub>2</sub>, SiMe<sub>3</sub>), preparation, structure and dynamic behaviour of (H.H. Karsch, B. Deubelly, G. Hanika, J. Riede, G. Müller), (344) 153
- Phosphinoethylsilyl chelate ligands in manganese complexes containing Mn,H,Si three-centred bond (U. Schubert, K. Bahr, J. Müller), (327) 357
- Phosphorus-substituted butadiene systems, complexation of (R. Appel, B. Niemann, W. Schuhn, N. Siabalis), (347) 299
- Polycyclic alumina-, lithia-, magnesia-, and sodia-silazanes with intra- and inter-molecular bonds (M. Veith, W. Frank, F. Töllner, H. Lange), (326) 315
- Polycyclic methylsilanes, preparation of (F.K. Mitter, E. Hengge), (332) 47
- Polydimethylsilanes, catalysts for transformation

- to polycarbosilanes of (F. Duboudin, M. Birrot, O. Babet, J. Dunoguès, R. Calas), (341) 125
- Pyridinyl-disiloxanes and their bis-*N*-oxides, synthesis and characterisation of (M. Zeldin, J.-M. Xu, C.-X. Tian), (326) 341
- [RhCl(COD)]<sub>2</sub>/bis(diphenylphosphineethyl)tetramethyldisiloxane, spectrophotometry of the reactivity with hydrosilylation reaction substrates of (W. Duczmal, B. Marciniec, W. Urbaniak), (327) 295
- Rhodium(I) hydride complex as catalyst in regiodefined synthesis of  $\alpha$ -trimethylsilyl ketones (S. Sato, I. Matsuda, Y. Izumi), (344) 71
- [ $\mu_4$ -SiCo(CO)<sub>4</sub>]<sub>2</sub>Co<sub>4</sub>(CO)<sub>11</sub>, a carbonylcobalt cluster incorporating five-coordinate silicon (M. Van Tiel, K.M. Mackay, B.K. Nicholson), (326) C101
- Silacyclobut-1-yl and related radicals, formation of (R.A. Jackson, A.K. Zarkadis), (341) 273
- Silacyclopropanes from reactions of silenes with Wittig reagents (A.G. Brook, A. MacMillan), (341) C9
- 1-Silaisoindolinone, structural analogue of saccharine and related compounds (U. Wannagat, R. Schrader), (341) 95
- Silanes containing two triflate groups, synthesis and reactions of (K. Matyjaszewski, Y.L. Chen), (340) 7
- Silanimine, Me<sub>2</sub>Si=NSi-t-Bu<sub>3</sub>, preparation, stability and reactivity of donor adducts of (N. Wiberg, K. Schurz), (341) 145
- Silanimines, generation by photolysis of hindered azidosilanes (S.S. Zigler, L.M. Johnson, R. West), (341) 187
- Silane formation in reduction reactions of CO<sub>2</sub> to formaldehyde (P. Arya, J. Boyer, R.J.P. Corriu, G.F. Lanneau, M. Perrot), (346) C11
- Silicon-sulphur catenates,  $\sigma$ -bond conjugation in (A. Herman, B. Dreczewski, W. Wojnowski), (339) 41
- Siloxanes, synthesis and <sup>17</sup>O NMR spectra of (K. Rühlmann, U. Scheim, S.A. Evans, Jr., J.W. Kelly, A.R. Bassindale), (340) 19
- Silyl- and germyl-ketenes, reaction with silyldiazomethanes of (G.S. Zaitseva, I.F. Lutsenko, A.V. Kisin, Yu.L. Baukov, J. Lorberth), (345) 253
- Silyl and stannyl pyrimidines, synthesis of (C. Párkányi, N.S. Cho, G.S. Yoo), (342) 1
- Silyl-substituted trihydro-iron complexes, FeH<sub>3</sub>(CO)(Ph<sub>2</sub>PCH<sub>2</sub>CH<sub>2</sub>PPh<sub>2</sub>)SiR<sub>3</sub> (M. Knorr, S. Gilbert, U. Schubert), (347) C17
- Silylation of indole, multinuclear NMR of reaction products from; evidence for 4,5-disilylation (C. Biran, M. Fourtignon, B. Efedene, J. Dunoguès), (344) 145
- $\alpha$ -Silylethers, electrochemical oxidation of; effects of silion on oxidation potentials and reaction pathways (J.-i. Yoshida, T. Murata, S. Isoe), (345) C23
- Silylphosphanes of the type PSi<sub>3</sub>Me<sub>9-x</sub>(SiMe<sub>3</sub>)<sub>x</sub> ( $x = 1-6$ ), formation and <sup>31</sup>P and <sup>29</sup>Si NMR of (K. Hassler), (348) 33
- Silylphosphanes of the type PSi<sub>3</sub>Me<sub>9-x</sub>(SiMe<sub>3</sub>)<sub>x</sub> ( $x = 1-6$ ), infrared and Raman spectra of (K. Hassler), (348) 41
- $\alpha$ - and  $\beta$ -Silylstyrenes and their adducts with dichlorocarbene, <sup>1</sup>H, <sup>13</sup>C and <sup>29</sup>Si NMR of (E. Liepinš, Yu. Goldberg, I. Iovel, E. Lukevics), (335) 301
- SiR<sub>3</sub> and PR<sub>3</sub>, behaviour towards substitution of  $\eta^2$ -allyl ligands of; preparation of Co(CO)<sub>2</sub>(PR<sub>3</sub>)<sub>2</sub>SiR<sub>3</sub> from ( $\eta^3$ -C<sub>3</sub>H<sub>5</sub>)Co(CO)<sub>2</sub>-PR<sub>3</sub> (U. Schubert, J. Müller), (340) 101
- Sterically hindered  $\alpha$ -silyloxazoles, synthesis, structure and reactions of (M. Borth, K.D. Bowles, L. Schlicksupp, N.R. Natale), (330) 1
- Tetra-*t*-butyldisilene, [2 + 2] cycloaddition to imine of (M. Weidenbruch, B. Flintjer, S. Pohl, D. Haase, J. Martens), (338) C1
- Tetramesityldisilene, [2 + 1]-cycloaddition with phenyldiazomethane under formation of disilaziridines of (H. Piana, U. Schubert), (348) C19
- 1,1,3,3-Tetramethyl-1,3-cyclodisiloxane in the gas phase, mass spectrometric evidence for the formation of (J. Tamás, Á. Gömöry, I. Besenyi, O.M. Nefedov, V.N. Khabashesku, Z.A. Kerzina, N.D. Kagramanov, A.K. Maltsev), (349) 37
- 6-Thia-3,3-diphenyl-3-sila(and -germa)-bicyclo[3.1.0]hexanes, preparation of (G. Manuel, A. Faucher, P. Mazerolles), (327) C25
- 2-Thienylsilanes, fragmentation under electron impact of (S. Rozite, I. Mažeika, A. Gaukhman, N. Erchak, E. Lukevics), (348) 189
- 1-(*p*-Toluenesulphonyl)-2-propene- and 1-(trimethylsilyl)-1-(*p*-toluenesulphonyl)-2-propene, palladium-catalysed allylic oxidation of (J. Muzart, J.-P. Pete, A. Riahi), (331) 113
- Trialkyl(2-furyl)germanes, reactions with electrophilic reagents of (E. Lukevics, L. Ignatovich, Yu. Goldberg, F. Polyak, A. Gaukhman, S. Rozite, J. Popelis), (348) 11
- 2-Trialkylsilylbutadienetricarbonyliron complexes, Friedel-Crafts reactions of (M. Franck-Neumann, M. Sedrati, M. Mokhi), (326) 389
- Trialkylstannyl-substituted esters in reactions with trimethylsilyl halides, exchange vs. hydrolysis (J.C. Podesta, A.B. Chopa, A.D. Ayala, L.C. Koll), (333) 25
- Triazasilatranes, <sup>13</sup>C, <sup>15</sup>N and <sup>29</sup>Si NMR spectra

- of (Ē. Kuņce, E. Liepiņš, A. Lapsiņa, G. Zelfāns, E. Lukevics), (333) 1
- Trimethoxysilylpropylcyclopentadiene, Diels-Alder reactions of; synthesis of a silica-supported 4,5-dicyanonorborene palladium complex (J.A. Adeleke, B.L. Booth), (339) 223
- Trimethylhalosilane compounds of 1,1,3,3-tetramethyl-guanidine and 2-trimethylsilyl-1,1,3,3-tetramethylguanidine, nature of; preparation and characterisation of mono- and bis-(2-trimethylsilyl)-1,1,3,3-tetramethylguanidium halides (S.C. Chaudhry, D. Kummer), (339) 241
- $\gamma$ -Trimethylsilyl alcohols, 1,4-elimination reactions via ionic and radical processes (J.R. Hwu, B.A. Gilbert), (332) 53
- Trimethylsilyl ester radical cations, and ESR study (C.J. Rhodes), (336) 317
- Trimethylsilyl-substituted cyclopentadienylindium(I) compounds, synthesis and properties (P. Jutzi, W. Leffers, G. Müller), (334) C24
- Trimethylsilyl terminal enynes, synthesis via silylated arsonium ylide of (Y. Shen, W. Liao), (346) 181
- m*-Trimethylsilylanisole, *ipso* effect of silicon during acylation of (B. Bennetau, M. Krempp, J. Dunoguès), (334) 263
- Trimethylsilyl-*N*-aryl carbamates, solvolysis of (Z. Böcskei, D. Knauz, M. Gál, L. Szakács, B. Csákvári), (342) 159
- Trimethylsilylated steroids, analytically significant steric effects on  $^{29}\text{Si}$  NMR chemical shifts in (J. Schraml, J. Čermák, V. Chvalovský, A. Kasal, C. Bliefert, E. Krahé), (341) C6
- Trimethylsilylcyclopentadienylthallium(I) complexes, syntheses and X-ray structures of  $[\text{Tl}(\mu\text{-}\eta\text{-C}_5\text{H}_4\text{SiMe}_3)_n]$  and  $[\text{Tl}(\mu\text{-}\eta\text{-C}_5\text{H}_3(\text{SiMe}_3)_{2-1,3})_6]$  (a "doughnut" molecule) (S. Harvey, C.L. Raston, B.W. Skelton, A.H. White, M.F. Lappert, G. Srivastava), (328) C1
- Trimethylsilyl-*N,N*-diisopropyl carbamate, structure in solid phase and solution of (J. Rohonczy, D. Knauz, B. Csákvári, P. Sohár, I. Pelczér, L. Párkányi), (340) 293
- Trimethylsilylmethyl-transition metal bond, unprecedented reaction mode of (K. Itoh, T. Fukahori), (349) 227
- Trimethylsilylmethylcyclopentenones, formation and reactivity of (D.C. Billington, W.J. Kerr, P.L. Pauson), (341) 181
- Triorganyl-, tetraorganyl-, organylorganoxy- and tetraorganoxy-silanes, thermochemistry of (M.G. Voronkov, V.A. Klychnikov, T.F. Danilova, V.I. Pepekin, A.N. Korchagina, Yu.I. Khudobin, V.P. Baryshok), (345) 27
- Triphenylsilane from gas-phase diffraction, molecular structure of (B. Rozsondai, I. Hargittai), (334) 269
- Tris(hexamethyldisilylamido)uranium(IV) chloride, one-electron reduction of (S. Renaud, A. Dormond, L. Roullier, Y. Mugnier), (347) 71
- N,N,N'*-Tris(trimethylsilyl)amidines, preparation of (R.T. Boeré, R.T. Oakley, R.W. Reed), (331) 161
- Tris(trimethylsilyl)methylsilicon compounds, reactions with organolithium reagents of (D.B. Azarian, C. Eaborn, P.D. Lickiss), (330) 1
- Vanadocene isocyanate and isothiocyanate complexes, synthesis and properties of (G.A. Razuvaev, A.S. Gordetsov, V.N. Latyaeva, S.V. Zimina, S.E. Skobeleva, N.P. Makarenko, V.K. Cherkasov, V.P. Mar'in, Yu.I. Dergunov), (329) 327
- Vinyl-, allyl- and alkynyl-siloles, coordination chemistry of; synthesis and structure of  $\eta^4, \eta^2$ -allyl- and 1-vinyl-2,5-diphenylsilylcyclopentadiene complexes (F. Carré, R.J.P. Corriu, C. Guerin, B.J.L. Henner, B. Kolani, W.W.C. Wong Chi Man), (328) 15
- Vinylidene heterocyclic compounds, preparation from heterocyclic organosilicon compounds containing two heteroatoms (D. Damour, J. Pomet, L. Miginiac), (349) 43
- Zinc, cadmium and mercury alkyls and amides, bond structures in; thermolysis of Zn-C, M-N (M = Zn, Cd, Hg) bonds (I.E. Gümrükcüoğlu, J. Jeffery, M.F. Lappert, J.B. Pedley, A.K. Rai), (341) 53

## Silver

- Carbonylosmium mixed metal clusters, fluxionality in (S.R. Drake, B.F.G. Johnson, J. Lewis), (340) C31
- $[\text{Fe}_2(\eta\text{-C}_5\text{H}_5)_2(\text{CO})_{4-n}(\text{CNMe})_n]$  complexes, reactions with silver(I) salts of; crystal structure of  $[\text{Fe}(\eta\text{-C}_5\text{H}_5)(\text{CO})_2(\text{CNMe})]\text{BF}_4$  (B. Callan, A.R. Manning, F.S. Stephens), (331) 357
- Mixed metal cluster compounds,  $[\text{M}_2\text{Ru}_4(\mu\text{-CO})_{10}(\text{PPh}_3)_2]$  (M = Cu, Ag, Au), synthesis and structural characterisation of; X-ray crystal structures of  $[\text{M}_2\text{Ru}_4(\mu\text{-CO})_3(\text{CO})_{10}(\text{PPh}_3)_2]$  (M = Cu, Ag) (S.S.D. Brown, I.D. Salter, T. Adatia, M. McPartlin), (332) C6
- Monomeric and oligomeric carbodiimides with polysilane and siloxane fragments, synthesis of (G.A. Razuvaev, A.S. Gordetsov, A.P. Kozina, T.N. Brevnova, V.V. Semenov, S.E. Skobeleva, N.A. Boxer, Yu.I. Dergunov), (327) 303



- Pentacarbonylchromium complexes,  $\text{Cr}(\text{CO})_5\text{-PRH}_2$  (R = Ph, cyclohexyl), reactions with mercury(II) and silver(I) compounds of (D. Obendorf, P. Peringer, N. Müller, H. Falk), (326) 375
- Pentafluorophenyl group distortion in metal complexes, limitations of rigid-body refinement (P.G. Jones), (345) 405
- Platinum-silver clusters, synthesis and crystal structure of  $[\text{Pt}_3\text{Ag}(\mu\text{-CO})_3(\text{PPh}_3)_5]\text{ClO}_4 \cdot 2\text{H}_2\text{O}$  (S. Bhaduri, K. Sharma, P.G. Jones, C.G. Erdbrügger), (326) C46
- (Polyhalophenyl)silver(I) complexes as arylating agents; crystal structure of  $[(\mu\text{-}2,4,6\text{-C}_6\text{F}_3\text{H}_2)(\text{AuPPh}_3)_2]\text{ClO}_4$  (R. Usón, A. Laguna, E.J. Fernández, A. Mendia, P.G. Jones), (350) 129
- $[\text{Pt}(\text{C}\equiv\text{CH})_2(\text{Ph}_2\text{PCH}_2\text{PPh}_2\text{-}P)_2]$ , synthesis and formation of heterobimetallic Pt-Ag, Pt-Au, Pt-Rh, Pt-Ir, and Pt-W derivatives of (S.W. Carr, P.G. Pringle, B.L. Shaw), (341) 543
- Silver(I) complexes with carbonyl-stabilised phosphorus ylides; crystal structures of  $[\text{Ag}(\text{CH}(\text{PPh}_3)\text{C}(\text{O})\text{R})_2]^+$  derivatives (J. Vicente, M.T. Chicote, J. Fernandez-Baeza, J. Martin, I. Saura-Llamas, J. Turpin, P.G. Jones), (331) 409
- Silver(I) 2,4,5-trichlorophenolate, crystal structure of (G. Smith, E.J. O'Reilly, B.J. Reynolds, C.H.L. Kennard, T.C.W. Mak), (331) 275
- ## Sodium
- Alkali(diphosphaallyl)ferrate, synthesis and reactions of (R. Appel, W. Schuhn), (329) 179
- (Arene)tricarbonylchromium(0) complexes, preparation, structure and reactions of; crystal structure of tricarbonyl[(8,9,11,12,13,14- $\eta$ )methyl-1,2,3,4-tetrahydronaphthalene]chromium(0) (R.C. Cambie, G.R. Clark, S.R. Gallagher, P.S. Rutledge, M.J. Stone, P.D. Woodgate), (342) 315
- Carbonyliron trinuclear derivatives from reactions of disodium octacarbonyldiferrate with (dialkylamino)dichlorophosphines (R.B. King, G.S. Chorgade), (341) 407
- Cyclopentadienyl-lithium, and -sodium ion pairs in THF and hexamethylphosphoric triamide, IR spectra of (O.G. Garkusha, I.A. Garbuzova, B.V. Lokshin, G.K. Borisov), (336) 13
- Cyclopentadienylterbium(II) chlorides,  $\text{C}_5\text{H}_5\text{-YbCl}(\text{L})$ , preparation and spectral characterisation of (S.J. Swamy, H. Schumann), (334) 1
- Di- $\eta^5$ -cyclopentadienylniobium binuclear and mononuclear complexes; crystal and molecular structure of  $[\text{Cp}_2\text{NbH}_2]^-[\text{Na} \cdot \text{benzo-15-crown-5}]^+$  (D.A. Lemenovskii, I.E. Nifant'ev, I.F. Urazowski, E.G. Perevalova, T.V. Timofeeva, Yu.L. Slovokhotov, Yu.T. Struchkov), (342) 31
- Ditropylniobium complexes by sodium reduction of  $[\text{Mo}(\text{CO})_3(\eta\text{-C}_7\text{H}_7)][\text{BF}_4]$ ; X-ray crystal structure of the ditropyl complex  $[(\text{Mo}(\text{CO})_3)_2(\eta^6, \eta^6\text{-C}_{14}\text{H}_{14})]$  (H. Adams, N.A. Bailey, D.G. Willett, M.J. Winter), (333) 61
- Group 1 tetrameric and hexameric aggregates, applications of point charge and HSE force field models to (R.J. Busby, H.L. Steel), (336) C25
- Indenylsodium  $\cdot N,N,N',N'$ -tetramethyl-1,2-diaminoethane,  $\eta^1/\eta^2$  infinite chain X-ray structure of (C. Schade, P.v.R. Schleyer, P. Gregory, H. Dietrich, W. Mahdi), (341) 19
- $\text{Na}_6[(\text{PhSiO}_{1.5})_{22}\text{Co}_3\text{O}_6] \cdot 7\text{H}_2\text{O}$ , synthesis and crystal structure of (Yu.E. Ovchinnikov, V.E. Shklover, Yu.T. Struchkov, M.M. Levitsky, A.A. Zhdanov), (347) 253
- 1-Phenyl-3-biphenyl-2-azaallyl-lithium and -sodium, ion pairing and kinetics of *cis,trans* to *trans,trans* isomerisation in (R.N. Young), (338) 139
- Tetramethyl(alkyl- and alkenyl)-cyclopentadienylmolybdenum complexes, preparation of (K.H. Dötz, J. Rott), (338) C11
- ## Sulphur
- ( $\mu\text{-}\sigma, \pi$ -Acetylide) ( $\mu$ -alkane- and  $\mu$ -arene-thiolate)bis(tricarbonyliron) complexes, synthesis and reactivity of (D. Seyferth, J.B. Hoke, D.R. Wheeler), (341) 421
- 2-(2-alkenyl)thiazolidines, regioselective synthesis from thiazolines and allylic Grignard reagents of (J. Ladurant, F. Barbot, L. Miginiac), (335) 283
- Alkyl- and aryl-thioindanes, preparation and properties of (G.G. Hoffmann), (338) 305
- Alkyl- and trimethylsilyl-furanes, UV photoelectron spectroscopy and quantum-mechanical study of (T. Veszprémi, L. Nyulász, J. Nagy), (331) 175
- Allylic lithium reagents with allyl groups partly incorporated into carbocyclic rings, preparation of (C.G. Screttas, I.C. Smonou), (342) 143
- Aminoiminomethanesulphinic acid (thiourea dioxide) used under phase transfer conditions for generating organochalcogenate anions; synthesis of sulphides, selenides and tellurides (J.V. Comasseto, E.S. Lang, J.T.B. Ferreira, F. Simonelli, V.R. Correia), (334) 329

- 4-Amino-5-mercapto-3-trifluoromethyl-1,2,4-triazole complexes with monoorganomercury and diorganothallium; crystal structure of dimethyl(4-amino-5-mercapto-3-trifluoromethyl-1,2,4-thallium(III)) Y.P. Mascarenhas, I. Vencato, M.C. Carrascal, J.M. Varela, J.S. Casas, J. Sordo, (344) 137
- (Arene)tricarbonylchromium(0) complexes, preparation, structure and reactions of; crystal structure of tricarbonyl[(8,9,11,12,13,14- $\eta$ )methyl-1,2,3,4-tetrahydronaphthalene]chromium(0) (R. Cambie, G.R. Clark, S.R. Gallagher, P.S. Rutledge, M.J. Stone, P.D. Woodgate), (342) 315
- Arsinodithiadiimido eight-membered heterocycle, *t*-BuAs(NSN)<sub>2</sub>As-*t*-Bu, carbonylmetal complexes of (M. Herberhold, K. Schamel), (346) 13
- [AuX<sub>3</sub>(ylide)] and *trans*-[Au(C<sub>6</sub>F<sub>5</sub>)X<sub>2</sub>(ylide)] (X = halide or pseudohalide) neutral complexes, synthesis and reactivity of; X-ray structure of (R. Usón, A. Laguna, M. Laguna, M.C. Gimeno, A. de Pablo, P.G. Jones, K. Meyer-Bäse, C.F. Erdbrügger), (336) 461
- Benzenethiolato- and *N*-phthalimido-metal carbonyl complexes, synthesis of (P.M. Treichel, P.C. Nakagaki, K.J. Haller), (327) 327
- Bis(pentamethylcyclopentadienylcarbonyl-cobalt) and -rhodium) complexes, stepwise formation of dinuclear chalcogenic complexes with elemental sulphur, selenium or tellurium from (H. Brunner, N. Janietz, W. Meier, J. Wachter, E. Herdtweck, W.A. Herrmann, O. Serhadli, M.L. Ziegler), (347) 237
- N,N*-Bis(phosphinomethyl)- and *N*-phosphinomethyl-*N*-thiomethyl- $\alpha$ -amino unsymmetrically-substituted acids, synthesis of (K. Kellner, W. Hanke), (326) C9
- Bis- $\mu$ -(*S*-alkyl)hexacarbonyldiiron binuclear complexes, preparation by decarbonylation reactions of dithiocarbonates with nonacarbonyldiiron of (A. Lagadee, R. Dabard, A. Le Rouzic, H. Patin), (326) 381
- Bis(2,4,6-tri-*t*-butylphenyl)germylene and bis(2,4,6-tri-*t*-butylphenyl)germathione, isomerisation by spontaneous C,H insertion of (L. Lange, B. Meyer, W.-W. du Mont), (329) C17
- Bis(trimethylsilyl)sulphur diimide, reactions with dodecatruthenium of; X-ray analysis of Ru<sub>2</sub>(CO)<sub>4</sub>[ $\mu$ -Me<sub>3</sub>Si-NSN-SiMe<sub>3</sub>]<sub>2</sub> (A. Gieren, T. Hübner, J. Wu, M. Herberhold, W. Bühlmeier), (329) 105
- (*t*-Butylthio)(hydrido)nonacarbonyltriiron, Fe<sub>3</sub>(CO)<sub>9</sub>( $\mu_2$ -H)( $\mu_3$ -*S*-*t*-Bu), kinetic investigations of deprotonation by amines of (L.-R. Frank, A. Winter, G. Huttner), (335) 249
- Carbo(di)thioatotriphenyltin complexes, stereochemistry of; crystal structures of [Ph<sub>3</sub>-Sn(SCSN(CH<sub>2</sub>)<sub>5</sub>)] and [Ph<sub>3</sub>Sn(SCON(CH<sub>2</sub>)<sub>4</sub>O)] (S. Chandra, B.D. James, R.J. Magee, W.C. Patalinghug, B.W. Skelton, A.H. White), (346) 7
- Carbon monoxide replacement by trimethylphosphite, detection of motions of ancillary bridging ligands during (A. Darchen, E.K. Lhadi, H. Patin), (327) C37
- Carbon sulphide and carbon selenide containing dinuclear platinum and palladium complexes with M( $\mu$ -E)M'(CE') and M( $\mu$ -CEE')M' structural units (M, M' = Pd, Pt; E, E' = S, Se) (H. Werner, M. Ebner, H. Otto), (350) 257
- Carbonyl-molybdenum and -rhenium cationic complexes, with *N*-heterocycles and tetra-thiafulvalene, preparation of (M. Appel, W. Sacher, W. Beck), (333) 237
- Carbophilic vs. thiophilic attack in reactions of metallated aromates and heteroaromates with carbon disulphide (H.D. Verkruijse, L. Brandsma), (332) 95
- Chalcocarbonyl complexes, OsCl<sub>2</sub>(CO)(CE)-(PPH<sub>3</sub>)<sub>2</sub> (E = S, Se, Te), synthesis and structures of (G.R. Clark, K. Marsden, C.E.F. Rickard, W.R. Roper, L.J. Wright), (338) 393
- Chalcocarbonylchromium complexes, arene displacement by tertiary phosphorus ligands in (A.A. Ismail, I.S. Butler), (346) 185
- [( $\eta$ -C<sub>5</sub>H<sub>5</sub>)(CO)<sub>2</sub>FeC(S)SMLn] (MLn = Fe( $\eta$ -C<sub>5</sub>H<sub>5</sub>)(CO)<sub>2</sub>, Re(CO)<sub>5</sub>), reactions with organic electrophiles of (L. Busetto, S. Bordoni, V. Zanotti), (339) 125
- C<sub>5</sub>H<sub>5</sub>Rh(=C=CHR)(PPr<sub>3</sub>-i), reactivity towards diazomethanes, sulphur, selenium and tellurium of; formation of unstable chalcogenoketenes in coordinated transition metals (J. Wolf, R. Zolk, U. Schubert, H. Werner), (340) 161
- (C<sub>5</sub>Me<sub>5</sub>)<sub>2</sub>Mo<sub>2</sub>P<sub>x</sub>S<sub>y</sub> complexes (*x* = 2, 4; *y* = 5 - *x*), P/S ligands in (H. Brunner, U. Klement, W. Meier, J. Wachter, O. Serhadli, M.L. Ziegler), (335) 339
- (C<sub>5</sub>R<sub>5</sub>)<sub>2</sub>M<sub>2</sub>(CO)<sub>4</sub> (R = H, Me; M = Cr, Mo, W), reactivity of the M $\equiv$ M bonds towards condensed chalcogenide vapours of (K. Endrich, E. Guggolz, O. Serhadli, M.L. Ziegler, R.P. Korswagen), (349) 323
- CS<sub>2</sub>W complexes, activated addition of alkynes to and formation of tetrahedral methylidyne-dicobaltungsten with (W.A. Schenk, D. Kuemmerle, C. Burschka), (349) 183
- CS<sub>2</sub>W complexes, electrophilic and nucleophilic attack on (W.A. Schenk, D. Kuemmerle, T. Schwietzke), (349) 163

- Cyclopentadienylcobalt(III) complexes with dithiocarbamate and xanthate ligands, preparation, spectra and fluxional behaviour of; crystal structure of  $[\text{Co}(\eta\text{-C}_5\text{H}_5)(\text{I})(\text{S}_2\text{-CNEt}_2)]$  (E.P. Cullen, J. Doherty, A.R. Manning, P. McArdle, D. Cunningham), (348) 109
- Cyclopentadienylation of pentafulvenes with stannyl- and nitrosyl-carbonylvandium complexes (D. Rehder, D. Wenke), (348) 205
- Cyclopentadienylruthenium complexes with sulphur donor ligands; comparative study of reactivity of  $\text{Ru}(\eta\text{-RC}_5\text{H}_4)\text{Cl}(\text{L})_2$  ( $\text{R} = \text{H}, \text{CH}_3, \text{CH}_3\text{CO}; \text{L} = \text{CO}, \text{Ph}_2\text{PCH}_2\text{CH}_2\text{-PPh}_2/2, \text{P}(\text{CH}_2\text{CH}_2\text{CN})_3$ ) towards anionic (S-S) donor ligands (A. Gutiérrez Alonso, L. Ballister Reventós), (338) 249
- Diamagnetic trigonal-bipyramidal cluster, ( $\eta\text{-MeC}_5\text{H}_4$ )<sub>5</sub>V<sub>5</sub>( $\mu_3\text{-S}$ )<sub>6</sub>, synthesis and molecular structure of (I.L. Eremenko, A.S. Katugin, A.A. Pasynskii, Yu.T. Struchkov, V.E. Shklover), (345) 79
- Di- and tri-organotin(IV) diethyldithiophosphinates, synthesis and characterisation of; crystal and molecular structure of bis(diethyldithiophosphinato)dimethyltin(IV),  $\text{Me}_2\text{Sn}(\text{S}_2\text{PEt}_2)_2$  (C. Silvestru, I. Haiduc, S. Klima, U. Thewalt, M. Gielen, J.J. Zuckerman), (327) 181
- Di- and tri-organotin(IV) diphenyldithiophosphinates, preparation and characterisation of (C. Silvestru, F. Ilies, I. Haiduc, M. Gielen, J.J. Zuckerman), (330) 315
- Dibenzozhalcogeno-silonines, transannular donor-acceptor interaction in; crystal and molecular structure of 13,13-diphenyl-8,13-dihydro-5*H*-dibenzo[*d, g*]1.2.6]dithiasilonine (Yu.E. Ovchinnikov, V.E. Shklover, Yu.T. Struchkov, V.F. Travun', O.G. Rodin, V.I. Rokitskaya), (347) 33
- Dicyclopentadienyltitanium alkoxides, thiolates and selenolates, preparation of; crystal structures of  $(\text{C}_5\text{Me}_5)_2\text{Lu}(\mu\text{-S}^1\text{C}_4\text{H}_9)_2\text{Li}(\text{THF})_2$  and  $(\text{C}_5\text{H}_5)_2\text{Lu}(\mu\text{-SeC}_6\text{H}_5)_2\text{Li}(\text{THF})_2$  (H. Schumann, I. Albrecht, M. Gallagher, E. Hahn, C. Muchmore, J. Pickardt), (349) 103
- Di- $\eta^5$ -cyclopentadienylthiophenolatoammimolybdenum(IV) hexafluorophosphate solvate,  $[\text{Mo}(\eta^5\text{-C}_5\text{H}_5)_2(\text{NH}_3)(\text{SC}_6\text{H}_5)]\text{PF}_6 \cdot (\text{CH}_3)_2\text{CO}$ , X-ray crystal structure (M.J. Calhorda, M.A.A.F. de C.T. Carrondo, M.H. Garcia, M.B. Hursthouse), (342) 209
- Di- $\eta^5$ -cyclopentadienyl-tungsten(IV) and -molybdenum(IV) crown ether complexes, synthesis and electrochemistry of (E. Fu, M.L.H. Green, V.J. Lowe, S.R. Marder), (341) C39
- Dicyclopentadienyluranium(IV) complexes containing tetrahydroborate, amido, pivalate and dithiocarbamate ligands (A.L. Arduini, J. Malito, J. Takats, E. Ciliberto, I. Fragala, P. Zanella), (326) 49
- Dienylmetal compounds, synthesis and reactivity of  $[\text{C}_5\text{H}_5\text{Fe}(\text{SMe}_2)_3]\text{PF}_6$  (N. Kuhn, E. Zauder), (340) C1
- Dihalogeno(organylthio)alane, preparation and properties of (G.G. Hoffmann), (335) 143
- Diphenylbis(isothiocyanato)bis(hexamethylphosphoramide)-tin(IV) and -lead(IV), crystal and molecular structures of (M. Onyszczuk, I. Wharf, M. Simard, A.L. Beauchamp), (326) 25
- Dithioesters,  $\text{S}=\text{C}(\text{Me})\text{SEt}$  and  $\text{S}=\text{C}(\text{Ph})\text{SMe}$ , carbonyl insertion into a C-S bond and complex dimerisation during reactions with carbonyliron complexes of (G.J. Kruger, A. van A. Lombard, H.G. Raubenheimer), (331) 247
- Dithiophosphate rhodium(III) complex formation from  $[(\eta^5\text{-C}_5\text{Me}_5)(\eta^1\text{-PSPPh}_2)\text{RhPh}_2\text{PS}]$ ; crystal structure of  $[(\eta^5\text{-C}_5\text{Me}_5)(\eta^1\text{-PSPPh}_2)\text{RhPh}_2\text{SPS}]$  (M.T. Pinillos, M.P. Jarauta, D. Carmona, L.A. Oro, M.C. Aprea, C. Foces-Foces, F.H. Cano), (345) C13
- cis*- and *trans*- $\text{Fe}(\text{CyNC})_4(\text{SPh})_2$ , bis-thiolate precursors of  $(\text{CyNC})_4\text{Fe}(\text{SPh})_2\text{Mo}(\text{CO})_4$ , synthesis of (L.D. Rosenhein, J.W. McDonald), (345) 143
- Ferrocenylchalcogenides, synthesis of (M. Herberhold, P. Leitner), (336) 153
- Ferrocenylmethylthiosuccinic acids, preparation and application to resolution of tertiary ferrocenylcarbinols of (R. Dabard, B. Miskiewicz, H. Patin, J. Wasielewski), (328) 185
- Ferrodithiocarboxylic acid, synthesis of (A. Mayr, H. Stolzenberg, W.P. Fehlhammer), (338) 223
- Five-coordinate carbyne-tungsten complex with a 1,2-dithiolene ligand, synthesis of (A.C. Filippou, E.O. Fischer), (330) C1
- From 2-thienylcopper couplings to trimethylsilyl-promoted organocopper additions (E.-L. Lindstedt, M. Nilsson, T. Olsson), (334) 255
- Halogenotricarbonylrhenium(I) complexes of sterically hindered dithioethers, synthesis and dynamic behaviour of (E.W. Abel, R. Corben, I. Moss, K.G. Orrell, N.R. Richardson, V. Šik), (344) 343
- Heterocumulene insertion into M-H bonds of  $(\text{C}_5\text{H}_5)_2\text{M}(\text{L})\text{H}$  ( $\text{M} = \text{Nb}, \text{Ta}; \text{L} = \text{CO}, \text{PMe}_2\text{Ph}$ ) (J.-F. Leboeuf, J.-C. Leblanc, C. Moise), (335) 331
- Heterometallic di- and tri-nuclear complexes with bridging thiocarbonyl and methylthiocarbonyl ligands; crystal and molecular structure of

- $C_5H_5(PMe_2)(\mu-CO)[\mu-CSMn(CO)_2C_5H_5]Mn(CO)C_5H_5$  (H. Werner, O. Kolb, P. Thometzek), (347) 137
- Hexamethyldistannane, synthesis from bis(trimethylstannyl)sulphide of (G. Capozzi, S. Menichetti, A. Ricci, M. Taddei), (344) 285
- (Hydridotris(3,5-dimethylpyrazol-1-yl)borato)tricarbonylmolybdenum, heat- and air-stable 17-electron radical and its sulphur-bridged dimer, formation of (K.-B. Shiu, L.-Y. Lee), (348) 357
- Hydrochalcogenide and hydride-hydrochalcogenide complexes of rhodium with the tripodal tetraphosphine, tris(2-diphenylphosphinoethyl)phosphine) (M. Di Vaira, P. Stopponi, M. Peruzzini), (333) C53
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, preparation and reactive behaviour of (R.A. Fischer, W.A. Herrmann), (330) 377
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, synthesis of (R.A. Fischer, H.-J. Kneuper, W.A. Herrmann), (330) 365
- Iridium-initiated C-C coupling of malonodinitrile with  $CS_2$ ; synthesis and crystal structure of  $[H_2Ir(PPhMe_2)_4]^+[HS(S)CC(CN)_2]^-$  (A. Behr, W. Keim, W. Kipshagen, D. Vogt, E. Herdtweck, W.A. Herrmann), (344) C15
- Iron atom discrimination by carbon in ligand fragmentation around a Fe-Fe bond; crystal structure of  $[\mu-\eta^3-RCH_2OC(S)SMcFe_2(CO)_5-P(OMe)_3]$  (A. Darchen, E.K. Lahdi, D. Grandjean, A. Mousser, H. Patin), (342) C15
- Iron-functionalised diphosphiranes,  $(C_5Me_5)(CO)_2MPCH_2P-2,4,6-t-Bu_3C_6H_2$  ( $M = Fe, Ru$ ), preparation by reactions of diphosphenyl complexes with  $Me_2S(O)=CH_2$  (L. Weber, E. Lücke), (327) C63
- Iron(0) interaction with  $CO_2$ , COS and  $CS_2$ , ab initio calculations on  $Fe(CO)_2(PH_3)_2(\eta^2-CO_2)$ ,  $Fe(CO)_2(PH_3)_2(\eta^2-COS)$ ,  $Fe(CO)_2(PH_3)_2(\eta^2-CS_2)$  and  $Fe(PH_3)_4(\eta^2-CO_2)$  (M. Rosi, A. Sgamellotti, F. Tarantelli, C. Floriani), (332) 153
- Iron-molybdenum and iron-tungsten sulphido clusters containing hydrazido(2-) ligands; synthesis and X-ray crystal and molecular structure of  $[\{Fe(CO)_3(\mu_3-S)\}_2Mo(NNMe_2)_2(PPh_3)](Fe-Fe) \cdot CH_2Cl_2$  (P.T. Bishop, J.R. Dilworth, S. Morton, J.A. Zubietta), (341) 373
- Isocyanomethylenephosphorane, [3 + 2] cycloaddition reactions with heteroallenes of (W.P. Fehlhammer, G. Zinner, M. Bakola-Christianopoulou), (331) 193
- Keto-stabilised phosphorus ylide gold(I) and gold(III) complexes (J. Vicente, M.T. Chicote, I. Saura-Llamas, J. Turpin, J. Fernandez-Baeza), (333) 129
- Macrocyclic thioether synthesis and monoalkylation of dithioles with  $[Fe^{II}(CO)_2]$  fragments as templates; X-ray structure of dibenzo-18-crown-S6 (D. Sellmann, P. Frank, F. Knoch), (339) 345
- ortho*-Manganation of substituted acetophenones and heteroaromatic methyl ketones; crystal structures of cyclometallated acetylthiophene derivatives from (J.M. Cooney, L.H.P. Gommans, L. Main, B.K. Nicholson), (349) 197
- Mercaptide-chelated porphyrins, axial ligation control by conformation and environmental effects in; synthetic compounds for cytochrome P-450 (F. Niedercorn, H. Ledon, I. Tkatchenko), (328) C7
- $\alpha$ -Metallation of vinylic ethers and thioethers, convenient procedures for (H.D. Verkruisje, L. Brandsma, P. von R. Schleyer), (332) 99
- Methylation of aromatics with  $Me_3S^+$ ,  $MeSe^+$  and  $Me_3Te^+$  in superacid media (M. Laali, H.Y. Chen, R.J. Gerzina), (348) 199
- Mono- and bi-dentate xanthate complexes,  $\eta^5-C_5R_5Fe(CO)(\eta^1-SC(S)OEt)L$  and  $\eta^5-C_5R_5Fe(\eta^2-S_2COEt)L$  ( $R = H, Me; L = PBu_3, PPh_3, P(OEt)_3, P(OPh)_3$ ), synthesis, characterisation and electrochemistry of (M. Morán, I. Cuadrado, J.R. Masaguer, J. Losada), (335) 255
- Monocarbonylrhodium(I) complexes with S-S donor ligands, reactions with  $I_2$  and  $CH_3I$  of (J.V. Heras, E. Pinilla, P. Ovejero), (332) 213
- Neutral and cationic carbonylmanganese-tetramethylthiourea complex; crystal structure of *cis*- $[Mn(CO)_4(SC[N(CH_3)_2])_2]ClO_4$  (C. Carriedo, M.V. Sanchez, G.A. Carriedo, V. Riera, X. Solans, M.L. Valin), (331) 53
- Organobis(thiophenolato)bismuth(III) complexes, synthesis, spectroscopic characterisation and microbiological effects of (T. Klapötke), (331) 299
- Organo-chromium and -tungsten complexes containing functional germylene ligands (A. Castel, P. Rivière, J. Satgé, M. Ahbala), (331) 11
- Organocobaloximes, regioselective reactions with *N*-halogeno compounds of (M.D. Johnson, G.M. Lampman, R.W. Koops, B.D. Gupta), (326) 281
- Organoiron sulphanes,  $(\mu-S_x)[FeCp(CO)_2]_2$  ( $x = 3, 4$ ), reactions of; synthesis of cyclopentadienyldicarbonyliron S-bonded monothiocarboxylates,  $FeCp(CO)_2(SCOR)$  (M.A. El-Hinnawi, A.M. Al-Ajlouni), (332) 321

- Organometallic compounds, primary amino-methylation via *N,N*-bis(trimethylsilyl)methylthiomethylamine of (L. Fiocca, K. Fiorenza, G. Reginato, A. Ricci, P. Dembech, G. Seconi), (341) C23
- Organorhenium(V) and organovanadium(V) sulphur-containing oxides, preparation of (J. Kulpe, E. Herdtweck, G. Weichelbaumer, W.A. Herrmann), (348) 369
- Organotin pentacoordination, polytopal dominance of square pyramidal geometry in; crystal structure of tribenzyl(2-thiolatopyridine-*N*-oxide)tin(IV) (S.W. Ng, C. Wei, V.G. Kumar Das, T.C.W. Mak), (326) C61
- Organotin(IV) compounds with *N*-aryl-2-mercaptoacetamides preparation and characterisation of (S.C. Dixit, R. Sharan, R.N. Kapoor), (332) 135
- Organylgermanium sesquichlorochalcogenides, (RGe)<sub>2n</sub>Y<sub>3n-1</sub>Cl<sub>2</sub> (*n* = 1-3; Y = O, S, Se; R = *t*-Bu, mesityl), preparation and X-ray analysis of (H. Puff, K. Braun, S. Franken, T.R. Kök, W. Schuh), (335) 157
- $\mu$ -Oxobis(triorgano-antimony- and -bismuth-sulphonates), preparation of; crystal structure of  $\{[(CH_3)_3Sb(OH)_2O](O_3SC_6H_5)_2\}$  (R. Rütther, F. Huber, H. Preut), (342) 185
- Palladium tetrafluoroborate complexes of 1,1'-bis(alkyl- or aryl-thio)- and 1,1'-bis(diphenylphosphino)-ferrocenes; bond formation between Fe and Pd in (M. Sato, M. Sekino, S. Akabori), (344) C31
- Pentacarbonylchromium(0) deprotonated sulphur donor complexes, reactions with carbon disulphide or carbon diselenide of (H.G. Raubenheimer, S. Lotz, G.J. Kruger, A.v.A. Lombard, J.C. Viljoen), (336) 349
- Pentacarbonyl-5-phenyl-5-phospho-2,8-dithia-1-stannabicyclo[3.3.0<sup>1.5</sup>]octanechromium(0)·pyridine, crystal structure of (K. Jurkschat, A. Tzschach, J. Meunier-Piret, M. Van Meerssche), (349) 143
- Pentafluorophenyl(dithiocarbamate)gold(III) complexes, crystal and molecular structure of (C<sub>6</sub>F<sub>5</sub>)<sub>2</sub>Au{S<sub>2</sub>CN(CH<sub>2</sub>Ph)<sub>2</sub>} (R. Usón, A. Laguna, M. Laguna, M. Luz Castilla, P.G. Jones, K. Meyer-Bäse), (336) 453
- Pentamethylcyclopentadienyloxomolybdenum sulphides, preparation and reactivity of (H. Brunner, H. Kauermann, J. Pfauntsch, J. Wachter, J.H. Enemark, C.G. Young), (331) 45
- Pentamethylcyclopentadienyloxopentasilphidovanadium, CpVO(S<sub>5</sub>), preparation and structure of (M. Herberhold, M. Kuhnlein, M.L. Ziegler, B. Nuber), (349) 131
- 2-Phenyl-1,3-dithia-2-stibolane, synthesis and structure of (H.M. Hoffmann, M. Dräger), (329) 51
- Ph<sub>2</sub>Te(S<sub>2</sub>P(OEt)<sub>2</sub>)<sub>2</sub> and two modifications of Ph<sub>2</sub>Te(S<sub>2</sub>CNEt<sub>2</sub>)<sub>2</sub>, crystal structures of (D. Dakternieks, R. Di Giacomo, R.W. Gable, B.F. Hoskins), (349) 305
- Platinum and rhodium complexes with diphenylphosphino(methylthio)methane as a monodentate, chelated or bridging ligand, preparation of (G.K. Anderson, R. Kumar), (342) 263
- Platinum(IV) derivatives of macrocyclic thioethers, preparation and dynamic behaviour of (E.W. Abel, P.D. Beer, I. Moss, K.G. Orrell, V. Šik, P.A. Bates, M.B. Hursthouse), (341) 559
- $[(PPh_3)_2PdFe(SC_5H_4)_2] \cdot 0.5C_6H_5CH_3$  unusual heterobinuclear complex containing a weak Fe-Pd bond, structure of (M. Cowie, R.S. Dickson), (326) 269
- (RC<sub>5</sub>H<sub>4</sub>)<sub>2</sub>Cr( $\mu_3$ -S)<sub>2</sub>( $\mu_4$ -S)M<sub>2</sub>L<sub>*n*</sub> clusters, (M = CO, Ni), effect of electronic structure on geometry of (I.L. Eremenko, A.A. Pasynskii, A.S. Katuvin, B. Oraszakhatov, V.L. Shirokii, V.E. Shklover, Yu.T. Struchkov), (345) 177
- Rhodium binuclear compounds bridged by bifunctional 2-mercaptothiazolinate anion (M. Cowie, T. Sielisch), (348) 241
- Rh<sub>2</sub>( $\mu$ -SR)<sub>2</sub>(CO)<sub>4</sub> and Rh<sub>2</sub>( $\mu$ -SR)<sub>2</sub>(CO)<sub>2</sub>(PR'<sub>3</sub>)<sub>2</sub> complexes, easy preparation on a large scale of (P. Kalck, F. Senocq, M. Siani, A. Thorez), (350) 77
- [RSFe<sub>2</sub>(CO)<sub>6</sub>]<sub>2</sub>S, preparation and structural characterisation of; route to Fe-S clusters containing an S atom coordinated to four metal atoms (L.-C. Song, M. Kadiata, J.-T. Wang, R.-J. Wang, H.-G. Wang), (340) 239
- $[Ru(SC_6F_5)_2\{P(C_6H_5)_2(H_4C_6H-2)\}_2]$ , preparation and X-ray structure of (R.-M. Catala, D. Cruz-Garriz, P. Terreros, H. Torrens, A. Hills, D.L. Hughes, R.L. Richards), (328) C40
- Silicon-sulphur catenates,  $\sigma$ -bond conjugation in (A. Herman, B. Dreczewski, W. Wojonowski), (339) 41
- Skew-trapezoid bipyramidal diorganotin/bischelates; crystal structure of dimethylbis(2-pyridinethiolato-*N*-oxide)tin(IV) (S.W. Ng, C. Wei, V.G. Kumar Das, T.C.W. Mak), (334) 295
- Stibinidene complexes, oxidative addition of thioles to (A. Lombard, G. Huttner, K. Evertz), (350) 243
- Sulphur and selenium containing heterodisubstituted ferrocenes, synthesis of; formation of 1,1'-dithiol- and 1,1'-diselenol-ferrocenes (R. Broussier, A. Abdulla, B. Gautheron), (332) 165

- Sulphur-ylide-palladium complexes, synthesis and reactions of (M.C. Cheng, S.M. Peng, L.J.B. Lin, B.H.H. Meng, C.H. Liu), (327) 275
- (Tertiary phosphine)gold(I) substituted imidazoles or pyrazolones, reactions with acidic reagents of; crystal structure of 1-methyl-2-(cyclohexylphosphinegoldthiolato)imidazole · 2benzimidazole (F. Bonati, A. Burini, B.R. Pietroni, E. Giorgini, B. Bovio), (344) 119
- Tetracarbonyl-chromium, -molybdenum and -tungsten complexes of dithioethers, steric influences on sulphur inversion barriers in (E.W. Abel, I. Moss, K.G. Orrell, C. Šik), (326) 187
- Tetrakis(trimethyl- $\mu$ -S,S,N-thiocyanatoplatinum,  $[(\text{Pt}(\text{CH}_3)_3\text{SCN})_4]$ , crystal structure of (B. Vance), (336) 441
- Tetra(*p*-methoxyphenyl)tin(IV) and tetra(*p*-methylthiophenyl)tin(IV), crystal and molecular structures of (I. Wharf, M.G. Simard), (332) 85
- Tetramethyl(alkyl- and alkenyl)cyclopentadienylmolybdenum complexes, preparation of (K.H. Dötz, J. Rott), (338) C11
- 6-Thia-3,3-diphenyl-3-sila(and -germa)-bicyclo[3.1.0]hexanes, preparation of (G. Manuel, A. Faucher, P. Mazerolles), (327) C25
- Thiagermetane,  $\text{Me}_2\text{GeCH}_2\text{SCH}_2$ , dithiagermolane,  $\text{Me}_2\text{GeCH}_2\text{SSCH}_2$  and thiagermetane dioxide,  $\text{Me}_2\text{GeCH}_2\text{SO}_2\text{CH}_2$  thermolysis, pyrolysis and photolysis of (J. Barrau, G. Rima, M. El-Amine, J. Satgé), (345) 39
- 2-Thienylsilanes, fragmentation under electron impact of (S. Rozite, I. Mažeika, A. Gaukhan, N. Erchak, E. Lukevics), (348) 189
- Thiobis(*t*-butylphosphido)hexacarbonyl diirons,  $\text{Fe}_2(\text{CO})_6(\text{Bu}^t\text{P})_2\text{S}_x$  ( $x = 2,3$ ), synthesis and characterisation of (M.A. El-Hinnawi, E.J. Wucherer, R.L. De, H. Vahrenkamp), (329) 381
- Thioether-thiolate iron, molybdenum and ruthenium complexes, structure, stereoisomerism and reactivity of (D. Sellmann, G. Binker, M. Moll, E. Herdtweck), (327) 403
- N*-Thionitrosodimethylamine-rhodium(I), -rhodium(III) and -ruthenium(II) cationic complexes, preparation and reactions of (G. Tresoldi, S. Sergi, S. Lo Schiavo, P. Piraino), (328) 387
- Thiophosphinito-bridged rhodium complexes, preparation and properties of; crystal structure of  $[\text{Rh}_2(\mu\text{-SPPPh}_2)_2(\text{COD})_2]$  (M.T. Pinillos, M.P. Jarauta, L.A. Oro, A. Tiripicchio, M. Tiripicchio-Camellini), (339) 181
- 1-(*p*-Toluenesulphonyl)-2-propene- and 1-(trimethylsilyl)-1-(*p*-toluenesulphonyl)-2-propene, palladium-catalysed allylic oxidation of (J. Muzart, J.-P. Pete, A. Riahi), (331) 113
- Transition metal coordinated thioaldehydes, selenoaldehydes and seleno ketones, kinetic investigations of (H. Fischer), (345) 65
- Tricarbonylchromium-bithiophene complexes, cyclic voltammetric investigations of (M. Dietrich, J. Heinze, D. Andrejewski, W.A. Herrmann), (329) 343
- Tricarbonylcyclopentadienylmethylthiolatungsten(II), reactions with mono- and dicyanoacetylenes of, formation of phosphorus ylide  $[(\text{C}_5\text{H}_5)(\text{CO})_2\text{W}(\text{CH}(\text{P}(\text{C}_6\text{H}_5)_3\text{C}(\text{CN})\text{SCH}_3))]$ ; crystal structure of  $[(\text{C}_5\text{H}_5)(\text{CO})_2(\text{P}(\text{C}_6\text{H}_5)_3)\text{W}(\text{C}(\text{O})\text{C}(\text{CN})=\text{CHSCH}_3) \cdot \text{CH}_2\text{Cl}_2]$  (M.M. Kubicki, R. Kergoat, H. Scordia, L.C. Gomes de Lima, J.E. Guerschais, P. L'Haridon), (340) 41
- Tricarbonyl(methylbenzo[*b*]thiophene)chromium complexes, synthesis and lithiation of (J.L. Davidson, H. Patel, P.N. Preston), (336) C44
- Tristannachalcogena cyclic compounds, preparation and structures of (H. Puff, B. Breuer, W. Schuh, R. Sievers, R. Zimmer), (332) 279
- Tris(trimethyltin) tetrathiophosphate  $(\text{Me}_3\text{SnS})_3\text{-PS}$ , preparation, vibrational spectra and crystal structure of (A.-F. Shihada, F. Weller), (342) 177
- Vanadocene isocyanate and isothiocyanate complexes, synthesis and properties of (G.A. Razuvaev, A.S. Gordetsov, V.N. Latsyaeva, S.C. Zimina, S.E. Skobeleva, N.P. Makarenko, V.K. Cherkasov, V.P. Mar'in, Yu.I. Dergunov), (329) 327

## Tantalum

- Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167
- Dicyclopentadienyltantalum complex, stereostable centrometallated chirality in (G. Bonnet, O. Lavastre, J.C. Leblanc, C. Moise, G. Vitulli), (347) C21
- Dimethyl{tris(trimethylsilyl)methyl}silanolatotantalum(V), -chromium(III) and -manganese(II), formation of (H. Blanchard, M.B. Hursthouse, A.C. Sullivan), (341) 367
- Heterocumulene insertion into M-H bonds of  $(\text{C}_5\text{H}_5)_2\text{M}(\text{L})\text{H}$  ( $\text{M} = \text{Nb, Ta}$ ;  $\text{L} = \text{CO, PMe}_2\text{Ph}$ ) (J.-F. Leboeuf, J.-C. Leblanc, C. Moise), (335) 331
- Hexacarbonyl-group 5 metal derivatives, reactions with 9,10-phenanthrenequinone of (F. Calderazzo, G. Pampaloni), (330) 47

Hydridotantalum seven-coordinate complexes, [Ta(H)(CO)<sub>6-n</sub>(oligophos)], preparation and dynamics of (D. Rehder, M. Fornalcy, P. Oltmans), (331) 207

Pentachlorotantalum reduction in pure trimethylphosphine; synthesis of compounds containing Ta-η<sup>2</sup>-CHPM<sub>2</sub>; crystal structure of [Ta(η<sup>2</sup>-CHPM<sub>2</sub>)(η-C<sub>4</sub>H<sub>6</sub>)(PM<sub>3</sub>)<sub>2</sub>Cl] (M.L.H. Green, P.M. Hare, J.A. Bandy), (330) 61

## Techetium

[C<sub>3</sub>H<sub>5</sub>Fe(CO)L(EMe<sub>2</sub>)]<sup>+</sup> (E = S, Se, Te), synthesis and reactivity of (N. Kuhn, H. Schumann, E. Zauder), (327) 17

## Tellurium

Allylic and vinylic silanes, germanes, stannanes and plumbanes, reactivity towards S<sub>H</sub>2' or S<sub>H</sub>2 substitution by carbon- or heteroatom-centered free radicals or (J.P. Light II, M. Ridenour, L. Beard, J.W. Hershberger), (326) 17

Aminoiminomethanesulphinic acid (thiourea dioxide) used under phase transfer conditions for generating organochalcogenate anions; synthesis of sulphides, selenides and tellurides (J.V. Comasseto, E.S. Lang, J.T.B. Ferreira, F. Simonelli, V.R. Correia), (334) 329

Aryl- and vinyl-tellurium compounds, carbonylation with CO in the presence of palladium(II) salts of (K. Ohe, H. Takahashi, S. Uemura, N. Sugita), (326) 35

Aryltellurium trihalides, palladium(II)/CO-mediated biaryl formation from (H. Takahashi, K. Ohe, S. Uemura, N. Sugita), (350) 227

Bis(pentamethylcyclopentadienylcarbonyl-co-balt) and -rhodium) complexes, stepwise formation of dinuclear chalcogenic complexes with elemental sulphur, selenium or tellurium from (H. Brunner, N. Janietz, W. Meier, J. Wachter, E. Herdtweck, W.A. Herrmann, O. Serhadli, M.L. Ziegler), (347) 237

Chalcocarbonyl complexes, OsCl<sub>2</sub>(CO)(CE)(PPh<sub>3</sub>)<sub>2</sub> (E = S, Se, Te), synthesis and structures of (G.R. Clark, K. Marsden, C.E.F. Rickard, W.R. Roper, L.J. Wright), (338) 393

C<sub>5</sub>H<sub>5</sub>Rh(=C=CHR)(PPr<sub>3</sub>-i), reactivity towards diazomethanes, sulphur, selenium and tellurium of; formation of unstable chalcogenoketenes in coordinated transition metals (J. Wolf, R. Zolk, U. Schubert, H. Werner), (340) 161

(C<sub>5</sub>R<sub>5</sub>)<sub>2</sub>M<sub>2</sub>(CO)<sub>4</sub> (R = H, Me; M = Cr, Mo, W), reactivity of the M≡M bonds towards condensed chalcogenide vapours of (K. Endrich, E. Guggolz, O. Serhadli, M.L. Ziegler, R.P. Korswagen), (349) 323

Diorganoyldiaryloxytelluranes with intramolecular Te...N coordination bonds, synthesis and structure of (V.I. Minkin, A.A. Maksimenko, G.K. Mehrotra, A.G. Maslakov, O.E. Kompan, I.D. Sadekov, Yu.T. Struchkov, D.S. Yufit), (348) 63

1,2-Ditellurane, synthesis of (H.B. Singh, P.K. Khanna), (338) 9

Divinyl ditellurides, synthesis and reactivity of (M.J. Dabdoub, J.V. Comasseto), (344) 167

Ferrocenylchalcogenides, synthesis of (M. Herberhold, P. Leitner), (336) 153

Fe<sub>2</sub>Te<sub>2</sub>M(CO)<sub>6</sub>(PPh<sub>3</sub>)<sub>2</sub> (M = Ni, Pd, Pt), new route from Fe<sub>3</sub>Te<sub>2</sub>(CO)<sub>9</sub> and M(PPh<sub>3</sub>)<sub>4</sub> to (P. Mathur, I.J. Mavunkal), (350) 251

Methylation of aromatics with Me<sub>3</sub>S<sup>+</sup>, Me<sub>3</sub>Se<sup>+</sup> and Me<sub>3</sub>Te<sup>+</sup> in superacid media (K. Laali, H.Y. Chen, R.J. Gerzina), (348) 199

3,5-Naphtho-1-telluracyclohexane, synthesis of (H.B. Singh, P.K. Khanna, S.K. Kumar), (338) 1

Octacarbonyldicobalt-mediated and -catalysed carbonylation of diaryl diselenides and ditellurides to seleno and telluro esters (H. Takahashi, K. Ohe, S. Uemura, N. Sugita), (334) C43

Organotellurium(IV) dihalides, NMR investigation of lability and Lewis acidity of; crystal structure of 1,3-dihydro-2λ<sup>4</sup>-benzotellurole-2,2-diyl difluoride, C<sub>8</sub>H<sub>8</sub>TeFe<sub>2</sub> (D. Dakternieks, R. Di Giacomo, R.W. Gable, B.F. Hoskins), (349) 95

Ph<sub>2</sub>Te(S<sub>2</sub>P(OEt)<sub>2</sub>)<sub>2</sub> and two modifications of Ph<sub>2</sub>Te(S<sub>2</sub>CNET<sub>2</sub>)<sub>2</sub>, crystal structures of (D. Dakternieks, R. Di Giacomo, R.W. Gable, B.F. Hoskins), (349) 305

Selenium and tellurium heterocyclic compounds, charge transfer complexes from (K.Y. Abis, W.R. McWhinnie), (330) 337

(μ<sub>3</sub>-Te)[(η<sup>5</sup>-C<sub>5</sub>H<sub>5</sub>)Mn(CO)<sub>2</sub>]<sub>3</sub>, electrophilicity of the trigonal planar coordinated tellurium atom in (W.A. Herrmann, C. Hecht, E. Herdtweck), (331) 309

Telluroacrylamide complexes, formation from pentacarbonyl(diphenyltelluroketone)tungsten and inamines (H. Fischer, I. Pashalidis), (348) C1

Tetraphenyltellurium and bis(2,2'-biphenylene) tellurium, <sup>125</sup>Te NMR and Mössbauer data for (C.H.W. Jones, R.D. Sharma), (332) 115

Transition metal complexes containing "naked" tellurium and selenium bridging ligands,

$^{125}\text{Te}$  and  $^{77}\text{Se}$  NMR spectra of (W.A. Herrmann, H.-J. Kneuper, (348) 193

Tristannachalcogena cyclic compounds, preparation and structures of (H. Puff, B. Breuer, W. Schuh, R. Sievers, R. Zimmer), (332) 279

## Terbium

Tricyclopentadienyllanthanides/sodium hydride, reduction and isomerisation of olefins with (C. Qian, Y. Ge, D. Deng, Y. Gu, C. Zhang), (344) 175

## Thallium

4-Amino-5-mercapto-3-trifluoromethyl-1,2,4-triazole complexes with monoorganomercury and diorganothallium; crystal structure of dimethyl(4-amino-5-mercapto-3-trifluoromethyl-1,2,4-triazolato)thallium(III) (Y.P. Mascarenhas, I. Vencato, M.C. Carrascal, J.M. Varela, J.S. Casas, J. Sordo), (344) 137

Cyclopentadienylthallium(I) compounds with bulky cyclopentadienyl ligands, preparation and characterisation of (H. Schumann, C. Janiak, H. Khani), (330) 347

Monocyclopentadienyl-indium and -thallium complexes, vibrational spectra and structure of (O.G. Garkusha, B.V. Lokshin, R.B. Materikova, L.M. Golubinskaya, V.I. Bregadze, A.P. Kurbakova), (342) 281

## Thorium

4-Amino-5-mercapto-3-trifluoromethyl-1,2,4-triazole complexes with monoorganomercury and diorganothallium; crystal structure of dimethyl(4-amino-5-mercapto-3-trifluoromethyl-1,2,4-triazolato)thallium(III) (Y.P. Mascarenhas, I. Vencato, M.C. Carrasca, J.M. Varela, J.S. Casas, J. Sordo), (344) 137

## Tin

Acetate-bridged distannanes,  $\text{Ph}_4\text{Sn}_2(\text{X}_3\text{CCO}_2)_2$  ( $\text{X} = \text{H}, \text{Cl}, \text{F}$ ), comparison of bond distances, coupling constants and stretching vibrations in (S. Adams, M. Dräger, B. Mathiasch), (326) 173

$\sigma$ -Alkyne organometallic compounds, synthesis catalysed by copper(I) iodide in triethylamine of (D. Villemin, E. Schigeko), (346) C24

Allyl-, crotyl-, 1-methylallyl-, cyclohex-2-enyl-, and cinnamyl-stannation of carbonyl com-

pounds in water (D. Furlani, D. Marton, G. Tagliavini, M. Zordan), (341) 345

Allylic and vinylic silanes, germanes, stannanes and plumbanes, reactivity towards  $\text{S}_{\text{H}}2'$  or  $\text{S}_{\text{H}}2$  substitution by carbon- or heteroatom-centered free radicals of (J.P. Light II, M. Ridenour, L. Beard, J.W. Hershberger), (326) 17

$\eta^3$ -Allyl-PtP( $\text{C}_6\text{H}_5$ ) $_3$ Cl, gas-phase ion-molecule reaction with  $\text{SnCl}_2$  of (M. Grassi, A. Musco, B. Pelli, P. Traldi), (349) 277

Aminomethyltributyltin compounds, formation from stannylation of immonium salts with tributylstannylmagnesium chloride of; regioselective route to  $\beta$ -aminoalcohols with (B. Elissondo, J.-B. Verlhac, J.-P. Quintard, M. Pereyre), (339) 267

$\beta$ -Binaphthyl-silane, -stannane and -borane asymmetric complexes, synthesis of (U.-M. Gross, M. Bartels, D. Kaufmann), (344) 277

Bis(2-aminopyridinium)dimethyltetrachlorostannate(IV), formation by hydrolysis of dimethyltin dichloride and crystal structure of (G. Valle, A. Sánchez González, R. Ettore, G. Plazzogna), (348) 49

Bis(amino)stannylenes, reaction with halogenoalkanes of (M. Veith, A. Müller), (342) 295

Bis(bis(trimethylstannyl))distibane,  $(\text{Me}_3\text{Sn})_2\text{-Sb-Sb}(\text{SnMe}_3)_2$ , preparation and crystal structure of (S. Roller, M. Dräger, H.J. Breunig, M. Ates, S. Gülec), (329) 319

Bis(*t*-butyl-, trimethylsilyl-, trimethylgermyl-, trimethylstannyl- and trimethylplumbyl-cyclopentadienyl)iron, synthesis and multinuclear NMR data of (F.H. Köhler, W.A. Geike, N. Hertkorn), (334) 359

Bis(dicarbonyl- $\eta^5$ -cyclopentadienyl)iron(diphenyltin), crystal structure of (L. Párkányi, K.H. Pannell, C. Hernandez), (347) 295

Bis(trimethylstannyl)dihydropentalenes, synthesis, structure and fluxional behaviour of isomers of (Yu.A. Ustynyuk, A.K. Shestakova, V.A. Chertkov, N.N. Zemlyansky, I.V. Borisova, A.I. Gusev, E.B. Tchuklanova, E.A. Chernyshev), (335) 43

Bis(triphenylphosphine)iminium(tetracarbonylnitrosylchromium), synthesis, characterisation and reactivity of (D.R. Mantell, W.L. Gladfelter), (347) 333

Bivalent group 14 metal amides and alkyls, oxidative addition reactions of organic halides or acid anhydrides to (M.F. Lappert, M.C. Misra, M. Onyszchuk, R.S. Rowe, P.P. Power, M.J. Slade), (330) 31

*t*-Butyl(trialkylstannyl)(trimethylgermyl)acetates synthesis and application of their anions to the Peterson-type reaction of (N. Kanemoto, Y. Sato, S. Inoue), (348) 25



- Carbo(di)thioatotriphenyltin complexes, stereochemistry of; crystal structures of  $[\text{Ph}_3\text{Sn}(\text{SCSN}(\text{CH}_2)_5)]$  and  $[\text{Ph}_3\text{Sn}(\text{SCON}(\text{CH}_2)_4\text{O})]$  (S. Chandra, B.D. James, R.J. Magee, W.C. Patalinghug, B.W. Skelton, A.H. White), (346) 7
- Carbonylphosphine palladium-tin clusters, synthesis of; X-ray diffraction study of the  $\text{Pd}_3\text{Sn}(\text{acac})_4(\text{CO})_2(\text{PPh}_3)_3$  cluster (V.V. Bashilov, V.I. Sokolov, Yu.L. Slovokhotov, Yu.T. Struchkov, E.G. Mednikov, N.K. Eremenko), (327) 285
- Carboxylate-bridged triorganotin(IV)-carboxylate polymers, repeat distance in (S.W. Ng, C. Wei, V.G. Kumar Das), (345) 59
- Chloro(2-alkoxynaphth-1-yl)(2,3,5,6- $\eta^4$ -bicyclo-[2.2.1]hepta-2,5-diene)platinum(II), synthesis and structure of (T. Debaerdemaeker, C. Weismann, H.-A. Brune), (350) 91
- Chlorotrinoethylstannane, chlorotris(dimethylphenylsilyl)methylstannane, trinoethyl(1,2,4-triazol-1-yl)stannane hemihydrate and 2,5-dimethyl-2,5-diphenylhexane, molecular structures of (D. Schomburg, M. Link, H. Linoh, R. Tacke), (339) 69
- cis*-(CO)<sub>4</sub>(SnPh<sub>3</sub>)Re[C(OEt)NR<sub>2</sub>] (R = *i*-Pr, cyclohexyl), behaviour towards Lewis acids of (A.C. Fillippou, E.O. Fischer, H.G. Alt), (330) 325
- [2 + 4]Cycloaddition with selenocarbonyldifluoride as dienophile of reactive E=C (*p-p*)  $\pi$ -systems (J. Grobe, D. Le Van, J. Welzel), (340) 153
- Cyclopentadienylation of pentafulvenes with stannyl- and nitrosyl-carbonylvandium complexes (D. Rehder, D. Wenke), (348) 205
- Cyclopent-2-enyltriphenyltin, crystal structure of (P. Ganis, G. Valle, G. Tagliavini, W. Kitching, K.G. Penman, M.A. Jones), (349) 57
- Dialkyldihalogenotin, highly selective synthesis directly from tin and alkyl halides or (R. Ugo, A. Chiesa, A. Fusi), (330) 25
- (Dialkyltin polymeric oxides,  $[\text{R}_2\text{SnO}]$  (R = Me, *n*-Bu), structure probed by high-resolution solid-state <sup>119</sup>Sn NMR of (R.K. Harris, A. Sebald), (331) C9
- Di- and tri-organotin(IV) diethyldithiophosphinates, synthesis and characterisation of; crystal and molecular structure of bis(diethyldithio-phosphinato)dimethyltin(IV),  $\text{Me}_2\text{Sn}(\text{S}_2\text{PET}_2)_2$  (C. Silvestru, I. Haiduc, S. Klima, U. Thewalt, M. Gielen, J.J. Zuckerman), (327) 181
- Di- and tri-organotin(IV) diphenyldithiophosphinates, preparation and characterisation of (C. Silvestru, F. Ilies, I. Haiduc, M. Gielen, J.J. Zuckerman), (330) 315
- Dibromobis(pyrazole)dimethyltin(IV), crystal structure of (B. Alberte, A. Sánchez González, E. García, J.S. Casas, J. Sordo, E.E. Castellano), (338) 187
- Di-*t*-butylcyclopentadienyl-silanes, -stannanes and -germanes, synthesis, structure and fluxional behaviour of (S.T. Abu-Orabi, P. Jutzi), (329) 169
- Di-*t*-butyldibenzoplatinol compounds, mechanism of photochemical biphenyl elimination from (R. Hohenadel, H.-A. Brune), (350) 101
- 1,3-Di-*t*-butyl-2,4-dimethyl-1,3-diaza-2,4-diborolidine, synthesis and investigations of (G. Schmid, D. Vehreschild-Yzermann, R. Boese), (326) 307
- Dichlorobis(2,4,6-tri-*t*-butylphenyl)stannane, formation and isomeric structures of (M. Weidenbruch, K. Schäfers, S. Pohl, W. Saak, K. Peters, H.G. von Schnering), (346) 171
- Dichlorodimethylbis(pyrazole-*N,N'*)tin(IV), structure of (G. Valle, R. Ettore, V. Peruzzo, G. Plazzogna), (326) 169
- endo*-Dicyclopentadiene, direct and indirect metallation of, <sup>119</sup>Sn and <sup>13</sup>C NMR of stannylated products of (J. Blümel, F.H. Köhler), (340) 303
- Di- $\eta$ -cyclopentadienyldicarbonyliron(*p*-tolyl)tin(IV); bromide, structural study of Z.-T. Wang, H.-K. Wang, X.-Y. Liu, X.-K. Yao, H.-G. Wang), (331) 263
- (*o*-Dimethylaminomethyl)phenyl- and (*o*-diphenylphosphinomethyl)phenyl-stannylpentacarbonyltungsten complexes, synthesis and structures of (H.-P. Abicht, K. Jurkschat, A. Tzschach, K. Peters, E.-M. Peters, H.G. von Schnering), (326) 357
- cis*-Dimethyl(chloro)stannyldiethylborylalkene, exchange reactions with organyltrimethylstannanes of (S. Kersch, B. Wrackmeyer), (338) 195
- Diphenylbis(isothiocyanato)bis(hexamethylphosphoramidate)tin(IV) and -lead(IV), crystal and molecular structures of (M. Onyszchuk, I. Wharf, M. Simard, A.L. Beauchamp), (326) 25
- Divinyltin(IV) compounds, <sup>13</sup>C and <sup>119</sup>Sn NMR spectra of (J. Holeček, K. Handlíř, M. Nádvořník, S.M. Tebe, A. Lyčka), (339) 61
- Ethylphenylstannylene derivatives of ethylene glycol, cytidine and 3,5-diiodosalicylic acid, synthesis and characterisation of (M. Gielen, T. Mancilla, J. Ramharter, R. Willem), (328) 61
- Group 14 free radicals derived from hydroxynaphthoquinones, ESR studies on (I.M. Ahmed, A. Hudson, A. Alberti), (333) 9
- Group 14-iron bonds containing complexes,

- photochemical diastereoselective synthesis of (B. Rouida, M. Pankowski, W. Chodkiewicz, G. Jaouen), (342) C10
- Hexamethyldistannane, synthesis from bis-(trimethylstannyl)sulphide of (G. Capozzi, S. Menichetti, A. Ricci, M. Taddei), (344) 285
- Hydroxyanthraquinones-group 14 adducts and crysazin-phosphorus adducts, ESR studies of (B.M. Ahmed, A. Hudson, A. Alberti), (350) 9
- Lithiation of 2-methylbenzoxazol, organometallic derivatives containing a tridentate ligand (S. Kersch, B. Wrackmeyer), (332) 25
- Methylphenyltin(IV) dichloride, single crystal and molecular structure between polymeric and monomeric  $R_2SnCl_2$  structures of (M.M. Amini, E.M. Holt, J.J. Zuckerman), (327) 147
- Methyltin trihalides and tin tetrahalides, *cis*- and *trans*-influences in octahedral complexes with tertiary phosphines of (O.A. Reutov, C.S. Petrosyan, N.S. Yashina, E.I. Gefel), (341) C31
- $M[Fe_2(CO)_8]_2$  ( $M = Si, Ge, Sn$ ), improved synthesis of; X-ray crystal structure of  $Si[Fe_2(CO)_8]_2$  (S.G. Anema, G.C. Barris, K.M. Mackay, B.K. Nicholson), (350) 207
- Monomeric and oligomeric carbodiimides with polysilane and siloxane fragments, synthesis of (G.A. Razuvaev, A.S. Gordetsov, A.P. Kozina, T.N. Brevnova, V.V. Semenov, S.E. Skobeleva, N.A. Boxer, Yu.I. Dergunov), (327) 303
- Octabutyl- $\mu$ -dichloro- $\mu_3$ -dioxodichlorotetratin(IV), crystal structure of (R. Hämäläinen, U. Turpeinen), (333) 323
- Organogermanium and organotin adducts with triphenylphosphine oxide and hexamethylphosphoramide (J.N. Spencer, S.M. Coley, J.C. Otter, A. Grushow, B.G. Enders, W.L. Nachlis, C.H. Yoder), (346) 161
- Organometallic compounds, primary aminomethylation via *N,N*-bis(trimethylsilyl)methylthiomethylamine of (L. Fiocca, K. Fiorenza, G. Reginato, A. Ricci, P. Dembech, G. Seconi), (341) C23
- Organotin adducts with triethylphosphine oxide (C.H. Yoder, S.M. Coley, A. Grushow, B.G. Enders, S.P. Kneizys, J.N. Spencer), (346) 165
- Organotin-containing phosphines, formation of (T.N. Mitchell, H.-J. Belt), (345) C28
- Organotin hydride addition to methyl cyclohexene-1-carboxylate and methyl indene-3-carboxylate (A.D. Ayala, N. Giagante, J.C. Podestá, W.P. Neumann), (340) 317
- Organotin pentacoordination, polytopal dominance of square pyramidal geometry in; crystal structure of tribenzyl(2-thiolatopyridine-*N*-oxide)tin(IV) (S.W. Ng, C. Wei, V.G. Kumar Das, T.C.W. Mak), (326) C61
- Paramagnetic metallocenes bearing Me,  $Me_3E$  ( $E = C, Si, Ge, Sn$ ) substituents, syntheses and  $^1H/^{13}C$  NMR studies of (F.H. Köhler, W.A. Geike), (328) 35
- Paramagnetic tin complexes EPR and ENDOR investigations of isomerisation at the tin atom of (H.B. Stegmann, M. Sadowski, P. Schuler, K. Scheffler), (339) 81
- Penta- and hexa-coordinated organotin compounds, synthesis and structures of (K. Jurkschat, J. Kalbitz, M. Dargatz, E. Kleinpeter, A. Tzschach), (347) 41
- Pentacarbonyl-chromium and-tungsten complexes, structural isomers of cyclic adducts of perfluoro-2-phosphapropene and isoprene as ligands in (J. Grobe, D. I.e Van, W. Meyring, B. Krebs, M. Dartmann), (340) 143
- Pentacarbonyl-5-phenyl-5-phospha-2,8-dithia-1-stannabicyclo[3.3.0<sup>1.5</sup>]octanechromium(0)·pyridine, crystal structure of (K. Jurkschat, A. Tzschach, J. Meunier-Piret, M. Van Meerssche), (349) 143
- Phenyl- and benzyl-group 14 element complexes, hyperconjugation in (A.N. Egorochkin, G.A. Razuvaev, M.A. Lopatin), (344) 49
- Platinum(II)/ $SnCl_2$  catalysis, mechanism of hydroformylation of olefins; reactivity of alkyl complexes containing chelating diphosphines (A. Scriveri, C. Botteghi, L. Toniolo, A. Berton), (344) 261
- Silyl and stannyl pyrimidines, synthesis of (C. Párkányi, N.S. Cho, G.S. Yoo), (342) 1
- Skew-trapezoid bipyramidal diorganotin/bischelates; crystal structure of dimethylbis(2-pyridinethiolato-*N*-oxide)tin(IV) (S.W. Ng, C. Wei, V.G. Kumar Das, T.C.W. Mak), (334) 295
- $[SnR_2]$  skeletal geometry, influence of substituents in carbon- and heteroatom-donor ligands on structure of (V.G. Kumar Das, Y. Chee-Keong, P.J. Smith), (327) 311
- Stereochemically active lone pairs of electrons in group 14 compounds; crystal structure of  $\{\eta^5-C_5H_5Co[P(OC_2H_5)_2O]_3\}_2M^{II}$  ( $M = Sn, Pb$ ) (E.M. Holt, W. Kläui, J.J. Zuckerman), (335) 29
- Tetra(*p*-methoxyphenyl)tin(IV) and tetra(*p*-methylthiophenyl)tin(IV), crystal and molecular structures of (I. Wharf, M.G. Simard), (332) 85
- Tetraorganotin pentacoordinated compound, Sn-O coordination bond in; X-ray crystal structure of (2-carbomethoxy-1,4-cyclohexadien-1-yl)trimethyltin (B. Jousseume, P.

Villeneuve, M. Dräger, S. Roller, J.M. Chezeau), (349) C1

Tetraorganotin unsymmetrical compounds, preparation and properties of (I.L. Marr, D. Rosales, J.L. Wardell), (349) 65

Thienyltetraorganotin(IV) compounds, synthesis and spectral characterisation of (V.G. Kumar Das, L.K. Lo, S.J. Blunden), (334) 307

Tin(IV) halides, reactions with  $[\text{Fe}_2(\eta\text{-C}_5\text{H}_5)_2(\text{CO})_{4-n}(\text{CNMe})_n]$  ( $n = 1, 2$ ) (P. Donegan, A.R. Manning), (336) 115

Trialkylstannyl-substituted esters in reactions with trimethylsilyl halides, exchange vs. hydrolysis (J.C. Podesta, A.B. Chopra, A.D. Ayala, L.C. Koll), (333) 25

Tribenzyl(2-pyridinethiolato-*N*-oxide)tin(IV), a square pyramidal organotin(IV) compound, crystal structure of (S.W. Ng, C. Wei, V.G. Kumar Das, T.C.W. Mak), (334) 283

Tribenzyltin(IV) compounds,  $^{13}\text{C}$  and  $^{119}\text{Sn}$  NMR spectra of (A. Lyčka, J. Jitman, A. Koloničny, J. Holeček), (333) 305

Tri-*n*-butylstannyl alkoxides of benzhydrol and substituted benzhydrols, kinetics and mechanisms of oxidation by bromine in  $\text{CCl}_4$  of (R. Ravindran, T.R. Balasubramanian), (344) 289

$\alpha$ -Tributylstannyl esters, synthesis and thermolysis of (J.G. Duboudin, M. Ratier, B. Trouve), (331) 181

Trimethylsilylation of carbenoids generated from allyl and benzyl halides (H. Andringa, Y.A. Heus-Kloos, L. Brandsma), (336) C41

Triorganotin(IV) derivatives of *N*-acetyl-L-phenylalanine and *N*-acetyl-L-phenylalanyl-glycine, preparation, IR and  $^{13}\text{C}$  and  $^{119}\text{Sn}$  NMR of (G.K. Sandhu, G. Kaur, J. Holeček, A. Lyčka), (345) 51

Triorganotin(IV) derivatives of *N*-benzoyl-DL-alanine and *N*-benzoyl-DL-alanyl-glycine, preparation and vibrational spectra of (G.K. Sandhu, G. Kaur, J. Holeček, A. Lyčka), (332) 75

Triorganotin mixed compounds,  $\text{R}_3\text{Sn-X-SnR}'_3$ ,  $^{119}\text{Sn}$  evidence for formation in solution of (S.J. Blunden, R. Hill), (333) 317

Triphenyltin halide-lactam complexes, synthesis and structural characterisation of (T. Tahara, H. Imazaki, K. Aoki, H. Yamazaki), (327) 157

Triphenyltin-substituted carbenerhenium mononuclear complexes, *cis*- $(\text{CO})_4(\text{SnPh}_3)\text{Re}[\text{C}(\text{OEt})\text{R}]$ , preparation and characterisation of (A.C. Filippou, E.O. Fischer, G. Müller, H.G. Alt), (329) 223

Tris(pyrazolyl)boratotin(II) compounds, synthesis and structures of (A.H. Cowley, R.L. Geerts, C.M. Nunn, C.J. Carrano), (341) C27

Tristannachalcogena cyclic compounds, preparation and structures of (H. Puff, B. Breuer, W. Schuh, R. Sievers, R. Zimmer), (332) 279

Tris(trimethyltin) tetrathiosphosphate,  $(\text{Me}_3\text{-SnS})_3\text{PS}$ , preparation, vibrational spectra and crystal structure of (A.-F. Shihada, F. Weller), (342) 177

Vanadocene isocyanate and isothiocyanate complexes, synthesis and properties of (G.A. Razuvaev, A.S. Gordetsov, V.N. Latyayeva, S.V. Zimina, S.E. Skobeleva, N.P. Makarenko, V.K. Cherkaso, V.P. Mar'in, Yu.I. Dergunov), (329) 327

## Titanium

Alkyldicyclopentadienyltitanium cationic complexes as catalysts for ethylene polymerization (R. Taube, L. Krukowka), (347) C9

$\pi$ -Allylic titanium(III) complexes, acyldemetallation of (A.N. Kasatkin, A.N. Kulak, G.A. Tolstikov), (346) 23

Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167

Asymmetric ring-opening of cyclohexene oxide with trimethylsilyl azide in the presence of titanium isopropoxide/chiral ligand (M. Emziane, K.I. Sutwardoyo, D. Sinou), (346) C7

Bis(cyclopentylcyclopentadienyl)- and bis(cyclohexylcyclopentadienyl)-titanium dichlorides, X-ray crystal structures of (Q. Huang, Y. Qian, Y. Tang, S. Chen), (340) 179

Bis(dicyclopentadienylchlorotitanium), disproportionation to dicyclopentadienyldichlorotitanium and dicyclopentadienyldicarbonyltitanium of; IR study at elevated CO gas pressure (E.U. Van Raay, C.D. Schmulbach, H.H. Brintzinger), (328) 275

Bis( $\eta^5$ -indenyl)dicarbonyl-titanium and -zirconium, formation, and crystal and molecular structures of (M.D. Rausch, K.J. Moriarty, J.L. Atwood, W.E. Hunter, E. Samuel), (327) 39

Bis(pentamethylcyclopentadienyl)titanium complexes, stepwise  $\text{Ti-Cl}$ ,  $\text{Ti-CH}_3$  and  $\text{Ti-C}_6\text{H}_5$  bond dissociation enthalpies in (A.R. Dias, M.S. Salema, J.A.M. Simões, J.W. Pattiasina, J.H. Teuben), (346) C4

Carbotitanation of unsaturated hydrocarbons and ketones with  $\eta^3$ -allyl( $\text{di-}\eta^5$ -cyclopentadienyl)titanium(III), effects of Lewis acids and bases on (J.J. Eisch, M.P. Boleslawski), (334) C1

- ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>Ti( $\mu_2$ -H)<sub>2</sub>Al(Cl)( $\mu_2$ -H)<sub>2</sub>Ti( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>, catalyst-precursor for hydrogenation in the [( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>TiCl]<sub>2</sub> · LiAlH<sub>4</sub> system, molecular structure and physico-chemical properties of (A.I. Sizov, I.V. Molodnitskaya, B.M. Bulychev, E.V. Evdokimova, G.L. Soloveichik, A.I. Gusev, E.G. Chuklanova, V.I. Andrianov), (335) 323
- [(C<sub>5</sub>Me<sub>4</sub>H)<sub>2</sub>Ti(CH<sub>3</sub>)<sub>2</sub>] as an initiator in thermal and photochemical isomerisations with (P. Courtot, R. Pichon, Y. Raoult, J.Y. Salaün), (327) C1
- Cp<sub>2</sub>TiCl<sub>2</sub>/Mg/BrCH<sub>2</sub>CH<sub>2</sub>Br system, isomerisation of terminal alkenes by (S.A. Rao, M. Periasamy), (342) 15
- [Cp<sub>2</sub>Ti( $\mu$ -OCOC≡COCO)]<sub>2</sub> and [Cp<sub>2</sub>Ti( $\mu$ -OCOC≡COCO)]<sub>5</sub> · 5Y (Y = CHCl<sub>2</sub> or C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>), formation and structures of (T. Gütthner, U. Thewalt), (350) 235
- Crystalline inorganic and organometallic complexes, estimation of standard enthalpies of formation of (A.R. Dias, J.A. Martinho Simões, C. Teixeira, C. Airoidi, A.P. Chagas), (335) 71
- Cyclopentadienyltitanium chlorides and organo-aluminium chlorides, effects of methyl substituents at the C<sub>5</sub>H<sub>5</sub> ligand on properties of (K. Mach, V. Varga, H. Antropiusová, J. Poláček), (333) 205
- Cyclopentadienyltitanium trichloride/lithium aluminium hydride and dicyclopentadienyltitanium trichloride/lithium aluminium hydride, synthesis of arenes by deoxygenation of endoxides with (C.H. Wong, C.W. Hung, H.N.C. Wong), (342) 9
- Dicyclopentadienylbis(trimethylphosphine)-titanium and -zirconium complexes, reactions with acetylenes of (H.G. Alt, H.E. Engelhardt, M.D. Rausch, L. Kool), (329) 61
- Di- $\eta^5$ -cyclopentadienyl(diethylalane)- $\mu$ -chloro-titanium(III), EPR spectra of reaction products with C<sub>1</sub> compounds of (S.K. Tyrlik, A. Korda, L. Poppe, A. Rockenbauer, M. Györ), (336) 343
- Dicyclopentadienylethylenetitanium, Cp<sub>2</sub>TiC<sub>2</sub>-H<sub>4</sub>; formation and reactivity of; crystal structure of (Cp<sub>2</sub>TiEt)<sub>2</sub>O (H.G. Alt, K.-H. Schwind, M.D. Rausch, U. Thewalt), (349) C7
- Dicyclopentadienyltitanium(IV)-containing cationic complexes, structure of a nitrile ligated complex (K. Berhalter, U. Thewalt), (332) 123
- Dicyclopentadienyltitanium(IV)-phenoxo complexes, preparation from aqueous solutions of (K. Döppert), (333) C1
- Ethylenebis(tetrahydroindenyl)-titanium and -zirconium dichlorides, diastereomeric derivatisation and enantiomeric separation of (A. Schäfer, E. Karl, L. Zsolnai, G. Huttner, H.-H. Brintzinger), (328) 87
- Ethylenebis(tetrahydroindenyl)-titanium and -zirconium dichlorides, X-ray structures of (S. Collins, B.A. Kuntz, N.J. Taylor, D.G. Ward), (342) 21
- Ethynyltriisopropoxytitanium reactions with pyrimidinones (F. Rise, D. Grace, K. Undheim), (338) 341
- Exchange reactions in coordination sphere of Al atom; crystal and molecular structure of [( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>Ti( $\mu_2$ -H)<sub>2</sub>]<sub>2</sub>Al( $\eta^2$ -H<sub>2</sub>BH<sub>2</sub>) (A.I. Sizov, I.V. Molodnitskaya, B.M. Bulychev, G.L. Soloveichik, V.K. Bel'skii), (344) 185
- M(C<sub>5</sub>H<sub>5</sub>)<sub>2</sub>L complexes (M = Mo, W, Ti; L = C<sub>6</sub>H<sub>4</sub>O<sub>2</sub>, C<sub>10</sub>H<sub>6</sub>O<sub>2</sub>), enthalpies of formation of (M.A.V. Ribeiro da Silva, M.D.M.C. Ribeiro da Silva, A.R. Dias), (345) 105
- [( $\eta^5$ -Me<sub>5</sub>C<sub>5</sub>)<sub>2</sub>Ti(H<sub>2</sub>O)<sub>2</sub>]<sup>2+</sup> and [( $\eta^5$ -Me<sub>5</sub>C<sub>5</sub>)-Ti(OH)(H<sub>2</sub>O)]<sup>+</sup> containing salts, preparation and crystal structures of (U. Thewalt, B. Honold), (348) 291
- Methyltitanium complexes, analysis by paired interacting orbitals of (A. Shiga, J. Kojima, T. Sasaki, Y. Kikuzono), (345) 275
- Monocyclopentadienyltitanium dichloride complexes containing trimethylphosphine and isonitrile ligands, formation and properties of; molecular structure of ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)-TiCl<sub>2</sub>(PMe<sub>3</sub>)<sub>2</sub> (A. Razavi, D.T. Mallin, O. Day, M.D. Rausch, H.G. Alt), (333) C48
- Pentacarbonylchromium(0) deprotonated sulphur donor complexes, reactions with carbon disulphide or carbon dielenide of (H.G. Raubenheimer, S. Lotz, G.J. Kruger, A.v.A. Lombard, J.C. Viljoen), (336) 349
- (Pentamethylcyclopentadienyl)trimethylsilicon, effective reagent for transfer of C<sub>5</sub>Me<sub>5</sub> rings; route to monopentamethylcyclopentadienyl trihalides of group 4 elements (G.H. Llinás, M. Mena, F. Palacios, P. Royo, R. Serrano), (340) 37
- Phenylgermanes, oligomerisation by catalytic dehydrocoupling of (C. Aitken, J.F. Harrod, A. Malek, E. Samuel), (349) 285
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu. L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Tetrachloro(diethylphthalate)titanium(IV), crystal structure of (J. Utiko, P. Sobota, T. Lis), (334) 341
- Tetrakis[ $\mu$ -terephthalatodi- $\eta^5$ -cyclopentadienyltitanium(IV)], an organotitanium macrocyclic complex, synthesis of (U. Thewalt, K.

- Döppert, T. Debaerdemaeker, G. Germain, V. Nastopoulos, (326) C37
- Titanated phosphonoacetates, reagents for stereospecific Knoevenagel condensations, structural study of (M.T. Reetz, M. von Itzstein), (334) 85
- Titanium and aluminium bimetallic hydride complexes, crystal and molecular structures of  $(\eta^5\text{-C}_5\text{H}_5)_2\text{Ti}(\mu_2\text{-H})_2\text{Al}(\text{CH}_3)(\mu_2\text{-H})_2\text{Ti}(\eta^5\text{-C}_5\text{H}_5)_2$  and  $[(\eta^5\text{-C}_5\text{H}_5)_2\text{Ti}(\mu_2\text{-H})_2\text{Al}(\mu_2\text{-H})(\eta^1\text{-}\eta^5\text{-C}_5\text{H}_4)\text{Ti}(\eta^5\text{-C}_5\text{H}_5)(\mu_2\text{-H})_2\text{-C}_6\text{H}_6$  (A.I. Sizov, I.V. Molodnitskaya, B.M. Bulychev, E.V. Evdokimova, V.K. Bels'kii, G.L. Soloveichik), (344) 293
- Titanocene chloro(ethyl)aluminates, influence on properties by methyl-substituted cyclopentadienyl ligands in (K. Mach, V. Varga), (347) 85
- Titanocenyl-substituted dimethyl ether, open-chain molecular structure of (G. Erker, R. Schlund, C. Krüger), (338) C4
- Tolane-titanocene complex, isolation, spectral characterisation and reactivity of (V.B. Shur, V.V. Burlakov, M.E. Vol'pin), (347) 77
- Trimethylsilylcyclopentadienylthallium(I) complexes, synthesis and X-ray structures of  $[\text{Tl}(\mu\text{-}\eta\text{-}\eta\text{-C}_5\text{H}_4\text{SiMe}_3)]_n$  and  $[\text{Tl}\{\mu\text{-}\eta\text{-}\eta\text{-C}_5\text{H}_3(\text{SiMe}_3)_2\text{-1,3}\}]_6$  (a "doughnut" molecule) (S. Harvey, C.L. Raston, B.W. Skelton, A.H. White, M.F. Lappert, G. Srivastava), (328) C1
- Transition metals; general**
- Mechanism of organometallic migration reactions, configuration mixing approach (A.J. Shusterman, I. Tamir, A. Pross), (340) 203
- Selected reactions of transition metal  $\pi$ -complexes; Annual Survey covering the year 1986 (B.W. Rockett, G. Marr), (343) 553
- Transition metals in organic synthesis; Annual Survey covering the year 1986 (L.S. Hegedus), (343) 147
- Transition metals in organic synthesis: hydroformylation, reduction and oxidation; Annual Survey covering the year 1986 (L. Markó), (343) 399
- Tungsten**
- Acetonitrile derivatives of cycloheptatrienylmolybdenum and -tungsten complexes, formation and synthetic applications of (R. Breeze, A. Ricalton, M.W. Whiteley), (327) C29
- Alkene-carbene complexes of tungsten, chromium and rhenium containing a six-membered ring, synthesis and structure of (C. Alvarez-Toledano, A. Parlier, M. Rudler, J.C. Daran, C. Knobler, Y. Jeannin), (328) 357
- $\eta^4$ -Alkenylketone-tungsten complexes, preparation and characterisation of; molecular structure of  $\{\eta^5\text{-C}_5\text{Me}_5(\text{CO})_2\text{W}[\eta^4\text{-PhCH=CH-COMe}]\}\{\text{BF}_4\} \cdot \text{CH}_2\text{Cl}_2$  (H.G. Alt, G.S. Herrmann, U. Thewalt), (327) 237
- Alkoxy(triphenylsilyl)carbene complexes,  $(\text{CO})_5\text{-MC(OR)SiPh}_3$  (M = Cr, Mo, W), thermal fragmentation pattern of (U. Schubert, H. Hörnig), (336) 307
- Alkyne- and phosphalkyne-metal carbonyl complexes, difference in coordination chemistry of; synthesis, crystal and molecular structures of  $[\text{Mo}_2(\text{CO})_4(\eta^5\text{-C}_5\text{H}_5)_2(\text{Bu}^i\text{CP})\text{-Fe}(\text{CO})_4]$  and  $[\text{Mo}_2(\text{CO})_4(\eta^5\text{-C}_5\text{H}_5)_2\text{-}(\text{Bu}^i\text{CP})\text{W}(\text{CO})_5]$  (P.B. Hitchcock, M.F. Meidine, J.F. Nixon), (333) 337
- $\sigma$ -Alkyne organometallic compounds, synthesis catalysed by copper(I) iodide in triethylamine of (D. Villemin, E. Schigeko), (346) C24
- Alkynyltungsten(IV) asymmetric complexes; crystal structure of  $\text{PPh}_4[\text{WCl}_5(\text{HC}\equiv\text{CPh})] \cdot \text{CH}_2\text{Cl}_2$  (M. Kersting, K. Dehnicke, D. Fenske), (346) 201
- Aminocarbene-tungsten complexes containing free and coordinated double bonds, synthesis and structure of (A. Parlier, H. Rudler, J.C. Daran, C. Alvarez, F. Delgado Reyes), (327) 339
- Aminocarbene-tungsten isomeric complexes containing a free C=C bond, synthesis and X-ray structure of (A. Parlier, H. Rudler, J.C. Daran, C. Alvarez), (333) 245
- Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167
- Arsinothiadimidate eight-membered heterocycle,  $t\text{-BuAs}(\text{NSN})_2\text{As-t-Bu}$ , carbonylmetal complexes of (M. Herberhold, K. Schamel), (346) 13
- Aryldiisocyanide-chromium, -molybdenum and -tungsten zero-valent polymers, synthesis and characterization of (I. Feinstein-Jaffe, S.E. Maisuls), (350) 57
- $\eta^6$ -Arylphosphinemolybdenum(0) electron rich complexes as ligands in group 6 carbonylmetal complexes (R.L. Luck, R.H. Morris), (347) 349
- Benzenethiolato- and *N*-phthalimido-metal carbonyl complexes, synthesis of (P.M. Treichel, P.C. Nakagaki, K.J. Haller), (327) 327
- Bimetallic biphenylene biscarbene complexes, synthesis, X-ray crystal structure and reactiv-

- ity towards nucleophilic reagents of (N. Hoa Tran Huy, P. Lefloch, F. Robert, Y. Jeannin), (327) 211
- 1,3-Bis(diphenylphosphino)propanedecarbonyldi-chromium, -molybdenum and -tungsten singly bridging complexes, synthesis and decomposition of (T.S.A. Hor), (340) 51
- 1,2-Bis(di-*p*-tolylphosphino)ethane-group 6 metal carbonyls, preparation and vibrational spectra of (P.N. Kapoor, P. Mercykutty), (339) 97
- Bis(triphenylphosphine)iminium(tetracarbonylnitrosylchromium), synthesis, characterisation and reactivity of (D.R. Mantell, W.L. Gladfelter), (347) 333
- trans*-Br(CO)<sub>2</sub>L<sub>2</sub>WCNEt<sub>2</sub> (L<sub>2</sub> = 2,2'-bipyridyl-1,10-phenanthroline), structure of the reaction product with [(CO)<sub>5</sub>MEPh<sub>2</sub>]<sup>-</sup> (M = Cr, Mo, W; E = P, As, Sb) (A.C. Filippou, E.O. Fischer, H.G. Alt, U. Thewalt), (326) 59
- Carbonyl containing carbynetungsten complex with W in high oxidation state, ( $\eta^5$ -C<sub>5</sub>H<sub>5</sub>)(I<sub>2</sub>)(CO)W $\equiv$ CNEt<sub>2</sub>, spectroscopic characterisation of (A.C. Filippou, E.O. Fischer), (341) C35
- Carbonyl(cyclopentadienyl)(trimethylphosphine)tolylocarbyne-molybdenum and -tungsten complexes, reactions of (F.R. Kreissl, W. Uedelhoven, D. Neugebauer), (344) C27
- Carbonyltungsten binuclear compounds bridged by hydride and bidentate phosphine ligands, synthesis of (J.T. Lin, Y.M. Shiao), (334) C31
- [ $\eta^5$ -(C<sub>5</sub>H<sub>4</sub>CHO)M(CO)<sub>3</sub>]<sup>-</sup> anions (M = Mo, W), reactivity towards carboxylic acid chlorides of (S. Töfke, U. Behrens), (331) 229
- Chromium, molybdenum and tungsten organometallic polymeric networks with aryldiisocyanide ligands (I. Feinstein-Jaffe, S.E. Maisuls), (326) C97
- Chromium, tungsten and iron isocyanide complexes, addition reactions to heteroallenes of (E. Bär, W.P. Fehlhammer, W. Weigand, W. Beck), (347) 101
- (C<sub>5</sub>Me<sub>x</sub>)<sub>2</sub>Mo<sub>2</sub>P<sub>x</sub>S<sub>y</sub> complexes (*x* = 2, 4; *y* = 5 - *x*), P/S ligands in (H. Brunner, U. Klement, W. Meier, J. Wachter, O. Serhadle, M.L. Ziegler), (335) 339
- Cocyclisation of bimetallic bis-carbene complexes, synthesis of bis-naphthol and bis-indene derivatives (N. Hoa Tran Huy, P. Lefloch), (344) 303
- trans*-[CpWMe(CHO)(CO)<sub>2</sub>]<sup>-</sup> and *trans*-[CpWH(COMe)(CO)<sub>2</sub>]<sup>-</sup> formation from CpWMe(CO)<sub>3</sub> and LiEt<sub>3</sub>BH of (J.T. Gauntlett, B.E. Mann, M.J. Winter, S. Woodward), (342) C5
- (C<sub>5</sub>R<sub>5</sub>)<sub>2</sub>M<sub>2</sub>(CO)<sub>4</sub> (R = H, Me; M = Cr, Mo, W), reactivity of the M $\equiv$ M bonds towards condensed chalcogenide vapours of (K. Endrich, E. Guggolz, O. Serhadle, M.L. Ziegler, R.P. Korswagan), (349) 323
- Crystalline inorganic and organometallic complexes, estimation of standard enthalpies of formation of (A.R. Dias, J.A. Martinho Simões, C. Teixeira, C. Airoidi, A.P. Chagas), (335) 71
- C=S-functionalised compounds, coordination chemistry of; dithioesters as  $\eta^1$ ,  $\eta^2$ , and  $\eta^3$  ligands in transition metal complexes of (W.A. Schenk, D. Rüb, C. Burschka), (328) 287
- C=S-functionalised compounds, reactions and  $\eta^1$ -,  $\eta^2$ - and  $\eta^3$ -dithioester complexes of (W.A. Schenk, D. Rüb, C. Burschka), (328) 305
- CS<sub>2</sub>W complexes, activated addition of alkynes to and formation of tetrahedral methylidyne-dicobalttungsten with (W.A. Schenk, D. Kuemmerle, C. Burschka), (349) 183
- CS<sub>2</sub>W complexes, electrophilic and nucleophilic attack on (W.A. Schenk, D. Kuemmerle, T. Schwietzke), (349) 163
- Cycloaddition of tetracyanoethene to Mn, Fe and Ni complexes, hydration of a W complex; X-ray structures of Fe{C[ $\equiv$ C(CN)<sub>2</sub>]CPh=C(CN)<sub>2</sub>}(CO)<sub>2</sub>( $\eta$ -C<sub>5</sub>H<sub>5</sub>) and Ni{C[ $\equiv$ C(CN)<sub>2</sub>]CPh=C(CN)<sub>2</sub>}(PPH<sub>3</sub>)( $\eta$ -C<sub>5</sub>H<sub>5</sub>) (M.I. Bruce, D.N. Duffy, M.J. Liddell, M.R. Snow, E.R.T. Tiekink), (335) 365
- $\eta^3$ -Cycloheptatrienyl-molybdenum and -tungsten complexes with bisphosphine or diamine ligands, spectroscopic investigation of structure and fluxionality of; synthesis of [W(CO)<sub>2</sub>(Ph<sub>2</sub>P(CH<sub>2</sub>)<sub>*n*</sub>PPh)]{ $\eta^3$ -C<sub>9</sub>H<sub>7</sub>(CN)<sub>4</sub>}] (*n* = 1 or 2) (R.A. Brown, S. Endud, J. Friend, J.M. Hill, M.W. Whiteley), (339) 283
- Cyclopentadienyllithium and alkyltrichlorosilanes, preparation of bridged trinuclear complexes from (M.E. Wright, V.W. Day), (329) 43
- Cyclopropyl-substituted  $\eta^1$ - and  $\eta^2$ -ketenyl-tungsten compounds, electronic structure and binding in carbonyl( $\eta^5$ -cyclopentadienyl)( $\eta^2$ -cyclopropylketenyl)(trimethylphosphine)tungsten (W.J. Sieber, M. Wolgruber, N. Hoa Tran-Huy, H.R. Schmidt, H. Heiss, P. Hofmann, F.R. Kreissl), (340) 341
- Diaminodiphosphene and aminophosphinidene complexes, synthesis and characterisation of (J. Borm, G. Huttner, L. Zsolnai, K. Evertz, H. Berke), (327) 223
- Di- and poly-nuclear transition metal complexes as catalysts for metal carbonyl-substitution reactions; role of supported metals and metal oxides as catalyst promoters (M.O. Alberts, N.J. Coville, E. Singleton), (326) 229
- Dicarbonylocarbyne-molybdenum and -tungsten

- stabilised by tridentate oxygen ligands (W. Kläui, H. Hamers), (345) 287
- Dicarbonyl( $\eta^5$ -cyclopentadienyl)tolylylcarbonyl-tungsten, reaction with dimethylchlorophosphine CC coupling of (M. Wolfgruber, F.R. Kreissl), (349) C4
- Di- $\eta^5$ -cyclopentadienyltungsten(IV) and -molybdenum(IV) crown, ether complexes, synthesis and electrochemistry of (E. Fu, M.L.H. Green, V.J. Lowe, S.R. Marder), (341) C39
- Diethylaminocarbonyl tungsten complexes, synthesis of thermally stable, cationic complexes (A.C. Filippou, E.O. Fischer, H.G. Alt), (340) 331
- Diethylaminocarbonyltungsten complexes, reductive elimination of halogeno ligands with  $\text{PMe}_3$  from (A.C. Filippou, E.O. Fischer, H.G. Alt), (344) 215
- (*o*-Dimethylaminomethyl)phenyl- and (*o*-diphenylphosphinomethyl)phenyl-stannylpentacarbonyltungsten complexes, synthesis and structures of (H.-P. Abicht, K. Jurkschat, A. Tzschach, K. Peters, E.-M. Peters, H.G. von Schnering), (326) 357
- 1,1-Dimethylindene, spirocyclopropane-1,1-indene and spirocyclopropane-9,9-fluorene, reactions with  $\text{L}_3\text{M}(\text{CO})_3$  (L =  $\text{NH}_3$ , Py; M = Cr, Mo, W) of (N.A. Ustynuk, L.N. Novikova, V.E. Zvorykin, D.N. Kravtsov, Yu. Ystynuk), (338) 19
- Enantioselective hydrosilylation, complexes with free donor groups as co-catalysts for (H. Brunner, H. Fisch), (335) 15
- Five-coordinate carbyne-tungsten complex with a 1,2-dithiolene ligand, synthesis of (A.C. Filippou, E.O. Fischer), (330) C1
- Germylene-chromium and -tungsten complexes, interaction with 1,2-dipoles of (A. Castel, P. Rivière, J. Satgé, M. Ahabala), (328) 123
- Group 6 metal tricarbonyls with ligating  $\alpha$ -diimine and triethyl phosphite, convenient synthesis and characterisation of (T.S.A. Hor, S.R.B. Rus), (348) 343
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, preparation and reactive behaviour of (R.A. Fischer, W.A. Herrmann), (330) 377
- Hydrogen chalcogenido-chromium, -molybdenum and -tungsten complexes, synthesis of (R.A. Fischer, H.-J. Kneuper, W.A. Herrmann), (330) 365
- Iron-molybdenum and iron-tungsten sulphido clusters containing hydrazido(2-) ligands; synthesis and X-ray crystal and molecular structure of  $\{[\text{Fe}(\text{CO})_3(\mu_3\text{-S})]_2\text{Mo}(\text{NN-Me}_2)_2(\text{PPh}_3)](\text{Fe-Fe}) \cdot \text{CH}_2\text{Cl}_2$  (P.T. Bishop, J.R. Dilworth, S. Morton, J.A. Zubieta), (341) 373
- Isocyanomethylenephosphorane, [3 + 2] cycloaddition reactions with heteroallenes of (W.P. Fehlhammer, G. Zinner, M. Bakola-Christianopoulou), (331) 193
- Isonitrile-substituted neutral and cationic diethylaminocarbonyltungsten complexes, synthesis of (A.C. Filippou, E.O. Fischer, R. Paciello), (347) 127
- Manganese, rhenium, chromium, molybdenum and tungsten binuclear carbonyls with double hydrogen bridges, MO calculations of (B. Jeżowska-Trzebiatowska, B. Nissen-Sobocińska), (342) 215
- $\text{M}(\text{C}_5\text{H}_5)_2\text{L}$  complexes (M = Mo, W, Ti; L =  $\text{C}_6\text{H}_4\text{O}_2$ ,  $\text{C}_{10}\text{H}_6\text{O}_2$ ), enthalpies of formation of (M.A.V. Ribeiro da Silva, M.D.M.C. Ribeiro da Silva, A.R. Dias), (345) 105
- $[\text{M}(\text{CO})_4\{(\text{Ph}_2\text{P})_2\text{C}=\text{CH}_2\}]$  (M = W, Mo, Cr), conjugate additions of functionalised carbanions to the vinylidene groups of (A.M. Herring, S.H. Koskimies, B.L. Shaw), (338) 13
- Metallacyclic alkenyl ketone substituted complexes, ( $\eta^5\text{-C}_5\text{Me}_5$ )(CO) $_2\text{M}[\text{R}^1\text{C}=\text{CR}^2\text{C}(\text{O})\text{Me}]$  (M = Cr, Mo, W;  $\text{R}^1$ ,  $\text{R}^2$  = H, Me, Ph), reactions with NO or ClNO of (H.G. Alt, U. Freytag, M. Herberhold, H.I. Hayen), (336) 361
- Metallacyclic pentamethylcyclopentadienyl-alkenylketone complexes of chromium, molybdenum and tungsten, competition of electronic and steric influence of substituents of; molecular structure of  $\text{C}_5\text{Me}_5(\text{CO})_2\text{Cr}[\text{HC}=\text{CPhC}(\text{O})\text{Me}]$  (H.G. Alt, G.S. Herrmann, H.E. Engelhardt, R.D. Rogers), (331) 329
- Methanolhydrocarbonylation, synthesis, properties and chemistry of multidentate alkoxyethylphosphanes and their behaviour as directing ligands for (E. Lindner, S. Meyer, P. Wegner, B. Karle, A. Sickinger, B. Steger), (335) 59
- Methoxide-tungsten (0) complex, reactions of (P. Kundel, H. Berke), (339) 103
- $[\text{Ml}_2(\text{CO})(\text{NCMe})_2]$  (M = Mo, W), reactions with one equivalent of pyridine on substituted pyridines of, formation of  $[\text{Ml}_2(\text{CO})_3(\text{NCMe})\text{L}]$  and  $[\text{M}(\mu\text{-I})(\text{CO})_3\text{L}]_2$  (P.K. Baker, S.G. Fraser), (329) 209
- Molybdena- and tungstena-cyclobutanes and -cyclobutabenzenes, synthesis of (H.J.R. de Boer, B.J.J. van de Heesteg, G. Schat, O.S. Akkerman, F. Bickelhaupt), (346) 197
- Mono- and di-hydrido-bridged platinum(II)-tungsten(IV) complexes; X-ray crystal structure of  $[\text{Cp}_2\text{W}(\mu\text{-H})_2\text{PtPh}(\text{PEt}_3)][\text{BPh}_4]$  and  $[\text{Cp}_2(\text{H})\text{W}(\mu\text{-H})\text{PtPh}(\text{PEt}_3)_2][\text{BPh}_4]$ . (A. Albinati, R. Naegeli, A. Togni, L.M. Venanzi), (330) 85

- Mono-, bis- and tris-trimethylphosphane-substituted diethylaminocarbyne-tungsten complexes (A.C. Filippou, E.O. Fischer, J. Okuda), (339) 309
- Monohydrido-bridged carbonyl complexes of early transition metals containing  $\eta^5$ -C<sub>5</sub>H<sub>5</sub>Nb(CO)<sub>3</sub> moiety (P. Oltmanns, D. Rehder), (345) 87
- Organo-chromium and -tungsten complexes containing functional germylene ligands (A. Castel, P. Rivière, J. Satgé, M. Ahbala), (331) 11
- Organo-molybdenum and -tungsten complexes containing bismuth, synthesis of (W. Clegg, N.A. Compton, R.J. Errington, N.C. Norman), (335) C1
- Paramagnetic metallocenes bearing Me, Me<sub>3</sub>E (E = C, Si, Ge, Sn) substituents, syntheses and <sup>1</sup>H/<sup>13</sup>C NMR studies of (F.H. Köhler, W.A. Geike), (328) 35
- Pentacarbonyl-chromium and -tungsten complexes, structural isomers of cyclic adducts of perfluoro-2-phosphapropene and isoprene as ligands in (J. Grobe, D. Le Van, W. Meyring, B. Krebs, M. Dartmann), (340) 143
- Pentacarbonyl(diphenylcarbene) tungsten, competition between dissociative and associative mechanisms in reactions with nitriles of (H. Fischer, S. Zeuner), (327) 63
- Pentamethylcyclopentadienyl-substituted diethylaminocarbyne low-valent tungsten complexes, synthesis of (A.C. Filippou, E.O. Fischer), (349) 367
- Pentamethylcyclopentadienyloxo-molybdenum-(VI) and -tungsten(VI) complexes, preparation, characterisation and isolation of (J.W. Faller, Y. Ma), (340) 59
- Phosphanetricarbonyl-molybdenum and -tungsten complexes of bidiazine, synthesis and spectra of (B. Olbrich-Deussner, W. Kaim), (340) 71
- Phosphine-ligand stabilisation by P-complexation with pentacarbonyltungsten (F. Mercier, F. Mathey, C. Afion-Akpan, J.F. Nixon), (348) 361
- (Phosphine)pentacarbonyltungsten, reactions of and formation of primary and secondary phosphines in coordination sphere of tungsten from (F. Nief, F. Mercier, F. Mathey), (328) 349
- Phosphorus-substituted butadiene systems, complexation of (R. Appel, B. Niemann, W. Schuhn, N. Siabalis), (347) 299
- Polarised hydridic tungsten-hydrogen complexes, reactions of (P. Kundel, H. Berke), (335) 353
- [Pt(C≡CH)<sub>2</sub>(Ph<sub>2</sub>PCH<sub>2</sub>PPh<sub>2</sub>-P)<sub>2</sub>], synthesis and formation of heterobimetallic Pt-Ag, Pt-Au, Pt-Rh, Pt-Ir, and Pt-W derivatives of (S.W. Carr, P.G. Pringle, B.L. Shaw), (341) 543
- Reduced metal oxides, molecular model for reductive cleavage of CO to carbide and oxide on (M.H. Chisholm), (334) 77
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Telluroacrylamide complexes, formation from pentacarbonyl(diphenyltelluroketone) tungsten and inamines (H. Fischer, I. Pashalidis), (348) C1
- Tetracarbonyl 2-carboxypicolinato- and 2-carboxyquinolinato-tungsten(0) anionic complexes, reactions with mercury(II) derivatives of (J.A. Campo, M. Cano, M.F. Perpiñan, A.E. Sánchez-Peláez), (345) 299
- Tetracarbonyl-chromium, -molybdenum and -tungsten complexes containing secondary and tertiary phosphines (R.L. Keiter, M.J. Madigan), (331) 341
- Tetracarbonyl-chromium, -molybdenum and -tungsten complexes of dithioethers, steric influences on sulphur inversion barriers in (E.W. Abel, I. Moss, K.G. Orrell, C. Šik), (326) 187
- To tilt or not to tilt? The dilemma of  $\mu$ -C<sub>3</sub>R<sub>3</sub> ligands in binuclear complexes (E.D. Jemmis, B.V. Prasad), (347) 401
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands, <sup>125</sup>Te and <sup>77</sup>Se NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Transition metal coordinated selenoketones, kinetics and mechanism of reactions with 1-diethylamino-1-propyne of (H. Fischer, U. Gerbing, A. Tirilomis), (332) 105
- Transition metal coordinated thioaldehydes, selenoaldehydes and seleno ketones, kinetic investigations of (H. Fischer), (345) 65
- Transition metal mediated homologation of BH<sub>3</sub>·THF: synthesis and crystal structure of [WH<sub>3</sub>(PMe<sub>3</sub>)<sub>3</sub>B<sub>3</sub>H<sub>8</sub>] (P.D. Grevenik, J.B. Leach, M.L.H. Green, N.M. Walker), (345) C31
- 2,4,6-Tri-*t*-butyldiphosphaallene, ArP=C=PAr (Ar = 2,4,6-*t*-Bu<sub>3</sub>C<sub>6</sub>H<sub>2</sub>), hydrogen modes migration in reactions with [W(CO)<sub>5</sub>(THF)] and [Fe<sub>3</sub>(CO)<sub>12</sub>] of: crystal structure of [Fe<sub>2</sub>(CO)<sub>6</sub>(ArP=CHPCH<sub>2</sub>(CMe<sub>2</sub>)C<sub>6</sub>H<sub>2</sub>-*t*-Bu<sub>2</sub>)] (C.A. Akpan, P.B. Hitchcock, J.F. Nixon, M. Yoshifuji, T. Niitsu, N. Inamoto), (338) C35
- Tricarbonyl-chromium, -molybdenum and -tungsten complexes containing bipyridyl and a unidentate diphosphine; facile synthesis via



- trimethylamine *N*-oxide-induced decarbonylations (T.S.A. Hor, S.-M. Chee), (331) 23
- Tricarbonylcyclopentadienylmethylthiolatotungsten(II), reactions with mono- and di-cyanoacetylenes of, formation of phosphorus ylide  $[(C_5H_5)(CO)_2W(CH(P(C_6H_5)_3)C(CN)SCH_3)]$ ; crystal structure of  $[(C_5H_5)(CO)_2(P(C_6H_5)_3)W(C(O)C(CN)=CHSCH_3) \cdot CH_2Cl_2]$  (M.M. Kubicki, R. Kergoat, H. Scordia, L.C. Gomes de Lima, J.E. Guerschais, P. L'Haridon), (340) 41
- Trimethylphosphane and hydridocarbonyl half-sandwich chromium, molybdenum and tungsten complexes, preparation and properties of (H.G. Alt, H.E. Engelhardt, W. Kläui, A. Müller), (331) 317
- Tungsten (0)-carbon and tungsten (0)-hydrogen bonds, insertion reactions with CO, CO<sub>2</sub> or activated acetylenes of (P. Kundel, H. Berke), (339) 297
- Tungsten-cobalt ion containing complexes, synthesis via alkylidyne group coupling reactions of; structure of  $[WCo\{\mu-C(C_6H_4Me-4)C(O)C(C_6H_4Me-4)\}(CO)_5(\eta-C_5H_5)]$  (I.J. Hart, A.E. Jardin, J.C. Jeffery, F.G.A. Stone), (341) 391
- Tungsten-rhodium complexes with bridging alkylidyne groups, synthesis of (M.D. Bermudez, F.G.A. Stone), (347) 115
- Vinyl-, allyl- and alkynyl-siloles, coordination chemistry of; synthesis and structure of  $\eta^4, \eta^2$ -allyl- and 1-vinyl-2,5-diphenylsilylcyclopentadiene complexes (F. Carré, R.J.P. Corriu, C. Guerin, B.J.L. Henner, B. Kolani, W.W.C. Wong Chi Man), (328) 15
- $[WH_2(C \equiv CO_2Me)_2(Ph_2PCH_2CH_2PPh_2)_2]$ , crystal structure of (A. Hills, D.L. Hughes, N. Kashef, R.L. Richards, M.A.N.D.A. Lemos, A.J.L. Pombeiro), (350) C4
- $[WI_2(CO)(NCMe)(\eta^2-RC_2R)_2]$  (R = Me, Ph), reactions with CO giving  $[WI_2(CO)_2(\eta^2-MeC_2Me)_2]$  or  $[W(\mu-I)(CO)(\eta^2-PhC_2-Ph)_2]$ ; crystal structure of the former (E.M. Armstrong, P.K. Baker, M.G.B. Drew), (336) 377

## Uranium

- Active uranium, reduction of diarbonyls, acyloins, alkynes and alkenes with (B.E. Kahn, R.D. Rieke), (346) C45
- Alkyluranium(III) complexes,  $(\eta^5-C_5H_5)_3URLi$ , ligand exchange reactions of (M. Foyentin, G. Folcher, M. Ephritikhine), (335) 201
- (Benzamidinato)uranium(IV) chloride, precursor for organoactinide complexes (M. Wedler, H.W. Roesky, F. Edelmann), (345) C1

- Dicyclopentadienyluranium(IV) complexes containing tetrahydroborate, amido, pivalate and dithiocarbamate ligands (A.L. Arduini, J. Malito, J. Takats, E. Ciliberto, I. Fragala, P. Zanella), (326) 49
- Heptacoordinate acetylacetonateuranium(IV) complexes, synthesis, crystal structure and ligand exchange reactions of (C. Baudin, P. Charpin, M. Ephritikhine, M. Lance, M. Nierlich, J. Vigner),
- Methyltris(hexamethylsilylamido)uranium, reactions of (A. Dormond, A. Aaliti, A. Elbouadili, C. Moise), (329) 187
- Monocyclopentadienyl- and hydrido-uranium(IV) complexes,  $(\eta-C_5H_5)U(CH_3)_3$  and  $(CH_3OCH_2CH_2OCH_3)U(BH_4)_3H$ , synthesis of (D. Baudry, M. Ephritikhine), (349) 123
- Tris(hexamethylsilylamido)uranium(IV) chloride, one-electron reduction of (S. Renaud, A. Dormond, L. Roullier, Y. Mugnier), (347) 71

## Vanadium

- Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167
- Bis-arene-vanadium anions as reducing agents towards CO<sub>2</sub> and CO (G. Fochi), (350) C1
- $[(\eta-C_5H_5)_2VCl][(\eta-C_5H_5)VCl_2](\mu-O)$ , preparation and structure of (F. Bottomley, L. Sutin, P.S. White), (338) 205
- Cyclopentadienylation of pentafulvenes with stannyl- and nitrosyl-carbonylvandium complexes (D. Rehder, D. Wenke), (348) 205
- Diamagnetic trigonal-bipyramidal cluster,  $(\pi-MeC_5H_4)_5V_5(\mu_3-S)_6$ , synthesis and molecular structure of (I.L. Eremenko, A.S. Katugin, A.A. Pasynskii, Yu.T. Struchkov, V.E. Shklover), (345) 79
- Dichloro(5,10,15,20-tetra-*p*-tolylporphyrinato)-vanadium(IV), electroreduction of (P. Reeb, Y., Mugnier), (339) 89
- Hexacarbonyl-group 5 metal derivatives, reactions with 9,10-phenanthrenequinone of (F. Calderazzo, G. Pampaloni), (330) 47
- Monohydrido-bridged carbonyl complexes of early transition metals containing  $\eta^5-C_5H_5Nb(CO)_3$  moiety (P. Oltmanns, D. Rehder), (345) 87
- Organorhenium(V) and organovanadium(V) sulphur-containing oxides, preparation of (J. Kulpe, E. Herdtweck, G. Weichselbaumer, W.A. Herrmann), (348) 369
- Pentamethylcyclopentadienyloxopentasilphidovanadium,  $CpVO(S_5)$ , preparation and structure of (M. Herberhold, M. Kuhnlein, M.L. Ziegler, B. Nuber), (349) 131

- Sulphide-bridged methylcyclopentadienylmetal tetrahedra, effect of electron deficit on; synthesis, characteristics and structures of  $Cp_3^*Cr_3(\mu_3-S)_4Co(CO)$ ,  $Cp_4^*Cr_4(\mu_3-O)(\mu_3-S)_3^+ZnCl_3 \cdot C_4H_8O^-$ ,  $Cp_4^*V_4S_4$  ( $Cp^* = \pi-CH_3C_5H_4$ ) (A.A. Pasynskii, I.L. Eremenko, A.S. Katugin, G.S. Gasanov, E.R. Turchanova, O.G. Ellert, Yu.T. Struchkov, V.E. Shklover, N.T. Berberova, A.G. Sogomonova, O.Yu. Okhlobystin), (344) 195
- (2,2,6,6-Tetramethylpiperidyl-1-oxyl)tricarbonylvanadium, -manganese and -cobalt electron-deficient complexes,  $^{51}V$ ,  $^{55}Mn$  and  $^{59}Co$  NMR investigations of (D. Rehder, P. Jaitner), (329) 337
- Vanadocene isocyanate and isothiocyanate complexes, synthesis and properties of (G.A. Razuvaev, A.S. Gordetsov, V.N. Lataeva, S.V. Zimina, S.E. Skobeleva, N.P. Makarenko, V.K. Cherkasov, V.P. Mar'in, Yu.I. Dergunov), (329) 327
- Vanadocene, reactions with aliphatic halides of (R. Sustmann, G. Kopp), (347) 325
- Vanadocene, reactions with benzyl bromide of (R. Sustmann, G. Kopp), (347) 313

## Ytterbium

- Cyclopentadienylytterbium(II) chlorides,  $C_5H_5-YbCl(L)$ , preparation and spectral characterisation of (S.J. Swamy, H. Schumann), (334) 1
- (Dicyclopentadienyl)(acetylacetonato)ytterbium,  $Yb(\eta^5-C_5H_5)_2 \cdot (CH_3COCHCOCH_3)$ , crystal and molecular structure of (L. Shi, H. Ma, Y. Yu, Z. Ye), (339) 277
- Tricyclopentadienyllanthanides/ sodium hydride, reduction and isomerisation of olefins with (C. Qian, Y. Ge, D. Deng, Y. Gu, C. Zhang), (344) 175
- Ytterbium mixed ligand organometallics with cyclopentadienyl and  $\beta$ -diketonato chelate ligands, synthesis and disproportionation of (H. Ma, Z. Ye), (326) 369

## Yttrium

- Dicyclopentadienyl-yttrium and -aluminium hydrido-chloride complexes; crystal and molecular structures of  $[(\eta^5-C_5H_5)_2Y(\mu_2-Cl)(\mu_3-H)Y(\eta^5-C_5H_5)_2](\mu_2-H)_2AlH \cdot NEt_3 \cdot C_6H_6$  (A.B. Erofeev, B.M. Bulychev, V.K. Bel'skii, G.L. Soloveichik), (335) 189
- Pentamethylcyclopentadienylcyclooctatetraene-scandium, -yttrium and -lanthanum, synthesis and UPS studies of (P. Bruin, M. Booi, J.H. Teuben, A. Oskam), (350) 17

- Permethyltyrocene methyl tetrahydrofuranate, formation and molecular structure of (K.H. den Haan, J.L. de Boer, J.H. Teuben, W.J.J. Smeets, A.L. Spek), (327) 31
- Tricyclopentadienyllanthanides/ sodium hydride, reduction and isomerisation of olefins with (C. Qian, Y. Ge, D. Deng, Y. Gu, C. Zhang), (344) 175

## Zinc

- 1-Acetoxy-1-ferrocenylethane,  $\alpha$ -alkylation of carbonyl compounds by reactions with (M.T. Reetz, M. Sauerwald), (328) 155
- Acetylenic ketones, efficient method for synthesis of (H.D. Verkrujisse, Y.A. Heus-Kloos, L. Brandsma), (338) 289
- $\alpha$ -Bromo-,  $\alpha$ -chloro- and  $\alpha$ -trimethylsilyl-zinc ester enolates, Reformatsky-type Darzens and Peterson reactions of (A. Fürstner), (336) C33
- Crystalline inorganic and organometallic complexes, estimation of standard enthalpies of formation of (A.R. Dias, J.A. Martinho Simões, C. Teixeira, C. Airoidi, A.P. Chagas), (335) 71
- (1,1-Dichloro-2,2,2-trifluoroethylzinc chloride)·2(dimethylformamide), crystal structure of (D. Belluš, B. Klingert, R.W. Lang, G. Rihs), (339) 17
- Dihexyn-4-ylzinc, intramolecular interaction between zinc atom and  $C \equiv C$  in (E. Okninska, K.B. Starowiejski), (347) 1
- Fluorodienes and fluorostyrenes, palladium-catalysed preparation and reactivity of (F. Tellier, R. Sauvêtre, J.F. Normant, V. Dromzee, Y. Jeannin), (331) 281
- Fluoroenynes, prepared by palladium-catalysed cross coupling reactions from alkynylzinc or fluorovinylzinc compounds (F. Tellier, R. Sauvêtre, J.-F. Normant), (328) 1
- ortho*-Methoxybenzaldehydic tricarbonylchromium complex, stereospecific Reformatsky reaction of (J. Brocard, L. Pelinski, J. Lebibi), (336) C47
- Monoalkylaminomethylation of organometals ( $M = Al, Mg, Zn$ ) with *N*-alkyl-*N*-trimethylsilylalkoxymethylamines (G. Courtois, L. Miginiac), (340) 127
- Nickel complexes in the presence of zinc, condensation of organic bromides with vinyl compounds catalysed by (S.A. Lebedev, V.S. Lopatina, E.S. Petrov, I.P. Beletskaya), (344) 253
- Organozinc derivatives of alkyl  $\alpha$ -bromomethylacrylates, preparation and characterisation of (N. El Alami, C. Belaud, J. Villiéras), (348) 1
- Palladium-catalysed or -promoted reductive C-C

- coupling, effects of phosphines and carbon ligands on (E.-I. Negishi, Tamato Takahashi, K. Akiyoshi), (334) 181
- $\alpha$ -Unsaturated organozinc and alkynyl-organomagnesium compounds, regioselective synthesis of 2-substituted pyridine derivatives from *N*-alkoxycarboxypyridinium salts of (A. Al-Arnaout, G. Courtois, L. Miginiac), (333) 139
- Zinc, cadmium and mercury alkyls and amides, bond structures in; thermolysis of Zn-C, M-N (M = Zn, Cd, Hg) bonds (I.E. Gümrükcüoğlu, J. Jeffery, M.F. Lappert, J.B. Pedley, A.K. Rai), (341) 53
- Zinc dihydride, reactions with donor molecules containing acidic hydrogen atoms (N.A. Bell, A.L. Kassyk), (345) 245

## Zirconium

- Alkenylzirconocene agostic complexes, formation by 'abnormal' hydrozirconation of alkynes of (G. Erker, R. Zwitter, C. Krüger, R. Schlund, I. Hyla-Kryspin, R. Gleiter), (346) C15
- Antitumor active cyclopentadienylmetal complexes, experimental investigation to test the cyclopentadiene hypothesis (P. Köpf-Maier, H. Köpf), (342) 167
- Bis( $\eta^5$ -indenyl)dicarbonyl-titanium and -zirconium, formation, and crystal and molecular structures of (M.D. Rausch, K.J. Moriarty, J.L. Atwood, W.E. Hunter, E. Samuel), (327) 39
- Carbometallation of  $\alpha,\beta$ -unsaturated carbonyl compounds and substituted oxacyclopentanes with zirconium-diene complexes (M. Akita, K. Matsuoka, K. Asami, H. Yasuda, A. Nakamura), (327) 193
- Carbonylhidridotris(triphenylphosphine)rhodium(I), RhH(CO)(PPh<sub>3</sub>)<sub>3</sub>, and phosphinomethylzirconium as catalytic system for hydroformylation of 1-hexene (R. Choukroun, D. Gervais, P. Kalck, F. Senocq), (335) C9
- Diarylzirconocene complexes, formation of metallacyclic phosphallyl-type products by thermally induced reactions with CH<sub>3</sub>-CH=PPh<sub>3</sub> from (G. Erker, P. Czisch, R. Benn, A. Ruffinska, R. Mynott), (328) 101
- Dicyclopentadienylbis(trimethylphosphine)-titanium and -zirconium complexes, reactions with acetylenes of (H.G. Alt, H.E. Engelhardt, M.D. Rausch, L. Kool), (329) 61
- Ethylenebis(tetrahydroindenyl)-titanium and -zirconium dichlorides, diastereomeric derivatisation and enantiomer separation of (A. Schäfer, E. Karl, L. Zsolnai, G. Huttner, H.-H. Brintzinger), (328) 87
- Ethylenebis(tetrahydroindenyl)-titanium and -zirconium dichlorides, X-ray structures of (S. Collins, B.A. Kuntz, N.J. Taylor, D.G. Ward), (342) 21
- Group 4 metallocene-substituted ylides, synthesis and reactions with ketones of (G. Erker, P. Czisch, R. Mynott), (334) 91
- Hydride, alkyl and halide iridium and zirconium complexes, MO study of stereoselective addition to (L. Zhu, N.M. Kostic), (335) 395
- Organozirconium(IV) compounds with *N*-aryl-2-mercaptoacetamides preparation and characterisation of (S.C. Dixit, R. Sharan, R.N. Kapoor), (332) 135
- (Pentamethylcyclopentadienyl)trimethylsilicon, effective reagent for transfer of C<sub>5</sub>Me<sub>5</sub> rings; route to monopentamethylcyclopentadienyl trihalides of group 4 elements (G.H. Llinás, M. Mena, F. Palacios, P. Royo, R. Serrano), (340) 37
- Small transition metal clusters, statistical analysis of magic numbers of valence electrons in (Yu.L. Slovokhotov, Yu.T. Struchkov), (333) 217
- Transition metal complexes containing "naked" tellurium and selenium bridging ligands, <sup>125</sup>Te and <sup>77</sup>Se NMR spectra of (W.A. Herrmann, H.-J. Kneuper), (348) 193
- Tris[(di- $\eta$ -cyclopentadienyl)( $\mu$ -terephthalato)zirconium(IV)] · dichloromethane(1/1), preparation and structure of (U. Thewalt, S. Klima, K. Berhalter), (342) 303
- Zirconoxycarbene complex, Cp<sub>2</sub>Zr(C<sub>6</sub>H<sub>4</sub>) $\overline{\text{O}}$ -C $\equiv$ Co(CO)( $\eta$ -C<sub>5</sub>H<sub>4</sub>X), molecular structure and equilibration with ( $\eta$ -C<sub>5</sub>H<sub>4</sub>X)Co(CO)<sub>2</sub>/Cp<sub>2</sub>Zr(butadiene) of (G. Erker, R. Lecht, C. Krüger, Y.-H. Tsay, H. Bönnemann), (326) C75

## Book reviews

- Advances in heterocyclic chemistry; edited by A.R. Katritzky, Vol. 41 (D.W. Young), (338) C14
- Advances in inorganic chemistry, Vol. 31; edited by H.J. Emeléus and A.G. Sharpe (K.R. Seddon), (347) C15
- Advances in molten salt chemistry, Vol. 6; edited by G. Mamantov, C.B. Mamantov and J. Braunstein (K.R. Seddon), (347) C13
- Advances in polymer science. 81. Catalytic and radical polymerization (G.J. Leigh), (340) C20
- Annual reports on NMR spectroscopy, Vol. 19; edited by G.A. Webb (A.G. Avent), (348) C15

- Anorganische Synthesechemie — ein integriertes Praktikum; by B. Heyn, B. Hipler, G. Kreisler, H. Schreier and D. Walther (C.B. Aakeröy and K.R. Seddon), (326) C89
- Asymmetric catalysis; edited by B. Bosnich (NATO ASI Series E: Applied sciences, No. 103) (P.A. Chaloner), (326) C55
- Catalysis: Science and technology. Vol. 8; edit. by J.R. Anderson and M. Boudart (P.A. Chaloner), (340) C21
- Catalyst design; progress and perspectives; edited by L.S. Hegedus (P.A. Chaloner), (331) C18
- Catalytic polymerization of olefins (Studies in surface science and catalysis, Vol. 25); edit. by T. Keii and K. Soga (P.A. Chaloner), (329) C35
- Dictionary of organometallic compounds, Second supplement; edited by J.E. Macintyre (C. Eaborn), (334) C50
- Electrochemistry II. Topics in current chemistry, Vol. 143, edited by E. Steckhan (K.R. Seddon), (348) C44
- Electron transfer reactions in organic chemistry; by L. Ebersson (Reactivity and structure concepts in organic chemistry, Vol. 25) (P.A. Chaloner) (344) C25
- Excited states and reactive intermediates — photochemistry, photophysics and electrochemistry. ACS symposium Series 307; edited by A.B.P. Lever (K.R. Seddon), (332) C22
- Flash points of organic and organometallic compounds; by R.M. Stephenson (P.A. Chaloner), (349) C15
- Gmelin handbook of inorganic chemistry, 8th edit., B — Boron compounds, 3rd Suppl., Vol. 1; by T. Onak (J.D. Smith) (344) C42
- Gmelin handbook of inorganic chemistry, 8th edit., B — Boron compounds, 3rd Supplement, Vol. 2, Boron and oxygen; by G. Heller (J.D. Smith), (334) C51
- Gmelin handbook of inorganic chemistry, 8th edit., F — fluorine, Supplement Vol. 5: Compounds with nitrogen (K.R. Seddon), (332) C23
- Gmelin handbook of inorganic chemistry, 8th edit., F — fluorine, Supplement Vol. 4: Compounds with oxygen and nitrogen (K.R. Seddon), (327) C57
- Gmelin handbook of inorganic chemistry, 8th edit., F — Perfluorohalogenoorgano compounds of main group elements, Supplement Vol. 3, Compounds with elements of the main group 6 (S<sup>IV</sup>, S<sup>VI</sup>, Se, and Te) with I (C. Eaborn), (335) C21
- Gmelin handbook of inorganic chemistry, 8th edit., Ga — Organogallium compounds Part 1; by J.-C. Maire, U. Krüerke, M. Mirbach, W. Petz and C. Siebert (J.D. Smith), (334) C51
- Gmelin handbook of inorganic chemistry, 8th edit., Index, Formula index, 1st Supplement, Volume 3, B<sub>2</sub>-B<sub>100</sub>, Volume 4, Ba-C<sub>7</sub>, Volume 5, C<sub>8</sub>-C<sub>17</sub>, Volume 6, C<sub>18</sub>-C<sub>x</sub>, Volume 7, Ca-I, Volume 8, In-Zr (K.R. Seddon), (328) C47
- Gmelin handbook of inorganic chemistry, 8th edit., Mn—manganese, Part D5, Coordination compounds 5 (J. Chatt), (341) C53
- Gmelin handbook of inorganic chemistry, 8th edit., Mo — molybdenum, Supplement volume B3a: Molybdenum oxide hydrates, oxomolybdenum species in aqueous solution (K.R. Seddon), (333) C37
- Gmelin handbook of inorganic chemistry, 8th edit., S — sulfur-nitrogen compounds, Part 3: Compounds with sulfur of oxidation number IV (K.R. Seddon), (332) C25
- Gmelin handbook of inorganic chemistry, 8th edit., S — sulfur-nitrogen compounds, Part 4: Compounds with sulfur of oxidation number IV (K.R. Seddon), (348) C16
- Gmelin handbook of inorganic chemistry, 8th edit., Sc, Y, La-Lu Rare earth elements, Part C10: Compounds with Te, Po (K.R. Seddon) (332) C24
- Gmelin handbook of inorganic chemistry, Sb — Organoantimony compounds, Part 4, Compounds of pentavalent antimony with three Sb-C bonds (C. Eaborn), (326) C52
- Gmelin handbook of inorganic chemistry, Si (a) Supplement Vol. B2, Silicon carbide, Part 1 (b) Supplement Vol. B3, Silicon carbide, Part 2 (C. Eaborn), (326) C51
- Gmelin handbook of inorganic chemistry, 8th edit., Th—Thorium, Supplement Vol. C3: Compounds with nitrogen (K.R. Seddon), (347) C35
- Gmelin handbook of inorganic chemistry, 8th edit., U — uranium, Supplement Vol. C12: Uranium carbides (K.R. Seddon), (332) C26
- Gmelin handbook of inorganic chemistry, 8th edit., W—Tungsten, Supplement Vol. A2: Physical properties (K.R. Seddon), (347) C36
- Gmelin handbook of inorganic chemistry, 8th edit., W — tungsten, Supplement volume A7: Metal, chemical reactions with inorganic and organic compounds (K.R. Seddon), (333) C38
- Homogeneous and heterogeneous catalysis, edit. by Yu. Yermakov and V. Likholobov (P.A. Chaloner), (344) C55
- Houben-Weyl Methoden der Organischen Chemie, Organo- $\pi$ -Verbindungen als Hilfsmittel in der Organischen Chemie, 4th edi-

- tion, Volume E18, parts 1 and 2; edited by J. Falbe (P.A. Chaloner), (326) C90
- Hypercarbon chemistry; by G.A. Olah, G.K.S. Prakash, R.E. Williams, L.D. Field and K. Wade (C. Eaborn), (334) C49
- Industrial applications of homogeneous catalysis; edited by A. Mortreux and F. Petit (G.L. Leigh), (350) C25
- Infrared and Raman spectra of inorganic and coordination compounds; by K. Nakamoto, 4th edition (K.R. Seddon), (326) C92
- Inorganic reactions and methods. Vol. 1. The formation of bonds to hydrogen (Part 1); edit. by J.J. Zuckerman (G.J. Leigh), (340) C20
- Inorganic reactions and methods, Vol. 1. The formation of bonds to hydrogen (Part 2); edit. by J.J. Zuckerman (G.J. Leigh), (344) C53
- International tables for crystallography, Vol. A, 2nd edition; edit. by T. Hahn (P.B. Hitchcock), (344) C42
- Ion-radicals in organic synthesis; by Z.V. Todres (M.G. Voronkov), (346) C61
- Landolt-Börnstein, Numerical data and functional relationships in science and technology. New series. Group III, Vol. 10, Structure data of organic crystals. Subvol. b, C<sub>16</sub>-C<sub>168</sub> (C. Eaborn), (326) C54
- Landolt-Börnstein, Numerical data and functional relationships in science and technology. New series, Group II, Vol. 17, Subvolume a, Magnetic properties of free radicals; edit. by H. Fischer (R.A. Jackson), (345) C20
- Landolt-Börnstein, Numerical data and functional relationships in science and technology. New series, Group II, Vol. 17, Subvolume b, Magnetic properties of free radicals: Non-conjugated carbon-centred radicals; edit. by H. Fischer (R.A. Jackson), (345) C20
- Mechanisms of inorganic and organometallic reactions, Vol. 4; edited by M.V. Twigg (329) C31
- Mechanisms of ionic polymerization: current problems; by B.L. Eusalimskii (P.A. Chaloner), (329) C15
- Metal clusters; edited by M. Moskovits (K. Wade), (326) C91
- Metal ions in biological systems, Vol. 21: Applications of nuclear magnetic resonance to paramagnetic species; edited by H. Sigel (R.C. Bray), (326) C49
- Metal ions in biological systems, Volume 22, ENDOR, EPR, and electron spin echo for probing coordination spheres; edit. by H. Sigel (R.C. Bray), (328) C51
- Modern NMR spectroscopy; by J.K.M. Sanders and B.K. Hunter (P.D. Lickiss), (332) C21
- Modern NMR techniques for chemistry research; by A.E. Derome (P.D. Lickiss) (329) C34
- Modern techniques in high-resolution FT-NMR; by N. Chandrakumar and S. Subramanian (A.G. Avent), (328) C46
- Molten salt techniques, Vol. 3; edited by D.G. Lovering and R.J. Gale (K.R. Seddon), (347) C12
- New synthetic methodology and functionally interesting compounds; edited by Z. Yoshida (P.A. Chaloner), (335) C6
- One-dimensional organometallic materials—An analysis of electronic structure effects; by M.C. Böhm, *Lecture Notes in chemistry*, Vol. 45 (K.R. Seddon), (348) C43
- Organic chemistry: The name game; by A. Nickon and E.F. Silversmith (C. Eaborn), (344) C39
- Organic photochemistry; edit. by A. Padwa, Volumes 8 and 9 (P.A. Chaloner), (344) C41
- Organic syntheses by oxidation with metal compounds; edited by W.J. Mijs and C.R.H.I. de Jonge (P.A. Chaloner), (326) C52
- Organolithium compounds/solvated electrons, by N.M. Alpatova, L.I. Krishtalik, A. Maercker, R.S. Mali, N.S. Narasimhan, Y.V. Pleskov, M. Theis (P.A. Chaloner), (338) C38
- Organometallic chemistry, Vol. 14; by E.W. Abel and F.G.A. Stone (M.F. Lappert), (326) C50
- Organometallic chemistry reviews; Annual surveys: Transition metals in organic synthesis, organic reactions of selected  $\pi$ -complexes; edit. by R.B. King and J.P. Oliver (P.A. Chaloner) (329) C34
- Organometallics in organic synthesis; edited by A. de Meijere and H. tom Dieck (P.A. Chaloner), (348) C45
- Organosilicon chemistry; by S. Pawlenko (C. Eaborn), (326) C86
- Periodic table of the elements (C. Eaborn), (326) C54
- Perspectives in the organic chemistry of sulphur; edited by B. Zwanenburg and A.J.H. Klunder (P.A. Chaloner), (331) C7
- Phosphorus-31 NMR spectroscopy in stereochemical analysis, Vol. 9; edited by J.G. Verkade and L.D. Quin (K.R. Seddon), (348) C42
- Polymeric reagents and catalysts (ACS symposium series, Vol. 308); edited by W.T. Ford (P.A. Chaloner), (331) C6
- Preparative chemistry using supported reagents; edited by P. Laszlo (P.A. Chaloner), (348) C34
- Preparative polar organometallic chemistry 1; by

- L. Brandsma and H. Verkrujse (P.A. Chaloner), (335) C7
- Principles and applications of organotransition metal chemistry; by J.P. Collman, L.S. Hegedus, J.R. Norton and R.G. Finke (M.F. Lappert), (336) C22
- Problems and solutions in organometallic chemistry; by S.E. Kegley and A.R. Pinhas (P.A. Chaloner), (329) C14
- Reactivity and structure: concepts in organic chemistry; edit. by K. Hafner, J.-M. Lehn, C.W. Ress, P.v.R. Schleyer, B.M. Trost, R. Zahradnik, Vol. 26, Polyquinane chemistry, Synthesis and reactions; by L.A. Paquette, A.M. Doherty (J.R. Hanson) (344) C24
- Silicon and silicones; by R.G. Rochow (C. Eaborn), (345) C35
- Small ring compounds in organic synthesis, Volumes 1 and 2; edit. by A. de Meijere (Topics in current chemistry, volumes 133 and 135) (P.A. Chaloner), (328) C52
- Spectroscopic methods in organic chemistry; by D.H. Williams and I. Fleming (C. Eaborn), (344) C40
- Spectroscopic properties of inorganic and organometallic compounds, Vol. 19; edit. by G. Davidson and E.A.V. Ebsworth (P.A. Chaloner), (344) C54
- Stereochemical analysis of alicyclic compounds by  $^{13}\text{C}$  NMR spectroscopy; by J.K. Whitesell and M.A. Morton (J.R. Hanson), (333) C11
- Stereoselective synthesis, by M. Nógrádi (P.A. Chaloner), (331) C18
- Structural chemistry of boron and silicon (C. Eaborn), (326) C93
- Structural methods in inorganic chemistry; by E.A.V. Ebsworth, D.W.H. Rankin and S. Cradock (P.A. Chaloner) (329) C33
- The chemistry and biochemistry of *N*-substituted porphyrins; by D.K. Lavallee (K.R. Seddon), (348) C46
- The chemistry of inorganic homo- and heterocycles, Vol. 1; edited by I. Haiduc and D.B. Sowerby (J.D. Smith), (348) C33
- The chemistry of the metal-carbon bond, Volume 4, The use of organometallic compounds in organic synthesis; edited by F.R. Hartley (C. Eaborn), (335) C20
- The periodic table of the elements; by R.J. Puddephatt and P.K. Monaghan (K.R. Seddon), (326) C88
- Tin in organic synthesis; by M. Pereyre, J.-P. Quintard and A. Rahm (P.A. Chaloner), (331) C5
- Variety in coordination modes of ligands in metal complexes; by S. Kawaguchi (G.J. Leigh), (350) C26