

JOURNAL OF ORGANOMETALLIC CHEMISTRY

CUMULATIVE SUBJECT INDEX: Vol. 226 (1982)—250 (1983)

Actinides

Lanthanides and actinides; Annual Survey covering the year 1980 (T.J. Marks), (227)317

Aluminium

Alkylmagnesiums and alkylmagnesium hydrides, hydrometallation of 1-octene catalysed by dicyclopentadienyltitanium dichloride with (E.C. Ashby, R.D. Ainslie), (250)1

Aluminium; Annual Survey covering the year 1980 (J.D. Smith), (227)241

Aluminium derivatives of 3,6-di-t-butyl-1,2-benzoquinone, ESR spectra and structures of (A.G. Davies, Z. Florjańczyk, E. Lusztyk, J. Lusztyk), (229)215

Bis(methylelement)dithiooxamid derivatives (element = Al, Ga, In, Si, Ge, Sn); planar and fused structural metallabicyclic compounds (T. Halder, W. Schwarz, J. Weidlein, P. Fischer), (246)29

Chloronitrosylcarbonylmolybdenum(0) complexes, synthesis and activity as catalysts of (K. Seyferth, R. Taube), (229)275

$[(C_6H_5)_2TiCl_2]_2/LiAlH_4$, catalytic system in aromatic solvents, ESR study of formation of titanocene hydride complexes (K. Mach, H. Antropiusová), (248)287

$\eta^6-C_6H_6 Ti(Cl_2AlCl_2)_2$, X-ray structure analysis of (U. Thewalt, F. Stollmaier), (228)149

Cycloalumadisilatriazane, preparation and NMR spectra of (U. Wannagat, T. Blumenthal, D.J. Brauer, H. Bürger), (249)33

1,4-Diaza-1,3-butadiene(α -diimine)-zinc and -aluminium stable radicals formed in single electron transfer reactions; their consequences for organic syntheses (G. van Koten, J.T.B.H. Jastrzebski, K. Vrieze), (250)49

Dicyclopentadienylchloroyttrium complex with aluminium hydride monoetherate $[(\eta^6-C_6H_5)_2YCl]_2AlH_3 \cdot OEt_2$, crystal

and molecular structure of (E.B. Lobkovskii, G.L. Soloveichik, A.B. Erofeev, B.M. Bulychev, V.K. Bel'skii), (235)151

Ethyl(pentamethylcyclopentadienyl)-rhodium and -iridium complexes, preparation of (A. Vázquez de Miguel, P.M. Maitlis), (244)C35

Hydralumination of alkenes, kinetic and stereochemical factors in and configurational stability of the C—Al bond (J.J. Eisch, K.C. Fichter), (250)63

Hydride-halide compounds of titanium and aluminium, isomerization of olefins on and geometry of the ligand environment of the Ti atom in (B.M. Bulichev, E.V. Evdokimova, A.I. Sizov, G.L. Soloveichik), (239)313

Hydrometallation of alkynes in the presence of copper(I) derivatives (D. Masure, P. Courtot, J.F. Normant), (226)C55

Lithium aluminium hydride solutions in diethyl ether, accurate titration method for (J. Villieras, M. Rambaud, B. Kirschleger), (249)315

Metalla-tranes (*Review*) (M.G. Voronkov, V.P. Baryshok), (239)199

Methylaluminium chlorides, vapour pressure of (W. Ufnalski, A. Sporzyński), (244)1

1,3-trans-Pentadiene, catalytic hydrogenation over $Rh_4(CO)_1$, supported on $\gamma-Al_2O_3$, (P.M. Lausarot, G.A. Vaglio, M. Valle), (240)441

Platinum(II) three coordinate cationic complex, $[(Ph_3PCH_2)(Ph_3P)PtCl]-[AlCl_4]$, preparation and derivatives of (O.J. Scherer, H. Jungmann), (228)C61

Silicinium ylids, stabilisation by adduct formation with aluminium trihalides; crystal structure of $[(Me_3C)_2SiNCMe_3]_2AlClF_2$, (W. Clegg, U. Klingebiel, J. Neemann, G.M. Sheldrick), (249)47

Tetraethylaluminoxane, synthesis and properties of (A. Woliński), (234)1

Tetramethylcyclobutadienepalladium dichloride, preparation of (H. Hoberg, H.J. Riegel, K. Seevogel), (229)281

Trichloronitridomolybdenum(VI) complexes, preparation and their suitability as precatalysts for metathesis of 2-pentene of (K. Seyferth, R. Taube), (229)C19

Trimethylmetal urotropine adducts of aluminium, gallium, indium and thallium (H. Krause, K. Sille, H.-D. Hausen, J. Weidlein), (235)253

Tris(trimethylsilyl)methyl derivatives of boron, aluminium and gallium, preparation and properties of (C. Eaborn, M.N. El-Kheli, N. Retta, J.D. Smith), (249)23

Antimony

Antimony; Annual Survey covering the year 1980 (L.D. Freedman, G.O. Doak), (237)21

Cyclopentadienylnickel cationic complexes with Sb-donor ligands (N. Kuhn, M. Winter), (243)C83

Fe—Fe bond cleavage in $[\text{Fe}_3(\text{CO})_9(\mu_3\text{-SR})]$ by electrophilic reagents of the Vth and VIth Main Group (A. Winter, L. Zsolnai, G. Huttner), (250)409

Metallated arsanies and stibanes with chiral iron substituents (H.-A. Kaul, D. Greissinger, M. Luksza, W. Malisch), (228)C29

Organometallic Ph_nMX ($\text{M} = \text{Hg, Sn, Pb, Sb}$; $\text{X} = \text{O, S, NR}$) and HX groups, determination of σ -constants of (L.M. Epstein, L.D. Ashkinadze, E.S. Shubina, D.N. Kravtsov, L.A. Kazitsyna), (228)53

Pentacarbonyliron in reaction with Group V donor ligands in the presence of $[(\eta^5\text{C}_5\text{H}_5\text{R})\text{Fe}(\text{CO})_2]$, and $[(\eta^5\text{C}_5\text{Me}_5)\text{Fe}(\text{CO})_2]$, as catalysts (M.O. Albers, N.J. Coville, E. Singleton), (232)261

Pentacarbonyl-manganese and -rhenium radicals, paramagnetic adducts trapped by N,N' -di-t-butyl-1,4-diaza-1,3-butadiene from; characterisation by ESR spectroscopy of (A. Alberti, A. Hudson), (248)199

Phosphorus, arsenic, antimony and bismuth trivalent compounds and their $\text{Ln}(\text{CO})_3$ complexes, Fourier transform ^{13}C NMR study of (G.M. Bodner, C. Gagnon, D.N. Whittern), (243)305

Ruthenium cluster carbonyls containing tertiary phosphines, phosphites, arsines, triphenylstibine or isocyanides, radical-ion-initiated synthesis of (M.I. Bruce, J.G. Matisons, B.K. Nicholson), (247)321

Tetramethyldistibane, cleavage reactions with bromine, iodine and methyl iodide and formation of the adducts $\text{MeSbI}_2 \cdot 2\text{Me}_4\text{SbI}$ (H.J. Breunig, H. Jawad), (243)417

Tetra-organoantimony mercaptides, thermal decomposition of (B.S. Bedi, D.W. Grant, L. Tewnion, J.L. Wardell), (239)251

Arsenic

Alkylarsinidene and arsinidene complexes with Group VIA metal carbonyl compounds, preparation and reactions of (B. Sigwarth, L. Zsolnai, O. Scheidsteiger, G. Huttner), (235)43

Bis(3-dimethylarsinopropyl)phenylarsine- and 1,2-bis(methylphenylarsino)ethane-rhodium(I), synthesis and reactions of (B.L. Booth, C.A. McAuliffe, G.L. Stanley), (226)191

$[\eta^5\text{C}_5\text{H}_5\text{Mo}(\text{CO})_2]_2[\mu\text{-catena-(CH}_2\text{As)}_5]$, synthesis and structural characterisation of; example of ring-chain conversion upon coordination (A.L. Rheingold, M.R. Churchill), (243)165

cis- and trans-Cyclopentadienyldicarbonyltungsten-arsane complexes with MeNC and t-BuNC as ligands, synthesis, characterisation and cleavage with phosphor ylids of (M. Luksza, K. Fiedlerling, U. Wanka, W. Malisch), (236)C1

Cyclopentadienylnickel complexes with bis(diphenylarsino)alkylidene as ligand, synthesis and reactivity of (N. Kuhn, M. Winter), (238)C53

Cyclopentadienylnickel compounds, coordination of bifunctional ligands in (N. Kuhn, M. Winter), (243)C42

Diarsenic, As_2 , as side-on bonded six-electron ligand (B. Sigwarth, L. Zsolnai, H. Berke, G. Huttner), (226)C5

Di-bridged trinuclear iron cluster, $\text{Fe}_3(\text{CO})_9(\mu_3\text{-S})(\mu_3\text{-X})$ ($\text{X} = \text{PR, AsR, SO}$), synthesis from $[\text{Fe}_3(\text{CO})_9(\mu_3\text{-S}-\text{C}_4\text{H}_9)]^+$ of (A. Winter, L. Zsolnai, G. Huttner), (234)337

1,1-Dichloro-1-R- λ^5 -arsole-1-chloroarsoles and 2,2',5,5'-tetraphenyldiarsolyl, chemistry of (G. Märkl, M. Hauptmann), (248)269

Diphenylarsine sulphide, $\text{C}_{14}\text{H}_{15}\text{AsS}$, and p-tolyldiethylarsine sulphide, $\text{C}_{11}\text{H}_{17}\text{AsS}$, crystal and molecular structures of (V.E. Zavodnik, V.K. Belsky, Yu.G. Galyametdinov), (226)41

$\text{Fe}_3(\text{CO})_9(\mu_3\text{-S})(\mu_3\text{-ER})$ ($\text{R} = \text{alkyl, aryl; E = P, As}$), ligand properties of (A. Winter, I. Jibril, G. Huttner), (247)259

- Fe**—Fe bond cleavage in $[Fe_3(CO)_9(\mu_3-SR)]^-$ by electrophilic reagents of the Vth and VIth Main Group (A. Winter, L. Zsolnai, G. Huttner), (250)409
- Group VI metal carbonyl complexes** containing the ligands: 1,6-bis(diphenylphosphino)-*trans*-hex-3-ene and 1,6-bis(diphenylarsino)*trans*-hex-3-ene; crystal and molecular structures of tricarbonyl-1,6-bis(diphenylphosphino)-*trans*-hex-3-enemolybdenum(0) (G.R. Clark, C.M. Cochrane, P.W. Clark), (236)197
- M(CO)_nL** ($M = Cr, Mo, W$) complexes with chelating ligands: (2-Me₂E'C₆H₄)-Si(EMe₂)Me₂ and (4-XC₆H₄)SiMe(EMe₂)-CH₂CH₂E'Me₂ ($X = F, Cl; E, E' = N, P, As$) (P. Aslanidis, J. Grobe), (249)103
- Metallated arsanes and stibanes with chiral iron substituents** (H.-A. Kaul, D. Greissinger, M. Lukasza, W. Malisch), (228)C29
- Pentacarbonyl heteroligand complexes of Group VIA transition metals**, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), (247)203
- Pentacarbonylalkylmanganese**, photochemical reactions with 1,3-butadienes and 1,3-pentadienes and insertion reactions with olefins into Mn—C bonds of (W. Lipps, C.G. Kreiter), (241)185
- Pentacarbonyliron** in reaction with Group V donor ligands in the presence of $[(\eta^5-C_5H_5R)Fe(CO)_2]_2$ and $[(\eta^5-C_5Me_5)Fe(CO)_2]_2$ as catalysts (M.O. Albers, N.J. Coville, E. Singleton), (232)261
- Pentacarbonyl-manganese and -rhenium radicals**, paramagnetic adducts trapped by *N,N'*-di-*t*-butyl-1,4-diaza-1,3-butadiene from; characterisation by ESR spectroscopy of (A. Alberti, A. Hudson), (248)199
- 1-Phenyl-2,5-diaryl(dialkyl)-arsoles**, conversion with alkali metal and organolithium compounds of (G. Märkl, H. Hauptmann, A. Merz), (249)335
- 1-Phospha- and 1-arsa-4-boracyclohexadienes**, preparation and properties of (H.-O. Berger, H. Nöth), (250)33
- Phosphine stabilised carbonylnitrosyl-vanadium compounds**, preparation and spectroscopic properties of (J. Schiemann, E. Weiss, F. Näumann, D. Rehder), (232)219
- Phosphorus, arsenic, antimony and bismuth trivalent compounds and their LN_i(CO)₃ complexes**, Fourier transform ¹³C NMR study of (G.M. Bodner, C. Gagnon, D.N. Whittern), (243)305
- Phosphorus and arsenic di-bridged hetero-metal—metal bonds** (A. Trenkle, H. Vahrenkamp), (236)71
- Platinum(II) three coordinate cationic complex**, $[(Ph_3PCH_3)(Ph_3P)PtCl]-[AlCl_4]$, preparation and derivatives of (O.J. Scherer, H. Jungmann), (228)C61
- Rhodium complexes**, catalytic activity in oligomerisation of terminal hydroxy-acetylenes (H.-A. Schäfer, R. Marcy, T. Rüping, H. Singer), (240)17
- Rhodium complexes containing tri-3-butenylarsine as ligand** (B.L. Booth, C.A. McAuliffe, G.L. Stanley), (231)255
- Ruthenium cluster carbonyls** containing tertiary phosphines, phosphites, arsines, triphenylstibine or isocyanides, radical-ion-initiated synthesis of (M.I. Bruce, J.G. Matisons, B.K. Nicholson), (247)321
- Tetraruthenium cluster** containing quadruply bridging PPh groups, rearrangement to cluster containing triply bridging PPh ligands through uptake of CO; crystal and molecular structures of $[Ru_4(\mu_3-XPh)_2(CO)_{13}]$ ($X = P, As$) (J.S. Field, R.J. Haines, D.N. Smit, K. Natarajan, O. Scheidsteiger, G. Huttner), (240)C23
- Trichloronitrosylferrate**, $[Fe(NO)Cl_3]^-$, structure of (M. Steimann, U. Nagel, R. Grenz, W. Beck), (247)171
- 2,2,2-Trideuteroethylarsine and -cyclopentaarsine**, synthesis and NMR spectra of (A.L. Rheingold, S. Natarajan), (231)119
- Triphenylarsine**, C₁₈H₁₅As, crystal and molecular structure of (A.N. Sobolev, V.K. Belsky, N.Yu. Chernikova, F.Yu. Akhmadulina), (244)129
- Barium**
- Dicumylbarium**, as initiator in anionic polymerisation and physicochemical properties in THF and THP of (L.C. Tang, C. Mathis, B. François), (243)359
- Synthetic possibilities of addition reactions between common organometallic compounds and conjugated enynes (Review)** (L. Miginiac), (238)235

Beryllium

Metallaviolenes, ESR study of (W. Kaim), (241)157

Bismuth

Bismuth; Annual Survey covering the year 1980 (G.O. Doak, L.D. Freedman), (237)51

Metallated arsanies and stibanes with chiral iron substituents (H.-A. Kaul, D. Greisinger, M. Luksza, W. Malisch), (228) C29

Pentacarbonyl-manganese and -rhenium radicals, paramagnetic adducts trapped by *N,N'*-di-t-butyl-1,4-diaza-1,3-butadiene from; characterisation by ESR spectroscopy of (A. Alberti, A. Hudson), (248)199

Phosphorus, arsenic, antimony and bismuth trivalent compounds and their $\text{LNi}(\text{CO})_3$ complexes, Fourier transform ^{13}C NMR study of (G.M. Bodner, C. Gagnon, D.N. Whittern), (243)305

Tris(*o*-deuterophenyl)bismuth and bis(*o*-deuterophenyl)bismuth bromide, preparation of and paramagnetic ^1H NMR shifts in (U. Praeckel, F. Huber), (240)C45

Boron

1-Alkenylboranes, cross-coupling reactions with 3,4-epoxy-1-butene catalysed by palladium or nickel complexes of (N. Miyaura, Y. Tanabe, H. Sugimoto, A. Suzuki), (233)C13

Alkoxydialkylaminophenylboranes, preparation and properties of (R.H. Cragg, T.J. Miller), (235)135

Alkyl-substituted borohydrides, investigations of the synthesis of (Review) (H.C. Brown), (239)43

Alkylamino- and dialkylamino-piperidino-phenylboranes, preparation and properties of (R.H. Cragg, T.J. Miller), (235)143

2-(Azol-1'-yl)-1,3,2-diazaboracycloalkanes, preparation and reactions of (F. Alam, K. Niedenzu), (243)19

1-Boraadamantane, iodination of ate complexes of (B.M. Mikhailov, M.E. Gurskii, D.G. Pershin), (246)19

3-Borabicyclo[3.3.1]nonane compounds, Matteson-Pasto rearrangements in (L.S. Vasilyev, V.V. Veselovskii, M.I. Struchkova, B.M. Mikhailov), (226)115

Borinane, convenient procedures for the synthesis of (H.C. Brown, G.G. Pai), (250)13

(Borinato)(cyclobutadiene)cobalt complexes with tetramethyl- and tetraphenyl-cyclobutadiene ligands, synthesis, electrophilic, aromatic and ring-member substitution at the borinato ligand (G.E. Herberich, A.K. Naithani), (241)1

Boron; Annual Survey covering the year 1980; Part II (K. Niedenzu), (227)199

Boron: Boranes in organic synthesis; Annual Survey covering the year 1980 (D.S. Matteson), (227)165

Boron chelates of salicylaldehydenitrone adducts (W. Kliegel, D. Nanninga), (243)373

Carbiminoborane monomers, preparation of (U. Sicker, A. Meller, W. Maringgele), (231)191

c_{los}o-Carborane system, unusual halogen exchange in (K. Fuller, T. Onak), (249) C6

Chlorodialkylaminophenylboranes, synthesis and properties of (R.H. Cragg, T.J. Miller), (232)201

7-Chloromethyl-3-allyl-3-borabicyclo[3.3.1]non-6-ene, chloro-allylic rearrangement of and synthesis of 4-chloro-1-boraadamantane complexes (B.M. Mikhailov, K.I. Cherkasova), (246)9

Cyclobutylmethylboranes, ring cleavage rearrangement of (E.A. Hill, P.A. Nylen, J.H. Fellinger), (239)279

π -Cyclopentadienyl- π -(3)-1,2-dicarbollyl-iron(III) 1-substituted derivatives, synthesis and reactions of; structure of $\pi\text{-C}_5\text{H}_5\text{Fe}^{\text{III}}\text{-}\pi\text{-1,2-C}_2\text{B}_9\text{H}_{10}\text{-1-CH(OEt)}$, (L.I. Zakharkin, V.V. Kobak, A.I. Yanovski, Yu.T. Struchkov), (228)119

Dialkylaminoethanethiophenylboranes, synthesis and properties of (R.H. Cragg, T.J. Miller), (243)387

Dialkylaminofluorophenylboranes, restricted rotation about the B-N bond in (R.H. Cragg, T.J. Miller, D.O'N. Smith), (231)C41

Dialkylaminophenylboranes, ^{13}C NMR study of (C. Brown, R.H. Cragg, T.J. Miller, D.O'N. Smith), (244)209

2,4-Dibora-1,3-diazaborbenzene and related borazine, ^{13}C NMR spectral study of heterocyclic derivatives of (S. Allaoud, H. Bitar, M. El Mouhtadi, B. Frange), (248)123

- 1,2-, 1,7- and 1,12-dicarbaclosododeca-boranes(12) substituted at B, synthesis of (L.I. Zakharkin, A.I. Kovredov, V.A. Ol'shevskaya, Zh.S. Shaugumbekova), (226)217
- Dimeric aldiminoborane and monomeric paddle-wheel shaped tris(ketimino)-borane (J.R. Jennings, R. Snaith, M.M. Mahmoud, S.C. Wallwork, S.J. Bryan, J. Halfpenny, E.A. Petch, K. Wade), (249)C1
- Dimethylboryl-containing dyes and related ^{11}B NMR studies (M.E. Glogowski, N. Zumbulyadis, J.L.R. Williams), (231)97
- 1,2-Dithiol- α -carborane, synthesis of cyclic and polymeric derivatives of (F. Teixidor, R.W. Rudolph), (241)301
- Di- and tri-valent lanthanide carboranyl derivatives, synthesis of (G.Z. Suleimanov, V.I. Bregadze, N.A. Koval'chuk, I.P. Beletskaya), (235)C17
- (η^5 -Divinylborane)-ruthenium and -rhodium complexes (G.E. Herberich, G. Pampaloni), (240)121
- Haloboranes and their alkyl derivatives (Review) (H.C. Brown, S.U. Kulkarni), (239)23
- Halomethaneboronates, preparation of (P.G.M. Wuts, P.A. Thompson), (234) 137
- B-(3-Hexyl)bis(bicyclo[2.2.2]octyl)-borane, exceptionally rapid thermal isomerization of (H.C. Brown, U.S. Racherla), (241)C37
- Hindered thexylb boronic esters derived from diethanolamines, N-B coordination in (R. Contreras, C. García, T. Mancilla, B. Wrackmeyer), (246)213
- Hydride transfer reaction of ate complexes of 7-substituted 3-alkyl-3-borabicyclo-[3.3.1]-nonanes and -non-6-enes (M.E. Gurskii, S.V. Baranin, A.S. Shashkov, A.I. Lutsenko, B.M. Mikhailov), (246)129
- Hydroboration of ferrocenylalkenes, stereochemistry of (C. Lo Sterzo, G. Ortaggi), (234)C28
- Hydroboration of unsaturated amines, formation of aminoalkylidenecycloalkanes by (J.-L. Torregrosa, M. Baboulene, V. Speziale, A. Lattes), (244)311
- Hydroboration-alkylation reactions of 1-bromopropargylamines (J.-L. Torregrosa, M. Baboulene, V. Speziale, A. Lattes), (238)281
- 1-[Ir(CO)(PhCN)(PPh₃)]-7-C₆H₅-1,7-(σ -C₂B₁₀H₁₀), homogeneous hydrogenation of alk-1-enes and alkynes catalysed by (F. Morandini, B. Longato, S. Bresadola), (239)377
- 2-Isopropyl-2-boraadamantane, bromination of (B.M. Mikhailov, T.A. Shchegoleva, E.M. Shashkova, V.G. Kiselev), (250)23
- Lithium carborane derivatives, interaction with lanthanides chlorides of (V.I. Bregadze, N.A. Koval'chuk, N.N. Godovikov, G.Z. Suleimanov, I.P. Beletskaya), (241)C13
- Metallatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199
- Metallaviolenes, ESR study of (W. Kaim), (241)157
- Metal-pentaborane(9) derivatives, 2-[Co(CO)₄]B₅H₈ and 2-[$(\eta^5\text{C}_5\text{H}_5)$ Fe(CO)₂]B₅H₈ (M.B. Fischer, D.F. Gaines, J.A. Ulman), (231)55
- Monomeric pyrazol-1-ylboranes, chemical behaviour of (F. Alam, K. Niedenzu), (240)107
- Nitrones of 2-formylphenylboronic acid esters, synthesis and properties of (W. Kliegel, D. Nanninga), (247)247
- Organoborane chemistry, fluorine substitution effects in; vibrational and X-ray structural analysis of K[CH₃BF₄] (D.J. Brauer, H. Bürger, G. Pawelke), (238)267
- Osmaboranes and iridatetraborane, synthesis and NMR spectra of (J. Bould, N.N. Greenwood, J.D. Kennedy), (249)11
- Pentacarbonylisocyanoborylchromium complexes, preparation and IR, NMR and mass spectra of (M. Höfler, H. Löwenich), (224)229
- Pentagonal fused bipyramidal metallo-carboranes containing wedge ligands as B—H, Sn and Ge, EHMO calculations on (M.J. Calhorda, D.M.P. Mingos), (229)229
- Phenylboranes, ^{13}C NMR studies of (R.H. Cragg, T.J. Miller), (241)289
- 1-Phenyl-3-borolenes, preparation of (G.E. Herberich, B. Hessner, D. Söhnen), (233)C35
- 1-Phenyl-4,5-dihydroborepin, complexation and rearrangement of; synthesis and structure of manganese and iron triple-decker complexes with 2-ethyl-1-phenylborol as bridging ligands (G.E. Herberich, J. Hengesbach, G. Huttner, A. Frank, U. Schubert), (246)141

(*-*)-(S)- α -Phenylethylamine-(*-*)-cyano-(pyrrolyl-1)borane and (+)-(R)- α -phenylethylamine-(+)-cycano(pyrrolyl-1)-borane, preparation of (B. Györi, J. Emri), (238)159

1-Phospha- and 1-arsa-4-boracyclohexadienes, preparation and properties of (H.-O. Berger, H. Nöth), (250)33

Phosphineborane analogues of trimethylsilyl amides (C.H. Yoder, L.A. Miller), (228)31

Polypyrazolylborate molybdenum optically active complexes with aminophosphines as chiral ligands (E. Frauenstorfer, H. Brunner), (240)371

Selenium and tellurium carboranyl derivatives, synthesis of (V.I. Bregadze, V.Ts. Kampel, A.Ya. Usiatinsky, O.B. Ponomareva, N.N. Godovikov), (233)C33

Seven and twelve vertex carbaplatina-boranes, theoretical comparison of "slip" distortion and rotational barriers in (M.J. Calhorda, D.M.P. Mingos, A.J. Welch), (228)309

Silatranes (*Review*) (M.G. Voronkov, V.M. Dyakov, S.V. Kirpichenko), (233)1

Tetra-t-butyl diborane(4), radical anion from (H. Klusík, A. Berndt), (232)C21

Tetra-t-butyl tetra borane(4), radical anion from (H. Klusík, A. Berndt), (234)C17

Tetraethylammonium hydrotris(3,5-dimethylpyrazolyl)boratotricarbonylmolybdenum(0), [NEt₄][Mo(CO)₃HB(C₆H₃N₂)₃], crystal and molecular structures of (C.P. Marabella, J.H. Enemark), (226)57

Tris(trimethylsilyl)methyl derivatives of boron, aluminium and gallium, preparation and properties of (C. Eaborn, M.N. El-Kheli, N. Retta, J.D. Smith), (249)23

Tris(trimethylsilyl)methylboron highly sterically hindered compound, preparation and molecular structure of (C. Eaborn, N. Retta, J.D. Smith, P.B. Hitchcock), (235)265

Cadmium

Zinc and cadmium; Annual Survey covering the year 1980 (J. Boersma), (237)1

Caesium

Alkali metal derivatives of octamethyltrisilazane, short Na—C contacts in

the molecular structure of the disodium salt (D.J. Brauer, H. Bürger, W. Geschwandtner, G.R. Liewald, C. Krüger), (248)1

Alkali metal salts of pentacyclopentadienide (R. Zhang, M. Tsutsui, D.E. Bergbreiter), (229)109

Alkali metal solutions, effect of cryptands on solubility and spectra in THF, dioxane and toluene (J. Lacoste, F. Schue), (231)279

n^6 and n^5 -Fluorenylchromium tricarbonyl anions, ¹³C NMR study of reversible isomerisation of (Yu.F. Oprunenko, Yu.N. Luzikov, Yu.A. Ustynyuk, N.A. Ustynyuk), (231)137

Heavier alkali metals; Annual Survey covering the year 1980 (E.M. Kaiser), (227)135

Tributylstannyl anionoids, reactions with alkyl bromides of (M. Newcomb, M.G. Smith), (228)61

Calcium

Solvent-free arylcalcium halides, preparation and reactions of (K. Mochida, H. Ogawa), (243)131

Synthetic possibilities of addition reactions between common organometallic compounds and conjugated enynes (*Review*) (L. Miginac), (238)235

Chromium

(Alkyl and perfluoroalkyl) C-nitroso-transition metal complexes, ¹⁵N NMR comparisons of (D.H. Evans, D.M.P. Mingos, J. Mason, A. Richards), (249)293

Alkylarsinidene and arsinidene complexes with Group VIA metal carbonyl compounds, preparation and reactions of (B. Sigwarth, L. Zsolnai, O. Scheidsteiger, G. Huttner), (235)43

Allyl-nickel, -chromium, -magnesium and -lithium complexes, *J*(¹³C—¹³C) values in (R. Benn, A. Rufińska), (239)C19

Antiferromagnetic heteronuclear cluster (Cp₄Cr₂Ni₂)(μ₃-S), (μ₄-S), synthesis and structure of (A.A. Pasynskii, I.L. Eremenko, O.G. Ellert, V.M. Novotortsev, Yu.V. Rakitin, V.T. Kalinnikov, V.E. Shklover, Yu.T. Struchkov), (234)315

η^6 -Arene-1,2-bis(triphenylphosphino)-ethanedicarbonylchromium and

- analogous compounds, preparation and reactions of (M.F. Semmelhack, W. Seufert, L. Keller), (226)183
- Arene- and cycloheptatriene-chromium tricarbonyl complexes, heats of iodination of (C.D. Hoff), (246)C53
- Arene-chromium dicarbonyl chelates (A. Solladié-Cavallo, J. Suffert, A. De Cian), (236)83
- (η^6 -Arene)(tricarbonyl)chromium, complex formation with benzene of (W.J. Bland, R. Davis, J.L.A. Durrant), (234)C20
- Arenetricarbonylchromium complexes, study of photolysis by IR, UV and ^1H and ^{13}C NMR spectroscopy of (E.A. Domogatskaya, V.N. Setkina, N.K. Baranetskaya, V.N. Trembovler, B.M. Yavorskii, A.Ya. Shteingshneider, P.V. Petrovskii), (248)161
- Benchrotrene, stereochemistry of cyclisation reactions with polyphosphoric acids of α - and β -alkyl- β -phenylpropionic acids of (B. Caro, G. Jaouen), (228)87
- Benchrotrene, titanocene and zirconocene, negative chemical ionization mass spectra with methane of (J. Tirouflet, J. Besançon, B. Gautheron, F. Gomez, D. Fraisse), (234)143
- Benzalacetophenone and bis(benzalacetophenone)chromium, electrochemical reduction of (L.N. Nekrasov, L.P. Yur'eva, S.M. Peregudova), (238)185
- Bimetallic cluster of the type: $(\mu\text{-C}_5\text{Me}_5)_2\text{M}_2\text{M}'_2(\mu_3\text{-S})_4(\text{CO})_2$, ($\text{M} = \text{Cr}, \text{Mo}; \text{M}' = \text{Co}$), formation of (H. Brunner, J. Wachter), (240)C41
- Bis(arene)chromium(I) complexes, voltammetric study of metal-ligand interaction in (N. Ito, T. Saji, K. Suga, S. Aoyagui), (229)43
- Bis(η -arene)chromium (d^5, d^6, d^7) complexes of trimethylsilylbenzene, 1,4-bis(trimethylsilyl)benzene and 1,3,5-tris(trimethylsilyl)benzene (C. Elschenbroich, J. Koch), (229)139
- Bis-carbene-tetracarbonylchromium complexes, structures of (U. Schubert, K. Ackermann, N. Hoa Tran Huy, W. Röll), (232)155
- Bis(phosphoryl)phosphine assemblage of Group VI metal complexes containing diphosphoxane P—O—P linkages, co-ordinated tautomers of (E.H. Wong, F.C. Bradley, E.J. Gabe), (244)235
- trans*-Bromotetracarbonylmethylcarbyne-chromium, $\text{Br}(\text{CO})\text{Cr}\equiv\text{CCH}_3$, inequiv-
- alence of the CH bonds in (N.Q. Dao, H. Fevrier, M. Jouan, N.H. Tran Huy, E.O. Fischer, D. Neugebauer), (240)C53
- Carbon disulphide-bridged metal complexes, preparation of (H. Stolzenberg, W.P. Fehlhammer), (235)C7
- Carbon disulphide-tungsten complexes, reactivity of (W.A. Schenk, T. Schwietzke, H. Müller), (232)C41
- Carbonylchromium compounds, photo-catalytic hydrogenation of dienes with (M.J. Mirbach, T.N. Phu, A. Saus), (236)309
- Carbonylchromium derivatives of azafluorenes, indole, carbazole and the corresponding anions (A.N. Nesmeyanov, N.A. Ustynyuk, T. Thoma, N.S. Prostakov, A.T. Soldatenkov, V.G. Pleshakov, K. Urga, Yu.A. Ustynyuk, O.I. Trifonova, Yu.F. Oprunenko), (231)5
- Carbonyl-chromium(0), -molybdenum(0) and -tungsten(0) complexes, bifunctional aminophosphanes as ligands in (K. Diemert, W. Kuchen, J. Kutter), (238)113
- Cationic half ylids prepared from neutral and cationic metal substituted ylids (W. Uedelhoven, K. Eberl, W. Sieber, F.R. Kreissl), (236)301
- Chromium, molybdenum and tungsten; Annual Survey covering the year 1980 (J.D. Atwood), (237)95
- Chromium, molybdenum and tungsten anionic decacarbonyls, synthesis of and synthesis and properties of $\text{Mg}(\text{THF})_2[\text{M}_2(\text{CO})_{10}]$ (P. Sobota, J. Utko, Z. Janas), (233)C38
- Chromium-assisted 1,5-sigmatropic rearrangement of hexaethylidenedecyclohexane to 1,3,5-triethyl-2,4,6-triethylbenzene (M. Yalpani, R. Benn, R. Goddard, G. Wilke), (240)49
- Chromium(0) π -complexes and corresponding arenes in dimethyl sulphoxide solutions, cathodic reduction of (L.P. Yur'eva, L.N. Nekrasov, S.M. Peregudova, A.P. Korotkov, L.N. Vykhodtseva, N.N. Zaitseva, Yu.A. Shevelev), (238)197
- Chromium triad carbenes, mechanistic study of tertiary phosphine and phosphite addition to (H.S. Choi, D.A. Sweigart), (228)249
- Cyclopentadienyldicarbonyl-manganese and -chromium dinuclear complexes

- containing germanium, sulphide, dinitrogen or phosphinidene bridges, MO study of bonding and conformations in (N.M. Kostić, R.F. Fenske), (233)337
- Cyclopropyl-carbene- and -carbyne-chromium and -tungsten complexes, preparation and reactions of; synthesis and X-ray structure of *trans*-(μ -bromo-pentacarbonylchromium)tetracarbonyl(cyclopropylcarbyne)chromium (E.O. Fischer, N.H. Tran-Huy, D. Neugebauer), (229)169
- Dicyclopentadienyl-vanadium and -chromium, oxidative addition of HN, and NCN, to (M. Morán, M. Gayoso), (243)423
- 1,4-Diferrocenyl-1,4-dibora-2,5-cyclohexadiene complexes with carbonylmetal fragments (G.E. Herberich, M.M. Kucharska-Jansen), (243)45
- η^5 -6-N-Dimethylamino-2,3-benzofulvene-chromium tricarbonyl, synthesis of (B.N. Strunin, V.I. Bakhmutov, N.I. Vasyukova, V.N. Trembovler, V.N. Setkina, D.N. Kursanov), (246)169
- η^6 -(2,6-Dimethylpyridine)(triphenylphosphine)dicarbonylchromium and related compounds, synthesis of (H.W. Choi, M.S. Sollberger), (243)C39
- Dimethylthiocarbamoyl chloride, reaction with [Cr(CO)₄(THF)] of and formation of trithiocarbonate, digelenothiocarbonate and triselenocarbonate complexes of pentacarbonylchromium(0) from one of the products containing coordinated *N,N*-dimethylthioformamide (H.G. Raubenheimer, G.J. Kruger, A. Lombard), (240)C11
- Diphenylacetylene, interaction with chromium atoms of (L.P. Yur'eva, N.N. Zaitseva, N.V. Zakurin, A.Yu. Vasil'kov, N.I. Vasyukova), (247)287
- Fe₃(CO)₉(μ_3 -ER) (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), (247)259
- Fischer-type carbene complexes, reactions with ethene of (J. Kadelke, H. Loevenich, W. Keim), (231)219
- η^6 - and η^5 -Fluorenylchromium tricarbonyl anions, ¹³C NMR study of reversible isomerisation of (Yu.F. Oprunenko, Yu.N. Luzikov, Yu.A. Ustyuk, N.A. Ustyuk), (213)137
- Group VI metal carbonyl complexes containing the ligands: 1,6-bis(diphenylphosphino)-*trans*-hex-3-ene and 1,6-bis(di-phenylarsino)-*trans*-hex-3-ene; crystal and molecular structures of tricarbonyl-1,6-bis(diphenylphosphino)-*trans*-hex-3-enemolybdenum(0) (G.R. Clark, C.M. Cochrane, P.W. Clark), (236)197
- Group VIA pentacarbonyl complexes of 2- and 4-vinylpyridine and copolymers, preparation, spectroscopic characterisation and photochemical properties of (J.M. Kelly, C. Long), (235)315
- Heterobimetallic complexes of tantalum prepared from dicyclopentadienyl-carbonyltantalum hydride and carbonyl-metal compounds (J.C. Leblanc, J.F. Reynoud, C. Moise), (244)C24
- Hexacarbonyl-chromium, -molybdenum and -tungsten, preparation and characterisation of 4,4'-disubstituted 2,2'-bipyridine derivatives of (J.A. Connor, C. Overton), (249)165
- Hexacarbonyl-Group VI metal compounds, photochemistry in polyvinyl-chloride film matrices at 12–298 K; reactivity of M(CO)₆ and M(CO)₅THF (R.H. Hooker, A.J. Rest), (249)137
- η^5 -Indenyl- and η^5 -fluorenyl-tricarbonylchromate anions, innersphere "ricochet" rearrangements on alkylation of (A.N. Nesmeyanov, N.A. Ustyuk, L.N. Novikova, V.G. Andrianov, Yu.T. Struchkov, Yu.A. Ustyuk, Yu.F. Oprunenko, Yu.N. Luzikov), (226)239
- Isocyanide-chromium complexes derived from ethanolic solutions of chromium(II); formation of (F.R. Lemke, D.E. Wigley, R.A. Walton), (248)321
- η^6 -(2-Lithiochlorobenzene)tricarbonylchromium(0), stability and decomposition of (M.F. Semmelhack, C. Ulleni), (235)C10
- M(CO)_nL (M = Cr, Mo, W) complexes with chelating ligands; (2-Me₂E'C₆H₄)-Si(EMe₂)Me₂ and (4-XC₆H₄)SiMe(EMe₂)-CH₂CH₂E'Me₂ (X = F, Cl; E, E' = N, P, As) (P. Aslanidis, J. Grobe), (249)103
- Metal dimer and cluster catalysed CO substitution reaction, supported metals and metal oxides as promoters for (M.O. Albers, N.J. Coville, E. Singleton), (234)C13
- Metallatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199
- Methyl η^6 -benzoate-benzoylisocyanide-dicarbonylchromium(0), (η^6 -C₆H₅CO₂CH₃)-Cr(CO)₅(CNCOC₆H₅), vibrational spectra of (P. Caillet, P. Le Maux), (243)51

- Methylcyclopentadienylchromium(III) sulphide diamagnetic tetramer and anti-ferromagnetic copper(II) bromide adduct of the tetrานuclear cluster ($\text{MeC}_5\text{H}_4)_4\text{-}(\mu_3\text{-O})(\mu_3\text{-S})_3$, synthesis and molecular structures of (A.A. Pasynskii, I.L. Eremenko, Yu.V. Rakitin, V.M. Novotortsev, O.G. Ellert, V.T. Kalininov, V.E. Shklover, Yu.T. Struchkov, S.V. Lindeman, T.Kh. Kurbanov, G.Sh. Gasanov), (248)309**
- cis-S(-)(Methylphenyl-1-naphthylgermyl)-(methylethoxycarbene)tetracarbonyl-manganese, synthesis, crystal structure and absolute configuration of; introduction of optically active triorganogermyl ligands into transition metal complexes (F. Carré, G. Cerveau, E. Colomer, R.J.P. Corriu), (229)257**
- Organic and organometallic compounds, analysis of the near infrared by photo-acoustic spectroscopy of (L.N. Lewis), (234)355**
- Organo-transition metal free radicals, hydrogen abstraction and dimerisation reactions of (J.A. Armstead, D.J. Cox, R. Davis), (236)213**
- Paramagnetic heterobimetallic $\eta^2\text{-CS}_2$ -bridged vanadium complexes (C. Moise), (247)27**
- Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), (247)203**
- Pentacarbonylisocyanoborylchromium complexes, preparation and IR, NMR and mass spectra of (M. Höfler, H. Löwenich), (226)229**
- Pentacarbonyl(methoxyphenylcarbene)-chromium, reactions with alkynes under formation of naphthol derivatives of (K.H. Dötz, J. Mühlmeier, U. Schubert, O. Obama), (247)187**
- Pentacarbonyl-4-methyl-1,2,4-triazole-chromium(0), crystal structure of and structural evidence for the absence of chromium-to-triazole π -bonding in (G. Vos, J.G. Haasnoot, G.C. Verschoor, C. Long, J.G. Vos), (231)315**
- Pentamethylcyclopentadienylmolybdenum dimer $\text{Mo}_2(\eta^5\text{-C}_5\text{Me}_5)_2(\text{CO})_4$, molecular structure and geometrical relationship with the nonmethylated analogue and corresponding chromium dimers of (J.-S. Huang, L.F. Dahl), (243)57**
- Phenanthrenetricarbonylchromium complex, catalytic hydrogenation of α -terpinene and 2,3-dihydroanisole by (P. Le Maux, G. Simonneaux), (229)C24**
- Phosphorus and arsenic di-bridged hetero-metal-metal bonds (A. Trenkle, H. Vahrenkamp), (236)71**
- α -Terpinene and 2,3-dihydroanisole, hydrogenation catalysed by phenanthrenechromium tricarbonyl in cyclohexane of (P. Le Maux, R. Dabard, G. Simonneaux), (241)37**
- Tetracarbonyl- η -dienechromium(0) complexes, dynamic behaviour of (M. Kotzian, C.G. Kreiter, S. Özkar), (229)29**
- Tetraphenyldiphosphine oxide complexes with Group VIB metal carbonyls (E.H. Wong, R.M. Ravenelle, E.J. Gabe, F.L. Lee, L. Prasad), (233)321**
- Tetraphenyldiphosphoxane ($\text{Ph}_3\text{POPPPh}_2$) ligand, chelating and monodentate coordination modes of (E.H. Wong, L. Prasad, E.J. Gabe, F.C. Bradley), (236)321**
- Thionocarbonate fixation by Group VIB metal carbonyls, chemistry, spectroscopy and molecular structure of the products of (J. Daub, J. Kappler, K.H. Jogun, J.J. Stezowski, H. Binder), (240)239**
- Transition metal complexes, halogenation of alkanes promoted by (R. Davis, I.F. Groves, C.C. Rowland), (239)C9**
- π -Tricarbonylchromium, effect of coordination on paratropic properties of biphenylene; an NMR study (A. Ceccon, A. Gambaro, A.M. Romanin, A. Venzo), (239)345**
- Tricarbonyl-chromium, -molybdenum and -tungsten complexes of the tropylium cation, relative electrophilic reactivities of (C.A. Bunton, K. Lal, W.E. Watts), (247)C14**
- Tricarbonylchromium $\eta^6\lambda^3$ -phosphorin and $\eta^6\lambda^5$ -phosphorin-ylide complexes, reactions of (K. Dimroth, H. Kaletsch), (247)271**
- Tricarbonylchromium tryptophan derivatives and their use in peptide synthesis (C. Sergheraert, A. Tartar), (240)163**
- Tricarbonylchromium unit, substitution reactions on indole promoted by (M.F. Semmelhack, W. Wulff, J.L. Garcia), (240)C5**

- Tricarbonyl- η^6 -1,3,5-cycloheptatriene-chromium(0), photochemical addition reactions with cyclic dienes of (C.G. Kreiter, E. Michels, H. Kurz), (232)249
- Tricarbonylmstellates(6-) of chromium, molybdenum and tungsten, derivatives of (G.L. Rochfort, J.E. Ellis), (250)265
- Tricarbonylthiophenechromium, ring metatllation with butyllithium of (M.N. Nefedova, V.N. Setkina, D.N. Kursanov), (244)C21
- Tricarbonyltriamminechromium, complexes of indenes and dihydronaphthalenes with (J. Vebrel, R. Mercier, J. Belleneuy), (235)197
- Tricarbonyl(2,5,7-trimethylcyclopent-[cd]azulene)chromium, synthesis and structure of (F. Edelmann, U. Behrens), (232)C24
- Trimethylphosphoranylidene(methyl(trimethylsiloxy)carbene complexes of chromium, molybdenum and tungsten, formation and E/Z isomerisation of (S. Voran, H. Blau, W. Malisch, U. Schubert), (232)C33
- Vinyl organometallic monomers: (η^5 -C₄H₄CH=CH₂)M(CO)₂(NO) (M = Cr, Mo, W) and (η^5 -C₄H₄CH=CH₂)-M(CO)₂ (M = Co, Rh, Ir), synthesis and ¹H NMR study of (D.W. Macomber, W.C. Spink, M.D. Rausch), (250)311
- ## Cobalt
- Alkylcobaloximes, ESR study of electron addition and photochemical processes at low temperature of (D.N.R. Rao, M.C.R. Symons), (244)C43
- (Alkyl- and perfluoroalkyl)-C-nitroso-transition metal complexes, ¹⁵N NMR comparisons of (D.H. Evans, D.M.P. Mingos, J. Mason, A. Richards), (249)293
- η -Allyl- η -cyclopentadienylcobalt cations (T. Avilés, F. Barroso, P. Royo, J.H. Noordik), (236)101
- Bimetallic cluster of the type: (η -C₅Me₅)₂M₂M'₂(μ ,_S)₄(CO)₂ (M = Cr, Mo; M' = Co), formation of (H. Brunner, J. Wachter), (240)C41
- Bis-acetone adduct [Co(Me₂CO)₂(TPyEA)]-(BPH₄)₂ (TPyEA = tris(1-pyrazolyl-ethyl)amine), synthesis, chemical properties and X-ray structure of (M. Di Vaira, P. Stoppioni, F. Mani), (247)95
- Bis(alkylgermyl)undecacarbonyltetra-carbonyl clusters, preparation of and metal exchange in (P. Gusbeth, H. Vahrenkamp), (247)C53
- Bis-aryl-cobalt(II) square-planar complexes, decomposition reactions of (M. Antón, G. Muller, J. Sales, J. Vinaixa), (239)365
- Bis[μ -carbonyl(η^5 -pentamethylcyclopenta-dienyl)cobalt](Co-Co), reactivity towards diazoalkanes and sulphur dioxide of (W.A. Herrmann, J.M. Huggins, C. Bauer, M. Smischek, H. Pfisterer, M.L. Ziegler), (226)C59
- Bis[(μ -carbonyl)(η^5 -pentamethylcyclopentadienyl)-rhodium](Rh-Rh) and -cobalt](Co=Co), reactions with cyclohexanone hydrazone of (W.A. Herrmann, C. Bauer, K.K. Mayer), (236)C18
- 1,2-Bis(imino)ethylpalladium(II) complexes preparation and reactivity of (B. Crociani, A. Mantovani, A. Scrivanti), (233)387
- (Borinato)(cyclobutadiene)cobalt complexes with tetramethyl- and tetraphenyl-cyclobutadiene ligands, synthesis, electrophilic, aromatic and ring-member substitution at the borinato ligand (G.E. Herberich, A.K. Naithani), (241)1
- Butadiene-transition metal complexes of Ti, Zr, Hf, Mo, W and Co, structure of and fluxional behaviour of butadiene in (R. Benn, G. Schroth), (228)71
- Carbenemetal complexes derived from optically active electron-rich olefins (L^{*}); X-ray structures of [Co(CO)(L^{*})-(NO)(PPh₃)] and cis-[Rh(Cl)(COD)-(L^{*})] (L^{*} = (S)-CN(Me)CH(Me)CH₂NMe, L^{*} = (S)-CN(CH₂CH₂CH₂)CHCH₂NMe) (A.W. Coleman, P.B. Hitchcock, M.F. Lappert, R.K. Maskell, J.H. Müller), (250)C9
- Carbynlcobalt, ligand effects in hydroformylation of acrylonitrile by (R.A. Dubois, P.E. Garrou), (241)69
- Carbynlcobalt/carbynlmanganese substituted germanes including [(CO)₂MnGeCo₃(CO)₂]_n, μ ,₃-(pentacarbonylmanganesegermylidyne)-cyclotris(tricarbonylcobalt)(3Co-Co) (J.A. Christie, D.N. Duffy, K.M. Mackay, B.K. Nicholson), (226)165
- Carbynl-ruthenium and -cobalt clusters, directed synthesis of mixed ligand derivatives of (M.I. Bruce, J.G. Matsons, B.K. Nicholson, M.L. Williams), (236) C57

- Chlorotris(carbonylmethallato)tin(IV) chiral complexes, synthesis and crystal structure of (F.H. Carré, R.J.P. Corriu, B.J.L. Henner), (228)139**
- Cobaloxime(I), reactions with aryl bromides of (K.L. Brown, R. Legates), (233)259**
- Cobalt, rhodium and iridium; Annual Survey covering the year 1979 (R.D.W. Kemmitt, D.R. Russell), (230)1**
- Cobalt, rhodium and iridium: Annual Survey covering the year 1980 (J.T. Mague), (230)99**
- Cobalt, rhodium and iridium; Annual Survey covering the year 1981 (J.T. Mague), (242)241**
- Cobalt, rhodium and iridium trimethylphosphite complexes, synthesis and reactivity of; crystal and molecular structure of $[\text{IrH}(\text{P}(\text{OMe})_3)_4(\text{P}(\text{OMe})_2\text{-OSnMe}_2\text{Cl}_2)]\text{[SnCl}_3\text{Me}_2]$ (P.B. Hitchcock, S.I. Klein, J.F. Nixon), (241)C9**
- Cobalt-catalysed carbonylation of optically active and α -deuterated phenethyl halides (F. Francalanci, A. Gardano, L. Abis, T. Fiorani, M. Foà), (243)87**
- Cobalt-catalysed carbonylation of secondary benzyl halides, phase transfer catalysis in (F. Francalanci, M. Foà), (232)59**
- Cobalt—iridium mixed tetranuclear cluster, $\text{Co}_2\text{Ir}_2(\text{CO})_{12}$, trimethylphosphite derivatives of (D. Labroue, R. Queau, R. Poilblanc), (233)359**
- Cobalt-promoted acrylonitrile coupling reactions (J.D. Druliner, R.C. Blackstone), (240)277**
- Cyclobutadienetricarbonylcobalt salts, synthesis of (P. Härtter, P.L. Pauson, S.S. Ullah), (247)C27**
- Cyclopentadienylbromocobalt intermediates in cyclopentadienylation of cobalt bromide with cyclopentadienylsodium (U. Koelle, F. Sistig, J. Gersdorf), (233)253**
- Cyclopentadienylcobalt disulphur dinitride derivative, synthesis and structure of (F. Edelmann), (228)C47**
- Cyclopentadienylcobalt(I)—olefin complexes, preparation and properties of (P. Hong, Y. Yamamoto, H. Yamazaki), (232)71**
- Cyclopentadienylnitrosylcobalt dinuclear cation, molecular structure and chemical properties of (F. Wochner, E. Keller, H.H. Brintzinger), (236)267**
- Dicyclopentadienyl-molybdenum and -tungsten dihydrides; reactions with octacarbonyldicobalt and nonacarbonyldiiron forming ionic heteronuclear complexes of (Y. Mugnier, C. Moise), (248)C33**
- Diethylene(tetramethylethylcyclopentadienyl)cobalt, protonation reactions of (R.B.A. Pardy, M.J. Taylor, E.C. Constable, J.D. Mersh, J.K.M. Sanders), (231)C25**
- Digermanium polycobalt carbonyls formed by addition reactions of Ge—H bonds (S.P. Foster, K.M. Mackay), (238)C46**
- m*- and *p*-*N,N*-Dimethylaminophenyl-ligand)cobaloximes, pK_a 's of the conjugate acids of (K.L. Brown, M. Ngamelue), (243)339**
- Binuclear complex with asymmetric Co(CS)Co bridging groups, $\text{C}_5\text{H}_5(\text{PMe}_3)\text{-CO}(\mu\text{-CS})_2\text{CoC}_5\text{H}_5$, synthesis and crystal structure of (H. Werner, O. Kolb, U. Schubert, K. Ackermann), (240)421**
- Diphenylphosphoryl azide and perfluoroo-n-hexylsulphonyl azide, reactions with triphenylphosphane-platinum(0), -rhodium(I), -iridium(I), -ruthenium(0), -cobalt(II) and -copper(I) complexes of (K. Bartel, K. v. Werner, W. Beck), (243)79**
- Dodecacarbonyltetracobalt unsupported in flowing hydrogen, determination of kinetic parameters of thermal decomposition of (D. Labroue, R. Pince, R. Queau), (249)405**
- Dodecacarbonyltetrarhodium and octacarbonyldicobalt as catalyst precursors for hydrogen activation in hydroformylation of olefins (P. Pino, F. Oldani, G. Consiglio), (250)491**
- [*Ethoxycarbonyl*methyl]cobalt tetracarbonyl, reaction with iodine dissolved in MeOH of (M. Tasi, V. Galamb, G. Pályi), (238)C31**
- $\text{Fe}_3(\mu_3\text{-Te})_2(\text{CO})_6$, synthesis of heterometallic clusters from and comparisons with analogous sulphide clusters (L.E. Bogan, Jr., D.A. Lesch, T.B. Rauchfuss), (250)429**
- Free radicals, application to catalytic synthesis of carbon monoxide derivatives of (P. Sobota, E. Kaczurba), (235)295**
- Heterodinuclear complexes with ruthenium—cobalt bonds bridged by a diphenylphosphido bond (R. Regragui, P.H. Dixneuf), (239)C12**

- Hydridocobalt tetracarbonyl, hydrogenation of styrenes by (J.A. Roth, P. Wiseman, L. Ruszala), (240)271**
- Indium porphyrins containing bi- or tri-nuclear frameworks, synthesis and vibrational spectra of (P. Cocolios, C. Moise, R. Guillard), (228)C43**
- Metal—metal double bonds in dinuclear cobalt and rhodium precursors, chlorogold, sulphur, selenium, tellurium and acetylene addition to (W.A. Herrmann, C. Bauer, J. Weichmann), (243)C21**
- Metal-pentaborane(9) derivatives, 2-[Co(CO)₄]B₅H₉ and 2-[(η^5C₅H₅)Fe(CO)₂]B₅H₉ (M.B. Fischer, D.F. Gaines, J.A. Ulman), (231)55**
- Metallatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199**
- cis-S(-)(Methylphenyl-1-naphthylgermyl)-(methylethoxycarbene)tetracarbonyl-manganese, synthesis, crystal structure and absolute configuration of; introduction of optically active triorganogermyl ligands into transition metal complexes (F. Carré, G. Cerveau, E. Colomer, R.J.P. Corriu), (229)257**
- Nitrosonium ion reactions with anionic carbonyl monomers and cluster; crystal and molecular structure of FeCo₂(μ-NH)(CO), (D.E. Fjare, D.G. Keyes, W.L. Gladfelter), (250)383**
- Octacarbonyldicobalt, reactions with tantalum and niobium hydrides of; synthesis of bi- and poly-nuclear complexes (C. Moise, J.F. Reynoud, J.C. Leblanc, R. Broussier), (240)C15**
- Octacarbonyldicobalt/sodium amalgam and bis(tetracarbonylcobalt)mercury/sodium amalgam systems, observations and effect of added LiBr on (P.S. Braterman, A.E. Leslie), (238)307**
- Octafluorocyclooctatetraene transition metal compounds, displacement of fluoride by metal carbonyl anions in (S.J. Doig, R.P. Hughes, S.L. Patt, D.E. Samkoff, W.L. Smith), (250)C1**
- Organic and organometallic compounds, analysis of the near infrared by photo-acoustic spectroscopy of (L.N. Lewis), (234)355**
- Organometallic methylene bridges, successful and unsuccessful routes to (Review) (W.A. Herrmann), (250)319**
- Paramagnetic carbonylmetal clusters of high nuclearity, ESR investigation of (T. Beringhelli, F. Morazzoni, D. Strumolo), (236)109**
- Pentamethylcyclopentadienyl-bis(trimethylphosphine)cobalt and trimethylphosphinecarbonylcobalt, synthesis and reactivity of and H/D exchange in dicationic pentamethylcyclopentadienylcobalt(III) complexes (H. Werner, B. Heiser, B. Klingert, R. Dölfel), (240)179**
- Perfluoroalkylcobalt organometallic compounds, synthesis and electrochemistry (A.M. van den Bergen, D.J. Brockway, B.O. West), (249)205**
- Phosphidodi-μ-carbonyltetradecacarbonyl hexacobaltate(1-) anion in its tetraphenylphosphonium salt, crystal and molecular structure of (G. Ciani, A. Sironi), (241)385**
- Phosphine-nickel(II), -cobalt(II), -palladium(0) and -palladium(II) complexes as catalysts in cross-coupling reactions of aryl- and alkyl-Grignard reagents with organic tellurides (S. Uemura, S.-I. Fukuzawa, S.R. Patil), (243)9**
- Phosphino-cobalt(II) complexes, kinetic investigation of reductive carbonylation of (M. Basato, M. Bressan, P. Rigo), (232)81**
- η^5-Phospholycobalt dicarbonyl, synthesis and properties of (C. Charrier, H. Bonnard, F. Mathey, D. Neibecker), (231)361**
- Phosphoranium ions as π-ligands in transition metal complexes, MO study of structure and bonding in (N.M. Kostić), (240)71**
- Propylene dimerisation catalysed by "HCoL_x" compounds (F. Petit, H. Masotti, G. Peiffer, G. Buono), (244)273**
- Rhodium and cobalt catalysis of the hydroformylation and hydrogenation of 1,1-diphenylethylene (Y. Matsui, M. Orchin), (246)57**
- Silicon- and germanium-transition metal bonds, dependence of the stereochemistry on the ligands and geometry of complexes on cleavage of (G. Cerveau, E. Colomer, R.J.P. Corriu), (236)33**
- Sodium tetracarbonylcobalt, reactions with NiX₂(dppe); synthesis and crystal structure of Co₂(μ-CO)₂(CO)₄(dppe) (P. Braunstein, I. Pruskil, G. Predieri, A. Tiripicchio), (247)227**
- Tetracarbonylcobalt hydride and pentacarbonylmanganese hydride, radical hydroformylation and hydrogenation with (T.E. Nalesnik, J.H. Freudenberg, M. Orchin), (236)95**

- Tetracarbonyl cobaltate ion supported anion exchangers as a heterogenized homogeneous catalyst; synthesis of acids and esters from organic halides (M. Foà, F. Francalanci, A. Gardano, G. Cainelli, A. Umani-Rochi), (248)225
- trans*-(Tetracarbonylcobalt)tetracarbonyl(phenylcarbyne)tungsten, synthesis and physical-chemical investigations of (E.O. Fischer, P. Friedrich, T.L. Lindner, D. Neugebauer, F.R. Kreissl, W. Uedelhoven, N.Q. Dao, G. Huttner), (247)239
- Tetracarbonylhycrocobalt and carbon monoxide, effect of solvent viscosity on the reaction with styrenes of (F. Ungváry, L. Markó), (249)411
- Tetracyanocobaltate(I), reaction with aryl halides of; formation of σ -arylpenta-cyanocobaltates(III) and cyanation to aryl cyanides (T. Funabiki, H. Nakamura, S. Yoshida), (243)95
- Tetrakis(triphenylphosphine)octacarbonyltetracobalt, synthesis and fragmentation kinetics of (R. Huq, A. Poë), (226)277
- Transition metal complexes, halogenation of alkanes promoted by (R. Davis, I.F. Groves, C.C. Rowland), (239)C9
- Transition metal phosphalkyne complexes; synthesis, crystal and molecular structure of $[\text{Co}_2(\text{CO})_6(\mu\text{-}^t\text{BuCP})\text{-W}(\text{CO})_4]$ (J.C.T.R. Burkett-St. Laurent, P.B. Hitchcock, H.W. Kroto, M.F. Meidine, J.F. Nixon), (238)C82
- Triphenylcarbinol, reaction with tetracarbonylcobalt hydride of (Y. Matsui, M. Orchin), (236)381
- Triphosphorus mononuclear cyclic complexes, structural correlations and NMR properties of (M. Di Vaira, L. Sacconi, P. Stoppioni), (250)183
- Tris(triphenylphosphine)cobalt activated NaBH_4 , deuterium tracing experiments of selective hydrogenation of the $\text{C}\equiv\text{C}$ bond in $\text{PHC}\equiv\text{CPh}$ with (B. Steinberger, M. Michman, H. Schwarz, G. Höhne), (244)283
- Vanadocene derivatives in reaction with octacarbonyldicobalt, formation of oxymethylidyne-nonacarbonyltricobalt derivatives (J. Martin, C. Moise), (232)C55
- Vinyl organometallic monomers: $(\eta^5\text{C}_5\text{H}_4\text{CH}=\text{CH}_2)\text{M}(\text{CO})_2(\text{NO})$ ($\text{M} = \text{Cr}, \text{Mo}, \text{W}$) and $(\eta^5\text{C}_5\text{H}_4\text{CH}=\text{CH}_2)\text{-M}(\text{CO})_2$ ($\text{M} = \text{Co}, \text{Rh}, \text{Ir}$), synthesis and ^1H NMR study of (D.W. Macomber, W.C. Spink, M.D. Rausch), (250)311
- ### Copper
- 2-Allyloxybenzothiazole-copper(I) π -complexes, selectivity in allylic substitution through neighbouring coordination (V. Calò, L. Lopez, G. Pease), (231)179
- Arylcopper(I) complexes containing tertiary phosphines, reactions with carbon dioxide of (N. Marsich, A. Camus, G. Nardin), (239)429
- Arylrhenium derivatives, synthesis using organocopper reagents of (J.R. Sweet, W.A.G. Graham), (241)45
- 1,2-Bis(imino)ethylpalladium(II) complexes preparation and reactivity of (B. Crociani, A. Mantovani, A. Scrivanti), (233)387
- Chiral lithium (2-pyridyl)[(S)-2-(1-dimethylaminoethyl)phenyl]cuprate, conjugate additions with (H. Malmberg, M. Nilsson), (243)241
- Copper(I) borohydride, reduction of CO_2 , CS_2 and COS by; X-ray crystal structure of $[(\text{triphos})\text{Cu}(\text{O}_2\text{CH})]$ (C. Bianchini, C.A. Ghilardi, A. Meli, S. Midollini, A. Orlanini), (248)C13
- Copper(I) and mercury(II) halides in reactions with unsymmetrical ditellurides (A.Z. Al-Rubaie, W.R. McWhinnie), (235)59
- Diphenylphosphoryl azide and perfluor-n-hexylsulphonyl azide, reactions with triphenylphosphane-platinum(0), -rhodium(I), -iridium(I), -ruthenium(0), -cobalt(II), and copper(I) complexes of (K. Bartel, K. v. Werner, W. Beck), (243)79
- Hydrometallation of alkynes in the presence of copper(I) derivatives (D. Masure, P. Courtot, J.F. Normant), (226)C55
- Magnesium dialkylcuprates, regioselectivity of reactions with α, β -ethylenic aldehydes of (M. Bourgoin-Commerçon, J.-P. Foulon, J.F. Normant), (228)321
- Metal-coordinated β -carbonylenolato and β -ketoinato ligands, C—C bond formation upon addition of cyanogen to (B. Corain, M. Basato), (232)C59
- Mixed metal decaosmium carbido clusters; X-ray structures of the monoanions $[\text{Os}_{10}\text{C}(\text{CO})_{14}\text{Cu}(\text{NCMe})]$ and $[\text{Os}_{10}\text{C}(\text{CO})_{14}\text{AuPPPh}_3]^-$ (B.F.G. Johnson, J. Lewis, W.J.H. Nelson,

- M.D. Vargas, D. Braga, M. McPartlin), (246)C69
- Methylcyclopentadienylchromium(III)**
sulphide diamagnetic tetramer and
antiferromagnetic copper(II) bromide
adduct of the tetranuclear cluster
($\text{MeC}_5\text{H}_4)_4\text{Cr}_4(\mu_3\text{-O})(\mu_3\text{-S})_3$, synthesis
and molecular structures of
(A.A. Pasynskii, I.L. Eremenko,
Yu.V. Rakitin, V.M. Novotortsev,
O.G. Ellert, V.T. Kalinnikov,
V.E. Shklover, Yu.T. Struchkov,
S.V. Lindeman, T.Kh. Kurbanov,
G.Sh. Gasanov), (248)309
- 'Organocupper(I) species in reactions**
with 3-bromo-3-alken-1-ynes, synthesis
of butatriene derivatives by (H. Kleijn,
M. Tigchelaar, R.J. Bullee, C.J.
Elsevier, J. Meijer, P. Vermeer),
(240)329
- Organocuprates, solvent effects on dia-**
stereoselective addition to a chiral
 α, β -unsaturated oxazolidine
(Y. Besace, J. Berlan, G. Pourcelot,
M. Huche), (247)C11
- Pentamethylcyclopentadienylcopper,**
a metal ligand fragment isolobal with
methylene (G.A. Carriero, J.A.K.
Howard, F.G.A. Stone), (250)C28
- Silyl hydrogen exchange with deuterium**
gas on copper (M. Bartók, Á. Molnár),
(235)161
- Stannylcopper(I)-induced substitution in**
propargylic substrates, regio- and
stereo-chemical features of (K. Ruitenberg,
H. Westmijze, J. Meijer, C.J.
Elsevier, P. Vermeer), (241)417
- Synthetic possibilities of addition reac-**
tions between common organometallic
compounds and conjugated enynes
(Review) (L. Miginiac), (238)235
- Tin, mercury and copper organic deriva-**
tives, cross-coupling reactions of
organic halides catalysed by
(I.P. Beletskaya), (250)551

Erbium

- Organolanthanide σ -bonded complexes,**
synthesis, properties and IR spectra of
(C. Qian, C. Ye, H. Lu, Y. Li, J. Zhou,
Y. Ge, M. Tsutsui), (247)161

- Organolanthanide chemistry, recent**
advances in (W.J. Evans), (250)217

Europium

- Cyclopentadiene-lanthanide derivatives,**
synthesis by the reaction of dicyclo-
pentadienylmercury with lanthanides
(G.Z. Suleimanov, L.F. Rybakova,
Ya.A. Nuriev, T.Kh. Kurbanov, I.P.
Beletskaya), (235)C19

Gadolinium

- Organolanthanide σ -bonded complexes,**
synthesis, properties and IR spectra of
(C. Qian, C. Ye, H. Lu, Y. Li, J. Zhou,
Y. Ge, M. Tsutsui), (247)161

Gallium

- Bis(methylelement)dithioxamid deriva-**
tives (element = Al, Ga, In, Si, Ge, Sn);
planar and fused structural metalla-
bicyclic compounds (T. Halder,
W. Schwarz, J. Weidlein, P. Fischer),
(246)29

- Dimethylmetal tripolonates of gallium,**
indium and tin (I. Waller, T. Halder,
W. Schwarz, J. Weidlein), (232)99

- Gallium and indium; Annual Survey**
covering the year 1980 (T. Tanaka),
(227)289

- Metallavoluenes, ESR study of** (W. Kaim),
(241)157

- Trimethylmetal urotropine adducts of**
aluminium, gallium, indium and
thallium (H. Krause, K. Sille, H.-D.
Hausen, J. Weidlein), (235)253

- Tris(trimethylsilyl)methyl derivatives of**
boron, aluminium and gallium, prepara-
tion and properties of (C. Eaborn,
M.N. El-Kheli, N. Retta, J.D. Smith),
(249)23

Germanium

- ω -Alkenyldimethylgermyl radicals, ring**
closure reactions of (K. Mochida,
K. Asami), (232)13

- Bis(alkylgermyl)undecacarbonyltetra-**
carbonyl clusters, preparation of and
metal exchange in (P. Gusbeth,
H. Vahrenkamp), (247)C53

- Bis(benzthiazol-2-yl)- and bis(benzoxazol-**
2-yl)-methylgermanes, synthesis and
reactions of (P. Jutzi, U. Gilge), (244)
355

- Bis(methylelement)dithioxamid deriva-**
tives (element = Al, Ga, In, Si, Ge, Sn);

- planar and fused structural metallabicyclic compounds (T. Halder, W. Schwarz, J. Weidlein, P. Fischer), (246)29
- t-Butylgermanium halides and chalcogenides, chemistry of (M. Wojnowska, M. Noltemeyer, H.-J. Fullgrabe, A. Meller), (228)229
- Carbonylcobalt/carbonylmanganese substituted germanes including $[(CO)_3MnGeCo_3(CO)_3]$, μ_3 -{(pentacarbonylmanganesegermylidyne)cyclotris(tricarbonylcobalt)} $(3Co-CO)$ (J.A. Christie, D.N. Duffy, K.M. Mackay, B.K. Nicholson), (226)165
- Cyclopentadienylidicarbonyl-manganese and -chromium dinuclear complexes containing germanium, sulphide, dinitrogen or phosphinidene bridges, MO study of bonding and conformations in (N.M. Kostić, R.F. Fenske), (233)337
- Dialkylgermylenes, $R_2Ge \cdot NEt_3$, condensation reactions with various oxiranes and thirane of (J. Barrau, M. Bouchat, H. Lavayssière, G. Dousse, J. Satgé), (243)281
- Di-t-butylgermanium oxide, structure of (H. Puff, S. Franken, W. Schuh, W. Schwab), (244)C41
- Digermanium polycobalt carbonyls formed by addition reactions of Ge—H bonds (S.P. Foster, K.M. Mackay), (238)C46
- Dimethylgermathione and dimethylsila-thione generation and their detection in the gas phase by PES (C. Guimon, G. Pfister-Guillouzo, H. Lavayssière, G. Dousse, J. Barrau, J. Satgé), (249)C17
- 4,4-Dimethyl-2-pentyn-1-al and related compounds, reactions with methyl diazoacetate of (A.S. Medvedeva, M.M. Demina, A.I. Borisova, O.I. Margorskaya, I.D. Kalikhman, E.I. Brodskaya, N.S. Vyazankin), (231)109
- 1,1-Dimethyl-sila- and -germa-cyclopentanes, reactions with nonacarbonyldiiron of (A. Laporterie, H. Iloughmane, J. Dubac), (244)C12
- [1]Ferrocenophanes, structure and reactions of (M. Clemance, R.M.G. Roberts, J. Silver), (243)461
- Germanium pentafluorophenyl hydrides, interaction with triethylthallium of (M.N. Bochkarev, T.A. Basalgina, G.S. Kalinina, G.A. Razuvaev), (243)405
- Germanones and germathiones, reactivity towards nitrilimines, nitriloxides and nitrones of (H. Lavayssière, J. Satgé, J. Barrau, M. Traore), (240)835
- Germanones and germathiones, reactivity towards three- and four-membered cyclic organic compounds of (J. Barrau, G. Rima, H. Lavayssière, G. Dousse, J. Satgé), (246)227
- Germyl anions and functional germanium derivatives, formation from reduction reactions of halogermanes under nucleophilic assistance (A. Castel, P. Rivière, J. Satgé), (232)137
- Germyl anions, germylenes and functional germanium derivatives, formation from reactions of halogermanes under nucleophilic assistance (P. Rivière, A. Castel, J. Satgé), (232)123
- Group IVA thiospiranes, UV photoelectron spectroscopy of M—S σ -bonding energy and spiroconjugation effects in (E. Andoni, M. Bossa, C. Cauletti, C. Furlani, A. Palma), (244)343
- Heptaphosphonotracyclenes: derivatives and homologues of $P_7(SiMe_3)_2$, (G. Fritz, K.D. Hoppe, W. Hönele, D. Weber, C. Mujica, V. Manriquez, H.-G. v. Schnering), (249)63
- Metallatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199
- cis-(S)(—)(Methylphenyl-1-naphthylgermyl)-(methylethoxycarbene)tetracarbonyl-manganese, synthesis, crystal structure and absolute configuration of; introduction of optically active triorganogermyl ligands into transition metal complexes (F. Carré, G. Cerveau, E. Colomer, R.J.P. Corriu), (229)257
- Methylphenyltriphenylgermylsilanes, cleavage of the Si—Ge bond in (R.J.P. Corriu, S. Ould-Kada, G.F. Lanneau), (248)39
- Methylphenyltriphenylgermylsilanes, synthesis and stereochemistry of (R.J.P. Corriu, S. Ould-Kada, G. Lanneau), (248)23
- Methyltrichlorogermainium, tetramethylgermanium and tetraethylgermanium, kinetics of H abstraction by CF_3 and C_2F_5 radicals from (M. Pieniążek, E. Ratajczak), (238)289
- Organoelement compounds, kinetics and mechanism of oxidation by ozon of (Review) (Yu.A. Alexandrov, B.I. Tarunin), (238)125

- Organomercurials, interaction with zero-valent nickel complex of (L.S. Isaeva, L.N. Morozova, V.V. Bashilov, P.V. Petrovskii, V.I. Sokolov, O.A. Reutov), (243)253
- Penta-2,4-dienyl-silanes, -germanes and -stannanes, regiochemistry of electrophilic cleavages of (M. Jones, W. Kitching), (247)C5
- Pentamethylcyclopentadienylgermanium chloride and trichlorogerманate, preparation and properties of (F.X. Kohl, P. Jutzi), (243)31
- Polygermanes and polygermasilanes, synthesis and UV spectra and theoretical study of substitution effects in (A. Castel, P. Rivière, B. Saint-Roch, J. Satgé, J.P. Malrieu), (247)149
- SiH and GeH stretching frequency variations in rotational conformers of \geq MHCH₂X compounds (D.C. McKean, I. Torto, A.R. Morrison), (226)C47
- Silicon- and germanium-transition metal bonds, dependence of the stereochemistry on the ligands and geometry of complexes on cleavage of (G. Cerveau, E. Colomer, R.J.P. Corriu), (236)33
- Silyl, germyl and stanny radicals, ESR of adducts with 1,4-diaza-1,3-butadiene and the diprotonated radical cation (A. Alberti, A. Hudson), (241)313
- Thallium tris[tris(pentafluorophenyl)-germyl]mercurate, reactivity of (G.A. Razuvaev, M.N. Bochkarev, L.V. Pankratov), (250)135
- Triethylgermyl anions, reactions of aryl halides with (K. Mochida, N. Matsushiga), (229)11
- Triethylgermyllithium, reactions with *N,N*-dialkylated carboxamides of (D.A. Bravo-Zhivotovskii, S.D. Pigarev, I.D. Kalikhman, O.A. Vyazankina, N.S. Vyazankina), (248)51
- Trifluoromethylgermylmercury derivatives (M.N. Bochkarev, N.L. Ermolaev, G.A. Razuvaev, Yu.K. Grishin, Yu.A. Ustynguk), (229)C1
- Trimethyl-Group IV cations in the gas-phase, unimolecular and collision-induced decomposition of (G.S. Groenewold, M.L. Gross, M.M. Bursey, P.R. Jones), (235)165
- Triphenyl(trifluoroacetato)germanium(IV), crystal and molecular structure of (C. Glidewell, D.C. Liles), (243)291
- Vinyl germanes, interaction with iron carbonyls of; crystal structure of Ge[Fe(CO)₄]₂ (A.S. Batsanov, L.V. Rybin, M.I. Rybinskaya, Yu.T. Struchkov, I.M. Salimgreeva, N.G. Bogatova), (249)319
- ## Gold
- Diarylgold(III) complexes, synthesis using organomercury compounds of (J. Vicente, M.T. Chicote, A. Arcas, M. Artigao, R. Jiménez), (247)123
- Di- μ -halo- and pseudohalo-tetrakis(penta-fluorophenyl)digold(III), synthesis and reactions of (R. Usón, A. Laguna, M. Laguna, M. Abad), (249)437
- Gold and platinum tertiary phosphine low nuclearity complexes, MO analysis of; development of isolobal analogies for the M(PR₃) fragment (D.G. Evans, D.M.P. Mingos), (232)171
- Gold-ruthenium pentanuclear clusters, metal framework arrangements in; crystal structures of [Au₂Ru₂(μ ₃-S)-(CO)₈(PPh₃)₃] and [Au₂Ru₂(μ -H)(μ -COMe)(CO)₉(PPh₃)₂] (L.J. Farrugia, M.J. Freeman, M. Green, A.G. Orpen, F.G.A. Stone, I.D. Salter), (249)273
- Gold-triiron butterfly cluster, AuFe₃(μ ₃-HC=NBu-t)(CO)₉(PPh₃), synthesis and crystal structure of (M.I. Bruce, B.K. Nicholson), (250)627
- Hexauruthenium nitrosyl cluster, synthesis of and X-ray analysis of Ru₆C(CO)₁₂-(NO)₂ and Ru₆C(CO)₁₂-(NO)(AuPPh₃) (B.F.G. Johnson, J. Lewis, W.J.H. Nelson, J. Puga, P.R. Raithby, D. Braga, M. McPartlin, W. Clegg), (243)C13
- Icosahedral cluster gold compounds, degradation reactions with chelating diphosphanes of; X-ray structure of di{bis(diphenylphosphino)methanido}-digold(I), {Au(Ph₂P)₂CH}, (C.E. Briant, K.P. Hall, D.M.P. Mingos), (229)C5
- Indolylgold(I) derivatives and indole as π -arene ligands in cationic rhodium(I) complexes (R. Usón, L.A. Oro, J.A. Cabeza, M. Valderrama), (231)C81
- N-Indolyltriaarylphosphinegold(I) derivatives as η^6 -arene ligands in pentamethylcyclopentadienylrhodium(III) complexes; X-ray structure of [(C₆Me₅)₂Rh(μ -In)-AuP(C₆H₅)₃] (ClO₄)₂·CH₂Cl₂, (A. Tiripicchio, M. Tiripicchio Camelini, R. Usón, L.A. Oro, J.A. Cabeza), (244)165

Iron-gold mixed metal carbido clusters, synthesis of and crystal structure of $\text{Fe}_4\text{AuC}(\mu\text{-H})(\text{CO})_{12}(\text{PPh}_3)$ and $\text{Fe}_4\text{Au}_2(\text{CO})_{12}(\text{PEt}_3)_2$ (B.F.G. Johnson, D.A. Kaner, J. Lewis, P.R. Raithby, M.J. Rosales), (231)C59

$\text{M}(\text{o-C}_6\text{H}_4\text{CH}_2\text{PR}_2)_2$ ($\text{M} = \text{Pd}, \text{Pt}$) cyclo-metallated complexes, metallation reactions of (H.-P. Abicht, P. Lehniger, K. Issleib), (250)609

Mixed-metal carbido cluster $\text{Fe}_5\text{C}(\mu_2\text{-CO})_3(\text{CO})_1(\mu_2\text{-AuPEt}_3)(\mu_4\text{-AuPEt}_3)$, synthesis and structural characterisation of and oxidation of Fe—Au clusters (B.F.G. Johnson, D.A. Kaner, J. Lewis, M.J. Rosales), (238)C73

Mixed metal decaosmium carbido clusters; X-ray structures of the monoanions $[\text{Os}_{10}\text{C}(\text{CO})_{24}\text{Cu}(\text{NMe})]^-$ and $[\text{Os}_{10}\text{C}(\text{CO})_{24}\text{AuPPh}_3]^-$ (B.F.G. Johnson, J. Lewis, W.J.H. Nelson, M.D. Vargas, D. Braga, M. McPartlin), (246)C69

Rhodium(I) and iridium(I) π -arene-indole and N -indolylgold(I) derivatives, X-ray structure of $[(\text{Me}_3\text{TFB})\text{Rh}(\eta^6\text{-HIn})]\text{ClO}_4$ ($\text{TFB} = \text{tetrafluorobenzobarrelene}$) (R. Usón, L.A. Oro, J.A. Cabeza, C. Foces-Foces, F.H. Cano, S. García-Blanco), (246)73

Tricyanate-goldtriosmium clusters, synthesis of (K. Burgess, B.F.G. Johnson, J. Lewis), (247)C42

Hafnium

Butadiene-transition metal complexes of Ti, Zr, Hf, Mo, W and Co, structure of and fluxional behaviour of butadiene in (R. Benn, G. Schroth), (228)71

Dicyclopentadienylhafnium compounds and their deuterated analogues, thermal decomposition of (G.A. Razuvayev, V.P. Mar'in, O.N. Drushkov, L.I. Vyshinskaya), (231)125

Mono- and di-hydride-zirconocenes and -hafnocenes reactions with diphenylacetylene (P. Meunier, B. Gautheron, S. Couturier), (231)C1

Pyrazolide-bridged heterometallic binuclear complexes (W.C. Deese, D.A. Johnson), (232)325

Titanium, zirconium and hafnium; Annual Survey covering the year 1980 (J.A. Labinger), (227)341

Tricyclopentadienyl-zirconium and -hafnium hydrides and deuterides, vibrational spectra of (B.V. Lokshin, Z.S.

Klemenkova, M.G. Ezernitskaya, L.I. Strunkina, E.M. Brainina), (235)69

Holmium

Organolanthanide σ -bonded complexes, synthesis, properties and IR spectra of (C. Qian, C. Ye, H. Lu, Y. Li, J. Zhou, Y. Ge, M. Tsutsui), (247)161

Indium

Bis(methylelement)dithiooxamid derivatives (element = Al, Ga, In, Si, Ge, Sn); planar and fused structural metalla-bicyclic compounds (T. Halder, W. Schwarz, J. Weidlein, P. Fischer), (246)29

Dimethylmetal tripolonates of gallium, indium and tin (I. Waller, T. Halder, W. Schwarz, J. Weidlein), (232)99

Gallium and indium; Annual Survey covering the year 1980 (T. Tanaka), (227)289

Indium porphyrins containing bi- or tri-nuclear frameworks, synthesis and vibrational spectra of (P. Cocolios, C. Moise, R. Guillard), (228)C43

Metallaviolenes, ESR study of (W. Kaim), (241)157

Trimethyl urotropine adducts of aluminium, gallium, indium and thallium (H. Krause, K. Sille, H.-D. Hausen, J. Weidlein), (235)253

Iridium

Bis(η^4 -cyclooctadiene- μ -methyleneiridium), insertion of diphenylacetylene into the methylene—iridium bond of (J. Müller, B. Passon, J. Pickardt), (236)C11

Bis(η^4 -cyclooctadiene- μ -methyleneiridium), synthesis, properties and structure of (J. Müller, B. Passon, J. Pickardt), (228)C51

Carbon—hydrogen—transition metal bonds (M. Brookhart, M.L.H. Green), (250) 395

Carbonylmetal cluster complexes, reactions with bis(diphenylphosphino)methane of (D.F. Foster, B.S. Nicholls, A.K. Smith), (236)395

μ -Carbonyltri- μ -carbonyloctacarbonyl-tetrakis(triphenylphosphite)octahedrohexairidium, synthesis and X-ray structure of (F. Demartin, M. Manassero, M. Sansoni, L. Garlaschelli, U. Sartorelli, F. Tagliabue), (234)C39

- Cobalt—iridium mixed tetranuclear cluster, $\text{Co}_2\text{Ir}_2(\text{CO})_{12}$, trimethylphosphite derivatives of (D. Labroue, R. Queau, R. Poilblanc), (233)359
- Cobalt, rhodium and iridium; Annual Survey covering the year 1979 (R.D.W. Kemmitt, D.R. Russell), (230)1
- Cobalt, rhodium and iridium; Annual Survey covering the year 1980 (T.J. Mague), (230)99
- Cobalt, rhodium and iridium; Annual Survey covering the year 1981 (J.T. Mague), (242)241
- Cobalt, rhodium and iridium trimethyl-phosphite complexes, synthesis and reactivity of; crystal and molecular structure of $[\text{IrH}(\text{P}(\text{OMe})_3)_4(\text{P}(\text{OMe})_2\text{-OSnMe}_2\text{Cl}_2)] [\text{SnCl}_3\text{Me}_2]$ (P.B. Hitchcock, S.I. Klein, J.F. Nixon), (241)C9
- η -Cyclopentadienyl- η -methyl dienonate-rhodium and -iridium complexes; base hydrolysis and protonation studies (P. Powell), (243)205
- Diphenylphosphoryl azide and perfluoro-n-hexylsulphonyl azide, reactions with triphenylphosphane-platinum(0), -rhodium(I), -iridium(I), -ruthenium(0), -cobalt(II) and -copper(I) complexes of (K. Bartel, K. v. Werner, W. Beck), (243)79
- Ethyl(pentamethylicyclopentadienyl)-rhodium and -iridium complexes, preparation of (A. Vázquez de Miguel, P.M. Maitlis), (244)C35
- trans*-Ir(CH₂CN)(CO)(PPh₃)₂, preparation and reactivity of (S. Zecchin, G. Zotti, G. Pilloni), (235)353
- IrCl₃(CCl₂)(PPh₃)₂, compound with Ir=C bond, synthesis, structure and reactions of (G.R. Clark, W.R. Roper, A.H. Wright), (236)C7
- 1-[Ir(CO)(PhCN)(PPh₃)]-7-C₆H₅-1,7-(σ -C₂B₁₀H₁₀), homogeneous hydrogenation of alk-1-enes and alkynes catalysed by (F. Morandini, B. Longato, S. Bresadola), (239)377
- [IrH₄(Bu^tPCH₂CH₂CHCHRCH₂PBu^t)₂] (R = H, Me), preparation and reactions with CO, Bu^tNC or HBr of (R.J. Errington, B.L. Shaw), (238)319
- Iridium complexes in arene substitution reactions under mild conditions (K. Isobe, A. Vázquez de Miguel, P.M. Maitlis), (250)C25
- Iridium complexes supported on zeolites, water gas shift reactions catalysed by (R. Ganzerla, F. Pinna, M. Lenarda, M. Graziani), (244)183
- Iridium(I) and rhodium(I) complexes, oxidative addition of dialkylphosphites to (M.A. Bennett, T.R.B. Mitchell), (250)499
- Iridium-substituted difluorophosphines, preparation and properties of; synthesis of PF₂-bridged heterometal complexes (E.A.V. Ebsworth, R.O. Gould, N.T. McManus, D.W.H. Rankin, M.D. Walkinshaw, J.D. Whitelock), (249)227
- Low-valent transition metal complexes, reactions with 1,2,3,4,7,7-hexafluorobicyclo[2.2.1]heptadiene and 2,3-bis(trimethyltin)- and 2,3-dichloro-1,4,5,6,7,7-hexafluorobicyclo[2.2.1]-hepta-2,5-dienes of (B.L. Booth, S. Casey, R.P. Critchley, R.N. Haszeldine), (226)301
- Low-valent transition metal complexes, reactions with perfluoronorbornadiene of (B.L. Booth, S. Casey, R.N. Haszeldine), (226)289
- Metal dimer and cluster catalysed CO substitution reaction, supported metals and metal oxides as promoters for (M.O. Albers, N.J. Coville, E. Singleton), (234)C13
- ortho*-Metalated arylhydrazido complex, [Ir(NHNHC₆H₃NO₂)(CO)(PPh₃)₂]BF₄, addition and substitution reactions with hydrogen chloride of (F.W.B. Einstein, T. Jones, D. Sutton, Z. Xiaoheng), (244)87
- ortho*-Metalated iridium complexes derived from reactions of aryldiazonium ions with IrH(CO)(PPh₃)₃ and IrH(CO)₂(PPh₃)₂ (J.A. Carroll, D. Sutton, Z. Xiaoheng), (244)73
- Methylsiloxanes, redistribution reactions catalysed by transition metal complexes (W.A. Gustavson, P.S. Epstein, M.D. Curtis), (238)87
- Methyltris(dialkylphosphino)silanes, reactions with carbonyl cluster complexes of (D.F. Foster, B.S. Nicholls, A.K. Smith), (244)159
- Mono- and hetero-nuclear rhodium(I) and iridium(I) complexes with 2-(2'-pyridyl)-benzimidazole, synthesis and reactivity of (R. Usón, L.A. Oro, J.A. Cabeza), (247)105
- Multidentate ligand stabilised metal carbonyl cluster complexes, reactions with phosphines and immobilisation on silica or organic polymers of (D.F. Foster, J. Harrison, B.S. Nicholls, A.K. Smith), (248)C29

- Osmaboranes and iridatetraborane, synthesis and NMR spectra of (J. Bould, N.N. Greenwood, J.D. Kennedy), (249)11
- Pentadecacarbonylhexairidium, reaction with a mixture of CO, H₂, and ethylene of; formation and X-ray characterisation of the anionic cluster [Ir₆(CO)₁₁COEt]⁻ (F. Demartin, M. Manassero, M. Sansoni, L. Garlaschelli, C. Raimondi C., S. Martinengo), (243)C10
- trans*-1,3-Pentadiene- and cyclobutene-rhodium(I) and -iridium(I) complexes (R.B. Osborne, J.A. Ibers), (232)267
- Polyhedral skeletal electron pair theory: its extension to non-conical ML₂ fragments (D.G. Evans, D.M.P. Mingos), (240)321
- 1-Pyrazolyliridium(I) derivatives, X-ray evidence for monodentate pyrazolato ligands (A.L. Bandini, G. Banditelli, F. Bonati, F. Demartin, M. Manassero, G. Minghetti), (238)C9
- Rhodium(I) and iridium(I) π -arene-indole and *N*-indolylgold(I) derivatives, X-ray structure of [(Me₃TFB)Rh(η^6 -HIn)]ClO₄ (TFB = tetrafluorobenzobarrelene) (R. Usón, L.A. Oro, J.A. Cabeza, C. Foces-Foces, F.H. Cano, S. García-Blanco), (246)73
- Rhodium(I) and iridium(I) complexes of phenazine and related ligands (A.R. Siedle, G. Filippovich, P.E. Toren, F.J. Palensky, E. Cook, R.A. Newark, W.L. Stebbings, K. Melancon, H.E. Mishmash), (246)83
- Rhodium(I)-iridium(III) hydrido-bridged phosphine complex, preparation and characterisation of (A. Musco, R. Naegeli, L.M. Venanzi, A. Albinati), (228)C15
- Rhodium and iridium phosphine complexes, hydrogenation of ketones and olefins via hydrogen transfer catalysed by (R. Spogliarich, A. Tencich, J. Kaspar, M. Graziani), (240)453
- Rhodium(I), iridium(I) and platinum(II) five-coordinate complexes containing three trichlorostannate ligands, synthesis and NMR studies of (M. Kretschmer, P.S. Pregosin, H. Rüegger), (241)87
- Rhodium(I) and iridium(I) species, reactions with oxiranes of (R.B. Osborne, J.A. Ibers), (232)273
- Rhodium(III)- and iridium(III)-tin(II) systems as catalysts in hydrogen-transfer reactions (J. Kaspar, R. Spogliarich, M. Graziani), (231)71
- Ruthenium(II), rhodium(III) and iridium(III) cationic arene complexes, preparative route to (M.I. Rybinskaya, A.R. Kudinov, V.S. Kaganovich), (246)279
- Silica-supported iridium-phosphine catalysts for the reaction of silanes with alcohols (J. Dwyer, H.S. Hilal, R.V. Parish), (228)191
- Tri- μ -carbonyl- μ -carbonylheptacarbonylpentakis(trimethylphosphite)-octahedrohexairidium, synthesis and X-ray characterisation of (F. Demartin, M. Manassero, M. Sansoni, L. Garlaschelli, M.C. Malatesta, U. Sartorelli), (248)C17
- Trihydrobis(triphenylphosphine)iridium, IrH₃(PPh₃)₂, reaction with diazonium salts of (M. Angioletta, G. Gaglio), (234)99
- Triphosphorus mononuclear cyclic complexes, structural correlations and NMR properties of (M. Di Vaira, L. Sacconi, P. Stopponi), (250)183
- Tris(organo-chelate)iridium(III) homoleptic complexes, synthesis by spontaneous *ortho*-metallation of *N,N'*- diarylcarbene ligands in and X-ray structures of (P.B. Hitchcock, M.F. Lappert, P. Terreros), (239)C26
- Tris(triphenylphosphine)carbonyl-rhodium and -iridium, electrogeneration of (G. Zotti, S. Zecchin, G. Pilloni), (246)61
- Undecacarbonyltetrairidiumtriethylphosphine, Ir₄(CO)₁₁PEt₃, equilibrium between two isomers of and pathway for carbonyl scrambling in (B.E. Mann, C.M. Spencer, A.K. Smith), (244)C17
- Vinyl organometallic monomers: (η^5 -C₅H₅-CH=CH₂)M(CO)₂(NO) (M = Cr, Mo, W) and (η^5 -C₅H₅CH=CH₂)M(CO)₂ (M = Co, Rh, Ir), synthesis and ¹H NMR study of (D.W. Macomber, W.C. Spink, M.D. Rausch), (250)311

Iron

- Acyliron phosphorus ylides with electron-rich organometal groups (A. Stasunik, W. Malisch), (247)C47
- Alkali metal tetracarbonylferrates in the synthesis of amines and dehalogenation reactions with (G.P. Boldrini, G. Cainelli, A. Umani-Ronchi), (243)195

- (Alkyl- and perfluoroalkyl-)C-nitroso-transition metal complexes, ^{15}N NMR comparisons of (D.H. Evans, D.M.P. Mingos, J. Mason, A. Richards), (249)293
- Alkylsilane-iron complexes, synthesis, IR and NMR spectra of (W. Ries, W. Malisch), (241)321
- Alkylthiononacarbonyltriiron clusters, synthesis and reactions of (J. Takács, L. Markó), (247)223
- π -Allyl- σ -carbamoyliron complex (OC_2) $\text{FeC}(\text{O})\text{N}(\text{CH}_2\text{Ph})(\eta^3\text{-CMe}=\text{CH}-\text{CHPh})$, X-ray crystal structure of (A.S. Batsanov, Yu.T. Struchkov), (248)101
- (1-3- η -Allyl)dicarbonylnitrosyliron, chemical reduction of mono-substituted derivatives of (G. Cardaci), (244)153
- σ , π -Arene-bridged carbonyliron complex, μ -(σ -C₆H₄CH₂NC₆H₅)Fe₃(CO)₈, synthesis and X-ray structure of (N.S. Nametkin, V.D. Tyurin, A.I. Nekhaev, Yu.P. Sobolev, M.G. Kondrat'eva, A.S. Batsanov, Yu.T. Struchkov), (243)323
- Arenecyclopentadienyliron complexes, ESR and electronic absorption spectra of deprotonation products of (S.P. Solodovnikov, N.A. Vol'kenau, L.S. Kotova), (231)45
- 3-Aryl- and 3-alkyl-[5]ferrocenophane-1,5-diones, stereochemistry of the reaction with Grignard reagents of (J. Mirek, S. Rachwal, R. Kawalek), (248)107
- Aryliron(III) complexes of octaethylporphyrins, synthesis and magnetic properties of (H. Ogoshi, H. Sugimoto, Z.-I. Yoshida, H. Kobayashi, H. Sakai, Y. Maeda), (234)185
- Arylphosphine addition to [Fe(CO)₃(1-5- η -C₆H₅)]⁺, anchimeric assistance in (J.G. Atton, L.A.P. Kane-Maguire), (226)C43
- η^6 -o-, m- and p-azidotoluene- η^5 -cyclopentadienyliron hexafluorophosphate, photolysis of (R.G. Sutherland, P.C. Chang, C.C. Lee), (234)197
- Benzencyclopentadienyliron, interaction with oxygen of (N.A. Vol'kenau, V.A. Petrakova), (233)C7
- sym*- and *asym*-Benzoferroles, electrochemical reduction yielding stable radical anion and dianion species of (G. Zotti, R.D. Rieke, J.S. McKennis), (228)281
- 1-Benzylidene-2,4-cyclohexadienetri-carbonyliron and related compounds, preparation of (G. Jaouen, B.F.G. Johnson, J. Lewis), (231)C21
- Bis- and tris-acetonitrile-iron(II) complexes (D. Catheline, D. Astruc), (248)C9
- [2,2-Bis(carbethoxy)propyl]cyclopenta-dienyldicarbonyliron, preparation and reactions of (P.E. Chatham, G.M. Karp, M.J. Kaufman, W. Nyitray, R.C. Kerber), (236)257
- 1,3-Bis(dicarbonyl- η -cyclopentadienyliron)-prop-2-en-1-one, synthesis and interaction with nonacarbonyldiiron of; crystal structure of octacarbonyl(η -cyclopentadienyl)- μ ₃-ethyldyne-tri-angulo-triiron (L.V. Rybin, E.A. Petrovskaya, Yu.T. Struchkov, A.S. Batsanov, M.I. Rybinskaya), (226)63
- Carbon disulphide and diselenide insertion into metal-amido bonds; mono- vs. bidentate dithiocarbamates formed by reactions of CS₂ + NHR, with [CpM(CO)_n]₁ (M = Fe, n = 2; M = Mo, n = 3) (E. Román, D. Catheline, D. Astruc), (236)229
- Carbon disulphide-bridged metal complexes, preparation of (H. Stolzenberg, W.P. Fehlhammer), (235)C7
- Carbon disulphide-iron, -palladium and -platinum complexes, reactions with electrophiles of (H. Stolzenberg, W.P. Fehlhammer, P. Dixneuf), (246)105
- Carbon-hydrogen-transition metal bonds (M. Brookhart, M.L.H. Green), (250)395
- Carbonyliron compounds, reactions with anionic nitrogen heterocycles of (V.N. Babin, Yu.A. Belousov, V.V. Gumennyuk, R.M. Salimov, R.B. Materikova, N.S. Kochetkova), (241)C41
- Carbonyliron-carbide and -nitride cluster compounds, Mössbauer spectra of (R.P. Brint, K. O'Cuill, T.R. Spalding, F.A. Deeney), (247)61
- Carbonyliron compounds as catalysts in hydroformylation and hydrogenation of styrene with carbon monoxide and water (J. Palágyi, L. Markó), (236)343
- Carbonyliron-sulphur cluster compounds, oxidative cleavage of metal-metal bonds in; synthesis and structure of Fe₃(CO)₉(μ_2 -X)(μ_3 -S-t-C₄H₉) (A. Winter, L. Zsolnai, G. Huttner), (232)47

- Carbonylmetal hydrides in reaction with decacarbonyldimanganese initiated by room light (P.L. Bogdan, A. Wong, J.D. Atwood), (229)185
- ($\eta^5\text{-C}_5\text{H}_5$)Fe(CO)(PPh₃)(COCH₂, COR) complexes, fragmentation to [$(\eta^5\text{-C}_5\text{H}_5)$ Fe(CO)₂(PPh₃)₂]⁺ of (S.G. Davies, O. Watts, N. Aktugo, H. Felkin), (243) C51
- ($\eta^5\text{-C}_5\text{H}_5$)Fe(CO)(PPh₃)(COCH₂, R), stereoselective elaboration of the acyl ligand in (G.J. Baird, S.G. Davies), (248)C1
- ($\eta^5\text{-C}_5\text{H}_5$)Fe(Ph₂PCH₂CH₂PPh₂)(CHO), evidence for (S.G. Davies, S.J. Simpson), (240)C48
- [($\eta^5\text{-C}_5\text{H}_5$)Fe(Ph₂PCH₂CH₂PPh₂)CO]PF₆, regioselectivity of hydride addition to and rearrangement of a product of (S.G. Davies, J. Hibberd, S.J. Simpson), (246)C26
- Chiral discrimination in organometallic systems; reaction between [Fe(CO)₃(1-5- η -2-MeOC₆H₄)]⁺ and (S,S)-(-)- ω -o-phenylenebis(1,2-methylphenylphosphine) (D.J. Evans, L.A.P. Kane-Maguire, S.B. Wild), (232)C9
- Chiral discrimination in organometallic systems; reaction of [Fe(CO)₃(1-5- η -2-MeOC₆H₄)]⁺ with (R)-(+)-1-phenylethylamine (J.G. Atton, L.A.P. Kane-Maguire, P.A. Williams, G.R. Stephenson), (232)C5
- Chlorotris(carbonylmettallato)tin(IV) chiral complexes, synthesis and crystal structure of (F.H. Carré, R.J.P. Corriu, B.J.L. Henner), (228)139
- Clusters of metal atoms, crystallographic disorder as structural evidence for the constancy of peripheral atom polyhedra around (M.I. Bruce, B.K. Nicholson, A.H. White), (240)C33
- 2-Cyano-2-triphenylphosphoranylidene dithioacetic acid and its alkyl esters, coordination chemistry, IR and NMR spectroscopic investigations of (U. Kunze, R. Merkel, M. Moll), (248)205
- Cycloheptatrienylidene-transition metal complexes, rotation barriers around the carbene-metal bond in (F.J. Manganiello, M.D. Radcliffe, W.M. Jones), (228)273
- Cyclopalladation, asymmetric, in ferrocenes as a tool for enantioselective synthesis; preparation of analogues of natural products (V.I. Sokolov, L.L. Troitskaya, N.S. Khrushchova), (250)439
- η^5 -Cyclopentadienyl- η^6 -areneiron cations with a methylene group attached to the arene, synthesis and reactions of (C. Moinet, E. Raoult), (229)C13
- η^5 -Cyclopentadienylbis[tris(2,2,2-trifluoroethyl)phosphito]iodoiron(II), preparation of (J.M. Shreeve, S.M. Williamson), (249)C18
- π -Cyclopentadienyl- π -(3)-1,2-dicarboxyl-iron(III) 1-substituted derivatives, synthesis and reactions of; structure of $\pi\text{-C}_5\text{H}_5\text{Fe}^{\text{III}}\text{-}\pi\text{-1,2-C}_2\text{B}_2\text{H}_{10}\text{-1-CH(OEt)}$, (L.I. Zakharkin, V.V. Kobak, A.I. Yanovski, Yu.T. Struchkov), (228)119
- [η^5 -Cyclopentadienyliron- η^6 -pentamethyl-aniline]⁺ and derivatives with amides and sulphon amides of (C. Moinet, E. Raoult), (231)245
- Cyclopropyliron σ complexes, synthesis by decarbonylation of acyl complexes of (F.J. Manganiello, L.W. Christensen, W.M. Jones), (235)327
- Diacetylferrocene—metal halide complexes, Mössbauer studies on (M.C. Clemance, R.M.G. Roberts, J. Silver), (247)219
- Di-bridged trinuclear iron cluster, Fe₃(CO)₉($\mu_3\text{-S})(\mu_3\text{-X})$ (X = PR, AsR, SO), synthesis from [Fe₃(CO)₉($\mu_3\text{-S}-\text{C}_4\text{H}_9$)]⁻ of (A. Winter, L. Zsolnai, G. Huttner), (234)337
- Dicyclopentadienyl-molybdenum and tungsten dihydrides, reactions with octacarbonyldicobalt and nonacarbonyldiiron forming ionic heteronuclear complexes of (Y. Mugnier, C. Moise), (248)C33
- Dicyclopentadienyltetracarbonyldiiron, [Fe₂($\eta^5\text{-C}_5\text{H}_5$)₂(CO)₄], reaction with alkyl isocyanides and formation of [Fe₂($\eta^5\text{-C}_5\text{H}_5$)₂(CNR)₂] (G. McNally, P.T. Murray, A.R. Manning), (243)C87
- 1,4-Diferrocenyl-1,4-dibora-2,5-cyclohexadiene complexes with carbonyl-metal fragments (G.E. Herberich, M.M. Kucharska-Jansen), (243)45
- Diiron hexacarbonyl dissymmetrical complexes, electron transfer catalysis of regioselective replacement of CO by P(OMe)₃ in (E.K. Lhadi, C. Mahe, H. Patin, A. Darchen), (246)C61
- α -N,N-Dimethylaminoethylferrocene, lithiation of; single crystal structure of [($\eta^5\text{-C}_5\text{H}_5\text{Li}$)Fe($\eta^5\text{-C}_5\text{H}_5$, LiCH(Me)-NMe₂)]₄[LiOEt]₂(TMED)₂ (I.R. Butler, W.R. Cullen, J. Reglinski, S.J. Rettig), (249)183

- 1'-Dimethylamino[3]ferrocenophane, asymmetric cyclopalladation of; central and planar chirality and effect of conformational rigidity in (V.I. Sokolov, L.L. Troitskaya, B. Gautheron, G. Taintutier), (235)369
- [3-8- η -5,13-Dimethyl[2.2]metacyclophane(η^5 -cyclopentadienyl)iron]⁺ [PF₆⁻] and [3-8- η -;11-16- η -5,13-dimethyl[2.2]metacyclophane[(η^5 -cyclopentadienyl)iron]₂]²⁺ [PF₆⁻]₂, synthesis and characterisation of (A.R. Koray), (232)345
- 1,1-Dimethyl-sila- and -germa-cyclopentanes, reactions with nonacarbonyldiiron of (A. Laporterie, H. Iloughmane, J. Dubac), (244)C12
- Diphenylcyclopropenethione, reactions with nonacarbonyldiiron of; crystal and molecular structure of C₆Ph₅Fe₂S₂(CO)₄ and C₆Ph₅S₂Fe₂(CO)₄ (G. Dettlaf, P. Hübener, J. Klimes, E. Weiss), (229)63
- Diphenylketeneiron complex, metal-centred ethylene isomerisation of (W.A. Herrmann, J. Weichmann, B. Balbach, M.L. Ziegler), (231)C69
- 1,3-Diselena[3]ferrocenophanes of C, Si and Sn, synthetic and structural studies on; crystal and molecular structure of bis(ferrocene-1,1'-diselenoato)tin(IV) at 163 K (A.G. Osborne, R.E. Hollands, R.F. Bryan, S. Lockhart), (226)129
- Dithiocarbene complexes derived from CS-bridged dinuclear complexes (L. Busetto, A. Palazzi, M. Monari), (228)C19
- Electrode-catalysed substitution reactions, preparative use applied for the synthesis of Fe(CO)(PPh₃)₂(η^5 -C₅H₅)COCH₃ of (D. Miholová, A.A. Vlček), (240)413
- Electrophiles containing chiral iron centres, asymmetric induction in C-C bond forming reactions of prochiral nucleophiles with (J.E. Jensen, L.L. Campbell, S. Nakanishi, T.C. Flood), (244)61
- Fe_x(CO)_y(C₂R₂)_z ($x = 1, 2, 3; y = 6, 8$), fragmentation patterns of mass spectra of (N. Bild, E.R.F. Gesing, C. Quiquerez, A. Wehrli), (248)85
- [Fe(CO)₃(1-5- η -dienyl)]⁺, hydroxide addition to a carbon monoxide ligand in (J.G. Atton, L.A.P. Kane-Maguire), (246)C23
- [Fe(CO)₃(1-5- η -2-MeOC₆H₅)]⁺[BF₄⁻], reactions with optically active tertiary phosphines of (D.J. Evans, L.A.P. Kane-Maguire), (236)C15
- [Fe₃(CO)₆(μ_3 -O)]²⁻ dianion, synthesis and structural characterisation of (A. Ceriotti, L. Resconi, F. Demartin, G. Longoni, M. Manassero, M. Sansoni), (249)C35
- Fe₃(CO)₆(μ_3 -PPh₃)₂, preparation and crystal structural of (S.L. Cook, J. Evans, L.R. Gray, M. Webster), (236)367
- Fe₃(CO)₆(μ_3 -S)(μ_3 -ER) (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), (247)259
- Fe—Fe bond cleavage in [Fe₃(CO)₆(μ_3 -SR)]²⁻ by electrophilic reagents of the Vth and VIth Main Group (A. Winter, L. Zsolnai, G. Huttner), (250)409
- [Fe(NO)₂I]₂ and Fe(NO)₂IPPh₃ in DMF, electrochemistry and ionization of (G. Piazza, G. Innotta), (240)257
- Ferricinium salt reduction with anionic nucleophiles and mechanism of an oscillatory process in ferrocene-ferricinium cation systems (N.S. Kochetkova, R.B. Materikova, Yu.A. Belousov, R.M. Salimov, V.N. Babin), (235)C21
- Ferridoporphyrins, synthesis, characterisation and insertion reactions with sulphur dioxide of (P. Cocolios, E. Laviron, R. Guillard), (228)C39
- Ferrocene; Annual Survey covering the year 1980 (G. Marr, B.W. Rockett), (227)373
- Ferrocene; Annual Survey covering the year 1981 (B.W. Rockett, G. Marr), (237)161
- Ferrocenes, formation via reaction of atoms with alkynes (L.H. Simons, J.J. Lagowski), (249)195
- Ferrocene, mono- and di-cations from ligand exchange reactions with heterocyclic systems of (C.C. Lee, A. Piórkó, R.G. Sutherland), (248)357
- Ferrocene stable anion, electrochemical formation of; formal rate constant of the ferrocene^{0/-} electrode (N. Ito, T. Saji, S. Aoyagi), (247)301
- [1.1]Ferrocenophane and bridge- and ring-substituted derivatives, conformational properties of (V.K. Kansal, W.E. Watts, U.T. Mueller-Westerhoff), (243)443
- [1]Ferrocenophanes, structure and reactions of (M. Clemance, R.M.G. Roberts, J. Silver), (243)461

- [4][3][4](1,2,3)Ferrocenophane, X-ray crystal structure of (M. Hisatome, Y. Kawajiri, K. Yamakawa, K. Kozawa, T. Uchida), (236)359
- Ferrocenylamines, syntheses and spectroscopic characterisation of (M. Herberhold, M. Ellinger, W. Kremnitz), (241)227
- Ferrocenyl bridged carbenium ions and related protonated ketones, Mössbauer studies on (G. Neshvad, R.M.G. Roberts, J. Silver), (240)265
- Ferrocenyl-carbenium ions, substituent effects in (G. Neshvad, R.M.G. Roberts, J. Silver), (236)237
- Ferrocenyl ketones, protonation of (G. Neshvad, R.M.G. Roberts, J. Silver), (236)349
- 2-Ferrocenyl-2-oxazoline, 1,2-disubstituted ferrocene preparation from (G. Schmitt, P. Klein, W. Ebertz), (234)63
- $\text{Fe}_3(\mu\text{-Te})_2(\text{CO})_6$, synthesis of heterometallic clusters from and comparisons with analogous sulphide clusters (L.E. Bogan, Jr., D.A. Lesch, T.B. Rauchfuss), (250)429
- Fischer-type carbene complexes, reactions with ethene of (J. Kadelki, H. Loevenich, W. Keim), (231)219
- Free radicals, application to catalytic synthesis of carbon monoxide derivatives of (P. Sobota, E. Kaczurba), (235)295
- Gold-triiron butterfly cluster, $\text{AuFe}_3(\mu\text{-HC=NBu-t})(\text{CO})_6(\text{PPh}_3)_3$, synthesis and crystal structure of (M.I. Bruce, B.K. Nicholson), (250)627
- Hydride reduction of the cation $[(\eta^5\text{C}_5\text{H}_5)\text{Fe}(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)\text{CO}]^{\text{PF}_6^-}$; formation of $(\eta^5\text{C}_5\text{H}_5)\text{FeH}(\text{CO})(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)$ and elimination of H_2 from $[(\eta^5\text{C}_5\text{H}_5)\text{FeH}(\text{CO})]_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)$ (S.G. Davies, J. Hibberd, S.J. Simpson, O. Watts), (238)C7; (241)C31
- Hydrido(tetrahydroborato)(1,1,1-tris(diphenylphosphinomethyl)ethane)-iron(II), synthesis and molecular structure of (C.A. Ghilardi, P. Innocenti, S. Midollini, A. Orlandini), (231)C78
- Hydroboration of ferrocenylalkenes, stereochemistry of (C. Lo Sterzo, G. Ortaggi), (234)C28
- Hydrocarbonyliron intermediates in Reppe synthesis (V. Bellagamba, R. Ercoli, A. Gamba), (235)201
- Indium porphyrins containing bi- or tri-nuclear frameworks, synthesis and vibrational spectra of (P. Cocolios, C. Moise, R. Guillard), (228)C43
- Iron complexes with η^1 -coordinated vinyl groups, spontaneous dimethylation with methyl iodide or methylfluorosulphonic acid esters of (G. Grötsch, W. Malisch), (246)C49
- Iron(II) complexes with 2,3,11,12-dibenzo-1,4,7,10,13-pentathiatridecane, synthesis and reactions of (D. Sellmann, U. Kleine-Kleffmann), (247)307
- Iron-gold mixed metal carbido clusters, synthesis of and crystal structure of $\text{Fe}_4\text{AuC}(\mu\text{-H})(\text{CO})_{12}(\text{PPh}_3)_2$ and $\text{Fe}_4\text{Au}_2(\text{CO})_{12}(\text{PET}_3)_2$ (B.F.G. Johnson, D.A. Kaner, J. Lewis, P.R. Raithby, M.J. Rosales), (231)C59
- Iron(0) intermediate complex isolated from dinitrogen fixing system $\text{LiPh} + \text{FeCl}_3$, structure of (T.A. Bazhenova, R.M. Lobkovskaya, R.P. Shibaeva, A.E. Shilov, A.K. Shilova, M. Gruselle, G. Leny, B. Tchoubar), (244)265
- Iron-nickel clusters, synthesis and reactions of; crystal and molecular structure of $[\text{Ni}(\text{PMe}_3)_2(\eta^5\text{C}_5\text{H}_5)][\text{Fe}_3\text{Ni}(\mu\text{-C}_5\text{Ph}_5)(\text{CO})_6(\mu\text{-C}_5\text{H}_5)]$ (M.I. Bruce, J.R. Rodgers, M.R. Snow, F.S. Wong), (240)299
- η^6 -Ketoarene- η^5 -cyclopentadienyliron cations, synthesis and reduction with sodium borohydride of (C.C. Lee, K.J. Demchuk, U.S. Gill, R.G. Sutherland), (247)71
- Lithium as ligand in transition metal compounds, INDO MO investigation of (M.C. Böhm, R. Gleiter), (228)1
- Low-valent transition metal complexes, reactions with 1,2,3,4,7,7-hexafluorobicyclo[2.2.1]heptadiene and 2,3-bis(trimethyltin)- and 2,3-dichloro-1,4,5,6,7,7-hexafluorobicyclo[2.2.1]-hepta-2,5-dienes of (B.L. Booth, S. Casey, R.P. Critchley, R.N. Haszeldine), (226)301
- Low-valent transition metal complexes, reactions with perfluoronorbornadiene of (B.L. Booth, S. Casey, R.N. Haszeldine), (226)289
- Manganese π -acetylenic, η -vinylidenic and η -allenylidenic complexes, reactions with nonacarbonyliiron of; crystal and molecular structure of $\text{Cp}(\text{CO})_2\text{Mn}(\mu\text{-C=CHCOOCH}_3)\text{Fe}(\text{CO})_2$ (N.E. Kolobova, L.L. Ivanov, O.S.

- Zhvanko, G.G. Aleksandrov, Yu.T. Struchkov), (228)265
- Manganese cationic carbyne and neutral carbene complexes with C₅H₅(CO), and C₅H₄FeC₅H₅ as ligands (E.O. Fischer, V.N. Postnov, F.R. Kreissl), (231)C73
- Me₂Si[η⁵-C₅H₄Fe(CO)₂(η¹-CH₂C₆H₅)]₂, evidence for enhanced reactivity in photofragmentation of (G.O. Nelson, M.E. Wright), (239)353
- Metacyclophaneiron multilayer complexes, ¹H NMR behaviour of (R.T. Swann, V. Boekelheide), (231)143
- Metal dimer and cluster catalysed CO substitution reaction, supported metals and metal oxides as promoters for (M.O. Albers, N.J. Coville, E. Singleton), (234)C13
- Metal dithioformates, nucleophilic attack by tertiary phosphines on; preparation and structure of [(dppe)Fe{S₂C(H)-dppe}]BPh₄⁻·CH₂Cl₂ (C. Bianchini, A. Meli, F. Nuzzi, P. Dapporto), (236)245
- Metal-pentaborane(9) derivatives, 2-[Co(CO)₄]B₅H₉ and 2-[η⁵-C₅H₅]Fe(CO)₂B₅H₉ (M.B. Fischer, D.F. Gaines, J.A. Ulman), (231)55
- Metallated arsan and stibanes with chiral iron substituents (H.-A. Kaul, D. Greisinger, M. Luksza, W. Malisch), (228)C29
- Metallatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199
- Metallocene monomers and polymers, ferrocenyl and ferrocenylen derivatives (C. Simionescu, T. Lixandru, L. Tătaru, I. Mazilu, M. Vătăă), (238)363
- [1,1]Metallocenophanes of iron and ruthenium, cyclic voltammetry of homo-binuclear and hetero-binuclear systems (A.F. Diaz, U.T. Mueller-Westerhoff, A. Nazzal, M. Tanner), (236)C45
- [1,1]Metallocenophanes of iron and ruthenium, synthesis and characterisation of homo-binuclear and hetero-binuclear systems (U.T. Mueller-Westerhoff, A. Nazzal, M. Tanner), (236)C41
- (η¹-2-Methoxyallyl)cyclopentadienylid-carbonyliron complex, enhanced reactivity in cycloaddition reactions with olefins by introduction of a phosphite ligand (R. Baker, V.B. Rao, E. Erdik), (243)451
- (2-Methoxy-5-methylcyclohexadienyl)-tricarbonyliron hexafluorophosphate, synthesis of enantiomerically pure isomer of (J.A.S. Howell, M.J. Thomas), (247)C21
- cis-(S)(—)(Methylphenyl-1-naphthylgermyl)-(methylethoxycarbene)tetracarbonyl-manganese, synthesis, crystal structure and absolute configuration of; introduction of optically active triorganogermyl ligands into transition metal complexes (F. Carré, G. Cerveau, E. Colomer, R.J.P. Corriu), (229)257
- Methylphosphine-bridged hexacarbonyl-diiron complexes, Fe₂(CO)₆(μ-PHMe)₂, ¹H and ³¹P NMR spectra of (P.M. Treichel, D.J. Berg), (243)315
- Mixed-metal carbido cluster Fe₂C(μ₂-CO)₃(CO)₁₁(μ₂-AuPEt₃)(μ₄-AuPEt₃), synthesis and structural characterisation of and oxidation of Fe—Au clusters (B.F.G. Johnson, D.A. Kaner, J. Lewis, M.J. Rosales), (238)C73
- Molybdenum, iron and manganese acetyl-bridged cationic complexes; structure of [(η-C₅H₅)(CO)₂Mo(μ₂-η²-CH₃CO)-Mo(CO)₂(η-C₅H₅)]⁺BF₄⁻ (K. Sünkel, K. Schloter, W. Beck, K. Ackermann, U. Schubert), (241)333
- Mono- and poly-nuclear transition metal complexes, fast atom bombardment mass spectrometry of (R. Davis, I.F. Groves, J.L.A. Durrant, P. Brooks, I. Lewis), (241)C27
- Multibridged ferrocenophanes, bridge enlargement reaction with diazomethane of and syntheses of ferrocenophanes tetramethylene bridges by application of the reaction (M. Hisatome, Y. Kawajiri, K. Yamakawa), (226)71
- Naphthyliron(II) complex formed in the reaction of FeCl₃ and C₁₀H₈Li, structure of (T.A. Bazhenova, R.M. Lobkovskaya, R.P. Shibaeva, A.K. Shilova, M. Gruselle, G. Leny, E. Deschamps), (244)375
- Nitrosonium ion reactions with anionic carbonyl monomers and clusters; crystal and molecular structure of FeCo₂(μ₃-NH)(CO)₆ (D.E. Fjare, D.G. Keyes, W.L. Gladfelter), (250)383
- Nonacarbonyldiiron in reaction with (η⁵-C₅H₅)(CO)₂Mn(η²-HC=CCOOCH₃); X-ray crystal structure of (1-η⁵-cyclopentadienyl)(1,2:1,3-μ-dicarbonyl)-(1-η²:2,3-σ-methylacrylate)(2,2,2,3,3,3-hexacarbonyl)-triangulo-1-manganese-2,3-diiron (N.E. Kolobova, L.L. Ivanov, O.S. Zhvanko, A.S. Batsanov, Yu.T. Struchkov), (231)37

- Nonacarbonyl-diiron and -diruthenium, substituted derivatives and their susceptibility to electrophilic attack of; X-ray crystal structure of $[\text{Fe}_2(\mu\text{-Br})(\text{CO})_4\{\mu\text{-}(\text{C}_6\text{H}_5\text{O})_2\}\text{PN}(\text{C}_2\text{H}_5)_2\text{P}(\text{OC}_6\text{H}_5)_2]_2$ (G. de Leeuw, J.S. Field, R.J. Haines, B. McCulloch, E. Meintjies, C. Monberg, K.G. Moodley, G.M. Olivier, C.N. Sampson, N.D. Steen), (228)C66
- Nonacarbonylditelluriumtriiron, crystal and molecular structure of (H. Schumann, M. Magerstädt, J. Pickardt), (240)407
- Octacarbonyltriiron cluster complex, structure of a carbenic precursor of tetrathiafulvalene coordinated to (A. Benoit, J.-Y. Le Marouille, C. Mahé, H. Patin), (233)C51
- Octafluorocyclooctatetraene transition metal compounds, displacement of fluoride by metal carbonyl anions in (S.J. Doig, R.P. Hughes, S.L. Patt, D.E. Samkoff, W.L. Smith), (250)C1
- Organic and organometallic compounds, analysis of the near infrared by photo-acoustic spectroscopy of (L.N. Lewis), (234)355
- Organometallic methylene bridges, successful and unsuccessful routes to (Review) (W.A. Herrmann), (250)319
- Organo-transition metal free radicals, hydrogen abstraction and dimerisation reactions of (J.A. Armstead, D.J. Cox, R. Davis), (236)213
- Paramagnetic heterobimetallic $\eta^2\text{-CS}_2$ -bridged vanadium complexes (C. Moise), (247)27
- Pentacarbonyliron, reaction with Group V donor ligands in the presence of $[(\eta^5\text{-C}_5\text{H}_5\text{R})\text{Fe}(\text{CO})_2]_2$ and $[(\eta^5\text{-C}_5\text{Me}_5)\text{Fe}(\text{CO})_2]_2$ as catalysts of (M.O. Albers, N.J. Coville, E. Singleton), (232)261
- Pentacarbonyliron, reduction-complexation reactions of phosphine sulphides with (F. Mercier, F. Mathey, J. Angenauft, J.-C. Couturier, Y. Mary), (231)237
- Pentacarbonyliron-promoted reductive coupling of benzoyl chloride in halobenzenes (T.-Y. Luh, K.S. Lee, S.W. Tam), (248)221
- Pentamethylcyclopentadienylcarbonyliron complexes, $\text{C}_5(\text{CH}_3)_5\text{Fe}(\text{CO})_3^+\text{PF}_6^-$ and $\text{C}_5(\text{CH}_3)_5\text{Fe}(\text{CO})_3^-\text{K}^+$, synthesis and characterisation of (D. Catheline, D. Astruc), (226)C52
- Perfluoro-n-propyliron tetracarbonyl iodide, reactions with mercury compounds of (I.I. Guerus, Yu.L. Yagupolskii), (247)81
- 1-Phenyl-4,5-dihydroborepin, complexation and rearrangement of; synthesis and structure of manganese and iron triple-decker complexes with 2-ethyl-1-phenylborol as bridging ligands (G.E. Herberich, J. Hengesbach, G. Huttner, A. Frank, U. Schubert), (246)141
- Phosphido- and chloro-bridged carbonyl-diiron compounds, synthesis and structural characterisation of (R.L. De, J. von Seyerl, G. Huttner), (243)331
- Phosphinothiocyclidenes, reactions with tetracarbonyliron-disodium complexes of (E. Lindner, G.A. Weiss), (244)C9
- Phosphorus and arsenic di-bridged hetero-metal-metal bonds (A. Trenkle, H. Vahrenkamp), (236)71
- Polyhedral skeletal electron pair theory: its extension to non-conical ML_n fragments (D.G. Evans, D.M.P. Mingos), (240)321
- Silyl-transition metal complexes, ^{29}Si NMR studies of bonding and molecular motions in (K.H. Pannell, A.R. Bassindale), (229)1
- Sodium (*pentahapto*-cyclopentadienyl)-dicarbonyliron, reactions with α, ω -dihaloalkanes leading to haloalkyl complexes (J.R. Moss), (231)229
- η^6 -Substituted arene- η^5 -cyclopentadienyl-iron hexafluorophosphates, ring replacement and nucleophilic substitution reactions of (C.C. Lee, U.S. Gill, M. Iqbal, C.I. Azogu, R.G. Sutherland), (231)151
- Substituted ferrocenes, accurate fragmentation pathways and ionic structure analysis of metastable ion spectra of (G. Innorta, F. Scagnolari, A. Modelli, S. Torroni, A. Foffani, S. Sorriso), (241)375
- Sulphinyl carbonions, reactions with organometallic compounds of; preparation of $(\eta^5\text{-C}_5\text{H}_5)_2\text{TiCH}_2\text{SC}_6\text{H}_4$ (C.R. Lucas), (236)281
- Tetracarbonyliron complexes of *p*-substituted styrenes, synthesis, properties and carbonyl insertion reactions of (E.K.G. Schmidt, M. Doğan), (234)73
- Thiaphane conversion to cyclophane via iron pentacarbonyl (A.R. Koray), (243)191

- 5-*exo*-Thiocyanate and -isothiocyanate substituted tricarbonyl(η -cyclohexa-1,3-diene)iron and tricarbonyl(η -cyclohepta-1,3-diene)iron, linkage isomerism in (D.A. Brown, N.J. Fitzpatrick, W.K. Glass, P.K. Sayal), (234)C52
- Transition metal complexes, halogenation of alkanes promoted by (R. Davis, I.F. Groves, C.C. Rowland), (239)C9
- Tricarbonyl(bi-1,7-cyclooctadienyl)-ruthenium, dehydrogenative metalla-cyclization of; preparation and X-ray structure of $\text{Fe}(\text{CO})_3(\text{C}_{16}\text{H}_{22})$, $\text{RuFe}(\text{CO})_6(\text{C}_{16}\text{H}_{22})$ and $\text{Ru}_2(\text{CO})_6(\text{C}_{16}\text{H}_{20})$ (I. Noda, H. Yasuda, A. Nakamura), (250)447
- Tricarbonyl[η^4 -cyclobutadiene]iron complexes, bond orders in (W.C. Herndon), (232)163
- Tricarbonyl(cyclohexadienyl)iron complexes, enolate-cation association effects on regioselectivity of reactions with nucleophiles of (A.J. Pearson, T.R. Perrior, D.C. Rees), (226)C39
- Trichloronitrosylferrate, $[\text{Fe}(\text{NOCl})_3]^-$, structure of (M. Steimann, U. Nagel, R. Grenz, W. Beck), (247)171
- Triethylphosphinecarbon disulphide adduct, Et₃PCS₂, reactivity toward iron(II) cations of; X-ray crystal structure of the complexes [(depe)₂Fe-(S,CPEt₃)₂(BPh₄)₂ and [(depe)₂Fe-(S,CH)](BPh₄)₂ (C. Bianchini, P. Innocenti, A. Meli, A. Orlandini, G. Scapacci), (233)233
- Triferrrocenyliodidephosphonium tri-iodide, synthesis and X-ray study of (G.V. Gridunova, V.E. Shklover, Yu.T. Struchkov, V.D. Vil'chevskaya, N.L. Podobedova, A.I. Krylova), (238)297
- Trimethyl(methylene)phosphorane, as catalyst in isomerisation of an acyliron phosphorus ylide to a phosphonium salt (H. Blau, W. Malisch), (235)C1
- Trimethyl(methylene)phosphorane, in deprotonation reactions with cationic carbeneiron complexes (G. Grötsch, W. Malisch), (246)C42
- Vinyl germanes, interaction with iron carbonyls of; crystal structure of Ge[Fe(CO)₄]₂ (A.S. Batsanov, L.V. Rybin, M.I. Rybinskaya, Yu.T. Struchkov, I.M. Salimgreeva, N.G. Bogatova), (249)319
- Vinylidene-iron and -ruthenium disubstituted, nucleophilic properties of η^1 -acetylidy ligands (S. Abbott, S.G. Davies, P. Warner), (246)C65

Lanthanides

- Di- η -cyclopentadienyllanthanoid(III) chlorides (*Review*) (M.F. Lappert, A. Singh), (239)133
- Lanthanides and actinides; Annual Survey covering the year 1980 (T.J. Marks), (227)317
- Metallatrances (*Review*) (M.G. Voronkov, V.P. Baryshok), (239)199
- Organometallic compounds containing oxygen- or nitrogen-donor ligands, steric and stereochemical aspects of (*Review*) (D.C. Bradley), (239)17

Lanthanum

- Cyclopentadiene-lanthanide derivatives, synthesis by the reaction of dicyclopentadienylmercury with lanthanides of (G.Z. Suleimanov, L.F. Rybakova, Ya.A. Nuriev, T.Kh. Kurbanov, I.P. Beletskaya), (235)C19
- Di- and tri-valent lanthanide carboranyl derivatives, synthesis of (G.Z. Suleimanov, V.I. Bregadze, N.A. Koval'chuk, I.P. Beletskaya), (235)C17
- Organolanthanide chemistry, recent advances in (W.J. Evans), (250)217

Lead

- 2,6-Dimethoxybenzoquinone and substituted pyrazines, ESR study of regio-selective addition of Group IVB organometallic radicals to (A. Alberti, G.F. Pedulli), (248)261
- Heptaphosphonortricyclicenes: derivatives and homologues of $P_7(\text{SiMe}_3)_3$ (G. Fritz, K.D. Hoppe, W. Hödle, D. Weber, C. Mujica, V. Manriquez, H.-G. v. Schnering), (249)63
- Lead(II) carboxylate structures (P.G. Harrison, A.T. Steel), (239)105
- Metallatrances (*Review*) (M.G. Voronkov, V.P. Baryshok), (239)199
- Organoelement compounds, kinetics and mechanism of oxidation by ozone of (*Review*) (Yu.A. Alexandrov, B.I. Tarunin), (238)125
- Organolead compounds, interpretation of nuclear spin—spin coupling constants in (P. Pyykkö), (232)21
- Organometallic Ph_nMX (M = Hg, Sn, Pb, Sb; X = O, S, NR) and HX groups, determination of σ -constants of (L.M. Epstein, L.D. Ashkinadze, E.S. Shubina, D.N. Kravtsov, L.A. Kazitsyna), (228)53

- Organic-tin and -lead asymmetric substituted compounds, $^1J(M-C)$ coupling constants and their relation to the s -character of the metal hybrid orbital of (D. Steinborn, R. Taube, R. Radeglia), (229)159
- Organic-tin and -lead derivatives of N -(2,4-dinitrophenyl)glycine (F. Huber, G. Roge, R. Barbieri, F. Di Bianca), (233)185
- Organic-tin and -lead seven-coordinate chelates, ^{119}Sn and ^{207}Pb NMR spectra of (J. Otera, A. Kusaba, T. Hinoishi, Y. Kawasaki), (228)223
- Platinum-lead bonded compounds, ^{31}P , ^{195}Pt and ^{207}Pb NMR studies on (S. Carr, R. Colton, D. Dakternieks), (240)143
- Trimethyl-Group IV cations in the gas-phase, unimolecular and collision-induced decomposition of (G.S. Groenewold, M.L. Gross, M.M. Bursey, P.R. Jones), (235)165
- Triphenyllead selenocyanate, solvent-induced linkage isomerism and ionisation in solutions of (M. Onyszchuk, I. Wharf), (249)C9
- ## Lithium
- Alkali metal derivatives of octamethyltrisiladiazane, short Na—C contacts in the molecular structure of the disodium salt (D.J. Brauer, H. Bürger, W. Geschwindtner, G.R. Liewald, C. Krüger), (248)1
- Alkali metal salts of pentaphenylcyclopentadienide (R. Zhang, M. Tsutsui, D.E. Bergbreiter), (229)109
- 2-Alkynyl ethers, conversion into allenic ethers of (H.D. Verkruijsse, M. Verboom, P.E. van Rijn, L. Brandsma), (232)C1
- Allyl-nickel, -chromium, -magnesium and -lithium complexes, $J(^{13}C—^{13}C)$ values in (R. Benn, A. Rufińska), (239)C19
- Benzoxazol-2-yltrimethyl-silane and -stannane, synthesis of (P. Jutzi, U. Gilge), (246)159
- Benzylalkyl and β -phenethylalkyl sulfides, metalation of (S. Cabiddu, C. Floris, S. Melis, P.P. Piras, F. Sotgiu), (236)149
- Bis(chloro(cyclooctadiene)rhodium) in reactions with organolithium compounds (J. Müller, B. Passon), (247)131
- t-Butylgermanium halides and chalcogenides, chemistry of (M. Wojnowska, M. Noltemeyer, H.-J. Fullgrabe, A. Meller), (228)229
- t-Butyllithium addition to the benzene ring of phenylphosphonium salts (H.J. Cristau, J. Coste, A. Truchon, H. Christol), (241)C1
- Carbanions α to sulphoxides and sulphones, structure of (G. Chassaing, A. Marquet, J. Corset, F. Froment), (232)293
- Carbiminoborane monomers, preparation of (U. Sicker, A. Meller, W. Maringgele), (231)191
- Chiral lithium [(2-pyridyl)[(S)-2-(1-dimethylaminoethyl)phenyl]cuprate, conjugate additions with (H. Malmberg, M. Nilsson), (243)241
- η^5 -Cyclopentadienyl- η^2 -alkenealkylnickel complexes, synthesis from nickelocene and alkylolithium of (H. Lehmkuhl, C. Naydowski, M. Bellenbaum), (246)C5
- η^5 -Cyclopentadienyl- η^2 -propenealkylnickel complexes, preparation from nickelocene, organomagnesium halides and propene of (H. Lehmkuhl, S. Pasynkiewicz, R. Benn, A. Rufińska), (240)C27
- Cyclopropyl-carbene- and -carbyne-chromium and -tungsten complexes, preparation and reactions of; synthesis and X-ray structure of *trans*-(μ -bromo-pentacarbonylchromium)tetra carbonyl(cyclopropylcarbyne)chromium (E.O. Fischer, N.H. Tran-Huy, D. Neugebauer), (229)169
- 1-Dialkylamino-1,2,3-trienes, preparation of (P.E. van Rijn, L. Brandsma), (233)C25
- α, ω -Dichloropermethyldiloxanes, selectivity in the reactions of alkylolithium reagents with (S.A. Kazoura, W.P. Weber), (243)149
- 5,7-Dihydronaphthalene- c,e metallocenes, synthesis via di-Grignard or dilithium reagents of (W.-P. Leung, C.L. Raston), (240)C1
- α -N,N-Dimethylaminoethylferrrocene, lithiation of; single crystal structure of $[(\eta^5-C_5H_5Li)Fe(\eta^5-C_5H_5LiCH(Me)-NMe_2)]_4 [LiOEt]_2 (TMED)_2$ (I.R. Butler, W.R. Cullen, J. Reglinski, S.J. Rettig), (249)183
- 8-(Dimethylamino)-1-naphthyllithium etherate, structure in the solid state and in solution of (J.T.B.H. Jastrzebski, G. van Koten, K. Goubitz, C. Arlen, M. Pfeffer), (246)C75
- 2,2-Diphenyl-2 λ^5 -phosphaphhenalenyl- and 2,2-dimethyl-2 λ^5 -phosphaindenyl-lithiums, formation and rearrangements of (H. Schmidbaur, A. Mörtl), (250)171

- 2,2'-Disubstituted biphenylene derivatives, preparation by regioselective dilithiation of biphenyl of (W. Neugebauer, A.J. Kos, P. v. R. Schleyer), (228)107
- 2,3-Disubstituted thiophene, synthesis via metallated acetylenes and allenes of (R.L.P. de Jong, L. Brandsma), (238)C17
- (Z)- β -Ethylenic γ -chloroalcohols and (Z)- α -ethylenic di- or tri-substituted epoxides, one-step syntheses of (A. Doucoure, B. Mauzé, L. Miginiac), (236)139
- η^6 - and η^5 -Fluorenylchromium tricarbonyl anions, ^{13}C NMR study of reversible isomerisation of (Yu.F. Oprunenko, Yu.N. Luzikov, Yu.A. Ustynyuk, N.A. Ustynyuk), (231)137
- Heterocyclic substituted stannanes, synthesis of (P. Jutzi, U. Gilge), (246)163
- Iron(0) intermediate complex isolated from dinitrogen fixing system LiPh + FeCl_3 , structure of (T.A. Bazhenova, R.M. Lobkovskaya, R.P. Shibaeva, A.E. Shilov, A.K. Shilova, M. Gruselle, G. Leny, B. Tchoubar), (244)265
- η^6 -(2-Lithioclorobenzene)tricarbonyl-chromium(0), stability and decomposition of (M.F. Semmelhack, C. Ullenius), (235)C10
- Lithiomethanes ($\text{CH}_{4-n}\text{Li}_n$), synthesis of and characterisation of the vapour species by flash vapourisation mass spectroscopy of (F.J. Landro, J.A. Gurak, J.W. Chinn, Jr., R.J. Lagow), (249)1
- Lithium; Annual Survey covering the year 1980 (E.M. Kaiser), (227)1
- Lithium as ligand in transition metal compounds, INDO MO investigation of (M.C. Böhm, R. Gleiter), (228)1
- Lithium carborane derivatives, interaction with lanthanides chlorides of (V.I. Bregadze, N.A. Koval'chuk, N.N. Godovikov, G.Z. Suleimanov, I.P. Beletskaya), (241)C13
- Lithium naphthalenide, quantitative estimation of (D.J. Ager), (241)139
- Lutetium complexes of di-t-butylphosphonium-dimethylide (H. Schumann, F.W. Reiher), (235)287
- $M(o\text{-C}_6\text{H}_4\text{CH}_2\text{PR}_2)_2$ ($M = \text{Pd}, \text{Pt}$) cyclo-metallated complexes, metallation reactions of (H.-P. Abicht, P. Lehniger, K. Issleib), (250)609
- ortho-Metallation reactions of *N*-substituted pyrroles (M.E.K. Cartoon, G.W.H. Cheeseman), (234)123
- 3-Methyl-5-(trimethylsilylmethyl)-1,2,4-oxadiazole and 3-methyl-4-nitro-5-(trimethylsilylmethyl)isoxazole, synthesis via organolithium reagents of (R. Pepino, A. Ricci, M. Taddei, P. Tedeschi), (231)91
- Mono-P-donor crown ether hybrid ligand complexes with potential for activation of coordinated CO via selective cation binding (J. Powell, K.S. Ng, W.W. Ng, S.C. Nyburg), (243)C1
- Naphthyliron(II) complex formed in the reaction of FeCl_3 and $\text{C}_{10}\text{H}_8\text{Li}$, structure of (T.A. Bazhenova, R.M. Lobkovskaya, R.P. Shibaeva, A.K. Shilova, M. Gruselle, G. Leny, E. Deschamps), (244)375
- Organolithiums derived from thioamides, $\text{RCH}_2\text{CSNMe}_2$, reactions with α -enones of (C. Goasdoue, N. Goasdoue, M. Gaudemar, M. Mladenova), (226)209
- Organolithiums in photochemical route to nucleophilic aromatic substitution of anthracene (M.E. Fox, A.C. Ranade, I. Madany), (239)269
- Pentamethylcyclopentadienylcopper, a metal ligand fragment isolobal with methylene (G.A. Carriero, J.A.K. Howard, F.G.A. Stone), (250)C28
- Pentamethylcyclopentadienylgermanium chloride and trichlorogermanate, preparation and properties of (F.X. Kohl, P. Jutzi), (243)31
- 1-Phenyl-2,5-diaryl(dialkyl)-arsoles, conversion with alkali metal and organolithium compounds of (G. Märkl, H. Hauptmann, A. Merz), (249)335
- Phenyllithium, reaction with carbon monoxide of (N.S. Nudelman, A.A. Vitale), (241)143
- Phenyllithium and phenylsodium *o*-functional derivatives of IVB and VB elements, synthesis and rearrangements of (J. Heinicke, E. Nietzschmann, A. Tzschach), (243)1
- Sulphinic acid-imidoamidostannanes, synthesis of (D. Hänssgen, R. Steffens), (236)53
- Sulphonyl carbanions, reactions with organometallic compounds of; preparation of ($\eta^5\text{C}_5\text{H}_5$), $\text{TiCH}_2\text{SC}_6\text{H}_4$ (C.R. Lucas), (236)281
- Synthetic possibilities of addition reactions between common organometallic compounds and conjugated enynes (Review) (L. Miginiac), (238)235

- Trialkylstannyllithium, mechanistic studies on decomposition of** (K. Kobayashi (née Kuno), M. Kawanisi, T. Hitomi, S. Kozima), (233)299
- Tungsten mononuclear complex with an alkylidene ligand and a double bond, synthesis and structural study of** (C.A. Toledano, J. Levisalles, M. Rudler, H. Rudler, J.-C. Daran, Y. Jeannin), (228)C7
- Lutetium**
- Lutetium complexes of di-t-butylphosphonium-dimethylide** (H. Schumann, F.W. Reier), (235)287
- Organolanthanide chemistry, recent advances in** (W.J. Evans), (250)217
- Magnesium**
- Alkylmagnesiums and alkylmagnesium hydrides, hydrometallation of 1-octene catalysed by dicyclopentadienyl-titanium dichloride with** (E.C. Ashby, R.D. Ainslie), (250)1
- Allyl-nickel, -chromium, -magnesium and -lithium complexes, $J(^{13}\text{C}-^{13}\text{C})$ values in** (R. Benn, A. Rufińska), (239)C19
- 3-Aryl- and 3-alkyl-[5]ferrocenophane-1,5-diones, stereochemistry of the reaction with Grignard reagents of** (J. Mirek, S. Rachwal, R. Kawalek), (248)107
- 1,4-Bis(bromomagnesio)butane and (dimeric) magnesacyclopentane, structures in solution of** (H.C. Holtkamp, G. Schat, C. Blomberg, F. Bickelhaupt), (240)1
- Chromium, molybdenum and tungsten anionic decacarbonyls, synthesis of and synthesis and properties of $\text{Mg}(\text{THF})_2[\text{M}_2(\text{CO})_{10}]$** (P. Sobota, J. Utko, Z. Janas), (233)C38
- η^5 -Cyclopentadienyl- η^2 -olefinskylnickel, preparation and NMR spectra of** (H. Lehmkühl, C. Naydowski, R. Benn, A. Rufińska, G. Schroth), (228)C1
- η^5 -Cyclopentadienyl- η^2 -propenealkylnickel complexes, preparation from nickelocene, organomagnesium halides and propene of** (H. Lehmkühl, S. Pasynkiewicz, R. Benn, A. Rufińska), (240)C27
- Dicyclopentadienyldichlorotitanium-magnesium, ^{13}C and ^1H NMR spectroscopy application to investigation of the dinitrogen fixation process in** (P. Sobota, Z. Janas), (243)35
- 5,7-Dihydrodibenzo[*c,e*]metallepins, synthesis via di-Grignard or dilithium reagents of** (W.-P. Leung, C.L. Raston), (240)C1
- (dipy)MgBr(THF) formation from α,α' -dipyridyl with Grignard reagents** (W. Poppitz, E. Uhlig), (244)C1
- Ferridoporphyrins, synthesis, characterisation and insertion reactions with sulphur dioxide of** (P. Cocolios, E. Laviron, R. Guillard), (228)C39
- Free radicals, application to catalytic synthesis of carbon monoxide derivatives of** (P. Sobota, E. Kaczurba), (235)295
- Magnesacycloalkanes and benzomagnesacycloalkenes, dimerization of** (F.J.M. Freijee, G. Schat, O.S. Akkerman, F. Bickelhaupt), (240)217
- Magnesium dialkylcuprates, regioselectivity of reactions with α,β -ethylenic aldehydes of** (M. Bourgain-Commerçon, J.-P. Foulon, J.F. Normant), (228)321
- Magnesocene, geometry and bonding of, an ab-initio MO-LCAO investigation** (K. Faegri, Jr., J. Almlöf, H.P. Lüthi), (249)303
- Metallaviolenes, ESR study of** (W. Kaim), (241)157
- Organic halides in reaction with magnesium, mechanism of the solid state reaction** (G.B. Sergeev, V.V. Zagorsky, F.Z. Badaev), (243)123
- Organomagnesium cyclic compounds, intramolecular coordination between magnesium and oxygen in** (F.J.M. Freijee, G. van der Wal, G. Schat, O.S. Akkerman, F. Bickelhaupt), (240)229
- Organometallic titanoxane, $[\text{Cp}_2\text{TiC}(\text{Ph})=\text{CH}(\text{Ph})]_2\text{O}$, synthesis and X-ray structure determination of; evidence for a titanocene complex** (V.B. Shur, S.Z. Bernadyuk, V.V. Burlakov, V.G. Andrianov, A.I. Yanovsky, Yu.T. Struchkov, M.E. Vol'pin), (243)157
- Palladium dichloride as catalyst in reactions of organomagnesium compounds with disubstituted acetylenes** (C. Broquet, H. Rivière), (226)1
- 1-Phenyl-3-borolenes, preparation of** (G.E. Herberich, B. Hessner, D. Söhnen), (233)C35
- Phosphine-nickel(II), -cobalt(II), -palladium(0) and -palladium(II) complexes as catalysts in cross-coupling reactions of aryl- and alkyl-Grignard reagents**

- with organic tellurides (S. Uemura, S.-I. Fukuzawa, S.R. Patil), (243)9
- Synthetic possibilities of addition reactions between common organometallic compounds and conjugated enynes (*Review*) (L. Miginiac), (238)235
- Titanocene, interaction with benzyne and tolane of; route to titanaindene and titanacyclopentadiene complexes (V.B. Shur, E.G. Berkovich, M.E. Vol'pin, B. Lorenz, M. Wahren), (228)C36
- ### Main metals — General
- Hydrogen as a pseudo-metal (*Review*) (A.G. Davies), (239)87
- Metal phenoxides (*Review*) (K.C. Malhotra, R.L. Martin), (239)159
- 1,2,3,4,5-Pentamethylcyclopentadiene, improved synthesis of (F.X. Kohl, P. Jutzi), (243)119
- ### Manganese
- η^3 -Allylcyanomethyltricarbonylmanganese, crystal structure of (G. Liehr, H.-J. Seibold, H. Behrens), (248)351
- η^3 -Allylmonocyanotricarbonyl metalate and η^3 -allylmononitriletricarbonyl-manganese and -rhenium, formation of (M. Moll, H. Behrens, H.-J. Seibold, P. Merbach), (248)329
- Carbon—hydrogen—transition metal bonds (M. Brookhart, M.L.H. Green), (250) 395
- Carbonylmanganese(I) complexes, *fac*- $[\text{MnBr}(\text{CO})_3\{\text{Ph}, \text{PC}(\text{S})\text{NPhH}\}]$ and $[\text{Mn}\{\text{S}(\text{NPh})\text{CPPh}_2\}(\text{CO})_4]$, molecular and crystal structures of; neutral phosphinothioformamides and their deprotonated anionic derivatives as S.P. ligands (B. Just, W. Klein, J. Kopf, K.G. Steinhäuser, R. Kramolowsky), (229)49
- Carbonylmetal hydrides in reaction with decacarbonyldimanganese initiated by room light (P.L. Bogdan, A. Wong, J.D. Atwood), (229)185
- Cationic half ylids prepared from neutral and cationic metal substituted ylids (W. Uedelhoven, K. Eberl, W. Sieber, F.R. Kreissl), (236)301
- $(\eta\text{-C}_5\text{H}_5)(\text{CO})_2\text{Mn}(\eta^2\text{-HC}\equiv\text{CCO}_2\text{Me})$, reaction with phosphines of; crystal and molecular structure of $(\eta\text{-C}_5\text{H}_5)(\text{CO})_2\text{Mn}=\text{C}(\text{CO}_2\text{Me})=\text{CHP}^+\text{Ph}_3^-$ (N.E. Kolobova, L.L. Ivanov, O.S. Zhvanko, I.N. Chechulina, A.S. Batsanov, Yu.T. Struchkov), (238)223
- Chloromethyl- and methoxymethyl-manganese, -rhenium and -ruthenium complexes, preparation of (J.R. Moss, S. Pelling), (236)221
- Cobalt carbonyl/manganese carbonyl substituted germanes including $[(\text{CO})_5\text{MnGeCo}_3(\text{CO})_3]\mu_3$ -pentacarbonyl-manganesegermylidyne)cyclotris(tricarbonylcobalt)(3Co—Co) (J.A. Christie, D.N. Duffy, K.M. Mackay, B.K. Nicholson), (226)165
- 2-Cyano-2-triphenylphosphoranylidene dithioacetic acid and its alkyl esters, coordination chemistry, IR and NMR spectroscopic investigations of (U. Kunze, R. Merkel, M. Moll), (248)205
- Cyclopentadienylidicarbonyl-manganese and -chromium dinuclear complexes containing germanium, sulphide, di-nitrogen or phosphinidene bridges, MO study of bonding and conformations in (N.M. Kostić, R.F. Fenske), (233)337
- Cyclopentadienylmanganese dicarbonyl chelate complexes (M.I. Rybinskaya, L.M. Korneva), (231)25
- Cymantrene derivatives with an aryl-cymantrenyl phenyl thioketone ligand, *E-Z* isomerisation of (V.I. Bakhmutov, P.V. Petrovskii, S.P. Dolgova, V.N. Setkina, E.I. Fedin, D.N. Kursanov), (246)177
- Decacarbonyldimanganese, steric effects of phosphine on photochemistry of (C. Busetto, A.M. Mattucci, E.M. Cernia, R. Bertani), (246)183
- Decacarbonyl-manganese and -rhenium, interaction with hindered *o*-quinones and formation of *o*-semiquinolate complexes (G.A. Abakumov, V.K. Cherkasov, K.G. Shalnova, I.A. Teplova, G.A. Razuvaev), (236)333
- Dicarbonyl(methylcyclopentadienyl)-manganese complexes of 4-vinyl-pyridine (J.M. Kelly, C. Long), (231)C9
- Dicyclopentadienyltrihydrido-niobium and -tantalum, photoinitiated reactions with decacarbonyldimanganese of; structure of $(\eta\text{-C}_5\text{H}_5)_2(\text{CO})\text{Ta}(\mu\text{-H})\text{Mn}_2(\text{CO})_9$ (F.J. Timmers, W.R. Scheidt, J.A. Labinger, S. Barai), (240)153

- ($\text{--}_{\text{s},\text{ss}}\text{-1-}[\alpha-(N,N\text{-Dimethylamino})\text{ethyl}]$ -2-formylcymantrene, molecular structure and absolute configuration of (N.M. Loim, M.V. Laryukova, V.G. Andrianov, V.A. Tsiryapkin, Z.N. Parnes, Yu.T. Struchkov), (248)73
- η^5 -Fluorenyltricarbonylmanganese in acid media, metallocotropic rearrangement of (M.G. Yezernitskaya, B.V. Lokshin, V.I. Zdanovich, I.A. Lobanova, N.E. Kolobova), (234)329
- Halopentacarbonyl-manganese and -rhenium, Raman intensity anomalies and intermediate mode behaviour in the $\nu(\text{CO})$ region in mixed crystals of (M. Arif, S.F.A. Kettle), (249)175
- Heterobimetallic complexes of tantalum prepared from dicyclopentadienyl-carbonyltantalum hydride and carbonyl-metal compounds (J.C. Leblanc, J.F. Reynoud, C. Moise), (244)C24
- Indium porphyrins containing bi- or tri-nuclear frameworks, synthesis and vibrational spectra of (P. Cocolios, C. Moise, R. Guillard), (228)C43
- Iodotris- and tetrakis-(pentacarbonylmetal)silane highly hindered derivatives containing manganese and rhenium, preparation and spectra of (B.J. Aylett, M.T. Taghipour), (249)55
- Ligand exchange of metal carbonyls by chain mechanism; electrochemical kinetics of electron transfer catalysis (J.W. Hershberger, C. Amatore, J.K. Kochi), (250)345
- Low-valent transition metal complexes, reactions with 1,2,3,4,7,7-hexafluorobicyclo[2.2.1]heptadiene and 2,3-bis(trimethyltin)- and 2,3-dichloro-1,4,5,6,7,7-hexafluorobicyclo[2.2.1]-hepta-2,5-dienes of (B.L. Booth, S. Casey, R.P. Critchley, R.N. Haszeldine), (226)301
- Low-valent transition metal complexes, reactions with perfluoronorbornadiene of (B.L. Booth, S. Casey, R.N. Haszeldine), (226)289
- Manganese π -acetylenic, η -vinylidenic and η -allenylidenic complexes, reactions with nonacarbonyldiiron; crystal and molecular structure of $\text{Cp}(\text{CO})_2\text{Mn}(\mu_2-\text{C}=\text{CHCOOCH}_3)\text{Fe}(\text{CO})_4$ (N.E. Kolobova, L.L. Ivanov, O.S. Zhvanko, G.G. Aleksandrov, Yu.T. Struchkov), (228)265
- Manganese cationic carbyne and neutral carbene complexes with $\text{C}_5\text{H}_4(\text{CO})_3$, and $\text{C}_5\text{H}_4\text{FeC}_5\text{H}_5$ as ligands (E.O. Fischer, V.N. Postnov, F.R. Kreissl), (231)C73
- Manganese(II) dihalide and tertiary phosphine solutions in THF and their reactions with dioxygen, studies on (C.A. McAuliffe), (228)255
- , — (M.L.H. Green), (228)263
- Manganese(I) neutral and cationic dicarbonyl complexes with diphosphines (G.A. Carriero, V. Riera, J. Santamaría), (234)175
- Manganese and rhenium η^3 -allyl complexes, ^{13}C NMR spectra of (M. Moll, H.-J. Seibold), (248)343
- Manganese, technetium and rhenium; Annual Survey covering the year 1980 (P.M. Treichel), (237)61
- Manganese, technetium and rhenium; Annual Survey covering the year 1981 (P.M. Treichel), (242)205
- $[\text{M}(\text{CO})_3(\eta\text{-arene})]\text{X}$ ($\text{M} = \text{Mn, Re}; \text{X} = \text{BF}_4^-, \text{PF}_6^-$) salts, field desorption mass spectra of (D.E. Games, L.A.P. Kane-Maguire, D.A. Sweigart), (234)323
- Metal dimer and cluster catalysed CO substitution reaction, supported metals and metal oxides as promoters for (M.O. Albers, N.J. Coville, E. Singleton), (234)C13
- cis-(S)($\text{--}(\text{Methylphenyl-1-naphthylgermyl})$ -methyleneethoxycarbene)tetra carbonyl-manganese, synthesis, crystal structure and absolute configuration of; introduction of optically active triorganogermyl ligands into transition metal complexes (F. Carré, G. Cerveau, E. Colomer, R.J.P. Corriu), (229)257
- Mixed metal "manganese rhenium cubane" $[\text{Mn}_3\text{Re}(\text{CO})_{12}(\text{SC}_6\text{H}_5)_4]$, photo-induced synthesis of (P. Jaitner), (231)225
- Molybdenum, iron and manganese acetyl-bridged cationic complexes; structure of $[(\pi\text{-C}_5\text{H}_5)(\text{CO})_2\text{Mo}(\mu_2-\text{n}^2\text{CH}_3\text{CO})\text{Mo}(\text{CO})_2(\pi\text{-C}_5\text{H}_5)]^+ \text{BF}_4^-$ (K. Sünkel, K. Schloter, W. Beck, K. Ackermann, U. Schubert), (241)333
- Niobocene carbonyl heteronuclear derivatives; molecular structures of $\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-CO})\text{Mn}(\text{CO})_4$, $\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-H})\text{Ni}(\text{CO})_3$ and $[\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-H})]_2\text{Mo}(\text{CO})_4$ (Yu.V. Skripkin, A.A. Pasynskii, V.T. Kalinnikov, M.A. Porai-Koshits, L.Kh. Minacheva, A.S. Antsyshkina, V.N. Ostrikova), (231)205

- Nonacarbonyldiiron in reaction with** ($\eta^5\text{-C}_5\text{H}_5$) $(\text{CO})_2\text{Mn}(\eta^2\text{-HC}\equiv\text{CCOOCH}_3)$; X-ray crystal structure of ($1\text{-}\eta^5\text{-cyclopentadienyl}$)($1,2;1,3\text{-}\mu\text{-dicarbonyl}$)-($1\text{-}\eta^2\text{-2,3-}\sigma\text{-methylacrylate}$)($2,2,2,3,3,3$ -hexacarbonyl)-triangulo-1-manganese-2,3-diiron (N.E. Kolobova, L.L. Ivanov, O.S. Zhvankov, A.S. Batsanov, Yu.T. Struchkov), (231)37
- Octafluorocyclooctatetraene transition metal compounds, displacement of fluoride by metal carbonyl anions in** (S.J. Doig, R.P. Hughes, S.L. Patt, D.E. Samkoff, W.L. Smith), (250)C1
- Organometallic methylene bridges, successful and unsuccessful routes to (Review)** (W.A. Herrmann), (250)319
- Organo-transition metal free radicals, hydrogen, abstraction and dimerisation reactions of** (J.A. Armstead, D.J. Cox, R. Davis), (236)213
- Paramagnetic heterobimetallic $\eta^2\text{-CS}_2$ -bridged vanadium complexes** (C. Moise), (247)27
- Pentacarbonylalkylmanganese, photochemical reactions with 1,3-butadienes and 1,3-pentadienes and insertion reactions with olefins into Mn—C bonds of** (W. Lipps, C.G. Kreiter), (241)185
- Pentacarbonyl-manganese and -rhenium radicals, paramagnetic adducts trapped by N,N' -di-t-butyl-1,4-diaza-1,3-butadiene from; characterisation by ESR spectroscopy of** (A. Alberti, A. Hudson), (248)199
- Pentacarbonylmanganese hydride, product selectivity by Micelle sequestering in olefin reactions with** (Y. Matsui, M. Orchin), (244)369
- Pentacarbonylmanganese-substituted tin hydrides, observations on** (S.P. Foster, K.M. Mackay), (247)21
- Pentamethylcyclopentadienyltricarbonyl-manganese, photolysis under formation of Mn≡Mn bonds of** (W.A. Herrmann, R. Serrano, J. Weichmann), (246)C57
- 1-Phenyl-4,5-dihydroborepin, complexation and rearrangement of; synthesis and structure of manganese and iron triple-decker complexes with 2-ethyl-1-phenylborol as bridging ligands** (G.E. Herberich, J. Hengesbach, G. Huttner, A. Frank, U. Schubert), (246)141
- Phosphorus and arsenic di-bridged hetero-metal—metal bonds** (A. Trenkle, H. Vahrenkamp), (236)71
- Silicon— and germanium—transition metal bonds, dependence of the stereochemistry on the ligands and geometry of complexes on cleavage of** (G. Cerveau, E. Colomer, R.J.P. Corriu), (236)33
- Sulphinyl carbanions, reactions with organometallic compounds of; preparation of** ($\eta^5\text{-C}_5\text{H}_5$) $\text{TiCH}_2\text{SC}_6\text{H}_4$ (C.R. Lucas), (236)281
- Tetracarbonylcobalt hydride and pentacarbonylmanganese hydride, radical hydroformylation and hydrogenation with** (T.E. Nalesnik, J.H. Freudenberg, M. Orchin), (236)95
- Tetracarbonyl- η^3 -pentadienylmanganese(I), photochemical synthesis of** (M. Leyendecker, C.G. Kreiter), (249)C31
- Thiocarbamoyl phosphine ligands and their manganese and rhenium carbonyl complexes, ^1H and ^{13}C NMR spectroscopy of** (A. Antoniadis, U. Kunze, M. Moll), (235)177
- Tin-manganese low symmetry compounds, Mössbauer spectra of** (B. Mahieu, D. Apers, I. Vanden Eynde, M. Gielen), (246)49
- Vinylidene-manganese complexes, conversion into π -olefinic complexes by action of phosphites of; crystal and molecular structure of** ($\eta^5\text{-C}_5\text{H}_5$) $(\text{CO})_2\text{Mn}[\eta^2\text{-PhCH=CHP(O)(OEt)}_2]$ (A.B. Antonova, S.V. Kovalenko, E.D. Korniyets, A.A. Johansson, Yu.T. Struchkov, A.I. Ahmedov, A.I. Yanovsky), (244)35
- Mercury**
- Arene-mercury(II) complexes, solid state structure determination from magic-angle spinning ^{13}C NMR and solution ^{13}C NMR of** (L.C. Damude, P.A.W. Dean, M.D. Sefcik, J. Schaefer), (226)105
- 2,2'-Bipyridine- and 1,10-phenanthroline-triphenylphosphinitetricarbonyl-molybdenum and -tungsten complexes, reactions with mercury halides and pseudohalides of** (M.P. Pardo, M. Cano), (247)293
- Copper(I) and mercury(II) halides in reactions with unsymmetrical ditellurides** (A.Z. Al-Rubaie, W.R. McWhinnie), (235)59
- Diarylgold(III) complexes, synthesis using organomercury compounds of** (J. Vicente, M.T. Chicote, A. Arcas, M. Artigao, R. Jimenez), (247)123

- Difluorocarbene complexes of ruthenium derived from trifluoromethyl compounds; structure of Ru(CF₃)(HgCF₃)-(CO)₂(PPh₃)₂ (G.R. Clark, S.V. Hoskins, W.R. Roper), (234)C9
- Di- and tri-valent lanthanide carboranyl derivatives, synthesis of (G.Z. Suleimanov, V.I. Bregadze, N.A. Koval'chuk, I.P. Beletskaya), (235)C17
- Formamidino and triazenido dinuclear compounds, [{2,6-(Me₂NCH₂)₂C₆H₃}-(*p*-tolylNYNR)PtHgBrCl]⁻ (Y = CH, N), containing a Pt—Hg donor bond (A.F.M.J. van der Ploeg, G. van Koten, K. Vrieze), (226)93
- [Hg_s(μ₂-Cy₂P)(O,SCF₃)_s] and [Hg_s(μ₂-Cy₂P)_s(SO₄H)_s], compounds involving the 10-membered ring system (Hg—P)_s (P. Peringer, J. Eichbichler), (241)281
- ¹⁹⁹Hg NMR, observation of diastereoisomers by (J. Eichbichler, P. Peringer), (231)95
- Mercuric(II) acetate, scalar ¹³C—¹⁹⁹Hg coupling in and crystal structure of (P.F. Barron), (236)157
- Mercurimethanes, CH_{4-n}(HgX)_n (X = Cl, Br, I, CN), ¹⁹⁹Hg NMR spectroscopy of (D.K. Breitinger, W. Kress, R. Sendelbeck, K. Ishiwada), (243)245
- Mercurimethanes, ¹H and ¹³C NMR investigations of (W. Kress, D.K. Breitinger, R. Sendelbeck), (246)1
- Octacarbonyldicobalt/sodium amalgam and bis(tetracarbonylcobalt)mercury/sodium amalgam systems, observations and effect of added LiBr on (P.S. Braterman, A.E. Leslie), (238)307
- Organomercurials, interaction with zero-valent nickel complex of (L.S. Isaeva, L.N. Morozova, V.V. Bashilov, P.V. Petrovskii, V.I. Sokolov, O.A. Reutov), (243)253
- Organomercury compounds, reactions with xenon difluoride of (K.P. Butin, Yu.M. Kiselev, T.V. Magdesieva, O.A. Reutov), (235)127
- Organometallic compounds, rôle of ion pairs in S_E reactions of (O.A. Reutov), (250)145
- Tin, mercury and copper organic derivatives, cross-coupling reactions of organic halides catalysed by (I.P. Beletskaya), (250)551
- Tin and mercury thiophenolate charge transfer complexes with tetracyanoethylene, electron absorption spectro-
- scopy of (P.G. Sennikov, A.A. Tumanov, A.N. Egorochkin, D.N. Kravtsov, L.S. Golovchenko, S.I. Pombrík), (248)17
- Organometallic Ph_nMX (M = Hg, Sn, Pb, Sb; X = O, S, NR) and HX groups, determination of σ-constants of (L.M. Epstein, L.D. Ashkinadze, E.S. Shubina, D.N. Kravtsov, L.A. Kazitsyna), (228)53
- Orgaro-thallium(III) and -mercury(II) compounds, reactions with nitronate ion and *N*-benzyl-1,4-dihydronicotinamide; electron-transfer activation of the metal—carbon bond toward homolysis (H. Kurosawa, H. Okada, M. Sato, T. Hattori), (250)83
- Organo-tin and -lead asymmetric substituted compounds ¹J(M—C) coupling constants and their relation to the s-character of the metal hybrid orbital of (D. Steinborn, R. Taube, R. Radeglia), (229)159
- Oxobromo- and dioxo-mercury derivatives of 2,2-dimethyl-3-pentanone, spectroscopic studies of (L. Gorrichon-Guigou, P. Maroni, R. Meyer, J. Corset), (228)15
- Perfluoro-n-propyliron tetracarbonyl iodide, reactions with mercury compounds of (I.I. Guerus, Yu.L. Yagupolskii), (247)81
- Phenyltriethyltin in reactions with mercury(II) salts, effects of alcoholic solvents on (M.R. Sedagha-Herati, P. Nahid), (239)307
- Platinum-mercury compounds as intermediates to mono- and di-arylplatinum(II) complexes (O. Rossell, J. Sales, M. Seco), (236)415
- Polymethoxyphenylmercury compounds, facile decarboxylation of (G.B. Deacon, M.F. O'Donoghue, G.N. Stretton, J.M. Miller), (233)C1
- Selenium and tellurium carboranyl derivatives, synthesis of (V.I. Bregadze, V.Ts. Kampel, A.Ya. Usiatinsky, O.B. Ponomareva, N.N. Godovikov), (233)C33
- Thallium tris[tris(pentafluorophenyl)-germyl]mercurate, reactivity of (G.A. Razuvaev, M.N. Bochkarev, L.V. Pankratov), (250)135
- Trifluoromethyl- and trichloromethyl-mercury(II) compounds, force field studies of (J. Mink, P.L. Goggin), (246)115

- Trifluoromethylgermylmercury derivatives (M.N. Bochkarev, N.L. Ermolaev, G.A. Razuvaev, Yu.K. Grishin, Yu.A. Ustynyuk), (229)C1
- Trimercurated acetaldehyde as the mercuration product of ethanol; crystal and molecular structure of $(\text{ClHg})_3 \cdot \text{CCHO} \cdot \text{DMF}$ and $(\text{BrHg})_3 \cdot \text{CCHO} \cdot \text{DMSO}$ (D. Grdenić, B. Korpar-Colig, M. Sikirica, M. Bruvo), (238)327
- ### Metallocenes
- 3-Aryl- and 3-alkyl-[5]ferrocenophane-1,5-diones, stereochemistry of the reaction with Grignard reagents of (J. Mirek, S. Rachwal, R. Kawalek), (248)107
- Benchrotrene, stereochemistry of cyclisation reactions with polyphosphoric acids of α - and β -alkyl- β -phenylpropionic acids of (B. Caro, G. Jaouen), (228)87
- Benchrotrene, titanocene and zirconocene, negative chemical ionization mass spectra with methane of (J. Tirouflet, J. Besançon, B. Gautheron, F. Gomez, D. Fraisse), (234)143
- Benzene-cyclopentadienyliron, interaction with oxygen of (N.A. Vol'kenau, V.A. Petrakova), (233)C7
- Bis(η -arene)chromium (d^5, d^6, d^7) complexes of trimethylsilylbenzene, 1,4-bis(trimethylsilyl)benzene and 1,3,5-tris(trimethylsilyl)benzene (C. Elschenbroich, J. Koch), (229)139
- Bis(pentamethylcyclopentadienyl)dicarbonyl dirhodium, reactions with alkynes under formation of dimetallocycles of; X-ray structure of $[(\eta\text{-C}_5\text{Me}_5)_2\text{Rh}_2(\mu\text{-CO})\{\mu\text{-}\eta^2\text{-}\eta^2\text{-C(O)C}_2(\text{CF}_3)_2\}]$ (R.S. Dickson, G.S. Evans, G.D. Fallon), (236)C49
- Bis(η -pentamethylcyclopentadienyl)-dimethylmolybdenum, synthesis using molybdenum atoms of (J.C. Green, M.L.H. Green, C.P. Morley), (233)C4
- Bis(pentamethylcyclopentadienyl)-uranium and -thorium complexes, cyclic voltammetric and coulometric study of (R.G. Finke, G. Gaughan, R. Voegeli), (229)179
- Butadiene-transition metal complexes of Ti, Zr, Hf, Mo, W and Co, structure of and fluxional behaviour of butadiene in (R. Benn, G. Schroth), (228)71
- $[(\text{C}_5\text{H}_5)_2\text{TiCl}]_2/\text{LiAlH}_4$ catalytic system in aromatic solvents, ESR study of forma-
- tion of titanocene hydride complexes (K. Mach, H. Antropiusová), (248)287
- Cyclopalladation, asymmetric, in ferrocenes as a tool for enantioselective synthesis; preparation of analogues of natural products (V.I. Sokolov, L.L. Troitskaya, N.S. Khrushchova), (250)439
- η^5 -Cyclopentadienyl- η^2 -alkenealkynickel complexes, synthesis from nickelocene and alkylolithium of (H. Lehmkuhl, C. Naydowski, M. Bellenbaum), (246)C5
- η^5 -Cyclopentadienyl- η^6 -areneiron cations with a methylene group attached to the arene, synthesis and reactions of (C. Moinet, E. Raoult), (229)C13
- Cyclopentadienylbromocobalt intermediates in cyclopentadienylation of cobalt bromide with cyclopentadienyl-sodium (U. Koelle, F. Sistig, J. Gersdorf), (233)253
- Cyclopentadienylcobalt disulphur dinitride derivative, synthesis and structure of (F. Edelmann), (228)C47
- $[\eta^5$ -Cyclopentadienyliron- η^6 -pentamethylaniline] $^+$ and derivatives with amides and sulphon amides of (C. Moinet, E. Raoult), (231)245
- Cyclopentadienylnickel complexes with seleno and telluro ethers as ligands, synthesis and reactivity of (N. Kuhn, M. Winter), (249)C28
- Cyclopentadienylnickel compounds, coordination of bifunctional ligands in (N. Kuhn, M. Winter), (243)C42
- η^5 -Cyclopentadienyl- η^2 -olefinalkynickel, preparation and NMR spectra of (H. Lehmkuhl, C. Naydowski, R. Benn, A. Rufińska, G. Schroth), (228)C1
- η^5 -Cyclopentadienyl- η^2 -propenealkynickel complexes, preparation from nickelocene, organomagnesium halides and propene of (H. Lehmkuhl, S. Pasynkiewicz, R. Benn, A. Rufińska), (240)C27
- Decamethylruthenocene, electrochemical oxidation of (U. Koelle, A. Salzer), (243)C27
- Diacetylferrocene—metal halide complexes, Mössbauer studies on (M.C. Clemance, R.M.G. Roberts, J. Silver), (247)219
- 1,3-Dichloro-2,4-di-t-butyl diazaphosphetidine as a coordinating ligand in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (243)C47
- Dicyclopentadienyldichlorotitanium-magnesium, ^{13}C and ^1H NMR spectro-

- scopy application to investigation of the dinitrogen fixation process in (P. Sobota, Z. Janas), (243)35
- Dicyclopentadienylhafnium compounds and their deuterated analogues, thermal decomposition of (G.A. Razuvayev, V.P. Mar'in, O.N. Drushkov, L.I. Vyshinskaya), (281)125
- Dicyclopentadienyltantalum complexes (A. Antiñolo, M. Fajardo, A. Otero, P. Royo), (246)269
- Dicyclopentadienyltitanium dichloride, ESR study of photolysis of (P.B. Brindley, A.G. Davies, J.A.-A. Hawari), (250)247
- 1,4-Diferrocenyl-1,4-dibora-2,5-cyclohexadiene complexes with carbonylmetal fragments (G.E. Herberich, M.M. Kucharska-Jansen), (243)45
- α -N,N-Dimethylaminoethylferrocene, lithiation of; single crystal structure of $[(\eta^5\text{-C}_5\text{H}_5\text{Li})\text{Fe}(\eta^5\text{-C}_5\text{H}_5\text{LiCH(Me)-NMe}_2)_2][\text{LiOEt}]_2(\text{TMED})_2$ (I.R. Butler, W.R. Cullen, J. Reglinski, S.J. Rettig), (249)183
- 1'-Dimethylamino[3]ferrocenophane, asymmetric cyclopalladation of; central and planar chirality and effect of conformational rigidity in (V.I. Sokolov, L.L. Troitskaya, B. Gautheron, G. Tainturier), (235)369
- [3-8- η -5,13-Dimethyl[2.2]metacyclophane-(η^5 -cyclopentadienyl)iron] $^+$ $[\text{PF}_6^-]$ and [3-8- η ;11-16- η -5,13-dimethyl-[2.2]metacyclophane[$(\eta^5$ -cyclopentadienyl)iron] $_2$] $^{2+}$ $[\text{PF}_6^-]$, synthesis and characterisation of (A.R. Koray), (232)345
- Dinuclear diazoalkanes, metal-centred rearrangements of and synthesis of alkylideneamido and isocyanato complexes from (W.A. Herrmann, L.K. Bell, M.L. Ziegler, H. Pfisterer, C. Pahl), (247)39
- Diphenylacetylene in reaction with $[(\eta^5\text{-C}_5\text{H}_5)_2\text{ZrH}(\mu\text{-H})]_2$, mechanistic and theoretical considerations (D.G. Bickley, N. Hao, P. Bougeard, B.G. Sayer, R.C. Burns, M.J. McGlinchey), (246)257
- 1,3-Diselena-[3]ferrocenophanes of C, Si and Sn, synthetic and structural studies on; crystal and molecular structure of bis(ferrocene-1,1'-diselenoato)tin(IV) at 163 K (A.G. Osborne, R.E. Hollands, R.F. Bryan, S. Lockhart), (226)129
- Ferricinium salt reduction with anionic nucleophiles and mechanism of an oscillatory process in ferrocene-ferricinium cation systems (N.S. Kochetkova, R.B. Materikova, Yu.A. Belousov, R.M. Salimov, V.N. Babin), (235)C21
- Ferrocene; Annual Survey covering the year 1980 (G. Marr, B.W. Rockett), (227)373
- Ferrocene; Annual Survey covering the year 1981 (B.W. Rockett, G. Marr), (237)161
- Ferrocenes formation via reaction of atoms with alkynes of (L.H. Simons, J.J. Lagowski), (249)195
- Ferrocene, mono- and di-cations from ligand exchange reactions with heterocyclic systems of (C.C. Lee, A. Piórko, R.G. Sutherland), (248)357
- Ferrocene stable anion, electrochemical formation of; formal rate constant of the ferrocene $^{0/-}$ electrode (N. Ito, T. Saki, S. Aoyagi), (247)301
- [1] Ferrocenophanes, structure and reactions of (M. Clemane, R.M.G. Roberts, J. Silver), (243)461
- [4][3][4](1,2,3)Ferrocenophane, X-ray crystal structure of (M. Hisatome, Y. Kawajiri, K. Yamakawa, K. Kozawa, T. Uchida), (236)359
- [1.1] Ferrocenophane and bridge- and ring-substituted derivatives, conformational properties of (V.K. Kansal, W.E. Watts, U.T. Mueller-Westerhoff), (243)443
- Ferrocenylamines, syntheses and spectroscopic characterisation of (M. Herberhold, M. Ellinger, W. Kremnitz), (241)227
- Ferrocenyl-bridged carbenium ions and related protonated ketones, Mössbauer studies on (G. Neshvad, R.M.G. Roberts, J. Silver), (240)265
- Ferrocenyl-carbenium ions, substituent effects in (G. Neshvad, R.M.G. Roberts, J. Silver), (236)237
- Ferrocenyl ketones, protonation of (G. Neshvad, R.M.G. Roberts, J. Silver), (236)349
- 2-Ferrocenyl-2-oxazoline, 1,2-disubstituted ferrocene preparation from (G. Schmitt, P. Klein, W. Ebertz), (234)63
- Heterobimetallic complexes of tantalum prepared from dicyclopentadienyl-carbonyltantalum hydride and carbonyl-metal compounds (J.C. Leblanc, J.F. Reynoud, C. Moise), (244)C24
- Hydride reduction of the cation $[(\eta^5\text{-C}_5\text{H}_5)_2\text{Fe}(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)\text{CO}] \text{PF}_6^-$; formation of $(\eta^5\text{-C}_5\text{H}_5)_2\text{FeH}(\text{CO})(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)$

- PPh_2) and elimination of H_2 from $[(\eta^5\text{-C}_5\text{H}_5)\text{FeH}(\text{CO})]_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{-PPPh}_2)$ (S.G. Davies, J. Hibberd, S.J. Simpson, O. Watts), (238)C7; (241)C31
- Hydrido-acetylide- and -vinylidene- osmium clusters, reactions with $[(\eta\text{-C}_5\text{H}_5)\text{Ni}(\text{CO})]_2$ of and of osmium carbonyls with $(\eta\text{-C}_5\text{H}_5)_2\text{Ni}_2(\text{HC}_2\text{Bu-t})$; synthesis and crystal structure of $(\eta\text{-C}_5\text{H}_5)_2\text{Ni}(\mu\text{-H})\text{Os}_2(\text{CO})_9(\mu\text{-}\eta^2\text{-C}=\text{CHBu-t})$ (E. Sappa, A. Tiripicchio, M. Tiripicchio Camellini), (246)287
- Hydroboration of ferrocenylalkenes, stereochemistry of (C. Lo Sterzo, G. Ortaggi), (234)C28
- η^6 -Ketoarene- η^5 -cyclopentadienyliron cations, synthesis and reduction with sodium borohydride of (C.C. Lee, K.J. Demchuk, U.S. Gill, R.G. Sutherland), (247)71
- $[\text{M}(\eta\text{-arene})(\eta\text{-C}_5\text{H}_5)]^+$ ($\text{M} = \text{Ru, Os}$) mixed sandwich cations, synthesis and characterisation of (I.W. Robertson, T.A. Stephenson, D.A. Tocher), (228)171
- Magnesocene, geometry and bonding of, an ab-initio MO-LCAO investigation (K. Faegri, Jr., J. Almlöf, H.P. Luthi), (249)303
- Metallocene monomers and polymers, ferrocenyl and ferrocylene derivatives (C. Simionescu, T. Lixandru, L. Tătaru, I. Mazilu, M. Vătă), (238)363
- [1,1]Metallocenophanes of iron and ruthenium, cyclic voltammetry of homo-binuclear and hetero-binuclear systems (A.F. Diaz, U.T. Mueller-Westerhoff, A. Nazzal, M. Tanner), (236)C45
- [1,1]Metallocenophanes of iron and ruthenium, synthesis and characterisation of homo-binuclear and hetero-binuclear systems (U.T. Mueller-Westerhoff, A. Nazzal, M. Tanner), (236)C41
- Molybdenum and tungsten bent metallocene complexes, nucleophilic attack on (A.R. Dias, C.C. Romão), (233)223
- Mono- and di-hydrido-zirconocenes and -hafnocenes reactions with diphenylacetylene of (P. Meunier, B. Gautheron, S. Couturier), (231)C1
- Multibridged ferrocenophanes, bridge enlargement reaction with diazo-methane of and syntheses of ferrocenophanes tetramethylene bridges by application of the reaction (M. Hisatome, Y. Kawajiri, K. Yamakawa), (226)71
- Nickelocene in reaction with tetrahalomethyl-di-t-butylhalophosphide systems (N. Kuhn, M. Winter), (232)C48
- Niobium(III) complexes containing acetylene, isocyanide, phosphine or phosphite ligands (R. Serrano, P. Royo), (247)33
- Niobocene carbonyl heteronuclear derivatives; molecular structures of $\text{Cp}_2\text{-Nb}(\text{CO})(\mu\text{-CO})\text{Mn}(\text{CO})_4$, $\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-H})\text{Ni}(\text{CO})_3$, and $[\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-H})_2\text{-Mo}(\text{CO})_3]$ (Yu.V. Skripkin, A.A. Pasynskii, V.T. Kalinnikov, M.A. Porai-Koshits, L.Kh. Miñacheva, A.S. Antsyshkina, V.N. Ostrikova), (231)205
- Organometallic titanoxane, $[\text{Cp}_2\text{TiC}(\text{Ph})=\text{CH}(\text{Ph})_2\text{O}$, synthesis and X-ray structure determination of; evidence for a titanocene complex (V.B. Shur, S.Z. Bernadyuk, V.V. Burlakov, V.G. Andrianov, A.I. Yanovsky, Yu.T. Struchkov, M.E. Vol'pin), (243)157
- Paramagnetic heterobimetallic $\eta^2\text{-CS}_2$ -bridged vanadium complexes (C. Moise), (247)27
- Pentacarbonyliron, used in reduction-complexation reactions of phosphine sulphides (F. Mercier, F. Mathey, J. Angenault, J.-C. Couturier, Y. Mary), (231)237
- Pentakis(methoxycarbonyl)cyclopentadienyl ligand, introduction into stanocene of (F.X. Kohl, E. Schlüter, P. Jutzi), (243)C37
- Pentamethylcyclopentadienyltricarbonylmanganese, photolysis under formation of $\text{Mn}=\text{Mn}$ bonds of (W.A. Herrmann, R. Serrano, J. Weichmann), (246)C57
- Phenyldichalcogenides, cleavage by dialkyl- and diaryl-zirconocenes of; synthesis of $(\eta^5\text{-RC}_5\text{H}_4)_2\text{Zr}(\text{EPh})\text{CH}_3$ and $(\eta^5\text{-RC}_5\text{H}_4)_2\text{Zr}(\text{EPh})_2$ ($\text{R} = \text{H, t-Bu}; \text{E} = \text{Se, S}$) (S. Pouly, G. Tainturier, B. Gautheron), (232)C65
- 1-Phenyl-4,5-dihydroborepin, complexation and rearrangement of; synthesis and structure of manganese and iron triple-decker complexes with 2-ethyl-1-phenylborol as bridging ligands (G.E. Herberich, J. Hengesbach, G. Huttner, A. Frank, U. Schubert), (246)141
- Selenophosphoranes as ligands in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (246)C80
- Substituted ferrocenes, accurate fragmentation pathways and ionic structure

- analysis of metastable ion spectra of (G. Innorta, F. Scagnolari, A. Modelli, S. Torroni, A. Foffani, S. Sorriso), (241)375
- Tetramethylcyclobutadienenickel(II) complexes, preparation of (H. Hoberg, H.J. Riegel), (229)85
- Titanium and zirconium complexes containing cyclopentadienyl-diphenylphosphine and -ethyldiphenylphosphine ligands, access to heterobimetallic structures (J.C. Leblanc, C. Moise, A. Maisonnat, R. Poilblanc, C. Charrier, F. Mathey), (231)C43
- Titanocene, interaction with benzene and tolane of; route to titanaindene and titanacyclopentadiene complexes (V.B. Shur, E.G. Berkovich, M.E. Vol'pin, B. Lorenz, M. Wahren), (228)C36
- ansa*-Titanocene chiral derivatives with bridged tetrahydroindenyl ligands, synthesis and molecular structures of (F.R.W.P. Wild, L. Zsolnai, G. Huttner, H.H. Brintzinger), (232)233
- Titanocene derivatives with aminothiophenolates as ligands (H. Köpf, S. Grabowski, B. Block), (246)243
- Titanocene dihalides, electrochemical behaviour under CO pressure of; electrogeneration of titanocene carbonyl dihalide and titanocene dicarbonyl (N. El Murr, A. Chaloyard), (231)1
- Triferrocenyliodidephosphonium tri-iodide, synthesis and X-ray study of (G.V. Gridunova, V.E. Shklover, Yu.T. Struchkov, V.D. Vil'chevskaya, N.L. Podobedova, A.I. Krylova), (238)297
- Vanadocene derivatives in reaction with octacarbonyldicobalt, formation of oxymethylidyne-nonacarbonyltricobalt derivatives (J. Martin, C. Moise), (232)C55
- Vinyl organometallic monomers: ($\eta^5\text{-C}_5\text{H}_4\text{-CH=CH}_2\text{)}\text{M}(\text{CO})_2(\text{NO})$ ($\text{M} = \text{Cr, Mo, W}$) and ($\eta^5\text{-C}_5\text{H}_4\text{CH=CH}_2\text{)}\text{M}(\text{CO})_2$ ($\text{M} = \text{Co, Rh, Ir}$), synthesis and $^1\text{H NMR}$ study of (D.W. Malcomber, W.C. Spink, M.D. Rausch), (250)311
- Zirconocene complexes, regio-selectivity of addition of alkynes to (V. Skibbe, G. Erker), (241)15
- ### Molybdenum
- (Acetylacetonato)(*L*-*N*-methylproline)-dioxomolybdenum, enantioselective epoxydation of an alcohol catalysed by (S. Coleman-Kammula, E.T. Duim-Koolstra), (246)53
- Alkylarsinidene and arsinidene complexes with Group VIA metal carbonyl compounds, preparation and reactions of (B. Sigwarth, L. Zsoinai, O. Scheidsteiger, G. Huttner), (235)43
- (Alkyl- and perfluoroalkyl-)C-nitroso-transition metal complexes, ^{15}N NMR comparisons of (D.H. Evans, D.M.P. Mingos, J. Mason, A. Richards), (249)293
- Aminocarbenechloromolybdenum complexes, synthesis from $\text{C}_5\text{H}_5(\text{CO})_2\text{MoNa}$ and *N*-methylbenzimidoyl chloride (H. Brunner, W. Meyer, J. Wachter), (243)437
- Benzyl-molybdenum complexes, *ortho* effects on carbon monoxide insertion in (J.D. Cotton, H.A. Kimlin, R.D. Markwell), (232)C75
- Bimetallic cluster of the type: ($\eta\text{-C}_5\text{Me}_5\text{)}_2\text{M}_2\text{M}'_2(\mu\text{-S})_4(\text{CO})_2$ ($\text{M} = \text{Cr, Mo}; \text{M}' = \text{Co}$), formation of (H. Brunner, J. Wachter), (240)C41
- 2,2'-Bipyridine- and 1,10-phenanthroline-triphenylphosphinetricarbonyl-molybdenum and -tungsten complexes, reactions with mercury halides and pseudo-halides of (M.P. Pardo, M. Cano), (247) 293
- Bis(alkygermyl)undecacarbonyltetracarbonyl clusters, preparation of and metal exchange in (P. Gusbeth, H. Vahrenkamp), (247)C53
- Bis[dicarbonyl($\eta^5\text{-pentamethylcyclopentadienyl})\text{molybdenum}$, coordination of diazoalkanes to Mo=Mo bonds in (L.K. Bell, W.A. Herrmann, G.W. Kriechbaum, H. Pfisterer, M.L. Ziegler), (240)381
- Bis(pentamethylcyclopentadienylcarbonylmolybdenum), reaction with $\text{CH}_2=\text{N-C=S}$ of; formation and crystal structure of ($\text{C}_5\text{Me}_5\text{)}_2\text{CO}_2\text{Mo}_2(\mu\text{-}\eta^2\text{-C}\equiv\text{NCH}_3)$ (H. Brunner, H. Buchner, J. Wachter, I. Bernal, W.H. Ries), (244) 247
- Bis($\eta\text{-pentamethylcyclopentadienyl})\text{-dimethylmolybdenum}$, synthesis using molybdenum atoms of (J.C. Green, M.L.H. Green, C.P. Morley), (233)C4
- Bis(pentamethylcyclopentadienyl)tetra-carbonylimolybdenum, addition of methylene and diazomethane to (W.A. Herrmann, L.K. Bell), (239)C4

- Bis(phosphoryl)phosphine assemblage of Group VI metal complexes containing diphosphoxane P—O—P linkages, co-ordinated tautomers of (E.H. Wong, F.C. Bradley, E.J. Gabe), (244)235
- Butadiene-transition metal complexes of Ti, Zr, Hf, Mo, W and Co, structure of and fluxional behaviour of butadiene in (R. Benn, G. Schroth), (228)71
- Carbene chelate complexes derived from N-methylbenzimidoyl chloride, structural investigation and stereochemistry of addition products of nucleophiles to (H. Brunner, J. Wachter, I. Bernal, G.M. Reisner, R. Benn), (243)179
- Carbon disulphide and diselenide insertion into metal—amido bonds; mono- vs. bidentate dithiocarbamates formed by reactions of CS₂ + NHR₂ with [CpM-(CO)_n]₂ (M = Fe, n = 2; M = Mo, n = 3) (E. Román, D. Catheline, D. Astruc), (236)229
- Carbon—hydrogen—transition metal bonds (M. Brookhart, M.L.H. Green), (250)395
- Carbonyl-molybdenum(0) and -molybdenum(III) complexes with organo-sulphur ligands, synthesis and properties of (D. Selmann, J. Schwarz), (241)343
- Chloronitrosylcarbonylmolybdenum(0) complexes, synthesis and activity as catalysts of (K. Seyferth, R. Taube), (229)275
- Chlorotris(carbonylmethallato)tin(IV) chiral complexes, synthesis and crystal structure of (F.H. Carré, R.J.P. Corriu, B.J.L. Henner), (228)139
- [η-C₅H₅Mo(CO)₂]₂ [μ-catena-(CH₂As)₅], synthesis and structural characterisation of; example of ring→chain conversion upon coordination (A.L. Rheingold, M.R. Churchill), (243)165
- Chromium, molybdenum and tungsten; Annual Survey covering the year 1980 (J.D. Atwood), (237)95
- Chromium, molybdenum and tungsten anionic decacarbonyls, synthesis of and synthesis and properties of Mg(THF)₂ [M₂(CO)₁₀] (P. Sobota, J. Utko, Z. Janas), (233)C38
- Chromium(0), molybdenum(0) and tungsten(0) carbonyl complexes, bifunctional aminophosphanes as ligands in (K. Diemert, W. Kuchen, J. Kutter), (238)113
- Chromium triad carbenes, mechanistic study of tertiary phosphine and phosphite addition to (H.S. Choi, D.A. Sweigart), (228)249
- Complex catalysts for olefin metathesis, structure-activity relationships of (R. Taube, K. Seyferth), (249)365
- (η⁵-Cycloheptatrienyl)tricarbonyl-(hydrido)molybdenum intermediate trapped in frozen gas matrices at 12 K, IR spectroscopic evidence for (R.H. Hooker, A.J. Rest), (234)C23
- Cyclopentadienylmetal compounds, spin lattice relaxation time studies of ring rotation in (D.F.R. Gilson, G. Gomez), (240)41
- (η⁵-Cyclopentadienyl)tricarbonyl-(hydrido)-molybdenum and -tungsten complexes, IR evidence for stepwise substitution of ethylene and insertion into the metal—hydrogen bond of (H.G. Alt, K.A. Mahmoud, A.J. Rest), (243)C5
- (η⁵-Cyclopentadienyl)tricarbonyl-molybdenum and -tungsten radicals, IR matrix isolation evidence for the formation in carbon monoxide matrices at 12 K of (K.A. Mahmoud, A.J. Rest, H.G. Alt), (246)C37
- Dicyclopentadienyl-molybdenum and -tungsten dihydrides, insertion reactions with cyanoacetylene and dicyanoacetylene into the M—H bonds of (H. Scordia, R. Kerfoot, M.M. Kubicki, J.E. Guerchais), (249)371
- Dicyclopentadienyl-molybdenum and -tungsten dihydrides, reactions with octacarbonyldicobalt and nonacarbonyl-diiron forming ionic heteronuclear complexes of (Y. Mugnier, C. Moise), (248)C33
- Dicyclopentadienyltetracarbonyl-dimolybdenum and -ditungsten, reactions with elemental selenium of (H. Brunner, J. Wachter, H. Wintergerst), (235)77
- 1,4-Diferrocenyl-1,4-dibora-2,5-cyclohexadiene complexes with carbonylmetal fragments (G.E. Herberich, M.M. Kucharska-Jansen), (243)45
- Dinitrogen ligand properties deduced from ⁹⁵Mo NMR spectroscopy (S. Donovan-Mtunzi, M. Hughes, G.J. Leigh, H.M. Ali, R.L. Richards, J. Mason), (246)C1
- Dinitrogen-metal complexes, reactions of dinitrogen in (Review) (J. Chatt, R.L. Richards), (239)65

- Dinuclear diazoalkanes, metal-centred rearrangements of and synthesis of alkylideneamido and isocyanato complexes from (W.A. Herrmann, L.K. Bell, M.L. Ziegler, H. Pfisterer, C. Pahl), (247)39
- Dioxodibromomolybdenum(V) complex, transformation of an epoxide into a 1,2-dibromoalkane by (H. Arzoumanian, H. Krentzien, R. Laï, J. Metzger, J.-F. Pétrignani), (243)175
- $\text{Fe}_3(\mu_2\text{-Te})_2(\text{CO})_9$, synthesis of hetero-metallic clusters from and comparisons with analogous sulphide clusters (L.E. Bogan, Jr., D.A. Lesch, T.B. Rauchfuss), (250)429
- Fischer-type carbene complexes, reactions with ethene of (J. Kadelki, H. Loevenich, W. Keim), (231)219
- Free radicals, application to catalytic synthesis of carbon monoxide derivatives of (P. Sobota, E. Kaczurba), (235)295
- Group VI metal carbonyl complexes containing the ligands: 1,6-bis(diphenylphosphino)-*trans*-hex-3-ene and 1,6-bis(diphenylarsino)-*trans*-hex-3-ene; crystal and molecular structures of tricarbonyl-1,6-bis(diphenylphosphino)-*trans*-hex-3-enemolybdenum(0) (G.R. Clark, C.M. Cochrane, P.W. Clark), (236)197
- Group VIA pentacarbonyl complexes of 2- and 4-vinylpyridine and copolymers, preparation, spectroscopic characterisation and photochemical properties of (J.M. Kelly, C. Long), (235)315
- Heterobimetallic complexes of tantalum prepared from dicyclopentadienylcarbonyltantalum hydride and carbonyl-metal compounds (J.C. Leblanc, J.F. Reynoud, C. Moise), (244)C24
- Hexacarbonyl-chromium, -molybdenum and -tungsten, preparation and characterisation of 4,4'-disubstituted 2,2'-bipyridine derivatives of (J.A. Connor, C. Overton), (249)165
- Hexacarbonyl-Group VI metal compounds, photochemistry in polyvinyl-chloride film matrices at 12–298 K; reactivity of $\text{M}(\text{CO})_6$ and $\text{M}(\text{CO})_5\text{THF}$ (R.H. Hooker, A.J. Rest), (249)137
- Indium porphyrins containing bi- or tri-nuclear frameworks, synthesis and vibrational spectra of (P. Cocolios, C. Moise, R. Guillard), (228)C43
- Ligand exchange of metal carbonyls by chain mechanism; electrochemical kinetics of electron transfer catalysis (J.W. Hershberger, C. Amatore, J.K. Kochi), (250)345
- $\text{M}(\text{CO})_n\text{L}$ ($\text{M} = \text{Cr}, \text{Mo}, \text{W}$) complexes with chelating ligands: (2-Me₂E'C₆H₄)-Si(EMe₂)Me₂ and (4-XC₆H₄)SiMe(EMe₂)-CH₂CH₂E'Me₂ ($X = \text{F}, \text{Cl}; \text{E}, \text{E}' = \text{N}, \text{P}, \text{As}$) (P. Aslanidis, J. Grobe), (249)103
- Metal carbonyl hydrides in reaction with decacarbonyldimanganese initiated by room light (P.L. Bogdan, A. Wong, J.D. Atwood), (229)185
- Methyldiphenylphosphine complexes of molybdenum(0), dinitrogen vs. η^6 -arene coordination in (H. Azizian, R. Luck, R.H. Morris, H. Wong), (238)C24
- cis-(S)(—)(Methylphenyl-1-naphthylgermyl)-(methylethoxycarbene)tetracarbonylmanganese, synthesis, crystal structure and absolute configuration of; introduction of optically active triorganogermyl ligands into transition metal complexes (F. Carré, G. Cerveau, E. Colomer, R.J.P. Corriu), (229)257
- Molybdenum asymmetric complexes, chirality changes in (J.W. Faller, Y. Shvo, K. Chao, H.H. Murray), (226)251
- Molybdenum and tungsten alkoxides, metal–metal bonds in and organometallic chemistry of (M.H. Chisholm), (239)79
- Molybdenum and tungsten bent metallocene complexes, nucleophilic attack on (A.R. Dias, C.C. Romão), (233)223
- Molybdenum and tungsten carbonylcyclopentadienyl hydrides, reactions with α -aminoacetylenes of (H. Brix, W. Beck), (234)151
- Molybdenum carbonyl complexes of diphenylphosphinous acid and its derivatives, synthesis and characterisation of (G.M. Gray, C.S. Kraihanzel), (238)209
- Molybdenum *cis*-disubstituted carbonyl complexes, correlation of NMR chemical shifts and CO stretching force constants for (G.M. Gray, C.S. Kraihanzel), (241)201
- Molybdenum, iron and manganese acetyl-bridged cationic complexes; structure of $[(\pi\text{-C}_5\text{H}_5)_2(\text{CO})_2\text{Mo}(\mu_2\text{-}\eta^2\text{CH}_3\text{CO})\text{Mo}(\text{CO})_2(\pi\text{-C}_5\text{H}_5)]^+ \text{BF}_4^-$ (K. Sünkel, K. Schlotter, W. Beck, K. Ackermann, U. Schubert), (241)333

- [$\text{Mo}(\text{N}_2)_2(\text{dppe})_2$], reactions with organic isocyanates of (F. Minzoni, C. Pelizzi, G. Predieri), (231)C6
- Mono-P-donor crown ether hybrid ligand complexes with potential for activation of coordinated CO via selective cation binding (J. Powell, K.S. Ng, W.W. Ng, S.C. Nyburg), (243)C1
- Niobocene carbonyl heteronuclear derivatives; molecular structures of $\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-CO})\text{Mn}(\text{CO})_4$, $\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-H})\text{Ni}(\text{CO})_3$, and [$\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-H})_2\text{Mo}(\text{CO})_4$] ($\text{Yu.V. Skripkin, A.A. Pasynskii, V.T. Kalinnikov, M.A. Porai-Koshits, L.Kh. Minaeheva, A.S. Antsyshkina, V.N. Ostrikova}$), (231)205
- Nitrosonium ion reactions with anionic carbonyl monomers and clusters; crystal and molecular structure of $\text{FeCo}_2(\mu\text{-NH})(\text{CO})_6$ ($\text{D.E. Fjare, D.G. Keyes, W.L. Gladfelter}$), (250)383
- Organometallic methylene bridges, successful and unsuccessful routes to (Review) (W.A. Herrmann), (250)319
- Organo-transition metal free radicals, hydrogen abstraction and dimerisation reactions of (J.A. Armstead, D.J. Cox, R. Davis), (236)213
- Paramagnetic heterobimetallic $\eta^2\text{-CS}_2$ -bridged vanadium complexes (C. Moise), (247)27
- Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), (247)203
- Pentamethylcyclopentadienylmolybdenum dimer $\text{Mo}_2(\eta^5\text{-C}_5\text{Me}_5)_2(\text{CO})_4$, molecular structure and geometrical relationship with the nonmethylated analogue and corresponding chromium dimers of (J.-S. Huang, L.F. Dahl), (243)57
- Peroxo and alkylperoxide molybdenum(VI) complexes as intermediates in epoxidation of olefins by alkyl hydroperoxides (P. Chaumette, H. Mimoun, L. Saussine, J. Fischer, A. Mitschler), (250)291
- Phosphine and phosphite derivatives of bimetallic Group VI complexes, ligand transfer and oxidative decarbonylation in; crystal structure of [$(\text{C}_5\text{H}_5)(\text{CO})_2\text{-W}(\mu\text{-SMe})(\mu\text{-I})\text{W}(\text{CO})_5\text{I}$] ($\text{J.L. Le Quéré, F.Y. Pétillon, J.E. Guerchais, Lj. Manojlović-Muir, K.W. Muir, D.W.A. Sharp}$), (249)127
- Phosphorus and arsenic di-bridged hetero-metal-metal bonds (A. Trenkle, H. Vahrenkamp), (236)71
- Polypyrazolylborate molybdenum optical-ly active complexes with aminophosphines as chiral ligands (E. Frauen-dorfer, H. Brunner), (240)371
- Pyridine replacement reactions of $\text{Mo}(\text{S,S})(\pi\text{-allyl})(\text{CO})_2\text{Py}$ ($\text{S,S = xanthate and dithiocarbamate}$) complexes of molybdenum and tungsten with sulphur donors (M.F. Perpiñán, L. Ballester, A. Santos), (241)215
- Selenolato- and tellurolato-bridged di-molybdenum complexes, synthesis and spectroscopic properties of (P. Jaitner), (233)333
- Tetraethylammonium hydrotris(3,5-di-methylpyrazolyl)boratotricarbonyl-molybdenum(0), $[\text{NEt}_4][\text{Mo}(\text{CO})_3\text{HB}(\text{C}_5\text{H}_3\text{N}_2)_3]$, crystal and molecular structures of (C.P. Marabella, J.H. Enemark), (226)57
- Tetraphenyldiphosphine oxide complexes with Group VIB metal carbonyls (E.H. Wong, R.M. Ravenelle, E.J. Gabe, F.L. Lee, L. Prasad), (233)321
- Tetraphenyldiphosphoxane ($\text{Ph}_2\text{POPPh}_2$) ligand, chelating and monodentate coordination modes of (E.H. Wong, L. Prasad, E.J. Gabe, F.C. Bradley), (236)321
- Thionocarbonate fixation by Group VIB metal carbonyls, chemistry, spectroscopy and molecular structure of the products of (J. Daub, J. Kappler, K.H. Jogun, J.J. Stezowski, H. Binder), (240)239
- Transition metal complexes, halogenation of alkanes promoted by (R. Davis, I.F. Groves, C.C. Rowland), (239)C9
- Transition metal phosphaalkyne complexes; synthesis, crystal and molecular structure of $[\text{Co}_2(\text{CO})_6(\mu\text{-t-BuCP})\text{W}(\text{CO})_5]$ ($\text{J.C.T.R. Burkett-St. Laurent, P.B. Hitchcock, H.W. Kroto, M.F. Meidine, J.F. Nixon}$), (238)C82
- Tricarbonyl-chromium, -molybdenum and -tungsten complexes of the tropylid cation, relative electrophilic reactivities of (C.A. Bunton, K. Lal, W.E. Watts), (247)C14
- Tricarbonyl- $\eta^6\text{-1,3,5-cycloheptatriene-}$ chromium(0), photochemical addition reactions with cyclic dienes of (C.G. Kreiter, E. Michels, H. Kurz), (232)249
- Tricarbonylmallates(6-) of chromium, molybdenum and tungsten, derivatives of (G.L. Rochfort, J.E. Ellis), (250)265
- Tricarbonyl(triquinacene)-molybdenum and -tungsten, synthesis and character-

- isation of (P.W. Codding, K.A. Kerr, A. Oudeman, T.S. Sorensen), (232)193
- Trichloronitridomolybdenum(VI) complexes, preparation and their suitability as precatalysts for metathesis of 2-pentene of (K. Seyferth, R. Taube), (229)C19
- Trimethylphosphine-dinitrogen-molybdenum and -tungsten complexes, preparation and properties of (E. Carmona, J.M. Marin, M.L. Poveda, R.D. Rogers, J.L. Atwood), (238)C63
- Trimethylphosphoranylidene(methyl(trimethylsiloxy))carbene complexes of chromium, molybdenum and tungsten, formation and E/Z isomerisation of (S. Voran, H. Blau, W. Malisch, U. Schubert), (232)C33
- Tris(butadiene)-molybdenum and -tungsten, UV photoelectron spectral and theoretical studies on (J.C. Green, M.R. Kelly, P.D. Grebenik, C.E. Briant, N.A. McEvoy, D.M.P. Mingos), (228)239
- Tungsten and molybdenum phosphine hexahydrides, the first examples of nine coordination among mononuclear molybdenum complexes (R.H. Crabtree, G.G. Hlatky), (238)C21
- Vinyl organometallic monomers: ($\eta^5\text{C}_5\text{H}_4\text{CH}=\text{CH}_2$) $\text{M}(\text{CO})_2(\text{NO})$ ($\text{M} = \text{Cr}, \text{Mo}, \text{W}$) and ($\eta^5\text{C}_5\text{H}_4\text{CH}=\text{CH}_2$)- $\text{M}(\text{CO})_2$ ($\text{M} = \text{Co}, \text{Rh}, \text{Ir}$), synthesis and ^1H NMR study of (D.W. Macomber, W.C. Spink, M.D. Rausch), (250)311
- ## Neodymium
- Organolanthanide chemistry, recent advances in (W.J. Evans), (250)217
- ## Nickel
- Alkanenitrile oxidative addition to nickel(0) complexes via π -intermediates (G. Favero, A. Morville, A. Turco), (241)251
- 1-Alkenylboranes, cross-coupling reactions with 3,4-epoxy-1-butene catalysed by palladium or nickel complexes of (N. Miyaura, Y. Tanabe, H. Sugimoto, A. Suzuki), (233)C13
- η^1, η^2 -Alkenyl- η^5 -cyclopentadienylnickel complexes, direct measurement of $^1\text{J}(\text{C}^{13}-\text{C}^{13})$ in coordinated double bonds in (R. Benn, A. Rufińska), (238)C27
- Allyl-nickel, -chromium, -magnesium and -lithium complexes, $J(\text{C}^{13}-\text{C}^{13})$ values in (R. Benn, A. Rufińska), (239)C19
- Antiferromagnetic heteronuclear cluster ($\text{Cp}_4\text{Cr}_2\text{Ni}_2$) $(\mu_3\text{-S})_2(\mu_3\text{-S})$, synthesis and structure of (A.A. Pasynskii, I.L. Eremenko, O.G. Ellert, V.M. Novotortsev, Yu.V. Rakitin, V.T. Kalinnikov, V.E. Shklover, Yu.T. Struchkov), (234)315
- Azanickelacyclopentane derivatives as intermediates in nickel-catalysed reactions of 2-pyridones (H. Hoberg, B.W. Oster), (234)C35
- 1,2-Bis(imino)ethylpalladium(II) complexes preparation and reactivity of (B. Crociani, A. Mantovani, A. Scrivanti), (233)387
- Bis(triphenylphosphine)(η^3 -allyl) cationic complexes, oligomerisation of butadienes with (P. Grenouillet, D. Neibcker, I. Tkatchenko), (243)213
- [$\text{CH}_2\text{C}(\text{S})\text{CHC}(\text{S})\text{CH}_3$] $[\text{CH}_2\text{S}(\text{O})(\text{CH}_2)_2]$ Ni , crystal and molecular structure of (D.S. Dudis, J.P. Fackler, Jr.), (249)289
- Chlorotris(carbonylmethallato)tin(IV) chiral complexes, synthesis and crystal structure of (F.H. Carré, R.J.P. Corriu, B.J.L. Henner), (228)139
- η^5 -Cyclopentadienyl- η^2 -alkenealkylnickel complexes, synthesis from nickelocene and alkyllithium of (H. Lehmkuhl, C. Naydowski, M. Bellenbaum), (246)C5
- Cyclopentadienylnickel cationic complexes with Sb-donor ligands (N. Kuhn, M. Winter), (243)C83
- π -Cyclopentadienylnickel(II) complexes, electrochemical reduction of (G. Bermudez, D. Pletcher), (231)173
- Cyclopentadienylnickel complexes with bis(diphenylarsino)alkylidene as ligand, synthesis and reactivity of (N. Kuhn, M. Winter), (238)C53
- Cyclopentadienylnickel complexes with bis(phenylthio)alkylidene ligands, synthesis and reactivity of (N. Kuhn, M. Winter), (234)C1
- Cyclopentadienylnickel complexes with phosphinous imides as ligands, synthesis and reactivity of (N. Kuhn, M. Winter), (229)C33
- Cyclopentadienylnickel complexes with seleno and telluro ethers as ligands, synthesis and reactivity of (N. Kuhn, M. Winter), (249)C28

- Cyclopentadienylnickel compounds, coordination of bifunctional ligands in (N. Kuhn, M. Winter), (243)C42**
- η^5 -Cyclopentadienyl- η^2 -olefinalkynickel, preparation and NMR spectra of (H. Lehmkuhl, C. Naydowski, R. Benn, A. Rufińska, G. Schroth), (228)C1**
- η^5 -Cyclopentadienyl- η^2 -propenealkyl-nickel complexes, preparation from nickelocene, organomagnesium halides and propene of (H. Lehmkuhl, S. Pasynkiewicz, R. Benn, A. Rufińska), (240)C27**
- η^5 -Cyclopentadienyl- η^3 -1-vinylallylnickel complexes, isomers of (H. Lehmkuhl, C. Naydowski, R. Benn, A. Rufińska), (240)C30**
- 1,3-Dichloro-2,4-di-t-butylazadiphosphetidine as a coordinating ligand in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (243)C47**
- Dicyclopentadienylnickel-alkyne complexes, photochemical formation and mass spectra of (E.J. Forbes, N. Iranpoor), (236)403**
- Dimethylacetylene dicarboxylate cyclo-addition to η^2 -coordinated trithiocarbonate (C. Bianchini, A. Meli), (236)C76**
- 2,2'-Dipyridyl-1,5-cyclooctadienenickel(0), crystal and molecular structures of (E. Dinjus, D. Walther, J. Kaiser, J. Sieler, N.N. Thanh), (236)123**
- η^2 -Dithiomethyl ester group, unprecedented intramolecular attack by a phosphine on; X-ray crystal structure of the complex $[\text{Ph}_2\text{PCH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{PPh}_2)_2\text{Ni}(\text{CS}_2\text{Me})]\text{BPh}_4^-$ (C. Bianchini, C.A. Ghilardi, A. Meli, A. Orlandini), (246)C13**
- Hydrido-acetylidyne- and -vinylidene-osmium clusters, reactions with $[(\eta\text{-C}_5\text{H}_5)\text{Ni}(\text{CO})_2]$, of and of osmium carbonyls with $(\eta\text{-C}_5\text{H}_5)_2\text{Ni}_2(\text{HC}, \text{Bu-t})$; synthesis and crystal structure of $(\eta\text{-C}_5\text{H}_5)_2\text{Ni}(\mu\text{-H})\text{-Os}_3(\text{CO})_4(\mu_4\text{-}\eta^2\text{-C=CHBu-t})$ (E. Sappa, A. Tiripicchio, M. Tiripicchio Camellini), (246)287**
- Iron-nickel clusters, synthesis and reactions of; crystal and molecular structure of $[\text{Ni}(\text{PMe}_3)_2(\eta\text{-C}_5\text{H}_5)][\text{Fe}_2\text{Ni}(\mu\text{-C}_5\text{Ph}_2)(\text{CO})_6(\eta\text{-C}_5\text{H}_5)]$ (M.I. Bruce, J.R. Rodgers, M.R. Snow, F.S. Wong), (240)299**
- Lithium as ligand in transition metal compounds, INDO MO investigation of (M.C. Böhm, R. Gleiter), (228)1**
- Metal-coordinated β -carbonylenolato and β -ketoiminato ligands, C-C bond formation upon addition of cyanogen to (B. Corain, M. Basato), (232)C59**
- Metallatrances (Review) (M.G. Voronkov, V.P. Baryshok), (239)199**
- Ni-C addition to complexed alkenes (H. Lehmkuhl, C. Naydowski, R. Benn, A. Rufińska, G. Schroth), (246)C9**
- Nickel-carbon bonds, stoichiometric insertion of carbon dioxide and ethylene into (A. Behr, W. Keim, G. Thelen), (249)C38**
- Nickel complexes as catalysts and in $[2+2+2']$ cycloaddition reactions of alkynes with carbon monoxide (H. Hoberg, D. Schaefer), (238)383**
- Nickel complexes as catalyst in substitution reactions of diethyl malonate by allylic acetates or sulphones (T. Cuvigny, M. Julia), (250)C21**
- Nickel(0) complexes in reactions with p -quinones; formation of phosphine-substituted radical anions (E. Uhlig, R. Fischer, R. Kirmse), (239)385**
- Nickel complexes with vinylsilanes, preparation of (L.S. Isaeva, T.A. Peganova, P.V. Petrovskii, F.F. Kayumov, F.G. Yusupova, V.P. Yur'ev), (248)375**
- Nickel(0) electron rich centres, oxidative coupling of carbon dioxide and azolefins at (D. Walther, E. Dinjus, J. Sieler, J. Kaiser, O. Lindqvist, L. Anderson), (240)289**
- Nickel-induced carbon monoxide coupling; formation of oxamides (H. Hoberg, H.J. Riegel), (236)C53**
- Nickel(0)-induced C-C interaction with alkynes and carbon monoxide (H. Hoberg, D. Schaefer), (236)C28**
- Nickel(II) induced reactions between Co and alkynes under maintenance of the triple bonds (H. Hoberg, H.J. Riegel), (241)245**
- Nickel-osmium clusters, high yield synthesis, spectra and reactivity towards H_2 , CO, alkynes and alkenes of (M. Castiglioni, E. Sappa, M. Valle, M. Lanfranchi, A. Tiripicchio), (241)99**
- Nickel(II), palladium(II) and palladium(0) derivatives of *p*-diethynylbenzene (L. Ballester, M. Cano, A. Santos), (229)101**
- Nickel(0) trigonal pyramidal complex, reactions with organic halides of (P. Stoppioni, A. Biliotti, R. Morassi), (236)119**

- Nickelocene in reaction with tetrahalo-methyl-di-t-butylhalophosphide systems (N. Kuhn, M. Winter), (232)C48
- $\text{NiNi'CC}'$ tetrahedral clusters, configurational stability of (H. Brunner, M. Muschiol), (248)233
- Niobocene carbonyl heteronuclear derivatives; molecular structure of $\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-H})\text{Ni}(\text{CO})_2$, and $[\text{Cp}_2\text{Nb}(\text{CO})(\mu\text{-H})_2\text{Mo}(\text{CO})_4]$ (Yu.V. Skripkin, A.A. Pasynskii, V.T. Kalinnikov, M.A. Porai-Koshits, L.Kh. Minacheva, A.S. Antsyshkina, V.N. Ostrikova), (231)205
- Organomercurials, interaction with zero-valent nickel complex of (L.S. Isaeva, L.N. Morozova, V.V. Bashilov, P.V. Petrovskii, V.I. Sokolov, O.A. Reutov), (243)253
- Oxanickelacyclopentene derivatives, novel type of versatile synthones (H. Hoberg, D. Schaefer, G. Burkhart), (228)C21
- 2,4-Pentadienoic acid methyl ester, reactions with nickel(0) and platinum(0) compounds of (H.M. Büch, G. Schroth, R. Myntott, P. Binger), (247)C63
- Phenylisothiocyanate nickel dihapto-bonded complex, synthesis and crystal structure of (C. Bianchini, D. Masi, C. Mealli, A. Meli), (247)C29
- Phosphine-nickel(II), -cobalt(II), -palladium(0) and -palladium(II) complexes as catalysts in cross-coupling reactions of aryl- and alkyl-Grignard reagents with organic tellurides (S. Uemura, S.-I. Fukuzawa, S.R. Patil), (243)9
- Phosphorus and arsenic di-bridged hetero-metal—metal bonds (A. Trenkle, H. Vahrenkamp), (236)71
- Phosphorus, arsenic, antimony and bismuth trivalent compounds and their $\text{Ln}(\text{CO})_3$ complexes, Fourier transform ^{13}C NMR study of (G.M. Bodner, C. Gagnon, D.N. Whittern), (243)305
- Selenophosphoranes as ligands in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (246)C80
- Sodium tetracarbonylcobalt, reactions with $\text{NiX}_2(\text{dppe})$; synthesis and crystal structure of $\text{Co}_2(\mu\text{-CO})_2(\text{CO})_2(\text{dppe})$ (P. Braunstein, I. Pruskil, G. Predieri, A. Tiripicchio), (247)227
- Stannio complexes of oxa-bridged stannylenes (M. Grenz, W.-W. Du Mont), (241)C5
- Sulphinyl carbanions, reactions with organometallic compounds of; prepara-
- tion of $(\eta^5\text{C}_5\text{H}_5)_2\text{TiCH}_2\text{SC}_6\text{H}_4$ (C.R. Lucas), (236)281
- Tetraazadiene-metal complexes, synthesis via Ar_2N_4 ligand transfer of; evidence for a stable tetraazadiene-bridged intermediate (P. Overbosch, G. van Koten), (229)193
- Tetramethylcyclobutadienenickel(II) complexes, preparation of (H. Hoberg, H.J. Riegel), (229)85
- Thiophosphoranes as ligands in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (239)C31
- Transition metal catalysed synthesis of octadienoic acids from dienes and 3-butenoic acids (G.P. Chiusoli, L. Pallini, G. Salerno), (238)C85
- Tricarbonyl(1-3:5,6-*n*-cyclooctadienylum)-iron cation and its derivatives, ligand substitution and nucleophilic reactivity of (G. Schiavon, C. Paradisi), (243)351
- Triphosphorus mononuclear cyclic complexes, structural correlations and NMR properties of (M. Di Vaira, L. Sacconi, P. Stoppioni), (250)183
- ## Niobium
- Carbon dioxide complexes of niobium, synthesis, reactivity and their use as ligands of; crystal structure of $(\text{n-C}_4\text{H}_9)_2\text{Nb}(\mu\text{-CS}_2)\text{W}(\text{CO})_5$ (J. Amaudrut, J. Sala-Pala, J.E. Guerchais, R. Mercier, J. Douglade), (235)301
- Carbylon metalate anions ($\text{M} = \text{V, Nb, Ta}$), preparation of (F. Calderazzo, G. Pampaloni), (250)C33
- Cyclopentadienylfulvalenenitreneniobium binuclear complexes, properties of (D.A. Lemenovskii, S.A. Konde, E.G. Perevalova), (226)223
- Cyclopentadienylfulvalenenitreneniobium diamagnetic and paramagnetic binuclear complexes, synthesis, spectra and structure of (D.A. Lemenovskii, V.P. Fedin, Yu.L. Slovohotov, Yu.T. Struchkov), (228)153
- Dicyclopentadienyl-niobium(III) and -niobium(IV) complexes (A. Antiñolo, M. Fajardo, A. Otero, P. Royo), (234)309
- Dicyclopentadienyltrihydrido-niobium and -tantalum, photoinitiated reactions with decacarbonyldimanganese of; structure of $(\eta^5\text{C}_5\text{H}_5)_2(\text{CO})\text{Ta}(\mu\text{-H})_2\text{Mn}_2(\text{CO})_6$ (F.J. Timmers, W.R. Scheidt, J.A. Labinger, S. Baral), (240)153

- Diels—Alder reaction of a η^1 -cyclopentadienyl group, crystal structure of a niobium derivatives containing a η^1 -substituted norbornadienyl unit (R. Mercier, J. Douglade, J. Amaudrut, J. Sala-Pala, J.E. Guerchais), (244)145**
- (η^2 -Disulphido)-niobium complexes, synthesis and comparison of their reactivity with that of (η^2 -dioxo) complexes of (J.-L. Migot, J. Sala-Pala, J.-E. Guerchais), (243)427**
- Hexacarbonylniobate(—I) anion, preparation and X-ray structure of (F. Calderazzo, G. Pampaloni, G. Pelizzi), (233)C41**
- Metalatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199**
- [Nb(η^5 -C₅H₅)₂{PS₂(OR)₂}]_n, EPR study of the electronic structure of; formation of derivatives by cleavage of S—S bonds in (J. Sala-Pala, J.-L. Migot, J.E. Guerchais, L. Le Gall, F. Grosjean), (248)299**
- Niobium(III) complexes containing acetylene, isocyanide, phosphine or phosphite ligands (R. Serrano, P. Royo), (247)33**
- Niobocene carbonyl heteronuclear derivatives; molecular structures of Cp₂Nb(CO)(μ -CO)Mn(CO)₄, Cp₂Nb(CO)(μ -H)Ni(CO)₃, and [Cp₂Nb(CO)(μ -H)]₂Mo(CO)₄ (Yu.V. Skripkin, A.A. Pasynskii, V.T. Kalinnikov, M.A. Porai-Koshits, L.Kh. Minacheva, A.S. Antsyshkina, V.N. Ostrikova), (231)205**
- Octacarbonyldicobalt, reactions with tantalum and niobium hydrides of; synthesis of bi- and poly-nuclear complexes (C. Moise, J.F. Reynoud, J.C. Leblanc, R. Broussier), (240)C15**
- Penta- and tetra-carbonylphosphine-niobates(—I), preparation and spectroscopic properties of (H.-C. Bechthold, D. Rehder), (233)215**
- Tricarbonyl- η^5 -cyclopentadienylhydrido-niobate(—I), preparation and ⁹³Nb NMR spectroscopic investigation of [Et₄N][CpNb(D)(CO)₃] and [Et₄N][CpNb(D)(CO)₃] (F. Näumann, D. Rehder, V. Pank), (240)363**
- Vanadium, niobium and tantalum; Annual Survey covering the year 1980 (J.A. Labinger), (227)359**
- Osmium**
- (Alkyl and perfluoroalkyl) C-nitroso-transition metal complexes, ¹⁵N NMR comparisons of (D.H. Evans, D.M.P. Mingos, J. Mason, A. Richards), (249)293**
- Alkylenimine-osmium trinuclear complexes, synthesis and N—H activation of; molecular structure of Os₃(CO)₁₁[NHC(CH₂)₅] (G. Süss-Fink, L. Khan, P.R. Raithby), (228)179**
- t-Bu₂PN=S=NP-t-Bu₂, fragmentation in addition reactions to osmium clusters of; synthesis, solid state structure and dynamic properties of Os₃(CO)₁₁[P-t-Bu₂(NH₂)] and HO₃(CO)[P-t-Bu₂N(H)S] (W. Ehrenreich, M. Herberhold, G. Süss-Fink, H.-P. Klein, U. Thewalt), (248)171**
- Carbon—hydrogen—transition metal bonds (M. Brookhart, M.L.H. Green), (250)395**
- Carbonylosmium clusters, UV photo-electron spectra of (G. Franozzi, R. Bertoncello, S. Aime, D. Osella), (229)C27**
- Decacarbonylbromohexafluorobutene-triosmium anion, structure and reactivity of; X-ray structures of [(Ph₃P)₂N]⁺[Os₃(CO)₁₀{CF₃(H)C=C(H)CF₃}Br], [(Ph₃P)₂N]⁺[Os₃(CO)₁₀{CF₃(H)C=C(H)CF₃}($\mu\text{-Br}$)] and [HO₃(CO)₁₀{CF₃(H)C=C(H)CF₃}($\mu\text{-Br}$)] (Z. Dawoodi, M.J. Mays, P.R. Raithby, K. Henrick, W. Clegg, G. Weber), (249)149**
- Decacarbonyltriosmium isonitrile complex, H₂Os₃(CO)₁₀[CN(CH₃)₂Si(OEt)₃]₂, oxide promoted isomerisation of (J. Evans, B.P. Gracey), (228)C4**
- Dichlorotetrakis(n-butyrate)diosmium(III), preparation, X-ray structure analysis and properties of (T.A. Stephenson, D.A. Tocher, M.D. Walkinshaw), (232)C51**
- 1,4-Diferrocenyl-1,4-dibora-2,5-cyclohexadiene complexes with carbonylmetal fragments (G.E. Herberich, M.M. Kucharska-Jansen), (243)45**
- Dodecacarbonyltriosmium and decacarbonyldihydrotriosmium, reactions with t-butylacetylene of; characterisation of the products and crystal structure of HO₃(CO)₁₀(HC=CHBu-t) (E. Sappa, A. Tiripicchio, A.M.M. Lanfredi), (249)391**
- dihapto-Formaldehyde complex, Os(η^2 -CH₂O)(CO)₂(PPh₃)₂, synthesis, structure and reactions of (G.R. Clark, C.E.L. Headford, K. Marsden, W.R. Roper), (231)335**

- $\text{HOs}_3(\text{CO})_{22}\text{I}$, synthesis and X-ray analysis of (B.F.G. Johnson, J. Lewis, W.J.H. Nelson, M. Vargas, D. Braga, M. McPartlin), (249)C21
- Hydrido-acetylide- and -vinylidene-osmium clusters, reactions with $[(\eta\text{-C}_5\text{H}_5)\text{Ni}(\text{CO})_2]$, of and osmium carbonyls with $(\eta\text{-C}_5\text{H}_5)_2\text{Ni}_2(\text{HC}_2\text{Bu-t})$; synthesis and crystal structure of $(\eta\text{-C}_5\text{H}_5)_2\text{Ni}(\mu\text{-H})\text{Os}_3(\text{CO})_6(\mu_4\text{-}\eta_2\text{-C=CHBu-t})$ (E. Sappa, A. Tiripicchio, M. Tiripicchio Camellini), (246)287
- Iridium-substituted difluorophosphines, preparation and properties of; synthesis of PF_2 -bridged heterometal complexes (E.A.V. Ebsworth, R.O. Gould, N.T. McManus, D.W.H. Rankin, M.D. Walkinshaw, J.D. Whitelock), (249)227
- $[\text{M}(\eta\text{-arene})(\eta\text{-C}_5\text{H}_5)]^+$ ($\text{M} = \text{Ru}, \text{Os}$) mixed sandwich cations, synthesis and characterisation of (I.W. Robertson, T.A. Stephenson, D.A. Tocher), (228)181
- Metal-carbido complexes of ruthenium and osmium, preparation of (B.F.G. Johnson, J. Lewis, W.J.H. Nelson, J.N. Nicholls, M.D. Vargas), (249)255
- Metal dimer and cluster catalysed CO substitution reaction, supported metals and metal oxides as promoters for (M.O. Albers, N.J. Coville, E. Singleton), (234)C13
- Metallacyclobutadiene complexes from ligand combination of CS and acetylene on osmium (G.P. Elliott, W.R. Roper), (250)C5
- Methylene-triosmium cluster, $\text{Os}_3(\text{CO})_{10}(\mu\text{-CO})(\mu\text{-CHSiMe}_3)$, crystal structure of (M.R. Churchill, H.J. Wasserman), (248)365
- Mixed metal decaosmium carbido clusters; X-ray structures of the monoanions $[\text{Os}_{10}\text{C}(\text{CO})_{12}\text{Cu}(\text{NCMe})]^-$ and $[\text{Os}_{10}\text{C}(\text{CO})_{12}\text{AuPPh}_3]^-$ (B.F.G. Johnson, J. Lewis, W.J.H. Nelson, M.D. Vargas, D. Braga, M. McPartlin), (246)C69
- Mono- and poly-nuclear transition metal complexes, fast atom bombardment mass spectrometry of (R. Davis, I.F. Groves, J.L.A. Durrant, P. Brooks, I. Lewis), (241)C27
- Nickel-osmium clusters, high yield synthesis, spectra and reactivity towards H_2 , CO, alkynes and alkenes of (M. Castiglioni, E. Sappa, M. Valle, M. Lanfranchi, A. Tiripicchio), (241)99
- Octahedral carbyneosmium(II) complexes (G.R. Clark, N.R. Edmonds, R.A. Paupit, W.R. Roper, J.M. Waters, A.H. Wright), (244)C57
- $[\text{Os}_3\text{H}_2(\text{CO})_{10}]$ and $[\text{Os}_3\text{H}(\text{CO})_{11}]^-$, reactions with $[\text{N}_3\text{SiMe}_3]$ and formation of $[\text{Os}_3\text{H}(\text{CO})_{10}(\mu\text{-NHPh})]$ using $[\text{Os}_3(\text{CO})_{11}(\text{NCMe})]$ of; X-ray structures of $[\text{Os}_3(\mu\text{-H})(\text{CO})_{10}(\eta\text{-N}_3\text{H}_2)]$ and $[\text{Os}_3(\mu\text{-H})(\text{CO})_{10}(\mu\text{-NHSiMe}_3)]$ (B.F.G. Johnson, J. Lewis, P.R. Raithby, S.W. Sankey), (228)135
- $\text{OsH}_4(\text{PMe}_2\text{Ph})_2$, dimerisation following photodissociation of dihydrogen of (M.A. Green, J.C. Huffman, K.G. Caulton), (243)C78
- Osmaboranes and iridatetraborane, synthesis and NMR spectra of (J. Bould, N.N. Greenwood, J.D. Kennedy), (249)11
- Osmium coordinated formaldehyde, synthesis of selenoformaldehyde and telluroformaldehyde complexes from (C.E.L. Headford, W.R. Roper), (244)C53
- Osmium di- and tri-nuclear compounds with formamidinato complexes (A.J. Deeming, R. Peters), (235)221
- Pentamethylcyclopentadienyldicarbonyl hydroxymethylosmium, thermolysis and photolysis of (C.J. May, W.A.G. Graham), (234)C49
- Polyhedral skeletal electron pair theory: its extension to non-conical ML_n fragments (D.G. Evans, D.M.P. Mingos), (240)321
- Tricyanate-goldtriosmium clusters, synthesis of (K. Burgess, B.F.G. Johnson, J. Lewis), (247)C42
- mer-Trihalocarbonyloxalato osmates(III), preparation, and spectroscopic characterisation of (H. Schulz, W. Preetz), (235)335
- Triosmium clusters containing 2-substituted pyridine moieties, synthesis and reactivity of (K. Burgess, B.F.G. Johnson, J. Lewis), (233)C55
- Tris(triphenylphosphine)osmium zero-valent complexes and derived compounds (T.J. Collins, K.R. Grundy, W.R. Roper), (231)161
- Undecacarbonyltriosmium clusters, $[\text{Os}_3(\text{CO})_{11}\text{CR}_2]$ ($\text{R} = \text{H}, \text{CH}_3$), preparation and molecular structure of (B.F.G. Johnson, J. Lewis, P.R. Raithby, S.W. Sankey), (231)C65

Palladium

- trans*-Acetoxypalladation of alkenes in chloride-free media (O.S. Andell, J.-E. Bäckvall), (244)401
- 1-Alkenylboranes, cross-coupling reactions with 3,4-epoxy-1-butene catalysed by palladium or nickel complexes of (N. Miyaura, Y. Tanabe, H. Suginome, A. Suzuki), (233)C13
- Alkylpalladium chelated compounds, reactions of (E.L. Weinberg, B.K. Hunter, M.C. Baird), (240)95
- η^3 -Allylpalladium complexes, NMR study of photolysis in the presence of oxygen or nitrosodurene of (M.P. Crozet, J. Muzart, P. Pale, P. Tordo), (244)191
- Allylsulphones, isomerisation catalysed by arenesulphinic acids of and the role of palladium on yield and regioselectivity (M. Julia, M. Nel, A. Righini, D. Uguen), (235)113
- Benzylchlorobis(triphenylphosphine)palladium(II), reactions with dimethyl acetylenedicarboxylate of (K. Hiraki, T. Itoh, K. Eguchi, M. Onishi), (241)C16
- 1,2-Bis(imino)ethylpalladium(II) complexes, preparation and reactivity of (B. Crociani, A. Mantovani, A. Scrivanti), (233)387
- Bis(pentafluorobenzene)palladium, chemical behaviour of THF in the presence of (G. Lopez, G. Garcia, J. Ruiz, N. Cutillaz), (246)C83
- (Z)-1,2-Bis(trimethylstannylyl)-1-alkenes, tetrakis(triphenylphosphine)palladium-catalysed synthesis by addition of hexamethyldistannane to 1-alkynes (T.N. Mitchell, A. Amamria, H. Killing, D. Rutschow), (241)C45
- Carbomethylation of vinyl aromatics, asymmetric induction in (G. Cometti, G.P. Chiusoli), (236)C81
- Carbon disulphide-iron, -palladium and -platinum complexes, reactions with electrophiles of (H. Stolzenberg, W.P. Fehlhammer, P. Dixneuf), (246)105
- Carbon-hydrogen-transition metal bonds (M. Brookhart, M.L.H. Green), (250) 395
- Carbonylphosphine polynuclear clusters of palladium, synthesis and structure of (E.G. Mednikov, N.K. Eremenko, S.P. Gubin, Yu.L. Slovokhotov, Yu.T. Struchkov), (239)401
- Catalytic activation of aromatic C—H bonds (M. Catellani, G.P. Chiusoli), (239)C35
- Cyclometallation with platinum(II) and palladium(II) of P-t-Bu₂-i-Bu and PPh₂-i-Bu (A.R.H. Bottomley, C. Crocker, B.L. Shaw), (250)617
- Cyclopalladation, asymmetric, in ferrocenes as a tool for enantioselective synthesis; preparation of analogues of natural products (V.I. Sokolov, L.L. Troitskaya, N.S. Khrushchova), (250)439
- Cyclopalladation and cyclorhodation of N-(3-thienyl)pyrazole (M. Nonoyama), (229)287
- Di- μ -chlorobis(*N,N*-dialkylbenzylamine-2,*C,N*)dipalladium(II) complexes, preparation of (N. Barr, S.F. Dyke), (243)223
- Di- μ -chlorobis[3-(dimethylamino)-1-formyl-2,2-dimethylpropyl-*C,N*]-dipalladium, reactions of (R. McCrindle, A.J. McAlees), (244)97
- Di- μ -chlorodichlorobis(η^4 -tetrakis-p-methoxyphenylcyclobutadiene)dipalladium, X-ray structure, spectroscopic properties and reactions with nucleophiles of (P.J. Ridgwell, P.M. Bailey, P.M. Maitlis), (233)373
- 1'-Dimethylamino[3]ferrocenophane, asymmetric cyclopalladation of; central and planar chirality and effect of conformational rigidity in (V.I. Sokolov, L.L. Troitskaya, B. Gautheron, G. Tainturier), (235)369
- 3,3-Dimethyl-4-methylthio-1-butyne derivative from reaction with dichlorobis(benzonitrile)palladium, X-ray crystal structure of chloro(2,4-bis(1',1'-dimethyl-2'-(methylthio)ethyl)-3-furyl-*C,S,S*)palladium(II) (R. McCrindle, G. Ferguson, G.J. Arsenault, A.J. McAlees, M. Parvez), (246)C19
- Hexamethyldisilane/tetrakis(triphenylphosphine)palladium system, reductive dehalogenation of α -halogenated carbonyl and cyano compounds with (H. Urata, H. Suzuki, Y. Moro-Oka, T. Ikawa), (234)367
- Low-valent transition metal complexes, reactions with 1,2,3,4,7,7-hexafluorobicyclo[2.2.1]heptadiene and 2,3-bis(trimethyltin)- and 2,3-dichloro-1,4,5,6,7,7-hexafluorobicyclo[2.2.1]hepta-2,5-dienes of (B.L. Booth, S. Casey, R.P. Critchley, R.N. Haszeldine), (226)301

- Low-valent transition metal complexes, reactions with perfluoronorbornadiene of (B.L. Booth, S. Casey, R.N. Haszeldine), (226)289**
- M(*o*-C₆H₄CH₂PR₂)₂ (*M* = Pd, Pt) cyclo-metallated complexes, metallation reactions of (H.-P. Abicht, P. Lehniger, K. Issleib), (250)609**
- Metal-coordinated β -carbonylenolato and β -ketoiminato ligands, C—C bond formation upon addition of cyanogen to (B. Corain, M. Basato), (232)C59**
- ortho-Metallation reactions of *N*-substituted pyrroles (M.E.K. Cartoon, G.W.H. Cheeseman), (234)123**
- Methylene dioxime-palladium(II) complexes; non-bonded Pd—H interaction in a chelating six-membered ring (T. Hosokawa, T. Ohta, S.-I. Murahashi, M. Kido), (228)C55**
- (8-Methylquinoline-*C,N*)(1-methoxy-naphthalene-8-*C,O*)palladium, synthesis, and crystal and molecular structure of (J. Dehand, A. Mauro, H. Ossor, M. Pfeffer, R.H. De A. Santos, J.R. Lechat), (250)537**
- Mono- and poly-nuclear transition metal complexes, fast atom bombardment mass spectrometry of (R. Davis, I.F. Groves, J.L.A. Durrant, P. Brooks, I. Lewis), (241)C27**
- Nickel(III), palladium(II) and palladium(0) derivatives of *p*-diethynylbenzene (L. Ballester, M. Cano, A. Santos), (229)101**
- Palladium(II) and platinum(II) carbon-bonded complexes, mechanisms of nucleophilic and electrophilic attack on (U. Belluco, R.A. Michelin, P. Uguagliati, B. Crociani), (250)565**
- Palladium(II) and platinum(II) pentafluorophenyl derivatives with O-donor ligands (G. López, G. García, N. Cutillas, J. Ruiz), (241)269**
- Palladium catalysed acyl—O bond fission-phenylation reaction of allyl esters with benzene (Y. Fujiwara, M. Yoshidomi, H. Kuromaru, H. Taniguchi), (226)C36**
- Palladium-catalysed arylation of activated alkenes with aroyl chlorides (H.-U. Blaser, A. Spencer), (233)267**
- Palladium-catalysed arylation of disubstituted activated alkenes with benzoyl chloride, stereochemistry of (A. Spencer), (240)209**
- Palladium-catalysed arylation of ethylene with aroyl chlorides, synthesis of styrene and stilbene derivatives by (A. Spencer), (247)117**
- Palladium-catalysed asymmetric telomerisation of isoprene; preparation of optically citronellol (M. Hidai, H. Mizuta, H. Yagi, Y. Nagai, K. Hata, Y. Uchida), (232)89**
- Palladium-catalysed C—C bond formation, competitive processes in (M. Catellani, G.P. Chiusoli), (233)C21**
- Palladium-catalysed cleavage reactions of C—N bonds of tertiary amines and carbonylation of organic halides leading to tertiary amides (T. Kobayashi, M. Tanaka), (231)C12**
- Palladium(0)-catalysed dechlorinative silylation of benzylic chlorides with methylchlorodisilanes; facile route to benzylmethylchlorosilanes (H. Matsumoto, M. Kasahara, I. Matsubara, M. Takahashi, T. Arai, M. Hasegawa, T. Nakano, Y. Nagai), (250)99**
- Palladium(II)-catalysed double carbonylation of organic halides in the presence of amines; formation of α -ketoamides (T. Kobayashi, M. Tanaka), (233)C64**
- Palladium-catalysed hydrocarboalkoxylation of *N*-vinylphthalimide (G. Cavinato, L. Toniolo, C. Botteghi, S. Gladiali), (229)93**
- Palladium-catalysed insertion reactions, termination step in (M. Catellani, G.P. Chiusoli), (250)509**
- Palladium-catalysed reaction of allylic ammonium bromides with nucleophiles (T. Hirao, N. Yamada, Y. Ohshiro, T. Agawa), (236)409**
- Palladium-catalysed sequential insertion of double bonds followed by β,γ -cleavage of a C—C bond (M. Catellani, G.P. Chiusoli), (247)C59**
- Palladium-catalysed synthesis of condensed cyclopentanes; crystal and molecular structure of 3-benzylidenepentacyclo-[9.2.1^{5,8}.1^{1,11}.0^{2,10}.0^{4,9}]pentadecane (M. Catellani, G.P. Chiusoli, P. Sgarabotto), (240)311**
- Palladium complexes, mechanism of formation of and as catalysts, in reactions with molecular hydrogen (A.S. Berenblyum, A.G. Knizhnik, S.L. Mund, I.I. Moiseev), (234)219**
- Palladium complexes, mechanism of formation and as catalysts, in reactions of palladium phosphine halides towards molecular hydrogen (A.S. Berenblyum,**

- A.P. Aseeva, L.I. Lakhman, I.I. Moiseev), (234)237
- Palladium(0) complexes coordinated by quinone and 1,5-cyclooctadiene, preparation and electrochemical properties of (M. Hiramatsu, K. Shiozaki, T. Fujinami, S. Sakai), (246)203
- Palladium(0) complexes coordinated by quinone derivatives, electrochemical properties of (M. Hiramatsu, H. Nakano, T. Fujinami, S. Sakai), (236)131
- Palladium(II) compounds with benzo[*h*]-quinoline and substituted 2,6-diaryl-pyridines (J. Selbin, M.A. Gutierrez), (246)95
- Palladium(II) cyclic acyl complexes derived from quinoline-8-carbaldehyde and 2-(dimethylamino)benzaldehyde, synthesis and NMR spectroscopy of (C.G. Anklin, P.S. Pregosin), (243)101
- Palladium(II) cyclometallated acetate-bridged dimers of 2-arylpypyridine and 2,6-diarylpyridine (J. Selbin, K. Abboud, S.F. Watkins, M.A. Gutierrez, F.R. Fronczek), (241)259
- Palladium dichloride as catalyst in reactions of organomagnesium compounds with disubstituted acetylenes (C. Broquet, H. Rivière), (226)1
- Palladium(II) promoted cleavage of C—P bonds in tertiary phosphines (K. Kikukawa, T. Matsuda), (235)243
- Palladium-(2-pyridyl) bonds, insertion of isocyanides into (A. Mantovani, B. Crociani), (236)C37
- Palladium(II)-styrene three-coordinate complex, $[\text{Pd}(\eta^5\text{-C}_5\text{H}_5)(\text{PET}_3)(\text{styrene})]\text{BF}_4^-$, molecular structure of (K. Miki, M. Yama, Y. Kai, N. Kasai), (239)417
- Phosphine-nickel(II), -cobalt(II), -palladium(0) and -palladium(II) complexes as catalysts in cross-coupling reactions of aryl- and alkyl-Grignard reagents with organic tellurides (S. Uemura, S.-I. Furukawa, S.R. Patil), (243)9
- Phosphoranium ions as π -ligands in transition metal complexes, MO study of structure and bonding in (N.M. Kostić), (240)71
- Platinum(0) and palladium(0) tertiary phosphine complexes, reactions with phenyl dicyanooxiranes of (R.B. Osborne, J.A. Ibers), (232)371
- Pyrazolide-bridged heterometallic binuclear complexes (W.C. Deese, D.A. Johnson), (232)325
- Tetraazadiene-metal complexes, synthesis via Ar_2N_4 ligand transfer of; evidence for a stable tetraazadiene-bridged intermediate (P. Overbosch, G. van Koten), (229)193
- Tetramethylcyclobutadienepalladium dichloride, preparation of (H. Hoberg, H.J. Riegel, K. Seevogel), (229)281
- Tin, mercury and copper organic derivatives, cross-coupling reactions of organic halides catalysed by (I.P. Beletskaya), (250)551
- Transition metal complexes with steroidal phosphine ligands, asymmetric hydrogenation, hydroformylation and hydrocarbalkoxylation of olefins by (S. Gladiali, G. Faedda, M. Marchetti, C. Botteghi), (244)289
- Triphenylphosphine peroxopalladium, oxidation of dienes by (M. Dagonneau, J.F. Fauvarque), (241)113
- $(\eta^5\text{-Triphenylphosphonium cyclopentadienylide})(\eta^4\text{-diene})$ -palladium(II) and -platinum(II) dicationic complexes (G. Tresoldi, F. Faraone, P. Piraino, F.A. Bottino), (231)265
- Triphosphorus mononuclear cyclic complexes, structural correlations and NMR properties of (M. Di Vaira, L. Sacconi, P. Stopponi), (250)183
- Ylideplatinum(II) complexes, synthesis via α -functionalised alkylplatinum(II) intermediates and comparison with palladium(II) complexes of; X-ray structure of *trans*- $[\text{Pt}(\text{CH}_2\text{PEt}_3)_2(\text{PET}_3)_2]^+$ (N.J. Kermode, M.F. Lappert, B.W. Skelton, A.H. White, J. Holton), (228)C71
- ## Phosphorus
- Acyliron phosphorus ylides with electron-rich organometal groups (A. Stasunik, W. Malisch), (247)C47
- (Alkyl- and perfluoroalkyl-)C-nitroso-transition metal complexes, ^{15}N NMR comparisons of (D.H. Evans, D.M.P. Mingos, J. Mason, A. Richards), (249)293
- Alkylsilver species, regiospecific addition to enynyl-sulphides, enynyl-sulphoxides and -phosphines of (H. Westmijze, H. Kleijn, P. Vermeer), (234)117
- $\eta^6\text{-Arene-1,2-bis(triphenylphosphino)}$ -ethanedicarbonylchromium and analogous compounds, preparation and reactions of (M.F. Semmelhack, W. Seufert, L. Keller), (226)183

- Arylcopper(I) complexes containing tertiary phosphines, reactions with carbon dioxide of (N. Marsich, A. Camus, G. Nardin), (239)429
- Arylphosphine addition to $[Fe(CO)_3(1-5\eta-C_6H_5)]^+$, anchimeric assistance in (J.G. Atton, L.A.P. Kane-Maguire), (226)C43
- Asymmetric hydrogenation catalyst system derived from the [rhodium(1,2-bis(diphenylphosphino)-1-cyclohexyl-ethane)] moiety (D.P. Riley), (234)85
- η^6 -*o*-, *m*- and *p*-azidotoluene- η^5 -cyclopentadienyliron hexafluorophosphate, photolysis of (R.G. Sutherland, P.C. Chang, C.C. Lee), (234)197
- Benzylchlorobis (triphenylphosphine)-palladium(II), reactions with dimethyl acetylenedicarboxylate of (K. Hiraki, T. Itoh, K. Eguchi, M. Onishi), (241)C16
- 1-Benzylidene-2,4-cyclohexadienetri-carbonyliron and related compounds, preparation of (G. Jaouen, B.F.G. Johnson, J. Lewis), (231)C21
- Benzyl-molybdenum complexes, *ortho* effects on carbon monoxide insertion in (J.D. Cotton, H.A. Kimlin, R.D. Markwell), (232)C75
- Bidentate amine *N*-oxides and phosphine oxides as ligands in rhodium(I) chemistry (R. Usón, L.A. Oro, M.A. Ciriano, F.J. Lahoz), (240)429
- Bis- μ -[bis(diphenylphosphino)methane]-chlorodihydridoplatinum(II) hexafluorophosphate, fluxional behaviour of (M.C. Grossel, R.P. Moulding, K.R. Seddon), (247)C32
- Bis[bis(diphenylphosphino)methanido]-platinum(II), $[Pt(Ph_2PCHPPh_2)_2]$, preparation and X-ray crystal structure of (M.P. Brown, A. Yavari, L. Manojlovic-Muir, K.W. Muir, R.P. Moulding, K.R. Seddon), (236)C33
- 1,2-Bis(diphenylphosphino)ethane derivatives of dodecacarbonyltriruthenium; preparation of, crystal and molecular structure of $Ru_3(CO)_{10}(\mu-Ph_2PCH_2CH_2PPh_2)$ (M.I. Bruce, T.W. Hambley, B.K. Nicholson, M.R. Snow), (235)83
- 1,2-Bis(iminoethyl)palladium(II) complexes, preparation and reactivity of (B. Crociani, A. Mantovani, A. Scrivanti), (233)387
- Bis(phosphoryl)phosphine assemblage of Group VI metal complexes containing diphosphoxane P-O-P linkages, coordinated tautomers of (E.H. Wong, F.C. Bradley, E.J. Gabe), (244)235
- Bis(2,4,6-tri-*t*-butylphenyl)diphosphene and bis(trimethylsilyl)diphosphene, photoelectron spectroscopy of (D. Gonbeau, G. Pfister-Guilhouzo), (247)C17
- Bis(triethylphosphine)methylhaloplatinum complexes, $[Pt(X)(CH_3)\{P(C_2H_5)_3\}_2]$ ($X = Cl, Br, I, CN$), bond energies and thermal decomposition of (A. Morville, G. Favero, A. Turco), (243)111
- (Z)-1,2-Bis(trimethylstannyl)-1-alkenes, tetrakis(triphenylphosphine)palladium-catalysed synthesis by addition of hexamethyldistannane to 1-alkynes (T.N. Mitchell, A. Amamria, H. Killing, D. Rutschow), (241)C45
- Bis(triphenylphosphine)(η^3 -allyl) cationic complexes, oligomerisation of butadienes with (P. Grenouillet, D. Neibecker, I. Tkatchenko), (243)213
- Bis[tris(trimethylsilyl)methyl]diphosphene, structure of (J. Jaud, C. Couret, J. Escudé), (249)C25
- t*-Butyllithium addition to the benzene ring of phenylphosphonium salts (H.J. Cristau, J. Coste, A. Truchon, H. Christol), (241)C1
- t*-Bu₃PN=S=NP-*t*-Bu₂, fragmentation in addition reactions to osmium clusters of; synthesis, solid state structure and dynamic properties of $Os_3(CO)_{11}[P-t-Bu_2(NH_2)]$ and $HOs_3(CO)_9[P-t-Bu_2(NH)S]$ (W. Ehrenreich, M. Herberhold, G. Süss-Fink, H.-P. Klein, U. Thewalt), (248)171
- Carbenemetal complexes derived from optically active electron-rich olefins (L_2^*); X-ray structure of $[Co(CO)L^*-(NO)(PPh_3)]$ and *cis*- $[Rh(Cl)(COD(L^*))]$ ($L^* = (S)-\dot{C}N(Me)CH(Me)CH_2NMe$, $L'^* = (S)-\dot{C}N(CH_2CH_2CH_2)CHCH_2NMe$) (A.W. Coleman, P.B. Hitchcock, M.F. Lappert, R.K. Maskell, J.H. Müller), (250)C9
- Carbon disulphide-tungsten complexes, reactivity of (W.A. Schenk, T. Schwietzke, H. Müller), (232)C41
- Carbon monoxide insertion into a Pt^{II}-C σ -bond, dependence on the nature of coordinated ditertiary phosphine of (M.A. Bennett, A. Rokicki), (244)C31
- Carbonylmanganese(I) complexes, *fac*- $[MnBr(CO)_3(Ph_2PC(S)NPh)]$ and $[Mn\{S(NPh)CPPh_2\}(CO)_4]$, molecular and crystal structures of; neutral phosphinothioformamides and their deprotonated anionic derivatives

- as S,P ligands (B. Just, W. Klein, J. Kopf, K.G. Steinhäuser, R. Kramolowsky), (229)49
- Carbonylmetal cluster complexes, reactions with bis(diphenylphosphino)methane of (D.F. Foster, B.S. Nicholls, A.K. Smith), (236)395
- Carbonyl-molybdenum(0) and -molybdenum(II) complexes with organo-sulphur ligands, synthesis and properties of (D. Sellmann, J. Schwarz), (241)343
- Carbonylphosphine polynuclear clusters of palladium, synthesis and structure of (E.G. Mednikov, N.K. Eremenko, S.P. Gubin, Yu.L. Slovokhotov, Yu.T. Struchkov), (239)401
- μ -Carbonyltri- μ -carbonyloctacarbonyl-tetrakis(triphenylphosphite)octahedrohexairidium, synthesis and X-ray structure of (F. Demartin, M. Manassero, M. Sansoni, L. Garlaschelli, U. Sartorelli, F. Tagliabue), (234)C39
- Cationic half ylids prepared from neutral and cationic metal substituted ylids (W. Uedelhoven, K. Eberl, W. Sieber, F.R. Kreissl), (236)301
- Cationic rhodium complexes as catalysts in activation of molecular oxygen, selective oxidation of terminal olefins and alcohols (M. Bressan, F. Morandini, P. Rigo), (247)C8
- (η^5 -C₅H₅)(CO)₂Mn(η^2 -HC≡CCO₂Me), reaction with phosphines of; crystal and molecular structure of (η^5 -C₅H₅)(CO)₂Mn—C(CO₂Me)=CHP⁺Ph₃, (N.E. Kolobova, L.L. Ivanov, O.S. Zhvanko, I.N. Chechulina, A.S. Batsanov, Yu.T. Struchkov), (238)223
- (η^5 -C₅H₅)Fe(CO)(PPh₃)(COCH₂, COR) complexes, fragmentation to [$(\eta^5$ -C₅H₅)Fe(CO)₂(PPh₃)]⁺ of (S.G. Davies, O. Watts, N. Aktugo, H. Felkin), (243)C51
- (η^5 -C₅H₅)Fe(Ph,PCH₂CH₂PPh₃)(CHO), evidence for (S.G. Davies, S.J. Simpson), (240)C48
- [(η^5 -C₅H₅)Fe(Ph,PCH₂CH₂PPh₃)CO]PF₆, regioselectivity of hydride addition to and rearrangement of a product of (S.G. Davies, J. Hibberd, S.J. Simpson), (246)C26
- Chiral discrimination in organometallic systems; reaction between [Fe(CO)₃-(1-5- η -2-MeOC₆H₄)]⁺ and (S,S)-(-)- α -phenylenebis(1,2-methylphenylphosphine) (D.J. Evans, L.A.P. Kane-Maguire, S.B. Wild), (232)C9
- trans*-Chlorocarbonylbis(triphenylphosphine)rhodium(I), crystal and molecular structure in its monoclinic form of (A. Ceriotti, G. Ciani, A. Sironi), (247)345
- (Chloro)(methyl)((+)-2S,3S-O-isopropylidene-2,3-dihydroxy-1,4-bis(diphenylphosphino)butane)platinum(II), crystal and molecular structure of; incorporation of chiral amines in chiral platinum complexes (N.C. Payne, D.W. Stephan), (228)203
- Chloronitrosylcarbonylmolybdenum(0) complexes, synthesis and activity as catalysts of (K. Seyferth, R. Taube), (229)275
- C₆H₅Rh(C₆R₅)PPh₃ⁱ complexes, preparation and protonation of; conversion of a rhodium tolane into isomeric rhoda-indene (H. Werner, J. Wolf, U. Schubert, K. Ackerman), (243)C63
- Chromium(0), molybdenum(0) and tungsten(0) carbonyl complexes, bifunctional aminophosphanes as ligands in (K. Diemert, W. Kuchen, J. Kutter), (238)113
- Chromium triad carbenes, mechanistic study of tertiary phosphine and phosphite addition to (H.S. Choi, D.A. Sweigart), (228)249
- Cobalt-iridium mixed tetranuclear cluster, Co₂Ir₂(CO)₁₂, trimethylphosphite derivatives of (D. Labroue, R. Queau, R. Poilblanc), (233)359
- Cobalt, rhodium and iridium trimethylphosphite complexes, synthesis and reactivity of; crystal and molecular structure of [IrH(P(OMe)₃)₄(P(OMe)₃-OSnMe₂Cl₂)]⁺[SnCl₃Me₂]⁻ (P.B. Hitchcock, S.I. Klein, J.F. Nixon), (241)C9
- 2-Cyano-2-triphenylphosphoranylidene dithioacetic acid and its alkyl esters, coordination chemistry, IR and NMR spectroscopic investigations of (U. Kunze, R. Merkel, M. Moll), (248)205
- Cyclometallation with platinum(II) and palladium(II) of P-t-Bu₂-i-Bu and PPh₂-i-Bu (A.R.H. Bottomley, C. Crocker, B.L. Shaw), (250)617
- Cycloocta-1,5-dienerhodium(I) complexes containing dibutylidihalocyclodiphosphazanes and related ligands, synthesis and NMR study of; crystal and molecular structure of bis{[(chloro)(cycloocta-1,5-diene)]⁺[1,3-di-t-butyl-2,4-difluorocyclodiphosphazane]}dirhodium(I) (J.C.T.R. Burkett St. Laurent, P.B. Hitchcock, J.F. Nixon), (249)243

- η^5 -Cyclopentadienylbis[tris(2,2,2-trifluoroethyl)phosphito]iodoiron(II), preparation of (J.M. Shreeve, S.M. Williamson), (249)C13
- Cyclopentadienylcobalt(I)-olefin complexes, preparation and properties of (P. Hong, Y. Yamamoto, H. Yamazaki), (232)71
- (η^5 -Cyclopentadienyl)(η^1 -cyclopentadienyl)phosphine-palladium complexes, synthesis, structure and bonding patterns in (H. Werner, H.-J. Kraus, U. Schubert, K. Ackermann, P. Hofmann), (250)517
- Cyclopentadienyldicarbonyl-manganese and -chromium dinuclear complexes containing germanium, sulphide, dinitrogen or phosphinidene bridges, MO study of bonding and conformations in (N.M. Kostić, R.F. Fenske), (233)337
- cis- and trans-Cyclopentadienyldicarbonyltungsten-arsane complexes with MeNC and t-BuNC as ligands, synthesis, characterisation and cleavage with phosphorus ylids of (M. Luksza, K. Fiedler, U. Wanka, W. Malisch), (236)C1
- Cyclopentadienylnickel complexes with phosphinimides as ligands, synthesis and reactivity of (N. Kuhn, M. Winter), (229)C33
- Cyclopentadienylnickel compounds, coordination of bifunctional ligands in (N. Kuhn, M. Winter), (243)C42
- Decacarbonylbromohexafluorobutenetriosmium anion, structure and reactivity of; X-ray structures of $[(\text{PH}_3\text{P})_2\text{N}]^-[\text{Os}_3(\text{CO})_{10}[\text{CF}_3(\text{H})\text{C}=\text{C}(\text{H})\text{CF}_3]\text{Br}]$, $[(\text{PH}_3\text{P})_2\text{N}][\text{Os}_3(\text{CO})_9\{\text{CF}_3(\text{H})=\text{C}=\text{C}(\text{H})\text{CF}_3\}(\mu\text{-Br})]$ and $[\text{HOs}_3(\text{CO})_9\{\text{CF}_3(\text{H})=\text{C}(\text{H})\text{CF}_3\}(\mu\text{-Br})]$ (Z. Dawoodi, M.J. Mays, P.R. Raithby, K. Henrick, W. Clegg, G. Weber), (249)149
- Decacarbonyldimanganese, steric effects of phosphine on photochemistry of (C. Busetto, A.M. Mattucci, E.M. Cernia, R. Bertani), (246)183
- Decacarbonyldirhenium, photochemical reaction with triphenylphosphine of (S.W. Lee, L.F. Wang, C.P. Cheng), (248)189
- Diazaphosphasiletidenesulphide rhenium dinuclear complex, synthesis by isomerisation of an amino(imino)thiophosphorane of (O.J. Scherer, J. Kerth), (243)C33
- Di-bridged trinuclear iron cluster, $\text{Fe}_3(\text{CO})_9(\mu_3\text{-S})(\mu_3\text{-X})$ ($\text{X} = \text{PR}_3, \text{AsR}_3, \text{SO}$), synthesis from $[\text{Fe}_3(\text{CO})_9(\mu_3\text{-S-t-C}_4\text{H}_9)]^{+}$ of (A. Winter, L. Zsolnai, G. Huttner), (234)337
- Dichlorocarbene-ruthenium complex, $\text{RuCl}_2(\text{CCl}_3)(\text{CO})(\text{PPh}_3)_2$, reactions of (W.R. Roper, A.H. Wright), (233)C59
- 1,3-Dichloro-2,4-di-t-butyl diazadiphosphidine as a coordinating ligand in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (243)C47
- Dichloromethane oxidation to carbonate ligands (O.J. Scherer, H. Jungmann, K. Hussong), (247)C1
- Difluorocarbene complexes of ruthenium derived from trifluoromethyl compounds; structure of $\text{Ru}(\text{CF}_3(\text{HgCF}_3))(\text{CO})_2(\text{PPh}_3)_2$ (G.R. Clark, S.V. Hoskins, W.R. Roper), (234)C9
- Diiron hexacarbonyl dissymmetrical complexes, electron transfer catalysis of regioselective replacement of CO by $\text{P}(\text{OMe})_3$ in (E.K. Lhadi, C. Mahe, H. Patin, A. Darchen), (246)C61
- [3-8- η^5 -5,13-Dimethyl[2.2]metacyclophane(η^5 -cyclopentadienyl)iron] $^{+}$ [PF_6^-] and [3-8- η^5 ;11-16- η^5 -5,13-dimethyl[2.2]metacyclophane-[(η^5 -cyclopentadienyl)iron] $^{+}$ [PF_6^-]], synthesis and characterisation of (A.R. Koray), (232)345
- P-2,6-Dimethylphenyl-C,C-diphenylselenophosphene, stable tricoordinate phosphorus(V) compound (Th.A. van der Knaap, M. Vos, F. Bickelhaupt), (244)363
- η^6 -(2,6-Dimethylpyridine)(triphenylphosphine)dicarbonylchromium and related compounds, synthesis of (H.W. Choi, M.S. Sollberger), (243)C39
- Dinitrogen ligand properties deduced from ^{15}Mo NMR spectroscopy (S. Donovan-Mtunzi, M. Hughes, G.J. Leigh, H.M. Ali, R.L. Richards, J. Mason), (246)C1
- Dinitrogen rhenium(I) complexes with organophosphite and isocyanide ligands, preparation of; X-ray structure of *mer*- $[\text{ReCl}(\text{N}_3)(\text{CNMe})\{\text{P}(\text{OMe})_3\}_3]$ (F.N.N. Carvalho, A.J.L. Pombeiro, O. Orama, U. Schubert, C.J. Pickett, R.L. Richards), (240)C18
- Dinuclear complex with asymmetric $\text{Co}(\text{CS})\text{Co}$ bridging groups, $\text{C}_5\text{H}_5(\text{PMMe}_3)\text{CO}(\mu\text{-CS})_2\text{CoC}_5\text{H}_5$, synthesis and crystal structure of (H. Werner, O. Kolb, U. Schubert, K. Ackermann), (240)421

- Di- and tri-organotin(IV) monophosphate esters, synthesis and vibrational spectra of (F.A.K. Nasser, J.J. Zuckerman), (244)17
- 2,2-Diphenyl-2 λ^5 -phosphaphenalenyl- and 2,2-dimethyl-2 λ^5 -phosphaindenyl-lithiums, formation and rearrangements of (H. Schmidbauer, A. Mörtl), (250)171
- Diphenylphosphoryl azide and perfluoroo-n-hexylsulphonyl azide, reactions with triphenylphosphane-platinum(0), -rhodium(I), -iridium(I), -ruthenium(0), -cobalt(II) and -copper(I) complexes of (K. Bartel, K. v. Werner, W. Beck), (243)79
- Diphosphenes, RP=PR', synthesis and characterisation of (J. Escudié, C. Couret, J.D. Andriamizaka, J. Satgé), (228)C76
- Diphosphinite rhodium complexes derived from natural tartaric acid, asymmetric hydrogenations catalysed by (J. Bourson, L. Oliveros), (229)77
- Dirhodium complex containing Rh—Rh bond, bridging diphenylphosphido ligands and a tetrahedral rhodium, ^{31}P NMR spectrum and molecular structure of (D.W. Meek, P.E. Kreter, G.G. Christoph), (231)C53
- η^2 -Dithiomethyl ester group, unprecedented intramolecular attack by a phosphine on; X-ray crystal structure of the complex [Ph₂PCH₂CH₂N(CH₂CH₂PPh₂)₂·Ni(CS₂Me)]BPh₄ (C. Bianchini, C.A. Ghilardi, A. Meli, A. Orlandini), (246)C13
- Dodecacarbonyltriruthenium, reactions with tris(diphenylphosphine)methane of; characterisation of Ru₃(CO)₁₂[HC(PPh₃)₃] and crystal and molecular structures of Ru₃(CO)₁₂[HC(PPh₃)₃](PhPC₆H₄PPh₃)·CHCl₃ (M.M. Harding, B.S. Nicholls, A.K. Smith), (226)C17
- Dodecacarbonyltriruthenium η^2 -olefin derivatives, formation and η^2 -alkyne-hydrido complex of; crystal structures of Ru₃(μ -P, η^2 -CH₂=CHC₆H₄PPh₃)(CO)₁₀ and H₂Ru₃(μ_3 -P, η^2 -HC≡CC₆H₄PPh₃)(CO)₁₀ (M.I. Bruce, B.K. Nicholson, M.L. Williams), (243)69
- Dodecamethyl-1 λ^3 ,4 λ^3 -diphospho-2,3,5,6,7,8-hexasilabicyclo[2.2.2]octane, preparation of (K. Hassler), (246)C31
- Electrode-catalysed substitution reactions, preparative use applied for the synthesis of Fe(CO)(PPh₃)(η^5 -C₅H₅)COCH₃ of (D. Miholová, A.A. Vlček), (240)413
- Electrophiles containing chiral iron centres, asymmetric induction in C—C bond forming reactions of prochiral nucleophiles with (J.E. Jensen, L.L. Campbell, S. Nakanishi, T.C. Flood), (244)61
- Ethylene(hydrido)rhodium complexes, [C₂H₂RhH(C₂H₄)PR₃]X, reactivity towards nucleophiles of (R. Feser, H. Werner), (233)193
- [Fe(CO)₅(1-5- η -2-MeOC₆H₅)][BF₄]⁻, reactions with optically active tertiary phosphines of (D.J. Evans, L.A.P. Kane-Maguire), (236)C15
- Fe₃(CO)₉(μ -PPh)₂, preparation and crystal structure of (S.L. Cook, J. Evans, L.R. Gray, M. Webster), (236)367
- Fe₃(CO)₉(μ_3 -S)(μ_3 -ER) (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), (247)259
- Fe—Fe bond cleavage in [Fe₃(CO)₉(μ_3 -SR)]⁻ by electrophilic reagents of the Vth and VIth Main Group (A. Winter, L. Zsolnai, G. Huttner), (250)409
- Fe(NO)₃I₂ and Fe(NO)₃IPPh₃ in DMF, electrochemistry and ionization of (G. Piazza, G. Innorta), (240)257
- [1]Ferrocenophanes, structure and reactions of (M. Clemane, R.M.G. Roberts, J. Silver), (243)461
- dihapto-Formaldehyde complex, Os(η^2 -CH₂O)(CO)₂(PPh₃)₂, synthesis, structure and reactions of (G.R. Clark, C.E.L. Headford, K. Marsden, W.R. Roper), (231)335
- Fulvene—platinum complexes, X-ray crystal structure of [Pt(η^2 -C₇H₄CPh₂)(PPh₃)₂] (A. Christofides, J.A.K. Howard, J.L. Spencer, F.G.A. Stone), (232)279
- Gold and platinum tertiary phosphine low nuclearity complexes, MO analysis of; development of isolobal analogies for the M(PR₃) fragment (D.G. Evans, D.M.P. Mingos), (232)171
- Gold—ruthenium pentanuclear clusters, metal framework arrangements in; crystal structures of [Au₂Ru₃(μ_3 -S)(CO)₈(PPh₃)₃] and [Au₂Ru₃(μ -H)(μ_3 -COMe)(CO)₈(PPh₃)₂] (L.J. Farrugia, M.J. Freeman, M. Green, A.G. Orpen, F.G.A. Stone, I.D. Salter), (249)273
- Gold-triiron butterfly cluster, AuFe₃(μ_3 -HC=NBu-t)(CO)₉(PPh₃)₂, synthesis and crystal structure of (M.I. Bruce, B.K. Nicholson), (250)627

- Group VI metal carbonyl complexes containing the ligands: 1,6-bis(diphenylphosphino)-*trans*-hex-3-ene and 1,6-bis(diphenylarsino)-*trans*-hex-3-ene; crystal and molecular structures of tricarbonyl-1,6-bis(diphenylphosphino)-*trans*-hex-3-enemolybdenum(0) (G.R. Clark, C.M. Cochrane, P.W. Clark), (236)197**
- Halomethyl- and dihalomethyl-rhodium(III) complexes, preparation by oxidative substitution of carbonyl- and ethylene-rhodium(I) compounds (H. Werner, W. Paul), (236)C71**
- Halonitrosylcarbonyltungsten complexes and their triphenylphosphine derivatives as olefin metathesis catalysts (A.E. Crease, H. Egglestone, N. Taylor), (238)C5**
- Heptaphosphanortricyclenes: derivatives and homologues of $P_7(\text{SiMe}_3)_3$ (G. Fritz, K.D. Hoppe, W. Höngle, D. Weber, C. Mujica, V. Manriquez, H.-G. v. Schnerring), (249)63**
- Heterodinuclear complexes with ruthenium-cobalt bonds bridged by a diphenylphosphido bond (R. Regragui, P.H. Dixneuf), (239)C12**
- Hexacarbonylniobate(-I) anion, preparation and X-ray structure of (F. Calderazzo, G. Pampaloni, G. Pelizzi), (233)C41**
- Hexamethylbenzyl(phosphine)-dimethyl- and -dihydrido-ruthenium(II) stable complexes, synthesis and properties of (H. Werner, H. Kletzin), (228)289**
- Hexamethyldisilane/tetrakis(triphenylphosphine)palladium system, reductive dehalogenation of α -halogenated carbonyl and cyano compounds with (H. Urata, H. Suzuki, Y. Moro-Oka, T. Ikawa), (234)367**
- Hexaruthenium nitrosyl cluster, synthesis of and X-ray analysis of $\text{Ru}_6(\text{CO})_{14}(\text{NO})_2$ and $\text{Ru}_6\text{C}(\text{CO})_{15}(\text{NO})(\text{AuPPPh}_3)$ (B.F.G. Johnson, J. Lewis, W.J.H. Nelson, J. Puga, P.R. Raithby, D. Braga, M. McPartlin, W. Clegg), (243)C13**
- [$\text{Hg}_5(\mu_2\text{-Cy}_2\text{P})_5(\text{O}_3\text{SCF}_3)_5$] and [$\text{Hg}_5(\mu_2\text{-Cy}_2\text{P})_5(\text{SO}_4\text{H})_5$], compounds involving the 10-membered ring system ($\text{Hg}_5\text{-P}_5$) (P. Peringer, J. Eichbichler), (241)281**
- [$(\mu\text{-H})_2\text{Re}_3(\text{CO})_9[(\text{EtO})_2\text{POP}(\text{OEt})_2]_2$], joint X-ray and neutron diffraction analysis of (D.W. Prest, M.J. Mays, A.G. Orpen, R.K. McMullan), (240)395**
- Hydride reduction of the cation $[(\eta^5\text{-C}_5\text{H}_5)\text{Fe}(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)\text{CO}]^- \text{PF}_6^-$; formation of $(\eta^5\text{-C}_5\text{H}_5)\text{FeH}(\text{CO})-(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)$ and elimination of H_2 from $[(\eta^5\text{-C}_5\text{H}_5)\text{FeH}(\text{CO})]_2(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)$ (S.G. Davies, J. Hibberd, S.J. Simpson, O. Watts), (238)C7; (241)C31**
- Hydride triphenylphosphineruthenium complexes with 3-formyl (or acyl) propionate and with 2-formyl (or acyl) benzoate, preparation and properties of (K. Osada, T. Ikariya, S. Yoshikawa), (231)79**
- Hydrido(olefin)rhodium stable complexes and $[\text{C}_5\text{H}_5\text{Rh}(\text{PMMe}_3)(\eta^3\text{-CH}_2\text{CHC}_6\text{H}_5)\text{-PF}_6^-$, synthesis of (H. Werner, R. Feser), (232)351**
- Hydrido(tetrahydroborato)(1,1,1-tris(diphenylphosphinomethyl)ethane)iron(II), synthesis and molecular structure of (C.A. Ghilardi, P. Innocenti, S. Midollini, A. Orlandini), (231)C78**
- Icosahedral cluster gold compounds, degradation reactions with chelating diphosphanes of; X-ray structure of di[bis(diphenylphosphino)methanido]-digold(I), $\{\text{Au}(\text{Ph}_2\text{P})_2\text{CH}\}_2$ (C.E. Briant, K.P. Hall, D.M.P. Mingos), (229)C5**
- N-Indolyltriarylphosphinegold(I) derivatives as η^6 -arene ligands in pentamethylcyclopentadienylrhodium(III) complexes; X-ray structure of $[(\text{C}_5\text{Me}_5)_2\text{Rh}(\mu\text{-In})\text{AuP}(\text{C}_6\text{H}_5)_3](\text{ClO}_4)_2 \cdot \text{CH}_2\text{Cl}_2$ (A. Tiripicchio, M. Tiripicchio Camellini, R. Usón, L.A. Oro, J.A. Cabeza), (244)165**
- trans*-Ir(CH_2CN)(CO)(PPh₃)₂, preparation and reactivity of (S. Zecchin, G. Zotti, G. Pilloni), (235)353**
- IrCl₃(CCl₂)(PPh₃)₂, compound with Ir=C bond, synthesis, structure and reactions of (G.R. Clark, W.R. Roper, A.H. Wright), (236)C7**
- 1-[Ir(CO)(PhCN)(PPh₃)]-7-C₆H₅-1,7-($\sigma\text{-C}_2\text{B}_9\text{H}_{10}$), homogeneous hydrogenation of alk-1-enes and alkynes catalysed by (F. Morandini, B. Longato, S. Bresadola), (239)377**
- [IrH₄{Bu^tPCH₂CH₂CHCHRCH₂PBu^t}]_n (R = H, Me), preparation and reactions with CO, Bu^tNC or HBr of (R.J. Errington, B.L. Shaw), (238)319**
- Iridium(I) and rhodium(I) complexes, oxidative addition of dialkylphosphites to (M.A. Bennett, T.R.B. Mitchell), (250)499**

- Iridium(I) and rhodium(I) five-coordinate trichlorostannate complexes, $(\text{PPN})[\text{M}(\text{SnCl}_3)_2(\text{diolefin})(\text{PR}_3)]$, synthesis and NMR spectroscopy of (M. Kretschmer, P.S. Pregosin, M. Garralda), (244)175
- Iridium-substituted difluorophosphines, preparation and properties of; synthesis of PF_2 -bridged heterometal complexes (E.A.V. Ebsworth, R.O. Gould, N.T. McManus, D.W.H. Rankin, M.D. Walkinshaw, J.D. Whitelock), (249)227
- Iron complexes with η^1 -coordinated vinyl groups, spontaneous dimethylation with methyl iodide or methylfluoro-sulphonic acid esters of (G. Grötsch, W. Malisch), (246)C49
- Iron(II) complexes with 2,3,11,12-dibenzo-1,4,7,10,13-pentathiadodecane, synthesis and reactions of (D. Sellmann, U. Kleine-Kleffmann), (247)307
- Iron-gold mixed metal carbido clusters, synthesis of and crystal structure of $\text{Fe}_4\text{AuC}(\mu\text{-H})(\text{CO})_{12}(\text{PPh}_3)$ and $\text{Fe}_4\text{Au}_2\text{C}(\text{CO})_{12}(\text{PET}_3)_2$ (B.F.G. Johnson, D.A. Kaner, J. Lewis, P.R. Raithby, M.J. Rosales), (231)C59
- Lutetium complexes of di-t-butylphosphonium-dimethylide (H. Schumann, F.W. Reier), (235)287
- Manganese(II) dihalide and tertiary phosphine solutions in THF and their reactions with dioxygen, studies on (C.A. McAuliffe), (228)255
- , — (M.L.H. Green), (228)263
- Manganese(I), neutral and cationic dicarbonyl complexes with diphosphines of (G.A. Carriero, V. Riera, J. Santamaría), (234)175
- $\text{M}(\text{o-C}_6\text{H}_4\text{CH}_2\text{PR}_2)_2$ ($\text{M} = \text{Pd, Pt}$) cyclo-metallated complexes, metallation reactions of (H.-P. Abicht, P. Lehniger, K. Issleib), (250)609
- $\text{M}(\text{CO})_n\text{L}$ ($\text{M} = \text{Cr, Mo, W}$) complexes with chelating ligands: (2-Me, E'C₆H₄)-Si(EMe₂)Me₂ and (4-XC₆H₄)SiMe-(EMe₂)CH₂CH₂E'Me₂ ($X = \text{F, Cl}$; E, E' = N, P, As) (P. Aslanidis, J. Grobe), (249)103
- Metal dithioformates, nucleophilic attack by tertiary phosphines on; preparation and structure of $[(\text{dppe})\text{Fe}[\text{S}, \text{C}(\text{H})-\text{dppe}]]\text{BPh}_4 \cdot \text{CH}_2\text{Cl}_2$ (G. Bianchini, A. Meli, F. Nuzzi, P. Dapporto), (236)245
- Metallated arsananes and stibanes with chiral iron substituents (H.-A. Kaul, D. Greisinger, M. Luksza, W. Malisch), (228)C29
- ortho*-Metallated arylhydrazido complex, $[\text{Ir}(\text{NHNHC}_6\text{H}_3\text{NO}_2)(\text{CO})(\text{PPh}_3)_2]\text{BF}_4$, addition and substitution reactions with hydrogen chloride of (F.W.B. Einstein, T. Jones, D. Sutton, Z. Xiaoheng), (244)87
- ortho*-Metallated iridium complexes derived from reactions of aryl diazonium ions with $\text{IrH}(\text{CO})(\text{PPh}_3)_3$ and $\text{IrH}(\text{CO})_2(\text{PPh}_3)_2$ (J.A. Carroll, D. Sutton, Z. Xiaoheng), (244)73
- Metallatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199
- Methane elimination from a platinum complex, theoretical study of (A. Flores-Riveros, O. Novaro), (235)383
- (η^1 -2-Methoxyallyl)cyclopentadienyl-dicarbonyliron complex, enhanced reactivity in cycloaddition reactions with olefins by introduction of a phosphite ligand (R. Baker, V.B. Rao, E. Erdik), (243)451
- Methyldiphenylphosphine complexes of molybdenum(0), dinitrogen vs. η^6 -arene coordination in (H. Azizian, R. Luck, R.H. Morris, H. Wong), (238)C24
- Methylphosphine-bridged hexacarbonyl-diiron complexes, $\text{Fe}_2(\text{CO})_6(\mu\text{-PHMe})_2$, ¹H and ³¹P NMR spectra of (P.M. Treichel, D.J. Berg), (243)315
- Methyltris(dialkylphosphino)silanes, reactions with carbonyl cluster complexes of (D.F. Foster, B.S. Nicholls, A.K. Smith), (244)159
- Mixed-metal carbido cluster $\text{Fe}_5\text{C}(\mu_2\text{-CO})_5(\text{CO})_1, (\mu_2\text{-AuPEt}_3)(\mu_4\text{-AuPEt}_3)$, synthesis and structural characterisation of and oxidation of Fe-Au clusters (B.F.G. Johnson, D.A. Kaner, J. Lewis, M.J. Rosales), (238)C73
- Mixed metal decaosmium carbido clusters; X-ray structures of the monoanions $[\text{Os}_{10}\text{C}(\text{CO})_{14}\text{Cu}(\text{NCMe})]^-$ and $[\text{Os}_{10}\text{C}(\text{CO})_{10}\text{AuPPh}_3]^-$ (B.F.G. Johnson, J. Lewis, W.J.H. Nelson, M.D. Vargas, D. Braga, M. McPartlin), (246)C69
- Molybdenum carbonyl complexes of diphenylphosphinous acid and its derivatives, synthesis and characterisation of (G.M. Gray, C.S. Krahanzel), (238)209

- Molybdenum *cis*-disubstituted carbonyl complexes, correlation of NMR chemical shifts and CO stretching force constants for (G.M. Gray, C.S. Kraihanzel), (241)201**
- [$\text{Mo}(\text{N}_2)_2(\text{dppe})_2$], reactions with organic isocyanates of (F. Minzoni, C. Pelizzi, G. Predieri), (231)C6
- Mono-P-donor crown ether hybrid ligand complexes with potential for activation of coordinated CO via selective cation binding (J. Powell, K.S. Ng, W.W. Ng, S.C. Nyburg), (243)C1**
- Mono-hydrido-bridged platinum(II) complexes, synthetic and spectroscopic studies of (D. Carmona, R. Thouvenot, L.M. Venanzi, F. Bachetti, L. Zambonelli), (250)589**
- Multidentate ligand stabilised metal carbonyl cluster complexes, reactions with phosphine and immobilisation on silica or organic polymers of (D.F. Foster, J. Harrison, B.S. Nicholls, A.K. Smith), (248)C29**
- [$\text{Nb}(\eta^5\text{-C}_5\text{H}_5)_2\{\text{PS}_2(\text{OR})_2\}_2$], EPR study of the electronic structure of; formation of derivatives by cleavage of S—S bonds in (J. Sala-Pala, J.-L. Migot, J.E. Guerchais, L. Le Gall, F. Grosjean), (248)299
- Nickel(0) complexes in reactions with *p*-quinones; formation of phosphine-substituted radical anions (E. Uhlig, R. Fischer, R. Kirmse), (239)385**
- Nickel(II) induced reactions between Co and alkynes under maintenance of the triple bonds (H. Hoberg, H.J. Riegel), (241)245**
- Nickelocene in reaction with tetrahalomethyl-di-*t*-butylhalophosphide systems (N. Kuhn, M. Winter), (232)C48**
- Nonacarbonyl-diiron and -diruthenium, substituted derivatives and their susceptibility to electrophilic attack of; X-ray crystal structure of [$\text{Fe}_2(\mu\text{-Br})-(\text{CO})_4[\mu\text{-}(\text{C}_6\text{H}_5\text{O})_2\text{PN}(\text{C}_2\text{H}_5)_2\text{P}(\text{OC}_6\text{H}_5)_2]_2\text{-PF}_6$] (G. de Leeuw, J.S. Field, R.J. Haines, B. McCulloch, E. Meintjes, C. Monberg, K.G. Moodley, G.M. Olivier, C.N. Sampson, N.D. Steen), (228)C66**
- Octahedral carbyneosmium(II) complexes (G.R. Clark, N.R. Edmonds, R.A. Paupit, W.R. Roper, J.M. Waters, A.H. Wright), (244)C57**
- Organomercurials, interaction with zero-valent nickel complex of (L.S. Isaeva, L.N. Morozova, V.V. Bashilov, P.V. Petrovskii, V.I. Sokolov, O.A. Reutov), (243)253**
- Organorhodium complexes with chelating phosphine ligands, synthesis, NMR spectral *cis*, *trans* influence and molecular structure of (E. Arpac, L. Dahlenburg), (241)27**
- $\text{OsH}_4(\text{PMe}_2\text{Ph})_3$, dimerisation following photodissociation of dihydrogen of (M.A. Green, J.C. Huffman, K.G. Caulton), (243)C78
- Osmaboranes and iridatetraborane, synthesis and NMR spectra of (J. Bould, N.N. Greenwood, J.D. Kennedy), (249)11**
- Osmium coordinated formaldehyde, synthesis of selenoformaldehyde and telluroformaldehyde complexes from (C.E.L. Headford, W.R. Roper), (244)C53**
- Palladium complexes, mechanism of formation and as catalysts, in reactions of palladium phosphine halides towards molecular hydrogen (A.S. Berenblyum, A.P. Aseeva, L.I. Lakhman, I.I. Moiseev), (234)237**
- Palladium complexes, mechanism of formation and as catalysts, in reactions with molecular hydrogen (A.S. Berenblyum, A.G. Knizhnik, S.A. Mund, I.I. Moiseev), (234)219**
- Palladium(I) promoted cleavage of C—P bonds in tertiary phosphines (K. Kikukawa, T. Matsuda), (238)243**
- Palladium-(2-pyridyl) bonds, insertion of isocyanides into (A. Mantovani, B. Crociani), (236)C37**
- Palladium(II)-styrene three-coordinate complex, [$\text{Pd}(\eta^5\text{-C}_5\text{H}_5)(\text{PEt}_3)(\text{styrene})\text{-BF}_4$], molecular structure of (K. Miki, M. Yama, Y. Kai, N. Kasai), (239)417**
- Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), (247)203**
- Pentacarbonylalkylmanganese, photochemical reactions with 1,3-butadienes and 1,3-pentadienes and insertion reactions with olefins into Mn—C bonds of (W. Lipps, C.G. Kreiter), (241)185**
- Pentacarbonyliron in reaction with Group V donor ligands in the presence of [$(\eta^5\text{-C}_5\text{H}_5\text{R})\text{Fe}(\text{CO})_2$]₂ and [$(\eta^5\text{-C}_5\text{Me}_5)\text{Fe}(\text{CO})_2$]₂ as catalysts (M.O. Albers, N.J. Coville, E. Singleton), (232)261**

- Penta- and tetra-carbonylphosphine-niobates(-I), preparation and spectroscopic properties of (H.-C. Bechthold, D. Rehder), (233)215
- 2,4-Pentadienoic acid methyl ester, reactions with nickel(0) and platinum(0) compounds of (H.M. Büch, G. Schroth, R. Mynott, P. Binger), (247)C63
- Pentamethylcyclopentadienyl-bis(trimethylphosphine)cobalt and -trimethylphosphinecarbonylcobalt, synthesis and reactivity of and H/D exchange in dicationic pentamethylcyclopentadienylcobalt(III) complexes (H. Werner, B. Heiser, B. Klingert, R. Dölfel), (240)179
- Pentamethylcyclopentadienylcopper, a metal ligand fragment isolobal with methylene (G.A. Carriero, J.A.K. Howard, F.G.A. Stone), (250)C28
- Phenylisothiocyanate nickel dihapto-bonded complex, synthesis and crystal structure of (C. Bianchini, D. Masi, C. Mealli, A. Meli), (247)C29
- Phenyllithium and phenylsodium σ -functional derivatives of IVB and VB elements, synthesis and rearrangements of (J. Heinicke, E. Nietzschmann, A. Tzschach), (243)1
- 1-Phospha- and 1-arsa-4-boracyclohexadienes, preparation and properties of (H.O. Berger, H. Nöth), (250)33
- Phosphido- and chloro-bridged carbonyldiiron compounds, synthesis and structural characterisation of (R.L. De, J. von Seyerl, G. Huttner) (243)331
- Phosphidodi- μ -carbonyltetradecacarbonyl hexacobaltate(1-) anion in its tetraphenylphosphonium salt, crystal and molecular structure of (G. Ciani, A. Sironi), (241)385
- Phosphine and phosphite derivatives of bi-metallic Group VI complex, ligand transfer and oxidative decarbonylation in; crystal structure of $[(C_5H_5)(CO)_2\text{-W}(\mu\text{-SMe})(\mu\text{-I})\text{W}(CO)_3\text{I}]$ (J.L. Le Quéré, F.Y. Pétillon, J.E. Guerchais, Lj. Manojlovic-Muir, K.W. Muir, D.W.A. Sharp), (249)127
- Phosphine stabilised carbonylnitrosyl-vanadium compounds, crystal structure of $V(CO)_3(NO)(PMe_3)_2$ (J. Schiemann, E. Weiss), (232)229
- Phosphine stabilised carbonylnitrosyl-vanadium compounds, preparation and spectroscopic properties of (J. Schiemann, E. Weiss, F. Näumann, D. Rehder), (232)219
- Phosphineborane analogues of trimethylsilyl amides (C.H. Yoder, L.A. Miller), (228)31
- Phosphine-nickel(II), -cobalt(II), -palladium(0) and -palladium(II) complexes as catalysts in cross-coupling reactions of aryl- and alkyl-Grignard reagents with organic tellurides (S. Uemura, S.-I. Fukuzawa, S.R. Patil), (243)9
- Phosphino-cobalt(II) complexes, kinetic investigation of reductive carbonylation of (M. Basato, M. Bressan, P. Rigo), (232)81
- Phosphinothiolylenes, reactions with tetracarbonyliron-disodium complexes of (E. Lindner, G.A. Weiss), (244)C9
- 2-Phosphinyl and 2-phosphonylethyl diorganotin halides, synthesis, molecular structure and stereoisomerization of (H. Weichmann, C. Mügge, A. Grand, J.B. Robert), (238)343
- Phosphoranium ions as π -ligands in transition metal complexes, MO study of structure and bonding in (N.M. Kostić), (240)71
- Phosphorus and arsenic di-bridged heterometal-metal bonds (A. Trenkle, H. Vahrenkamp), (236)71
- Phosphorus, arsenic, antimony and bismuth trivalent compounds and their $LNi(CO)_3$ complexes, Fourier transform ^{13}C NMR study of (G.M. Bodner, C. Gagnon, D.N. Whittern), (243)305
- Phosphorus and tin containing metalla-cyclic compounds of platinum, syntheses and structures of (H. Weichmann), (238)C49
- Platina- and rhoda-cycloalkanes, synthesis by substitution and oxidative addition to C—Cl bonds and properties of (E. Lindner, F. Bouachir, R. Fawzi, D. Hübner), (235)345
- Platinum(II) cationic ylide complex, structure and formation from a chloromethylplatinum complex of (C. Engelter, J.R. Moss, M.L. Niven, L.R. Nassimbeni, G. Reid), (232)C78
- Platinum(0) and palladium(0) tertiary phosphine complexes, reactions with phenyl dicyanoxiranes of (R.B. Osborne, J.A. Ibers), (232)371
- Platinum(II) three coordinate cationic complex, $[(Ph_3PCH_2)_2(Ph_3P)PtCl_2]$ [AlCl₄]⁻, preparation and derivatives of (O.J. Scherer, H. Jungmann), (228)C61
- Platinum(II)-tin bonded compounds, ^{31}P , ^{119}Sn and ^{195}Pt NMR studies on (S. Carr, R. Colton, D. Dakternieks), (249)327

- Platinum(0) trigonal planar, mixed olefin complex, $[\text{Pt}(\text{P}(\text{C}_6\text{H}_{11})_3)(\text{C}_2\text{H}_4)(\text{C}_2\text{F}_4)]$, low temperature X-ray diffraction study of (J.A.K. Howard, P. Mitrprachachon, A. Roy), (235)375
- Platinum—lead bonded compounds, ^{31}P , ^{195}Pt and ^{207}Pb NMR studies on (S. Carr, R. Colton, D. Dakternieks), (240)143
- Polyhedral skeletal electron pair theory: its extension to non-conical ML_2 fragments (D.G. Evans, D.M.P. Mingos), (240)321
- Polypyrazolylborate molybdenum optically active complexes with aminophosphines as chiral ligands (E. Frauendorfer, H. Brunner), (240)371
- trans*-[$\text{PtCl}(\text{COCl}_6\text{H}_{13-n})(\text{PPh}_3)_2$], intermediate precursor in catalytic hydroformylation of 1-hexane, isolation and molecular structure of (R. Bardi, A.M. Piazzesi, A. Del Pra, G. Cavinato, L. Toniolo), (234)107
- 1-Pyrazolyliridium(I) derivatives, X-ray evidence for monodentate pyrazolato ligands (A.L. Bandini, G. Banditelli, F. Bonati, F. Demartin, M. Manassero, G. Minghetti), (238)C9
- [$\text{ReCl}(\text{Ph}_2\text{PCH}_2\text{CH}_2\text{PPh}_2)_2$], preparation and X-ray structure of (D.L. Hughes, A.J.L. Pombeiro, C.J. Pickett, R.L. Richards), (248)C26
- [$\{\text{Rh}(\text{C}_5\text{Me}_5)\}_3\text{Cl}_5\text{np}_3\text{PF}_6 \cdot 0.5\text{C}_3\text{H}_8\text{O}$ (np_3 = tris(2-diphenylphosphinoethyl)-amine), crystal and molecular structures of (P. Dapporto, P. Stoppioni, P.M. Maitlis), (236)273
- Rhodium(I) biphosphine complexes, reuse in catalytic homogeneous hydrogenation of 2-acetamidoacrylic acid (A. Uehara, J.C. Bailar, Jr.), (239)11
- Rhodium(I) cationic complexes containing 2,2'-bis(diphenylphosphino)biphenyl, preparation and catalytic properties of (A. Uehara, J.C. Bailar, Jr.), (239)1
- Rhodium cationic hydrogenation catalysts containing chelating diphosphine ligands; effect of chelate ring size (C.R. Landis, J. Halpern), (250)485
- Rhodium(III) complex, $\text{RhCH}_2\text{PMe}_2\text{CH}_2\text{CH}_2\text{PMe}_2$, synthesis of (H. Werner, L. Hofmann, W. Paul), (236)C65
- Rhodium complexes, catalytic activity in oligomerisation of terminal hydroxy-acetylenes (H.-A. Schäfer, R. Marcy, T. Rüping, H. Singer), (240)17
- Rhodium(I) complexes of chiral phosphines derived from amino acids, asymmetric hydrogenation of acetophenone with (F. Joó, E. Trócsányi), (231)63
- Rhodium-DIOP catalytic system, enantio-selective hydrogeneration of amino-alkyl aryl ketones with (S. Törös, L. Kollár, B. Heil, L. Markó), (232)C17
- Rhodium(I)—iridium(III) hydrido-bridged phosphine complex, preparation and characterisation of (A. Musco, R. Naegeli, L.M. Venanzi, A. Albinati), (228)C15
- Rhodium and iridium phosphine complexes, hydrogenation of ketones and olefins via hydrogen transfer catalysed by (R. Spogliarich, A. Tencich, J. Kaspar, M. Graziani), (240)453
- Rhodium(I) mono- and di-nuclear cationic complexes with phosphine oxides and related ligands (R. Usón, L.A. Oro, M.A. Ciriano, F.J. Lahoz, M.C. Bello), (234)205
- Rhodium—rhodium asymmetrical dinuclear complexes, synthesis and properties of $\text{C}_5\text{Me}_5(\text{L})\text{Rh}(\mu\text{-CO})_2\text{RhC}_5\text{Me}_5$ (H. Werner, B. Klingert), (233)365
- [$\text{Rh}_4(\mu\text{-PPH}_2)_4(\mu\text{-CO})_2(\text{CO})_4$], synthesis and crystal structure of its monoclinic form of (C.P. Lau, C.Y. Ren, L. Book, T.C.W. Mak), (249)429
- [$\text{Rh}_3(\mu\text{-PPH}_2)_3(\text{CO})_6(\text{PPH}_2\text{H})$] six-membered inorganic ring complex, synthesis and molecular structure of (R.B. English, R.J. Haines, N.D. Steen), (238)C34
- $\text{Ru}_5\text{C}(\text{CO})_{11}[\text{PPh}_3(\text{CH}_2)_n\text{PPh}_2]$, chain length effects on the coordination mode of bidentate phosphines in (J. Evans, B.P. Gracey, L.R. Gray, M. Webster), (240)C61
- Ruthenium chiral complexes, asymmetric Canizzaro reaction with (M. Bianchi, U. Matteoli, G. Menchi, P. Frediani, F. Piacenti), (240)65
- Ruthenium chiral complexes, investigations on hydrogen transfer reactions in asymmetric synthesis by (M. Bianchi, U. Matteoli, P. Frediani, G. Menchi, F. Piacenti), (240)59
- Ruthenium cluster carbonyls containing tertiary phosphines, phosphites, arsines, triphenylstibine or isocyanides, radical-ion-initiated synthesis of (M.I. Bruce, J.G. Matsons, B.K. Nicholson), (247)321

- Selenophosphoranes as ligands in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (246)C80
- Silica-supported iridium—phosphine catalysts for the reaction of silanes with alcohols (J. Dwyer, H.S. Hilal, R.V. Parish), (228)191
- η^6 -Substituted arene- η^5 -cyclopentadienyl-iron hexafluorophosphates, ring replacement and nucleophilic substitution reactions of (C.C. Lee, U.S. Gill, M. Iqbal, C.I. Azogu, R.G. Sutherland), (231)151
- Tertiary phosphineplatinum(0) complexes, protonation by ammonium ion of; characterization and reactions of the resulting hydrides of (R.G. Goel, R.C. Srivastava), (244)303
- Tetra- μ -carbonylhexacarbonyltris[bis(diphenylphosphino)methane]hexarhodium, synthesis and structural characterisation of (A. Ceriotti, G. Ciani, L. Garlaschelli, U. Sartorelli, A. Sironi), (229)C9
- Tetrakis(triphenylphosphine)rhodium hydride, catalytic activity in transfer hydrogenation between alcohols and α , β -unsaturated ketones of; evidence for regiospecificity and unusual rate-limiting step (D. Beaupère, P. Bauer, L. Nadjo, R. Uzan), (238)C12
- Tetrakis(triphenylphosphine)rhodium hydride, complex formation with alcohols in benzene solution of (D. Beaupère, P. Bauer, L. Nadjo, R. Uzan), (231)C49
- Tetraphenyldiphosphine oxide complexes with Group VIB metal carbonyls (E.H. Wong, R.M. Ravenelle, E.J. Gabe, F.L. Lee, L. Prasad), (233)321
- Tetraphenyldiphosphoxane ($\text{Ph}_2\text{POPPh}_2$) ligand, chelating and monodentate coordination modes of (E.H. Wong, L. Prasad, E.J. Gabe, F.C. Bradley), (236)321
- Tetraruthenium cluster containing quadruply bridging PPh groups, rearrangement to cluster containing triply bridging PPh ligands through uptake of CO; crystal and molecular structures of $[\text{Ru}_4(\mu_3-\text{XPh})(\text{CO})_{13}]$ ($\text{X} = \text{P, As}$) J.S. Field, R.J. Haines, D.N. Smit, K. Natarajan, O. Scheidsteiger, G. Huttner), (240)C23
- Thiocarbamoyl phosphine ligands and their manganese and rhenium carbonyl complexes, ^1H and ^{13}C NMR spectroscopy of (A. Antoniadis, U. Kunze, M. Moll), (235)177
- Thionocarbonate fixation by Group VIB metal carbonyls, chemistry, spectroscopy and molecular structure of the products of (J. Daub, J. Kappler, K.H. Jogun, J.J. Stezowski, H. Binder), (240)239
- Thiophosphoranes as ligands in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (239)C31
- Titanium and zirconium complexes containing cyclopentadienyl-diphenylphosphine and -ethyldiphenylphosphine ligands, access to heterobimetallic structures (J.C. Leblanc, C. Moise, A. Maisonnat, R. Poilblanc, C. Charrier, F. Mathey), (231)C43
- Transition metal acetylides, reactions with tetracyanoethylene of; synthesis and structure of $\text{Rh}(\text{C}\equiv\text{CPh})[\text{n}^2-\text{C}_2(\text{CN})_4](\text{NCMe})(\text{PPPh}_3)_2$ (M.I. Bruce, T.E. Hambley, M.R. Snow, A.G. Swincer), (235)105
- Transition metal complexes with steroidal phosphine ligands, asymmetric hydrogenation, hydroformylation and hydrocarbalkoxylation of olefins by (S. Gladiali, G. Faenda, M. Marchetti, C. Botteghi), (244)289
- Transition metal phosphaalkyne complexes; synthesis, crystal and molecular structure of $[\text{Co}_2(\text{CO})_6(\mu^{\text{t}}\text{BuCP})\text{W}(\text{CO})_5]$ (J.C.T.R. Burkett-St. Laurent, P.B. Hitchcock, H.W. Kroto, M.F. Meidine, J.F. Nixon), (238)C82
- Transition metal-substituted carbonic acid derivatives (K. Eberl, M. Wolfgruber, W. Sieber, F.R. Kreissl), (236)171
- Trialkylphosphines, assignment of ^{13}C NMR resonances from spin-lattice relaxation time measurements in spectra of (G.M. Bodner, L. Bauer), (226)85
- Tricarbonylbis(trimethylphosphine)- η^2 -chloro- or -bromo-fumaric acid dimethyl ester octahedral tungsten complexes, oxidative rearrangement of the olefin in and loss of CO ligands from (C.G. Kreiter, U. Koemm), (238)C67
- Tri- μ -carbonyl- μ -carbonylheptacarbonylpentakis(trimethylphosphite)-octahedro-hexairidium, synthesis and X-ray characterisation of (F. Demartin, M. Manassero, M. Sansoni, L. Garlaschelli, M.C. Malatesta, U. Sartorelli), (248)C17

- Tricarbonylchromium $\eta^6\lambda^3$ -phosphorin and $\eta^6\lambda^5$ -phosphorin-ylide complexes, reactions of (K. Dimroth, H. Kaletsch), (247)271
- Trichloronitridomolybdenum(VI) complexes, preparation and their suitability as precatalysts for metathesis of 2-pentenes of (K. Seyferth, R. Taube), (229)C19
- Triethylphosphinecarbon disulphide adduct, Et₃PCS₂, reactivity toward iron(II) cations of; X-ray crystal structure of the complexes [(depe), Fe-(S₂CPEt₃)₂(BPh₄)₂ and [(depe), Fe-(S₂CH)(BPh₄)₂] (depe = bis(diethylphosphino)ethane (C. Bianchini, P. Innocenti, A. Meli, A. Orlandini, G. Scapacci), (233)233
- Triethylsilanes, alcoholysis catalysed by bis(trimethylphosphinedicarbonyldichlororuthenium) (U. Oehmichen, H. Singer), (243)199
- Triferrocenyliodidephosphonium triiodide, synthesis and X-ray study of (G.V. Gridunova, V.E. Shklover, Yu.T. Strukov, V.D. Vil'chevskaya, N.L. Podobedova, A.I. Krylova), (238)297
- Trihydrobis(triphenylphosphine)iridium, IrH₃(PPPh₃)₂, reaction with diazonium salts of (M. Angoletta, G. Gaglio), (234)99
- Trimethyl(methylene)phosphorane as catalyst in isomerisation of an acyliron phosphorus ylide to a phosphonium salt (H. Blau, W. Malisch), (235)C1
- Trimethyl(methylene)phosphorane in deprotonation reactions with cationic carbeneiron complexes (G. Grötsch, W. Malisch), (246)C42
- Trimethylphosphine-dinitrogen-molybdenum and -tungsten complexes, preparation and properties of (E. Carmona, J.M. Marin, M.L. Poveda, R.D. Rogers, J.L. Atwood), (238)C63
- Trimethylphosphoranylidene(methyl(trimethylsiloxy)carbene complexes of chromium, molybdenum and tungsten, formation and E/Z isomerisation of (S. Voran, H. Blau, W. Malisch, U. Schubert), (232)C33
- Triphenylphosphine peroxopalladium, oxidation of dienes by (M. Dagonneau, J.F. Fauvarque), (241)113
- (η^5 -Triphenylphosphonium cyclopenta-dienylide)(η^4 -diene)-palladium(II) and -platinum(II) dicationic complexes (G. Tresoldi, F. Faraone, P. Piraino, F.A. Bottino), (231)265
- Triphenylphosphonopropionbetainetri-organotin(IV) salts, [(C₆H₅)₃P(CH₂)₂CO₂SnR₃]⁺X⁻, synthesis by nucleophilic displacement of anions from triorganotins of (S.-W. Ng, J.J. Zuckerman), (234)257
- Triphenyl(*P,P,P*-triphenylphosphine imidato-N)phosphorus(I) thiocyanate, crystal and molecular structure of; configuration of (R,*P*NPR₃)⁺ (C. Glidewell, H.D. Holden), (226)171
- Triphosphorus mononuclear cyclic complexes, structural correlations and NMR properties of (M. Di Vaira, L. Sacconi, P. Stoppioni), (250)183
- Tris- μ -[bis(diphenylphosphino)methane]-diplatinum(0), preparation and characterisation of (M.C. Grossel, M.P. Brown, C.D. Nelson, A. Yavari, E. Kallas, R.P. Moulding, K.R. Seddon), (232)C13
- Tris(dimethylphenylphosphine)penta-hydridorhenium(V), flash photolytic investigation of transients in photochemistry of (S. Muralidharan, G. Ferraudi, M.A. Green, K.G. Caulton), (244)47
- Trishydridoruthenium(IV) cationic complexes, synthesis by protonation of neutral dihydridoruthenium(II) compounds of (H. Werner, H. Kletzin), (243)C59
- Tris(triphenylphosphine)carbonyl-rhodium and -iridium, electroregeneration of (G. Zotti, S. Zecchin, G. Pilloni), (246)61
- Tris(triphenylphosphine)cobalt activated NaBH₄, deuterium tracing experiments of selective hydrogenation of the C≡C bond in PHC≡CPH with (B. Steinberger, M. Michman, H. Schwarz, G. Höhne), (244)283
- Tris(triphenylphosphine)dichlororuthenium as catalyst in selective conversion of primary amines into *N,N*-dimethylalkyl- and *N,N*-dialkylmethyl-amines with methanol (A. Arcelli, Bui-The-Khai, G. Pozzi), (235)93
- Tris(triphenylphosphine)dichlororuthenium as catalyst in synthesis of *N*-methyl-dialkylamines from *N*-methyl- and *N,N*-dimethylalkylamines (A. Arcelli, Bui-the-Khai, G. Porzi), (231)C31
- Tungsten and molybdenum phosphine hexahydrides, the first examples of nine coordination among mononuclear molybdenum complexes (R.H. Crabtree, G.G. Hlatky), (238)C21

- Tungsten octahedral complexes with unsaturated ketones and aldehydes
asymmetrical olefinic ligands, hindered (R. Rumin), (247)351
olefin rotation in (U. Koemm, C.G.
Kreiter), (240)27
- Undecacarbonyltetrairidiumtriethylphosphine, $\text{Ir}_4(\text{CO})_{11}\text{PEt}_3$, equilibrium
between two isomers of and pathway Carbon disulphide-bridged metal com-
for carbonyl scrambling in (B.E. Mann, plexes, preparation of (H. Stolzenberg,
C.M. Spencer, A.K. Smith), (244)C17 W.P. Fehlhammer), (235)C7
- Vinylidene-iron and -ruthenium disubstituted, nucleophilic properties of Carbon disulphide-iron, -palladium and
 η^1 -acetylide ligands (S. Abbott, S.G. -platinum complexes, reactions with
Davies, P. Warner), (246)C65 electrophiles of (H. Stolzenberg, W.P.
Fehlhammer, P. Dixneuf), (246)105
- Ylideplatinum(II) complexes, synthesis Carbon monoxide insertion into a Pt^{II} —C
via α -functionalised alkylplatinum(II) σ -bond, dependence on the nature of
intermediates and comparison with coordinated ditertiary phosphine of
palladium(II) complexes of; X-ray structure (M.A. Bennett, A. Rokicki),
of *trans*-[$\text{Pt}(\text{CH}_2\text{PEt}_3)_2\text{I}(\text{PEt}_3)_2\text{I}$] (244)C31
(N.J. Kermode, M.F. Lappert, B.W.
Skelton, A.H. White, J. Holton),
(228)C71
- (Chloro)(methyl)((+)-2*S*,3*S*-O-isopropylidene-2,3-dihydroxy-1,4-bis(diphenylphosphino)butane)platinum(II), crystal and molecular structure of; incorporation of chiral amines in chiral platinum complexes (N.C. Payne, D.W. Stephan), (228)203
- Cyclometallation with platinum(II) and palladium(II) of $\text{P}-t\text{-Bu}_2-i\text{-Bu}$ and $\text{PPh}_2-i\text{-Bu}$ (A.R.H. Bottomley, C. Crocker, B.L. Shaw), (250)617
- Dichloromethane oxidation to carbonate ligands (O.J. Scherer, H. Jungmann, K. Hussong), (247)C1
- Diphenylphosphoryl azide and perfluorophenylsulphonyl azide, reactions with triphenylphosphane-platinum(0), -rhodium(I), -iridium(I), -ruthenium(0), -cobalt(II) and -copper(I) complexes of (K. Bartel, K. v. Werner, W. Beck), (243)79
- $\text{Fe}_3(\mu_3-\text{Te})_2(\text{CO})_9$, synthesis of heterometallic clusters from and comparisons with analogous sulphide clusters (L.E. Bogan, Jr., D.A. Lesch, T.B. Rauchfuss), (250)429
- Formamidino and triazenido dinuclear compounds, [$\{2,6-(\text{Me}_2\text{NCH}_2)_2\text{C}_6\text{H}_3\}-(p\text{-tolylNYNR})\text{PtHgBrCl}$] ($\text{Y} = \text{CH}, \text{N}$), containing a Pt—Hg donor bond (A.F.M.J. van der Ploeg, G. van Koten, K. Vrieze), (226)93
- Fulvene—platinum complexes, X-ray crystal structure of [$\text{Pt}(\eta^2-\text{C}_5\text{H}_4\text{CPh}_2)-(\text{PPh}_3)_2$] (A. Christofides, J.A.K. Howard, J.L. Spencer, F.G.A. Stone), (232)279
- Gold and platinum tertiary phosphine low nuclearity complexes, MO analysis of; development of isolobal analogies for the $\text{M}(\text{PR}_3)$ fragment (D.G. Evans, D.M.P. Mingos), (232)171
- Platinum
- Alkoxy carbonylplatinum(II) complexes, photochemistry of (C.F. Shiba, W.H. Waddell), (241)119
- Alkylnylplatinum(II) binuclear complexes, preparation of (R.J. Puddephatt, M.A. Thomson), (238)231
- Allylsilanes coordinated to platinum(II), hydrolysis of (J.W. Fitch, M. Brown, N.H. Hall, P.B. Mebe, K.A. Owens, M.R. Roesch), (244)201
- Bis- μ -{bis(diphenylphosphino)methane}-chlorodihydridoplatinum(II) hexafluorophosphate, fluxional behaviour of (M.C. Grossel, R.P. Moulding, K.R. Seddon), (247)C32
- Bis[bis(diphenylphosphino)methanido]-platinum(II), [$\text{Pt}(\text{Ph}_2\text{PCHPPh}_2)_2$], preparation and X-ray crystal structure of (M.P. Brown, A. Yavari, L. Manojlovic-Muir, K.W. Muir, R.P. Moulding, K.R. Seddon), (236)C33
- 1,2-Bis(imino)ethylpalladium(II) complexes preparation and reactivity of (B. Crociani, A. Mantovani, A. Scrivanti), (233)387
- Bis(triethylphosphine)methylhaloplatinum complexes, [$\text{Pt}(\text{X})(\text{CH}_3)_2[\text{P}(\text{C}_2\text{H}_5)_3]_2$] ($\text{X} = \text{Cl}, \text{Br}, \text{I}, \text{CN}$), bond energies and thermal decomposition of (A. Morville, G. Favero, A. Turco), (243)111
- Bis(2,4,6-trimethylpyridinedichloroplatinum) as catalyst in hydrogenation and hydrosilylation of olefins, and α,β -

- Hydridocyanoalkylplatinum(II) complexes, photoinduced reductive elimination of cyanoalkanes from (S. Sostero, O. Traverso, R. Ros, R.A. Michelin), (246)325
- Iridium-substituted difluorophosphines, preparation and properties of; synthesis of PF_2 -bridged heterometal complexes (E.A.V. Ebsworth, R.O. Gould, N.T. McManus, D.W.H. Rankin, M.D. Walkinshaw, J.D. Whitelock), (249)227
- Low-valent transition metal complexes, reactions with 1,2,3,4,7,7-hexafluorobicyclo[2.2.1]heptadiene and 2,3-bis(trimethyltin)- and 2,3-dichloro-1,4,5,6,7,7-hexafluorobicyclo[2.2.1]-hepta-2,5-dienes of (B.L. Booth, S. Casey, R.P. Critchley, R.N. Haszeldine), (226)301
- Low-valent transition metal complexes, reactions with perfluoronorbornadiene of (B.L. Booth, S. Casey, R.N. Haszeldine), (226)289
- $\text{M}(\text{o-C}_6\text{H}_4\text{CH}_2\text{PR}_2)_2$, ($\text{M} = \text{Pd, Pt}$) cyclo-metallated complexes, metallation reactions of (H.-P. Abicht, P. Lehniger, K. Issleib), (250)609
- Metal-tetraazadiene complexes, synthesis via Ar_2N_4 ligand transfer of; evidence for a stable tetraazadiene-bridged intermediate (P. Overbosch, G. van Koten), (229)193
- Methane elimination from a platinum complex, theoretical study of (A. Flores-Riveros, O. Novaro), (235)383
- Methyldiplatinum(I) complexes (K.A. Azam, R.J. Puddephatt, M.P. Brown, A. Yavari), (234)C31
- Mono-hydrido-bridged platinum(II) complexes, synthetic and spectroscopic studies of (D. Carmona, R. Thouvenot, L.M. Venanzi, F. Bachechi, L. Zambonelli), (250)589
- Mono hydridomonophosphido-bridged diplatinum complexes, synthesis and molecular structure of (J. Jans, R. Naegeli, L.M. Venanzi, A. Albinati), (247)C37
- Mono- and poly-nuclear transition metal complexes, fast atom bombardment mass spectrometry of (R. Davis, I.F. Groves, J.L.A. Durrant, P. Brooks, I. Lewis), (241)C27
- Olefin hydroformylation and hydrocarbo-alkoxylation competitively catalysed by $[\text{PtCl}_2(\text{PPh}_3)_2]/\text{SnCl}_2$ system (G. Cavinato, L. Toniolo), (241)275
- Organoplatinum bridging diselenide complex, $[(\text{PtMe}_3\text{I})_2\text{MeSeSeMe}]$, X-ray crystal structure of (E.W. Abel, A.R. Khan, K. Kite, M.B. Hursthouse, K.M.A. Malik, M.A. Mazid), (235)121
- Palladium(II) and platinum(II) carbon-bonded complexes, mechanisms of nucleophilic and electrophilic attack on (U. Bellucco, R.A. Michelin, P. Uguagliati, B. Crociani), (250)565
- Palladium(II) and platinum(II) penta-fluorophenyl derivatives with O-donor ligands (G. López, G. García, N. Cutillas, J. Ruiz), (241)269
- Palladium-(2-pyridyl) bonds, insertion of isocyanides into (A. Mantovani, B. Crociani), (236)C37
- 2,4-Pentadienoic acid methyl ester, reactions with nickel(0) and platinum(0) compounds of (H.M. Büch, G. Schroth, R. Myntott, P. Binger), (247)C63
- Pentamethylcyclopentadienylcopper, a metal ligand fragment isolobal with methylene (G.A. Carriedo, J.A.K. Howard, F.G.A. Stone), (250)C28
- Phosphorus and tin containing metalla-cyclic compounds of platinum, syntheses and structures of (H. Weichmann), (238)C49
- Platina- and rhoda-cycloalkanes, synthesis by substitution and oxidative addition to C—Cl bonds and properties of (E. Lindner, F. Bouachir, R. Fawzi, D. Hübnér), (235)345
- Platinum(0) and palladium(0) tertiary phosphine complexes, reactions with phenyl dicyanooxiranes of (R.B. Osborne, J.A. Ibers), (232)371
- Platinum(II) cationic ylide complex, structure and formation from a chloromethylplatinum complex of (C. Engelter, J.R. Moss, M.L. Niven, L.R. Nassimbeni, G. Reid), (232)C78
- Platinum-lead bonded compounds, ^{31}P , ^{195}Pt and ^{207}Pb NMR studies on (S. Carr, R. Colton, D. Dakternieks), (240)143
- Platinum-mercury compounds as intermediates to mono- and di-arylplatinum(II) complexes (O. Rossell, J. Sales, M. Seco), (236)415
- Platinum(II) three coordinate cationic complex, $[(\text{Ph}_3\text{PCH}_2)(\text{Ph}_3\text{P})\text{PtCl}_3\text{AlCl}_4]$, preparation and derivatives of (O.J. Scherer, H. Jungmann), (228)C61
- Platinum(II)-tin bonded compounds, ^{31}P , ^{119}Sn and ^{195}Pt NMR studies on (S. Carr, R. Colton, D. Dakternieks), (249)327

- Platinum(0) trigonal planar, mixed olefin complex, $[\text{Pt}(\text{P}(\text{C}_6\text{H}_{11})_3)(\text{C}_2\text{H}_4)(\text{C}_2\text{F}_4)]$, low-temperature X-ray diffraction study of (J.A.K. Howard, P. Mitrprachachon, A. Roy), (235)375
- Polyhedral skeletal electron pair theory: its extension to non-conical ML_n fragments (D.G. Evans, D.M.P. Mingos), (240)321
- trans*-[PtCl(COC₆H₁₃-n)(PPh₃)₂], intermediate precursor in catalytic hydroformylation of 1-hexene, isolation and molecular structure of (R. Bardi, A.M. Piazzesi, A. Del Pra, G. Cavinato, L. Toniolo), (234)107
- [Pt^{II}(NH₂CH₂CH₂NH₂)(C₅H₄NC(O)CN-C₅H₃(CH₃)₂-3,5)]ClO₄ · 2H₂O, X-ray molecular structure of (G.-E. Matsubayashi, K. Ueyama, K. Nakatsu), (240)103
- Rhodium(I) and platinum(II) complexes with chelating bidentate isonitrile ligands (M.L. Winzenburg, J.A. Kargol, R.J. Angelici), (249)415
- Rhodium(I), iridium(I) and platinum(II) five-coordinate complexes containing three trichlorostannate ligands, synthesis and NMR studies of (M. Kretschmer, P.S. Pregosin, H. Rüegger), (241)87
- Ruthenium catalysed hydroacylation of olefins (P. Isnard, B. Denise, R.P.A. Sneeden, J.M. Cognion, P. Durual), (240)285
- Seven and twelve vertex carbaplatinaboranes, theoretical comparison of "slip" distortion and rotational barriers in (M.J. Calhorda, D.M.P. Mingos, A.J. Welch), (228)309
- Tertiary phosphineplatinum(0) complexes, protonation by ammonium ion of; characterization and reactions of the resulting hydrides of (R.G. Goel, R.C. Srivastava), (244)303
- Trifluoromethylgermylmercury derivatives (M.N. Bochkarev, N.L. Ermolaev, G.A. Razubaev, Yu.K. Grishin, Yu.A. Ustynyuk), (229)C1
- Trimethylplatinum(IV) thiol compounds, preparation and characterisation of (E.W. Abel, K. Kite, B.L. Williams), (231)271
- (η^4 -Triphenylphosphonium cyclopentadienylide)(η^4 -diene)-palladium(II) and -platinum(II) dicationic complexes (G. Tresoldi, F. Faraone, P. Piraino, F.A. Bottino), (231)265
- Triphosphorus mononuclear cyclic complexes, structural correlations and NMR properties of (M. Di Vaira, L. Sacconi, P. Stoppioni), (259)183
- Tris- μ -[bis(diphenylphosphino)methane]-dipiplatnum(0), preparation and characterisation of (M.C. Grossel, M.P. Brown, C.D. Nelson, A. Yavari, E. Kallas, R.P. Moulding, K.R. Seddon), (232)C13
- Tris(1-pyrazolyl)methane, metalation by dimethylplatinum(II) of (A.J. Canty, N.J. Minchin), (226)C14
- Ylideplatinum(II) complexes, synthesis via α -functionalised alkylplatinum(II) intermediates and comparison with palladium(II) complexes of; X-ray structure of *trans*-[Pt(CH₂PEt₃)₂(PEt₃)₂]I (N.J. Kermode, M.F. Lappert, B.W. Skelton, A.H. White, J. Holton), (228)C71

Potassium

- Alkali metal derivatives of octamethyltrisiladiazane, short Na—C contacts in the molecular structure of the disodium salt (D.J. Brauer, H. Bürger, W. Geschwandtner, G.R. Liewald, C. Krüger), (248)1
- Alkali-metal promoted transfer of dimethylsilylene from dodecamethylcyclohexasilane to silanes and dienes (R.T. Conlin, L.L. Peterson), (232)C71
- Alkali metal salts of pentacyclopentadienide (R. Zhang, M. Tsutsui, D.E. Bergbreiter), (229)109
- Alkali metal solutions, effect of cryptands on solubility and spectra in THF, dioxane and toluene (J. Lacoste, F. Schue), (231)279
- 2-Alkynyl ethers, conversion into allenic ethers of (H.D. Verkrijse, M. Verboom, P.E. van Rijn, L. Brandsma), (232)C1
- Carbanion α to sulphonides and sulphones, structure of (G. Chassaing, A. Marquet, J. Corset, F. Froment), (232)293
- η^6 - and η^5 -Fluorenylchromium tricarbonyl anions, ¹³C NMR study of reversible isomerisation of (Yu.F. Oprunenko, Yu.N. Luzikov, Yu.A. Ustynyuk, N.A. Ustynyuk), (231)137
- Heavier alkali metals; Annual Survey covering the year 1980 (E.M. Kaiser), (227)135

- Organoborate chemistry, fluorine substitution effects in; vibrational and X-ray structural analysis of $K[CH_3BF_3]$ (D.J. Brauer, H. Bürger, G. Pawelke), (238)267
- 1-Phenyl-2,5-diaryl(dialkyl)-arsoles, conversion with alkali metal and organolithium compounds of (G. Märkl, H. Hauptmann, A. Merz), (249)335
- Tributylstannyl anionoids, reactions with alkyl bromides of (M. Newcomb, M.G. Smith), (228)61
- Rhenium**
- η^3 -Allylmonocyanotricarbonyl metalate and η^3 -allylmononitriletricarbonyl-manganese and -rhenium, formation of (M. Moll, H. Behrens, H.-J. Seibold, P. Merbach), (248)329
- Arylrhenium derivatives, synthesis using organocopper reagents of (J.R. Sweet, W.A.G. Graham), (241)45
- Carboethoxy(silyl)alkylidene and silyl-ketenyl-bridged dirhenium complexes as by-products in silylcarbene synthesis (E.O. Fischer, P. Rustemeyer, O. Obama, D. Neugebauer, U. Schubert), (247)7
- Chloromethyl- and methoxymethyl-manganese, -rhenium and -ruthenium complexes, preparation of (J.R. Moss, S. Pellings), (236)221
- 2-Cyano-2-triphenylphosphoranylidene dithioacetic acid and its alkyl esters, coordination chemistry, IR and NMR spectroscopic investigations of (U. Kunze, R. Merkel, M. Moll), (248)205
- Decacarbonyldirhenium, photochemical reaction with cyclic and acyclic olefins (K.-H. Franzreb, C.G. Kreiter), (246)189
- Decacarbonyldirhenium, photochemical reaction with triphenylphosphine of (S.W. Lee, L.F. Wang, C.P. Cheng), (248)189
- Decacarbonyl-manganese and -rhenium, interaction with hindered *o*-quinones of and formation of *o*-semiquinolate complexes (G.A. Abakumov, V.K. Cherkasov, K.G. Shalnova, I.A. Teplova, G.A. Razuvayev), (236)333
- Decacarbonyltetrahydrotrirhenium unsaturated anion, $[Re_3H_4(CO)_{10}]^-$, reactions with carboxylic acids of and X-ray structure of the anions $[Re_3H_4(CO)_{10}(\mu-O_2CR)]^-$ ($R = H, CF_3$) (T. Beringhelli, G. Ciano, G. D'Alfonso, M. Freni, A. Sironi), (233)C46
- Diazaphosphasiletidene sulphide rhenium dinuclear complex, synthesis by isomerisation of an amino(imino)thiophosphorane of (O.J. Scherer, J. Kerth), (243)C33
- Dinitrogen rhenium(I) complexes with organophosphite and isocyanide ligands, preparation of; X-ray structure of *mer*- $[ReCl(N)_3(CNMe)\{P(OMe)_3\}_3]$ (F.N.N. Carvalho, A.J.L. Pombiro, O. Obama, U. Schubert, C.J. Pickett, R.L. Richards), (240)C18
- Dithiocarbene complexes derived from CS₂-bridged dinuclear complexes (L. Busetto, A. Palazzi, M. Monari), (228)C19
- Halopentacarbonyl-manganese and -rhenium, Raman intensity anomalies and intermediate mode behaviour in the $\nu(CO)$ region in mixed crystals of (M. Arif, S.F.A. Kettle), (249)175
- $[(\mu-H)_3Re_3(CO)_6\{(EtO)_2POP(OEt)_2\}_2]$, joint X-ray and neutron diffraction analysis of (D.W. Prest, M.J. Mays, A.G. Orpen, R.K. McMullan), (240)395
- Iodotris- and tetrakis-(pentacarbonyl-metal)silane highly hindered derivatives containing manganese and rhenium, preparation and spectra of (B.J. Aylett, M.T. Taghipour), (249)55
- Ligand exchange of metal carbonyls by chain mechanism; electrochemical kinetics of electron transfer catalysis (J.W. Hershberger, C. Amatore, J.K. Kochi), (250)345
- Manganese, technetium and rhenium; Annual Survey covering the year 1980 (P.M. Treichel), (237)61
- Manganese, technetium and rhenium; Annual Survey covering the year 1981 (P.M. Treichel), (242)205
- Manganese and rhenium η^3 -allyl complexes, ¹³C NMR spectra of (M. Moll, H.-J. Seibold), (248)343
- $[M(CO)_3(\eta\text{-arene})]X$ ($M = Mn, Re; X = BF_4^-$, PF₆⁻) salts, field desorption mass spectra of (D.E. Games, L.A.P. Kane-Maguire, D.A. Sweigart), (234)323
- Metal dimer and cluster catalysed CO substitution reaction, supported metals and metal oxides as promoters for (M.O. Albers, N.J. Coville, E. Singleton), (234)C13
- Mixed metal "manganese rhenium cubane" $[Mn_3Re(CO)_12(SC_6H_5)_4]$, photo-induced synthesis of (P. Jaitner), (231)225

- Mono- and di-alkoxy(triphenylsilyl)carbene complexes of rhenium, structural investigations of (U. Schubert, K. Ackermann, P. Rustemeyer), (231)323
- Mono- and poly-nuclear transition metal complexes, fast atom bombardment mass spectrometry of (R. Davis, I.F. Groves, J.L.A. Durrant, P. Brooks, I. Lewis), (241)C27
- Octafluorocyclooctatetraene transition metal compounds, displacement of fluoride by metal carbonyl anions in (S.J. Doig, R.P. Hughes, S.L. Patt, D.E. Samkoff, W.L. Smith), (250)C1
- Octahedral carbonyl cluster of rhenium, $[\text{Re}_6(\mu_3\text{-H})_2\text{C}(\text{CO})_{12}]^{2-}$, synthesis, X-ray structure and ^{13}C NMR study of (G. Ciani, G. D'Alfonso, P. Romiti, A. Sironi, M. Freni), (244)C27
- Organic-transition metal free radicals, hydrogen abstraction and dimerisation reactions of (J.A. Armstead, D.J. Cox, R. Davis), (236)213
- Pentacarbonyl(7- η^1 -cyclohepta-1,3,5-trienyl)rhenium(I), synthesis and X-ray structure of (D.M. Heinekey, W.A.G. Graham), (232)335
- Pentacarbonyl-manganese and -rhenium radicals, paramagnetic adducts trapped by N,N' -di-t-butyl-1,4-diaza-1,3-butadiene from; characterisation by ESR spectroscopy of (A. Alberti, A. Hudson), (248)199
- $[\text{ReCl}(\text{Ph}, \text{PCH}_2\text{CH}_2\text{PPh}_2)_2]$, preparation and X-ray structure of (D.L. Hughes, A.J.L. Pombeiro, C.J. Pickett, R.L. Richards), (248)C26
- $[\text{Re}_3\text{H}_4(\text{CO})_{10}]^-$, reactions with mercaptans of; synthesis and X-ray characterisation of the anion $[\text{Re}_3\text{H}_3(\text{CO})_9(\mu_3\text{-SBu-t})]^-$ (R. Bonfichi, G. Ciani, G. D'Alfonso, P. Romiti, A. Sironi), (231)C35
- $[\text{Re}_3\text{H}_3(\mu\text{-X})(\text{CO})_{10}]^-$ anions, synthesis of and X-ray characterisation of $[\text{Re}_3\text{H}_3(\mu\text{-Cl})(\text{CO})_{10}](\text{NET}_3)$ (G. Ciani, G. D'Alfonso, M. Freni, P. Romiti, A. Sironi), (226)C31
- Rhenium carbonyl halide binuclear complexes of disulphides and diselenides, synchronous ligand atom pyramidal inversions in; X-ray crystal structure of $[\text{Re}_2\text{Br}_2(\text{CO})_6(\text{C}_6\text{H}_5\text{CH}_2\text{SeSeCH}_2\text{-C}_6\text{H}_4)]$ (E.W. Abel, S.K. Bhargava, M.M. Bhatti, M.A. Mazid, K.G. Orrell, V. Šík, M.B. Hursthouse, K.M.A. Malik), (250)373
- Ruthenium complexes in hydrogenation of carbon monoxide with iodide promoters, catalytic and mechanistic investigations of (B.D. Dombek), (250)467
- Silicon— and germanium—transition metal bonds, dependence of the stereochemistry on the ligands and geometry of complexes on cleavage of (G. Cerveau, E. Colomer, R.J.P. Corriu), (236)33
- Thiocarbamoyl phosphine ligands and their manganese and rhenium carbonyl complexes, ^1H and ^{13}C NMR spectroscopy of (A. Antoniadis, U. Kunze, M. Moll), (238)177
- Transition metal complexes, halogenation of alkanes promoted by (R. Davis, I.F. Groves, C.C. Rowland), (239)C9
- Tris(dimethylphenylphosphine)penta-hydridorhenium(V), flash photolytic investigation of transients in photochemistry of (S. Muralidharan, G. Ferraudi, M.A. Green, K.G. Caulton), (244)47
- ### Rhodium
- Acetylacetonato(ethylene)(hexafluorobut-2-yne)rhodium(I) and acetylacetonato-(cyclooctene)(hexafluorobut-2-yne)-rhodium(I), structures of (J.H. Barlow, M.G. Curl, D.R. Russell, G.R. Clark), (235)231
- (Alkyl- and perfluoroalkyl-)C-nitroso-transition metal complexes, ^{15}N NMR comparisons of (D.H. Evans, D.M.P. Mingos, J. Mason, A. Richards), (249)293
- μ -Alkylidene-rhodium complexes, formation and intramolecular reactions of (R.S. Dickson, G.D. Fallon, R.J. Nesbit, G.N. Pain), (236)C61
- Arene-rhodium(I) complexes with trimethyltetrafluorobenzobarrelene; crystal structure of $[\text{Rh}(\text{Me}_3\text{TFB})(1,4\text{-C}_6\text{H}_4\text{Me}_2)]\text{ClO}_4$ (R. Usón, L.A. Oro, C. Foces-Foces, F.H. Cano, S. García-Blanco, M. Valderrama), (229)293
- Asymmetric hydrogenation catalyst system derived from the [rhodium-(1,2-bis(diphenylphosphino)-1-cyclohexylethane)] moiety (D.P. Riley), (234)85
- Bidentate amine N-oxides and phosphine oxides as ligands in rhodium(I) chemistry (R. Usón, L.A. Oro, M.A. Ciriano, F.J. Lahoz), (240)429

- Bis[$(\mu\text{-carbonyl})(\eta^5\text{-pentamethylcyclopentadienyl})$ -rhodium] $(Rh=Rh)$ and -cobalt] $(Co=Co)$, reactions with cyclohexanone hydrazone of (W.A. Herrmann, C. Bauer, K.K. Mayer), (236)C18
- Bis(chloro(cyclooctadiene)rhodium) in reactions with organolithium compounds (J. Müller, B. Passon), (247)131
- Bis(3-dimethylarsinopropyl)phenylarsine- and 1,2-bis(methylphenylarsino)ethane-rhodium(I), synthesis and reactions of (B.L. Booth, C.A. McAuliffe, G.L. Stanley), (226)191
- ortho*-Bis(dimethylsilyl)benzene, reactions with nitriles catalysed by rhodium complexes of (R.J.P. Corriu, J.J.E. Moreau, M. Pataud-Sat), (228)301
- Bis(methylcyclopentadienyl)dicarbonyl-dirhodium, reactions with alkynes under formation of dimetallocycles of; X-ray structure of [$(\eta^5\text{C}_5\text{Me}_5)_2\text{Rh}_2(\mu\text{-CO})-\{\mu\text{-}\eta^2,\eta^2\text{-C(O)C}_2(\text{CF}_3)_2\}$] (R.S. Dickson, G.S. Evans, G.D. Fallon), (236)C49
- Carbenemetal complexes derived from optically active electron-rich olefins (L^\star); X-ray structure of $[\text{Co}(\text{CO})(L^\star)\text{-}(\text{NO})(\text{PPh}_3)]$ and *cis*- $[\text{Rh}(\text{Cl})(\text{COD})\text{-}(L^\star)]$ ($L^\star = (\text{S})\text{-CN}(\text{Me})\text{CH}(\text{Me})\text{CH}_2\text{NMe}$, $L'^\star = (\text{S})\text{-CN}(\text{CH}_2\text{CH}_2\text{CH}_2)\text{CHCH}_2\text{NMe}$) (A.W. Coleman, P.B. Hitchcock, M.F. Lappert, R.K. Maskell, J.H. Müller), (250)C9
- Carbon—hydrogen—transition metal bonds (M. Brookhart, M.L.H. Green), (250)395
- Carbonylmetal cluster complexes, reactions with bis(diphenylphosphino)methane of (D.F. Foster, B.S. Nicholls, A.K. Smith), (236)395
- Carbonylrhodium clusters, thermal growth and decomposition of (J.L. Vidal, R.C. Schoening), (241)395
- Cationic rhodium complexes as catalysts in activation of molecular oxygen, selective oxidation of terminal olefins and alcohols (M. Bressan, F. Morandini, P. Rigo), (247)C8
- trans*-Chlorocarbonylbis(triphenylphosphine)rhodium(I), crystal and molecular structure in its monoclinic form of (A. Ceriotti, G. Ciani, A. Sironi), (247)345
- $\text{C}_5\text{H}_5\text{Rh}(\text{C}_2\text{R}_2)\text{PPh}_3^i$ complexes, preparation and protonation of; conversion of a rhodium tolane into isomeric rhoda-indene (H. Werner, J. Wolf, U. Schubert, K. Ackerman), (243)C63
- [$(\eta^5\text{C}_5\text{Me}_5)_2\text{Rh}_2(\mu\text{-NO})(\mu\text{-CO})\text{BF}_4$], unsaturated complex, reaction with diazo compounds of (P.A. Dimas, J.R. Shapley), (228)C12
- Cobalt, rhodium and iridium; Annual Survey covering the year 1979 (R.D.W. Kemmitt, D.R. Russell), (230)1
- Cobalt, rhodium and iridium: Annual Survey covering the year 1950 (J.T. Mague), (230)99
- Cobalt, rhodium and iridium; Annual Survey covering the year 1981 (J.T. Mague), (242)241
- Cobalt, rhodium and iridium trimethylphosphite complexes, synthesis and reactivity of; crystal and molecular structure of $[\text{IrH}(\text{P}(\text{OMe})_3)_4(\text{P}(\text{OMe})_3\text{-OSnMe}_2\text{Cl}_2)][\text{SnCl}_3\text{Me}_2]$ (P.B. Hitchcock, S.I. Klein, J.F. Nixon), (241)C9
- $(\mu\text{-CO})[(\eta^5\text{C}_5\text{H}_5)\text{Rh}(\text{CO})]_2$, electronic structure determined by UV photo-electron spectroscopy and CNDO calculations of (G. Granozzi, E. Tondello, D. Ajò, F. Faraone), (240)191
- $[(1,5\text{-COD})\text{RhCl}]_2(\mu\text{-DAD})$ (DAD = diaza-diene), structure in the solid state and in solution of; stability of conformation by $\text{Rh}^{\text{I}}\cdots\text{H—C}$ exchange influences (H. tom Dieck, J. Klaus), (246)301
- Cycloocta-1,5-dienerhodium(I) complexes containing dibutylidihalocyclodiphosphazanes and related ligands, synthesis and NMR study of; crystal and molecular structure of bis{[(chloro)-(cycloocta-1,5-diene)] \cdot {1,3-di-t-butyl-2,4-difluorocyclodiphosphazane}}-dirhodium(I) (J.C.T.R. Burkett St. Laurent, P.B. Hitchcock, J.F. Nixon), (249)243
- Cycloocta-1,5-diene(η^5 -1,3,6-tri-t-butyl-fulvene)rhodium hexafluorophosphate, formation and crystal structure of (G. Moran, M. Green, A.G. Orpen), (250)C15
- Cyclopalladation and cyclorhodation of *N*-(3-thienyl)pyrazole (M. Nonoyama), (229)287
- $(\eta^5\text{-Cyclopentadienyl})(\eta^4\text{-1,7-diphenylheptatrien-1-one})\text{rhodium(I)}$ complexes, protonation of two isomers of (P. Powell) (244)393
- $\eta\text{-Cyclopentadienyl-}\eta\text{-methyl dioenoate-rhodium and -iridium complexes; base hydrolysis and protonation studies}$ (P. Powell), (243) 205

- Diphenylphosphoryl azide and perfluoro-n-hexylsulphonyl azide, reactions with triphenylphosphane-platinum(0), -rhodium(I), -iridium(I), -ruthenium(0), -cobalt(II) and -copper(I) complexes of (K. Bartel, K. v. Werner, W. Beck), (243)79
- Diphosphinite rhodium complexes derived from natural tartaric acid, asymmetric hydrogenations catalysed by (J. Bourson, L. Oliveros), (229)77
- Dirhodium complex containing Rh—Rh bond, bridging diphenylphosphido ligands and a tetrahedral rhodium, ^{31}P NMR spectrum and molecular structure of (D.W. Meek, P.E. Kreter, G.G. Christoph), (231)C53
- Dirhodium octacarbonyl and tetrarhodium dodecacarbonyl equilibrium under carbon monoxide pressure, quantitative study of (F. Oldani, G. Bor), (246)309
- (η^5 -Divinylborane)-ruthenium and -rhodium complexes (G.E. Herberich, G. Pampaloni), (240)121
- Dodecacarbonyltetrarhodium and octacarbonyldicobalt as catalyst precursors for hydrogen activation in hydroformylation of olefins (P. Pino, F. Oldani, G. Consiglio), (250)491
- Durene-rhodium(I) complexes; crystal structures of $[\text{Rh}(\text{durene})(\text{diolefin})]-\text{ClO}_4$ (L.A. Oro, C. Foces-Foces, F.H. Cano, S. Garcia-Blanco), (236)385
- Ethylene(hydrido)rhodium complexes $[\text{C}_5\text{H}_5\text{RhH}(\text{C}_2\text{H}_4)\text{Pr}_2]\text{X}$ reactivity towards nucleophiles of (R. Feser, H. Werner), (233)193
- Ethyl(pentamethylcyclopentadienyl)-rhodium and -iridium complexes, preparation of (A. Vázquez de Miguel, P.M. Maitlis), (244)C35
- Halomethyl- and dihalomethyl-rhodium(III) complexes, preparation by oxidative substitution of carbonyl- and ethylene-rhodium(I) compounds (H. Werner, W. Paul), (236)C71
- Hexadecacarbonylhexarhodium, preparation by carbonylation of $[\text{Rh}(\text{COD})-\text{N}_3]_2$ and $[\text{Rh}(\text{CO})_2\text{NCO}]_2$ of (G. La Monica, C. Monti, M. Pizzotti, S. Cenini), (241)241
- Hydrido(olefin)rhodium stable complexes and $[\text{C}_5\text{H}_5\text{Rh}(\text{PMe}_3)(\eta^3\text{CH}_3\text{CHC}_6\text{H}_5)]-\text{PF}_6^-$, synthesis of (H. Werner, R. Feser), (232)351
- Indolylgold(I) derivatives and indole as π -arene ligands in cationic rhodium(I) complexes (R. Usón, L.A. Oro, J.A. Cabeza, M. Valderrama), (231)C81
- N-Indolyltriaarylpophosphinegold(I) derivatives as η^6 -arene ligands in pentamethylcyclopentadienylrhodium(III) complexes; X-ray structure of $[(\text{C}_5\text{Me}_5)-\text{Rh}(\mu-\text{In})\text{AuP}(\text{C}_6\text{H}_5)_3](\text{ClO}_4)_2 \cdot \text{CH}_2\text{Cl}_2$ (A. Tiripicchio, M. Tiripicchio Camelini, R. Usón, L.A. Oro, J.A. Cabeza), (244)165
- Iodide-promoted rhodium catalysts, homogeneous catalysis of hydrogenolysis of methanol with (D.J. Drury, M.J. Green, D.J.M. Ray, A.J. Stevenson), (236)C23
- Iridium(I) and rhodium(I) complexes, oxidative addition of dialkylphosphites to (M.A. Bennett, T.R.B. Mitchell), (250)499
- Iridium(I) and rhodium(I) five-coordinate trichlorostannate complexes, (PPN)- $[\text{M}(\text{SnCl}_3)_2(\text{diolefin})(\text{PR}_3)]$, synthesis and NMR spectroscopy of (M. Kretschmer, P.S. Pregosin, M. Garralda), (244)175
- Ketocarbene addition to a carbonylmetal bridged complex (W.A. Herrmann, C. Bauer, M.L. Ziegler, H. Pfisterer), (243)C54
- Low-valent transition metal complexes, reactions with 1,2,3,4,7,7-hexafluorobicyclo[2.2.1]heptadiene and 2,3-bis(trimethyltin)- and 2,3-dichloro-1,4,5,6,7,7-hexafluorobicyclo[2.2.1]-hepta-2,5-dienes of (B.L. Booth, S. Casey, R.P. Critchley, R.N. Haszeldine), (226)301
- Low-valent transition metal complexes, reactions with perfluoronorbornadiene of (B.L. Booth, S. Casey, R.N. Haszeldine), (226)289
- Metal—metal double bonds in dinuclear cobalt and rhodium precursors, chlorogold, sulphur, selenium, tellurium and acetylene addition to (W.A. Herrman, C. Bauer, J. Weichmann), (243)C21
- Methyltris(dialkylphosphino)silanes, reactions with carbonyl cluster complexes of (D.F. Foster, B.S. Nicholls, A.K. Smith), (244)159
- Mono- and hetero-nuclear rhodium(I) and iridium(I) complexes with 2-(2'-pyridyl)benzimidazole, synthesis and reactivity of (R. Usón, L.A. Oro, J.A. Cabeza), (247)105

- Mono- and poly-nuclear transition metal complexes, fast atom bombardment mass spectrometry of (R. Davis, I.F. Groves, J.L.A. Durrant, P. Brooks, I. Lewis), (241)C27
- Multidentate ligand stabilised metal carbonyl cluster complexes, reactions with phosphines and immobilisation on silica or organic polymers of (D.F. Foster, J. Harrison, B.S. Nicholls, A.K. Smith), (248)C29
- Organometallic methylene bridges, successful and unsuccessful routes to (*Review*) (W.A. Herrmann), (250)319
- Organo-transition metal free radicals, hydrogen abstraction and dimerisation reactions of (J.A. Armstead, D.J. Cox, R. Davis), (236)213
- Paramagnetic carbonylmetal clusters of high nuclearity, ESR investigation of (T. Beringhelli, F. Morazzoni, D. Strumolo), (236)109
- 1,3-*trans*-Pentadiene, catalytic hydrogenation over $\text{Rh}_4(\text{CO})_1$, supported on $\gamma\text{-Al}_2\text{O}_3$ of (P.M. Lausarot, G.A. Vaglio, M. Valle), (240)441
- trans*-1,3-Pentadiene- and cyclobutene-rhodium(I) and -iridium(I) complexes (R.B. Osborne, J.A. Ibers), (232)267
- Pentamethylcyclopentadienylcopper, a metal ligand fragment isolobal with methylene (G.A. Carriero, J.A.K. Howard, F.G.A. Stone), (250)C28
- Platina- and rhoda-cycloalkanes, synthesis by substitution and oxidative addition to C—Cl bonds and properties of (E. Lindner, F. Bouachir, R. Fawzi, D. Hübner), (235)345
- Polyhedral skeletal electron pair theory: its extension to non-conical ML_2 fragments (D.G. Evans, D.M.P. Mingos), (240)321
- Pyrazolide-bridged heterometallic binuclear complexes (W.C. Deese, D.A. Johnson), (232)325
- γ -Radiation produced supported rhodium complex catalyst, determination of Rh by atomic absorption spectroscopy of (F.R. Hartley, S.G. Murray, P.N. Nicholson), (231)369
- Regioselective asymmetric hydrosilylation, synthesis of optically active allylic alcohols via (T. Kogure, I. Ojima), (234)249
- $[\{\text{Rh}(\text{C}_5\text{Me}_5)\}_3\text{Cl}_3\text{np}_3]\text{PF}_6 \cdot 0.5 \text{C}_3\text{H}_5\text{O}$ (np_3 = tris(2-diphenylphosphinoethyl)-amine), crystal and molecular structures of (P. Dapporto, P. Stoppioni, P.M. Maitlis), (236)273
- Rhodium(I) acetylacetone complexes of monosubstituted olefins, ^{13}C NMR study of structure and dynamics of (D. Parker), (240)83
- Rhodium cationic hydrogenation catalysts containing chelating diphosphine ligands; effect of chelate ring size (C.R. Landis, J. Halpern), (250)485
- Rhodium and cobalt catalysis of the hydroformylation and hydrogenation of 1,1-diphenylethylene (Y. Matsui, M. Orchin), (246)57
- Rhodium(I) and iridium(I) π -arene-indole and $\cdot N$ -indolylgold(I) derivatives, X-ray structure of $[(\text{Me}_3\text{TFB})\text{Rh}(\eta^6\text{-HIn})]\text{ClO}_4$ (TFB = tetrafluorobenzobarrelene) (R. Usón, L.A. Oro, J.A. Cabeza, C. Foces-Foces, F.H. Cano, S. García-Blanco), (246)73
- Rhodium(I) and iridium(I) complexes of phenazine and related ligands (A.R. Siedle, G. Filippovich, P.E. Toren, F.J. Palensky, E. Cook, R.A. Newark, W.L. Stebbings, K. Melancon, H.E. Mishmash), (246)83
- Rhodium and iridium phosphine complexes, hydrogenation of ketones and olefins via hydrogen transfer catalysed by (R. Spogliarich, A. Tencich, J. Kaspar, M. Graziani), (240)453
- Rhodium(I) and iridium(I) species, reactions with oxiranes of (R.B. Osborne, J.A. Ibers), (232)273
- Rhodium(III)- and iridium(III)-tin(II) systems as catalysts in hydrogen-transfer reactions (J. Kaspar, R. Spogliarich, M. Graziani), (231)71
- Rhodium(I) and platinum(II) complexes with chelating bidentate isonitrile ligands (M.L. Winzenburg, J.A. Kargol, R.J. Angelici), (249)415
- Rhodium(I) bisphosphine complexes, reuse in catalytic homogeneous hydrogenation of 2-acetamidoacrylic acid (A. Uehara, J.C. Bailar, Jr.), (239)11
- Rhodium-catalysed hydroformylation of (+)(*R*)-1-phenylethyl vinyl ether, diastereoselectivity in (R. Lazzaroni, S. Pucci, S. Bertozzi, D. Pini), (247)C56
- Rhodium(I) cationic complexes containing 2,2'-bis(diphenylphosphino)biphenyl, preparation and catalytic properties of (A. Uehara, J.C. Bailar, Jr.), (239)1

- Rhodium(III) complex, $\text{RhCH}_2\text{PMe}_2\text{CH}_2-\text{CH}_2\text{PMe}_2$, synthesis of (H. Werner, L. Hofmann, W. Paul), (236)C65
- Rhodium complexes, catalytic activity in oligomerisation of terminal hydroxy-acetylenes (H.-A. Schäfer, R. Marcy, T. Rüping, H. Singer), (240)17
- Rhodium(I) complexes of chiral phosphines derived from amino acids, asymmetric hydrogenation of acetophenone with (F. Joó, E. Trócsányi), (231)63
- Rhodium(I) complexes of chiral Schiff bases, enantioselective transfer hydrogenation of ketones catalysed by (G. Zassinovich, F. Grisoni), (247)C24
- Rhodium(I) complexes of 2,2,N,N-tetramethyl-3-buten-1-amine, ^1H , ^{13}C and ^{103}Rh NMR spectroscopy of (M. Cocivera, A.J. McAlees, R. McGrindle, P. Szczecinski), (235)97
- Rhodium complexes containing tri-3-but enylarsine as ligand (B.L. Booth, C.A. McAuliffe, G.L. Stanley), (231)255
- Rhodium diolefins cationic complexes with sulphur donors, X-ray structure of $[\text{Rh}(\text{NBD})_2(\text{SEt}_2)]\text{ClO}_4$ (A. Tiripicchio, M. Tiripicchio Camellini, C. Claver, A. Ruiz, L.A. Oro), (241)77
- Rhodium-DIOP catalytic system, enantioselective hydrogenation of aminoalkyl aryl ketones with (S. Törös, L. Kollár, B. Heil, L. Markó), (232)C17
- Rhodium(I) indazole and indazolate complexes, synthesis of (R. Usón, L.A. Oro, M.A. Ciriano, M.C. Bello), (240)199
- Rhodium(I), iridium(I) and platinum(II) five-coordinate complexes containing three trichlorostannate ligands, synthesis and NMR studies of (M. Kretschmer, P.S. Pregosin, H. Rüegger), (241)87
- Rhodium(I)-iridium(III) hydrido-bridged phosphine complex, preparation and characterisation of (A. Musco, R. Naegeli, L.M. Venanzi, A. Albinati), (228)C15
- Rhodium(I) mono- and di-nuclear cationic complexes with phosphine oxides and related ligands (R. Usón, L.A. Oro, M.A. Ciriano, F.J. Lahoz, M.C. Bello), (234)205
- Rhodium(I) monomeric and dimeric complexes, enthalpy changes in oxidative addition reactions of iodine with (J.U. Mondal, K.G. Young, D.M. Blake), (240)447
- Rhodium-rhodium asymmetrical dinuclear complexes, synthesis and properties of $\text{C}_5\text{Me}_5(\text{L})\text{Rh}(\mu\text{-CO})_2\text{RhC}_5\text{Me}_5$ (H. Werner, B. Klingert), (233)365
- Rhodium "solvated" atoms, catalytic activity in hydrogenation of olefinic and aromatic compounds under mild conditions of (G. Vitulli, P. Salvadori, A. Raffaelli, P.A. Costantino, R. Lazaroni), (239)C23
- $[\text{Rh}_4(\mu\text{-PPH}_2)_4(\mu\text{-CO})_2(\text{CO})_4]$, synthesis and crystal structure of its monoclinic form of (C.P. Lau, C.Y. Ren, L. Book, T.C.W. Mak), (249)429
- $[\text{Rh}_3(\mu\text{-PPH}_2)_3(\text{CO})_6(\text{PPh}_3\text{H})]$ six-membered inorganic ring complex, synthesis and molecular structure of (R.B. English, R.J. Haines, N.D. Steen), (238)C34
- Ruthenium catalysed hydroacylation of olefins (P. Isnard, B. Denise, R.P.A. Sneeden, J.M. Cognion, P. Durual), (240)285
- Ruthenium(II), rhodium(III) and iridium(III) cationic arene complexes, preparative route to (M.I. Rybinskaya, A.R. Kudinov, V.S. Kaganovich), (246)279
- Tetra- μ -carbonylhexacarbonyltris[bis-(diphenylphosphino)methane]hexa-rhodium, synthesis and structural characterisation of (A. Ceriotti, G. Ciani, L. Garlaschelli, U. Sartorelli, A. Sironi), (229)C9
- Tetrakis(triphenylphosphine)rhodium hydride, catalytic activity in transfer hydrogenation between alcohols and α,β -unsaturated ketones of; evidence for regiospecificity and an unusual rate-limiting step (D. Beaupère, P. Bauer, L. Nadjo, R. Uzan), (238)C12
- Tetrakis(triphenylphosphine)rhodium hydride, complex formation with alcohols in benzene solution of (D. Beaupère, P. Bauer, L. Nadjo, R. Uzan), (231)C49
- Transition metal acetylides, reactions with tetracyanoethylene of; synthesis and structure of $\text{Rh}(\text{C}\equiv\text{CPh})[\eta^2\text{-C}_2(\text{CN})_4](\text{NCMe})(\text{PPh}_3)_2$ (M.I. Bruce, T.E. Hambley, M.R. Snow, A.G. Swincer), (235)105
- Transition metal catalysed synthesis of octadienoic acids from dienes and 3-butenoic acids (G.P. Chiusoli, L. Pallini, G. Salerno), (238)C85

Transition metal complexes with steroidal phosphine ligands, asymmetric hydrogenation, hydroformylation and hydrocarbalkoxylation of olefins by (S. Gladiali, G. Faedda, M. Marchetti, C. Botteghi), (244)289

Triphosphorus mononuclear cyclic complexes, structural correlations and NMR properties of (M. Di Vaira, L. Sacconi, P. Stoppioni), (250)183

Tris(triphenylphosphine)carbonyl-rhodium and -iridium, electrogeneration of (G. Zotti, S. Zecchin, G. Pilloni), (246)61

Vinyl organometallic monomers: ($\eta^5\text{C}_5\text{H}_4\text{CH}=\text{CH}_2\text{M}(\text{CO})_2(\text{NO})$ ($\text{M} = \text{Cr}, \text{Mo}, \text{W}$) and ($\eta^5\text{C}_5\text{H}_4\text{CH}=\text{CH}_2\text{M}(\text{CO})_2$ ($\text{M} = \text{Co}, \text{Rh}, \text{Ir}$)), synthesis and ^1H NMR study of (D.W. Macomber, W.C. Spink, M.D. Rausch), (250)311

Rubidium

Alkali metal derivatives of octamethyltrisilazane, short Na—C contacts in the molecular structure of the disodium salt (D.J. Brauer, H. Bürger, W. Geschwandtner, G.R. Liewald, C. Krüger), (248)1

Alkali metal solutions, effect of cryptands on solubility and spectra in THF, dioxane and toluene (J. Lacoste, F. Schue), (231)279

η^6 - and η^5 -Fluorenylchromium tricarbonyl anions, ^{13}C NMR study of reversible isomerisation of (Yu.F. Oprunenko, Yu.N. Luzikov, Yu.A. Ustynyuk, N.A. Ustynyuk), (231)137

Heavier alkali metals; Annual Survey covering the year 1980 (E.M. Kaiser), (227)135

Ruthenium

(Alkyl- and perfluoroalkyl-)C-nitroso-transition metal complexes, ^{15}N NMR comparisons of (D.H. Evans, D.M.P. Mingos, J. Mason, A. Richards), (249)293

Bis-arene-ruthenium cationic complexes, synthesis and reduction of (M.I. Rybinskaya, V.S. Kaganovich, A.R. Kudinov), (235)215

1,2-Bis(diphenylphosphino)ethane derivatives of dodecacarbonyltriruthenium; preparation of; crystal and molecular structures of $\text{Ru}_3(\text{CO})_{10}(\mu\text{-Ph}_2\text{PCH}_2\text{CH}_2$

$\text{PPh}_2)$ (M.I. Bruce, T.W. Hambley, B.K. Nicholson, M.R. Snow), (238)83

Carbon—hydrogen—transition metal bonds (M. Brookhart, M.L.H. Green), (250)395

Chloromethyl- and methoxymethyl-manganese, -rhodium and -ruthenium complexes, preparation of (J.R. Moss, S. Pelling), (236)221

Clusters of metal atoms, crystallographic disorder as structural evidence for the constancy of peripheral atom polyhedra around (M.I. Bruce, B.K. Nicholson, A.H. White), (240)C33

Cycloruthenapentadienyl complexes, synthesis and structural studies on (A. Astier, J.-C. Daran, Y. Jeannin, C. Rigault), (241)53

Decamethylruthenocene, electrochemical oxidation of (U. Koelle, A. Salzer), (243)C27

Dichlorocarbene-ruthenium complex, $\text{RuCl}_2(\text{CCl}_2)(\text{CO})(\text{PPh}_3)_2$, reactions of (W.R. Roper, A.H. Wright), (233)C59

1,4-Diferrocenyl-1,4-dibora-2,5-cyclohexadiene complexes with carbonylmetal fragments (G.E. Herberich, M.M. Kucharska-Jansen), (243)45

Difluorocarbene complexes of ruthenium derived from trifluoromethyl compounds; structure of $\text{Ru}(\text{CF}_3)_3(\text{HgCF}_3)(\text{CO})_2(\text{PPh}_3)_2$ (G.R. Clark, S.V. Hoskins, W.R. Roper), (234)C9

Diphenylphosphoryl azide and perfluoron-hexylsulphonyl azide, reactions with triphenylphosphane-platinum(0), -rhodium(I), -iridium(I), -ruthenium(0), -cobalt(II) and -copper(I) complexes of (K. Bartel, K. v. Werner, W. Beck), (243)79

Diruthenium complex, $[\text{Ru}_2(\mu\text{-CO})(\mu\text{-C}_2\text{Ph}_2)(\eta^5\text{C}_5\text{H}_5)_2]$, sequential methylene addition to the alkyne group in (R.E. Colborn, A.F. Dyke, S.A.R. Knox, K.A. MacPherson, A.G. Orpen), (239)C15

(η^5 -Divinylborane)-ruthenium and -rhodium complexes (G.E. Herberich, G. Pampaloni), (240)121

Dodecacarbonyltriruthenium, carbon—halogen bond activation at (S. Aime, D. Osella, A.J. Deeming, A.M. Manotti Lanfredi, A. Tiripicchio), (244)C47

Dodecacarbonyltriruthenium, catalytic oxidative coupling of diols by (Y. Shvo, Y. Blum, D. Reshef, M. Menzin), (226)C21

- Dodecacarbonyltriruthenium, reaction with styrene of (B.F.G. Johnson, J. Lewis, S. Aime, L. Milone, D. Osella), (233)247
- Dodecacarbonyltriruthenium, reaction with tris(diphenylphosphine)methane of; characterisation of $\text{Ru}_3(\text{CO})_9[\text{HC}(\text{PPH}_3)_3]$ and crystal and molecular structures of $\text{Ru}_3(\text{CO})_9[\text{HC}(\text{PPH}_3)_2\text{(PhPC}_6\text{H}_4\text{PPH}_3)] \cdot \text{CHCl}_3$ (M.M. Harding, B.S. Nicholls, A.K. Smith), (226)C17
- Dodecacarbonyltriruthenium η^2 -olefin derivatives, formation and η^2 -alkyne-hydrido complex of; crystal structures of $\text{Ru}_3(\mu\text{-P}, \eta^2\text{-CH}_2=\text{CHC}_6\text{H}_4\text{PPH}_3)_2\text{(CO)}_{10}$ and $\text{H}_2\text{Ru}_3(\mu\text{-P}, \eta^2\text{-HC}\equiv\text{CC}_6\text{H}_4\text{PPH}_3)(\text{CO})_8$ (M.I. Bruce, B.K. Nicholson, M.L. Williams), (243)69
- Enantiomer discrimination in hydrogen transfer from racemic alcohols to prochiral ketones in the presence of $\text{H}_2\text{Ru}_3(\text{CO})_8(-)\text{DIOP}_2$ (M. Bianchi, U. Matteoli, P. Frediani, G. Menchi, F. Piacenti), (236)375
- Gold—ruthenium pentanuclear clusters, metal framework arrangements in; crystal structures of $[\text{Au}_2\text{Ru}_3(\mu_3\text{-S})(\text{CO})_8(\text{PPH}_3)_3]$ and $[\text{Au}_2\text{Ru}_3(\mu\text{-H})_2(\mu_3\text{-COMe})(\text{CO})_8(\text{PPH}_3)_2]$ (L.J. Farrugia, M.J. Freeman, M. Green, A.G. Orpen, F.G.A. Stone, I.D. Salter), (249)273
- Heterodinuclear complexes with ruthenium—cobalt bonds bridged by a diphenylphosphido bond (R. Regragui, P.H. Dixneuf), (239)C12
- Hexamethylbenzyl(phosphine)-dimethyl- and -dihydrido-ruthenium(II) stable complexes, synthesis and properties of (H. Werner, H. Kletzin), (228)289
- Hexaruthenium nitrosyl cluster, synthesis of and X-ray analysis of $\text{Ru}_6\text{C}(\text{CO})_{14}\text{-}(\text{NO})_2$ and $\text{Ru}_6\text{C}(\text{CO})_{15}\text{(NO)}(\text{AuPPH}_3)$ (B.F.G. Johnson, J. Lewis, W.J.H. Nelson, J. Puga, P.R. Raithby, D. Braga, M. McPartlin, W. Clegg), (243)C13
- Hydride triphenylphosphineruthenium complexes with 3-formyl (or acyl) propionate and with 2-formyl (or acyl) benzoate, preparation and properties of (K. Osakada, T. Ikariya, S. Yoshi-kawa), (231)79
- μ -Hydrido arene-ruthenium(II) dinuclear complexes (M.A. Bennett, J.P. Ennett, K.I. Gell), (233)C17
- Hydroxo-bridged, tetranuclear η -arene-ruthenium(II) quadrivalent cation, [$\{\text{Ru}(\eta\text{-C}_5\text{H}_5)(\text{OH})\}_4\}](\text{SO}_4)_2 \cdot 12 \text{ H}_2\text{O}$, preparation, X-ray crystal structure and reactions of (R.O. Gould, C.L. Jones, D.R. Robertson, D.A. Tocher, T.A. Stephenson), (226)199
- Iridium-substituted difluorophosphines, preparation and properties of; synthesis of PF_2 -bridged heterometal complexes (E.A.V. Ebsworth, R.O. Gould, N.T. McManus, D.W.H. Rankin, M.D. Walkinshaw, J.D. Whitelock), (249)227
- [$\text{M}(\eta\text{-arene})(\eta\text{-C}_5\text{H}_5)\text{]}^+$ ($\text{M} = \text{Ru, Os}$), mixed sandwich cations, synthesis and characterisation of (I.W. Robertson, T.A. Stephenson, D.A. Tocher), (228)171
- Metal-carbido complexes of ruthenium and osmium, preparation of (B.F.G. Johnson, J. Lewis, W.J.H. Nelson, J.N. Nicholls, M.D. Vargas), (249)255
- Metal dimer and cluster catalysed CO substitution reaction, supported metals and metal oxides as promoters for (M.O. Albers, N.J. Coville, E. Singleton), (234)C13
- [1,1]Metallocenophanes of iron and ruthenium, cyclic voltammetry of homo-binuclear and hetero-binuclear systems (A.F. Diaz, U.T. Mueller-Westerhoff, A. Nazzal, M. Tanner), (236)C45
- [1,1]Metallocenophanes of iron and ruthenium, synthesis and characterisation of homo-binuclear and hetero-binuclear systems (U.T. Mueller-Westerhoff, A. Nazzal, M. Tanner), (236)C41
- Methyltris(dialkylphosphino)silanes, reactions with carbonyl cluster complexes of (D.F. Foster, B.S. Nicholls, A.K. Smith), (244)159
- Mono- and poly-nuclear transition metal complexes, fast atom bombardment mass spectrometry of (R. Davis, I.F. Groves, J.L.A. Durrant, P. Brooks, I. Lewis), (241)C27
- Multidentate ligand stabilised metal carbonyl cluster complexes, reactions with phosphines and immobilisation on silica or organic polymers of (D.F. Foster, J. Harrison, B.S. Nicholls, A.K. Smith), (248)C29
- Nitrosonium ion reactions with anionic carbonyl monomers and clusters; crystal and molecular structure of $\text{FeCo}_2(\mu_3\text{-NH})(\text{CO})_8$ (D.E. Fjare, D.G. Keyes, W.L. Gladfelter), (250)383

- Nonacarbonyl-diiron and -diruthenium, substituted derivatives and their susceptibility to electrophilic attack of; X-ray crystal structure of $[\text{Fe}_2(\mu\text{-Br})(\text{CO})_4 \cdot \{\mu\text{-}(\text{C}_6\text{H}_5\text{O})_2\text{PN}(\text{C}_2\text{H}_5)_2\text{P}(\text{OC}_6\text{H}_5)_2\}_2] \cdot \text{PF}_6^-$ (G. de Leeuw, J.S. Field, R.J. Haines, B. McCulloch, E. Meintjies, C. Monberg, K.G. Moodley, G.M. Olivier, C.N. Sampson, N.D. Steen), (228)C66
- Organorhodium complexes with chelating phosphine ligands, synthesis, NMR spectral *cis, trans* influence and molecular structure of (E. Arpac, L. Dahlenburg), (241)27
- $\text{Ru}_n\text{C}(\text{CO})_{13}[\text{PPh}_2(\text{CH}_2)_n\text{PPh}_2]$, chain length effects on the coordination mode of bidentate phosphines in (J. Evans, B.P. Gracey, L.R. Gray, M. Webster), (240)C61
- Ruthenium and cobalt cluster carbonyls, directed syntheses of mixed ligand derivatives of (M.I. Bruce, J.G. Matisons, B.K. Nicholson, M.L. Williams), (236)C57
- Ruthenium "butterfly" acetylene-carbonyl complex, UV photoelectron spectral and theoretical study of alkyne-cluster interaction in (G. Granozzi, R. Betoncello, M. Acampora, D. Ajò, D. Osella, S. Aime), (244)383
- Ruthenium catalysts, hydroformylation of olefins in the presence of (M. Bianchi, G. Menchi, P. Frediani, U. Matteoli, F. Piacenti), (247)89
- Ruthenium chiral complexes, asymmetric Canizzaro reaction with (M. Bianchi, U. Matteoli, G. Menchi, P. Frediani, F. Piacenti), (240)65
- Ruthenium chiral complexes, investigations on hydrogen transfer reactions in asymmetric synthesis by (M. Bianchi, U. Matteoli, P. Frediani, G. Menchi, F. Piacenti), (240)59
- Ruthenium cluster carbonyls containing tertiary phosphines, phosphites, arsines, triphenylstibine or isocyanides, radical-ion-initiated synthesis of (M.I. Bruce, J.G. Matisons, B.K. Nicholson), (247)321
- Ruthenium complexes, catalytic activity in rearrangement reactions of 2-butyne-1,4-diol to butyrolactone (Y. Shvo, Y. Blum, D. Reshef), (238)C79
- Ruthenium complexes, catalytic activity in synthesis of ketones from olefin-carbon monoxide mixtures and an alcohol (P. Isnard, B. Denise, R.P.A. Sneeden, J.M. Cognion, P. Durual), (240)169
- Ruthenium complexes, in hydrogenation of carbon monoxide with iodide promoters, catalytic and mechanistic investigations of (B.D. Dombek), (250)467
- Ruthenium(0) complexes, synthesis and methylation with formaldehyde of (W.R. Roper, L.J. Wright), (234)C5
- Ruthenium electrogenerated mixed-valence complexes, spectroscopic and magnetic studies on (G.A. Heath, A.J. Lindsay, T.A. Stephenson, D.K. Vattis), (233)353
- Ruthenium(II), rhodium(III) and iridium(III) cationic arene complexes, preparative route to (M.I. Rybinskaya, A.R. Kudinov, V.S. Kaganovich), (246)279
- Tetraruthenium cluster containing quadruply bridging PPh_3 groups, rearrangement to cluster containing triply bridging PPh_3 ligands through uptake of CO; crystal and molecular structures of $[\text{Ru}_4(\mu_3\text{-XPh})_2(\text{CO})_{13}]^{\cdot} (\text{X} = \text{P}, \text{As})$ (J.S. Field, R.J. Haines, D.N. Smit, K. Natarajan, O. Scheidsteiger, G. Huttner), (240)C23
- Tricarbonyl (bi-1,7-cyclooctadienyl)-ruthenium, dehydrogenative metalla-cyclization of; preparation and X-ray structure of $\text{Fe}(\text{CO})_3(\text{C}_{16}\text{H}_{22})$, $\text{RuFe}(\text{CO})_6(\text{C}_{16}\text{H}_{22})$ and $\text{Ru}_2(\text{CO})_6(\text{C}_{16}\text{H}_{20})$ (I. Noda, H. Yasuda, A. Nakamura), (250)447
- Tricarbonyl(1-3:5,6- η -cyclooctadienylium)-ruthenium cation and derivatives, ligand substitution in and nucleophilic reactivity of (C. Paradisi, G. Schiavon), (246)197
- Triethylsilanes, alcoholysis catalysed by bis(trimethylphosphinedicarbonyl-dichlororuthenium) (U. Oehmichen, H. Singer), (243)199
- Trishydridoruthenium(IV) cationic complexes, synthesis by protonation of neutral dihydridoruthenium(II) compounds of (H. Werner, H. Kletzin), (243)C59
- Tris(triphenylphosphine)dichlororuthenium as catalyst in selective conversion of primary amines into *N,N*-dimethyl-alkyl- and *N,N*-dialkylmethyl-amines with methanol (A. Arcelli, Bui-The-Khai, G. Porzi), (235)93

Tris(triphenylphosphine)dichlororuthenium as catalyst in synthesis of *N*-methyl-dialkylamines from *N*-methyl- and *N,N*-dimethylalkylamines (A. Arcelli, Bui-The-Khai, G. Porzi), (231)C31

Vinylidene-iron and -ruthenium disubstituted, nucleophilic properties of η^1 -acetylide ligands (S. Abbott, S.G. Davies, P. Warner), (246)C65

Samarium

Cyclopentadiene-lanthanide derivatives, synthesis by the reaction of dicyclopentadienylmercury with lanthanides (G.Z. Suleimanov, L.F. Rybakova, Ya.A. Nuriev, T.Kh. Kurbanov, I.P. Beletskaya), (235)C19

Organolanthanide chemistry, recent advances in (W.J. Evans), (250)217

Samarium diiodide, organic reactions promoted by (J. Souppé, L. Danon, J.L. Namy, H.B. Kagan), (250)227

Selenium

Carbon disulphide and diselenide insertion into metal-amido bonds; mono- vs. bi-dentate dithiocarbamates formed by reactions of $CS_2 + NHR_2$ with $[CpM-(CO)_n]_2$, ($M = Fe$, $n = 2$, $M = Mo$, $n = 3$) (E. Román, D. Catheline, D. Astruc), (236)229

Cyclopentadienylnickel complexes with seleno and telluro ethers as ligands, synthesis and reactivity of (N. Kuhn, M. Winter), (249)C28

Dicyclopentadienyltetracarbonyl-dimolybdenum and -ditungsten, reactions with elemental selenium of (H. Brunner, J. Wachter, H. Wintergerst), (235)77

2,6-Dimethoxybenzoquinone and substituted pyrazines, ESR study of regioselective addition of Group IVB organometallic radicals to (A. Alberti, G.F. Pedulli), (248)261

P-2,6-Dimethylphenyl-*C*-diphenyl-selenophosphene, stable tricoordinate phosphorus(V) compound (Th.A. van der Knaap, M. Vos, F. Bickelhaupt), (244)363

Dimethylthiocarbamoyl chloride, reaction with $[Cr(CO)_5(THF)]$ of and formation of trithiocarbonate, diselenothiocarbonate and triselenocarbonate complexes of pentacarbonylchromium(0) from one of the products containing

coordinated *N,N*-dimethylthioformamide (H.G. Raubenheimer, G.J. Kruger, A. Lombard), (240)C11

1,3-Diselena-[3]ferrocenophanes of C, Si and Sn, synthetic and structural studies on; crystal and molecular structure of bis(ferrocene-1,1'-diselenoato)tin(IV) at 163 K (A.G. Osborne, R.E. Hollands, R.F. Bryan, S. Lockhart), (226)129

(n^2 -Disulphido)-niobium complexes, synthesis and comparison of their reactivity with that of (n^2 -dioxo) complexes of (J.-L. Migot, J. Sala-Pala, J.-E. Guerchais), (243)427

Fe—Fe bond cleavage in $[Fe_3(CO)_6(\mu_3-SR)]^-$ by electrophilic reagents of the Vth and VIth Main Group (A. Winter, L. Zsolnai, G. Huttner), (250)409

Iridium-substituted difluorophosphines, preparation and properties of; synthesis of PF_2 -bridged heterometal complexes (E.A.V. Ebsworth, R.O. Gould, N.T. McManus, D.W.H. Rankin, M.D. Walkinshaw, J.D. Whitelock), (249)227

Metal—metal double bonds in dinuclear cobalt and rhodium precursors, chlorogold, sulphur, selenium, tellurium and acetylene addition to (W.A. Herrman, C. Bauer, J. Weichmann), (243)C21

Octa-*t*-butyltetrastadtannachalcogen cyclic compounds, preparation and structure of (H. Puff, A. Bongartz, W. Schuh, R. Zimmer), (248)61

2,2,3,3,5,5,6,6-Octamethyl-1,4-dithia-cyclohexasilane, -1,4-diselenacyclohexasilane and -1-selena-4-thiacyclohexasilane, preparation of (E. Hengge, H.G. Schuster), (240)C65

Organoplatinum bridging diselenide complex, $[(PtMe_3)_2, MeSeSeMe]$, X-ray crystal structure of (E.W. Abel, A.R. Khan, K. Kite, M.B. Hursthouse, K.M.A. Malik, M.A. Mazid), (235)121

Osmium coordinated formaldehyde, synthesis of selenoformaldehyde and telluroformaldehyde complexes from (C.E.L. Headford, W.R. Roper), (244)C53

Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), (247)203

Pentagonal fused bipyramidal metallocarboranes containing edge ligands as B—H, Sn and Ge, EHMO calculations on (M.J. Calhorda, D.M.P. Mingos), (229)229

- Phenyldichalcogenides, cleavage by dialkyl- and diaryl-zirconocenes of; synthesis of ($\eta^5\text{-RC}_5\text{H}_4$)₂Zr(EPh)CH₃, and ($\eta^5\text{-RC}_5\text{H}_4$)₂Zr(EPh)₂ (R = H, t-Bu; E = Se, S) (S. Pouly, G. Tainturier, B. Gautheron), (232)C65**
- α -Phenylselenoacrylic acid derivatives, C₄ bridged radical dimerisation with (Z. Janousek, S. Piettre, F. Gorissen-Hervens, H.G. Viehe), (250)197**
- Rhenium carbonyl halide binuclear complexes of disulphides and diselenides, synchronous ligand atom pyramidal inversions in; X-ray crystal structure of [Re₂Br₂(CO)₆(C₆H₅CH₂SeSeCH₂C₆H₅)] (E.W. Abel, S.K. Bhargava, M.M. Bhatti, M.A. Mazid, K.G. Orrell, V. Šik, M.B. Hursthouse, K.M.A. Malik), (250)373**
- Selenato- and tellurolato-bridged dimolybdenum complexes, synthesis and spectroscopic properties of (P. Jaitner), (233)333**
- Selenium and tellurium carboranyl derivatives, synthesis of (V.I. Bregadze, V.Ts. Kampel, A.Ya. Usiatinsky, O.B. Ponomareva, N.N. Godovikov), (233)C33**
- Selenophosphoranes as ligands in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (246)C80**
- Silver complexes with trimeric thioformaldehyde and trimeric selenoformaldehyde, synthesis and structures of (H. Hofmann, P.G. Jones, M. Noltemeyer, E. Peymann, W. Pinkert, H.W. Roesky, G.M. Sheldrick), (249)97**
- 2,3,4,5-Tetrakis(dimethyl)sulphocyclopentasilane and 2,3,4,5-tetrakis-(dimethyl)selenacyclopentasilane preparation of (E. Hengge, H.G. Schuster), (231)C17**
- Triphenyllead selenocyanate, solvent-induced linkage isomerism and ionisation in solutions of (M. Onyszchuk, I. Wharf), (249)C9**
- Silicon**
- Actinide-centred cyclometallation; unusually distorted thorium bishydrocarbyl: Th[$\eta^5\text{-}(\text{CH}_3)_5\text{C}_5\text{H}_4$]₂[CH₂Si(CH₃)₃]₂ (J.W. Bruno, T.J. Marks, V.W. Day), (250)237**
- Acyliron phosphorus ylides with electron-rich organometal groups (A. Stasunik, W. Malisch), (247)C47**
- Alkali metal derivatives of octamethyltrisiladiazane, short Na—C contacts in the molecular structure of the disodium salt (D.J. Brauer, H. Bürger, W. Geschwandtner, G.R. Liewald, C. Krüger), (248)1**
- Alkali-metal promoted transfer of dimethylsilylene from dodecamethylcyclohexasilane to silanes and dienes (R.T. Conlin, L.L. Peterson), (232)C71**
- Alkenyldisilanes, oxidation by *m*-chloroperbenzoic acid (T.A. Dixon, K.P. Steele, W.P. Weber), (231)299**
- Alkylhalosilanes, additive relations in ²⁹Si chemical shifts of (D. Cory, A. Wong, W.M. Ritchey), (235)277**
- Alkylsilane-iron complexes, synthesis, IR and NMR spectra of (W. Ries, W. Malisch), (241)821**
- 2-Alkyl-2-trimethylsilylmethyl-1,3-dithianes, silicon migration and ring cleavage reactions of (T.A. Hase, L. Lahtinen), (240)9**
- 2-Alkynyl ethers, conversion into allenic ethers of (H.D. Verkrijssse, M. Verboom, P.E. van Rijn, L. Brandsma), (232)C1**
- η^3 -Allylmonocyanotricarbonyl metalate and η^3 -allylmononitriletricarbonyl-manganese and -rhenium, formation of (M. Moll, H. Behrens, H.-J. Seibold, P. Merbach), (248)329**
- Allylsilanes coordinated to platinum(II), hydrolysis of (J.W. Fitch, M. Brown, N.H. Hall, P.B. Mebe, K.A. Owens, M.R. Roesch), (244)201**
- (Aroyloxymethyl)trifluorosilanes, NMR study of (A.I. Albanov, L.I. Cubanova, M.F. Larin, V.A. Pestunovich, M.G. Voronkov), (244)5**
- Benzoxazol-2-yltrimethyl-silane and -stannane, synthesis of (P. Jutzi, U. Gilge), (246)159**
- Bis(*η*-arene)chromium (d^5 , d^6 , d^7) complexes of trimethylsilylbenzene, 1,4-bis(trimethylsilyl)benzene and 1,3,5-tris(trimethylsilyl)benzene (C. Elschenbroich, J. Koch), (229)139**
- ortho-Bis(dimethylsilyl)benzene, reactions with nitriles catalysed by rhodium complexes of (R.J.P. Corriu, J.J.E. Moreau, M. Pataud-Sat), (228)301**
- Bis(methylelement)dithioxamid derivatives (element = Al, Ga, In, Si, Ge, Sn); planar and fused structural metallabicyclic compounds (T. Halder, W. Schwarz, J. Weidlein, P. Fischer), (246)29**

- Bis(2,4,6-tri-t-butylphenyl)diphosphene and bis(tris(trimethylsilyl)diphosphene), photoelectron spectroscopy of (D. Gonbeau, G. Pfister-Guillouzo), (247)C17
- Bis(2,4,6-trimethylpyridinedichloroplatinum) as catalyst in hydrogenation and hydrosilylation of olefins, and α , β -unsaturated ketones and aldehydes (R. Rumin), (247)351
- Bis[tris(trimethylsilyl)methyl]diphosphene, structure of (J. Jaud, C. Couret, J. Escudié), (249)C25
- L(-)-Bornoxyphenyl- β -(triethoxysilyl)-ethylsulphidohydridotin, preparation and properties of (H. Schumann, B. Pachaly), (243)C75
- 9-(9-Bromofluorenyl)tris(trimethylsilyl)silane, rearrangement in (U. Schubert, C. Steib), (238)C1
- Carbiminoborane monomers, preparation of (U. Sicker, A. Meller, W. Maringgele), (231)191
- Carboethoxy(silyl)alkylidene and silylketenyl-bridged dirhenium complexes as by-products in silylcarbene synthesis (E.O. Fischer, P. Rustemeyer, O. Obama, D. Neugebauer, U. Schubert), (247)7
- C=C-Si, Ph-Si, Si-C=C-Si, N-Si, Si-N-Si and Si,N systems, electronic effects in (E. Fraïnnet, M. Bordeau, C. Clément), (233)149
- 1-m-Chlorophenoxy silatrane, crystal structure of (L. Párkányi, P. Hencsei, L. Bihátsi), (232)315
- Cycloalumadisilatriazane, preparation and NMR spectra of (U. Wannagat, T. Blumenthal, D.J. Brauer, H. Bürger), (249)33
- η^5 -Cyclopentadienyl- η^2 -olefinalkynickel, preparation and NMR spectra of (H. Lehmkuhl, C. Naydowski, R. Benn, A. Rufińska, G. Schroth), (228)C1
- Cyclosilazane, [(Me₂Si)₂ONC₆F₅]₂, crystal structure of (P. Clare, D.B. Sowerby, I. Haiduc), (236)293
- Decacarbonyltriосmium isonitrile complex, H₂O₃(CO)₁₀[CN(CH₃)₃Si(OEt)₃], oxide promoted isomerisation of (J. Evans, B.P. Gracey), (228)C4
- 1-Dialkylamino-1,2,3-trienes, preparation of (P.E. van Rijn, L. Brandsma), (233)C25
- Diazaphosphasiletidesulphide rhenium dinuclear complex, synthesis by isomerisation of an amino(imino)thiophosphorane of (O.J. Scherer, J. Kerth), (243)C33
- Diazasilametallacycles, crystal and molecular structure of Ti(NBu-t-SiMe₂N-Bu-t)Cl₂ (R.A. Jones, M.H. Seeberger, J.L. Atwood, W.E. Hunter), (247)1
- 1,3-Diaza-2-sila-4 λ^2 -stannetidins, rearrangements with cyclic dienes of (M. Veith, F. Töllner), (246)219
- α , ω -Dichloropermethysiloxanes, selectivity in the reactions of alkyllithium reagents with (S.A. Kazoura, W.P. Weber), (243)149
- Diffuorosilylene, reactions with cyclopentene and cyclohexa-1,3-diene (Y.-M. Pai, C.-K. Chen, C.-S. Liu), (226)21
- Disfunctional silanes and β -diketones, novel cyclic dienolates from (J.A. Cella, T.D. Mitchell), (244)C5
- 5,7-Dihydrodibenzo[c,e]metallepins, synthesis via di-Grignard or dilithium reagents of (W.-P. Leung, C.L. Raston), (240)C1
- 2,6-Dimethoxybenzoquinone and substituted pyrazines, ESR study of regioselective addition of Group IVB organometallic radicals to (A. Alberti, G.F. Pedulli), (248)261
- 1,2-Dimethoxytetramethylsilane, reactions with styrene and formation of silacyclopentanes having phenyl substituents on ring carbons of (H. Watanabe, J. Inose, T. Muraoka, M. Saito, Y. Nagai), (244)329
- Dimethylgermathione and dimethylsila-thione generation and their detection in the gas phase by PES (C. Guimon, G. Pfister-Guillouzo, H. Lavayssiere, G. Dousse, J. Barrau, J. Satgé), (249)C17
- 4,4-Dimethyl-2-pentyn-1-al and related compounds, reactions with methyl diazoacetate of (A.S. Medvedeva, M.M. Demina, A.I. Borisova, O.I. Margorskaya, I.D. Kalikhman, E.I. Brodskaya, N.S. Vyazankin), (231)109
- [Dimethyl(phenyl)silyl]tris(trimethylsilyl)methane, molecular structure of (P.B. Hitchcock), (228)C83
- 1,1-Dimethyl-sila- and -germa-cyclopentanes, reactions with nonacarbonyldiiron of (A. Laporterie, H. Iloughmane, J. Dubac), (244)C12
- 1,1-Dimethyl-1-silaethylene-*d*₃, Ar-matrix stabilisation and IR spectrum of (A.K. Maltsev, V.N. Khabashesku, O.M. Nefedov), (226)11

- Dimethylsilylene, insertion reactions and relative reactivity towards O—H, Si—H and Si—alkoxy bonds of (K.P. Steele, D. Tzeng, W.P. Weber), (231)291
- Dimethylsilylene, steric requirements for deoxygenation of dialkyl sulphoxides by (I.S. Alnaimi, W.P. Weber), (241)171
- Dimethyl[tris(trimethylsilyl)methyl]silyl iodide, bimolecular displacements of iodine in reactions with salts of (S.A.I. Al-Shali, C. Eaborn), (246)C34
- 1,3-Dioxa-6-aza-2-silacyclooctanes, conformational properties of 8-membered heterocycle and trigonal bipyramidal of five-coordinated silicon in (E. Kupče, E. Liepinš, E. Lukevics), (248)131
- 1,3-Diphenyl-1,3-dimethyl-2,4-dineopentyl-1,3-disilacyclobutanes, synthesis and stereochemistry of 5 isomers of (P.R. Jones, M.E. Lee), (232)33
- Diphosphenes, RP=PR', synthesis and characterisation of (J. Escudié, C. Couret, J.D. Andriamizaka, J. Satgé), (228)C76
- 1,3-Diselena-[3]ferrocenophanes of C, Si and Sn, synthetic and structural studies on; crystal and molecular structure of bis(ferrocene-1,1'-diselenoato)tin(IV) at 163 K (A.G. Osborne, R.E. Hollands, R.F. Bryan, S. Lockhart), (226)129
- Disilane derivatives, comparative ^{29}Si NMR investigations of (H. Söllradl, E. Hengge), (243)257
- Disiloxane derivatives of acetamide and benzamides (B. Dejak, Z. Lasocki), (246)151
- Dodecamethyl-1 λ^3 , 4 λ^3 -diphospha-2,3,5,6,7,8-hexasilabicyclo[2.2.2]octane, preparation of (K. Hassler), (246)C31
- Electron-accepting properties of silicon in Si—O—C and Si—O—Si systems (M. Bordeau), (229)203
- [1]Ferrocenophanes, structure and reactions of (M. Clemance, R.M.G. Roberts, J. Silver), (243)461
- Germyl anions and functional germanium derivatives, formation from reduction reactions of halogermanes under nucleophilic assistance (A. Castel, P. Rivière, J. Satgé), (232)137
- Germyl anions, germylenes and functional germanium derivatives, formation from reactions of halogermanes under nucleophilic assistance (P. Rivière, A. Castel, J. Satgé), (232)123
- Group IVA thiospiranes, UV photoelectron spectroscopy of M—S σ -bonding energy and spiroconjugation effects in (E. Andoni, M. Bossa, C. Cauletti, C. Furlani, A. Palma), (244)343
- Haloalkylsilyl amines, NMR spectra and basicities of (C.H. Yoder, B.M. Cader), (233)275
- Halomethylsilanes, dipole moments of (J. Nagy, G. Zsombok, E. Hengge, W. Veigl), (232)1
- Halotrimethylsilanes, and trimethylsilyl triflate NMR study of interaction with dimethyl formamide and acetonitrile (A.R. Bassindale, T. Stout), (238)C41
- Heptaphosphonortricycles: derivatives and homologues of $P_7(\text{SiMe}_3)_3$ (G. Fritz, K.D. Hoppe, W. Höne, D. Weber, C. Mujica, V. Manriquez, H.-G. v. Schnering), (249)63
- Hexamethylcyclodisilazane, vibrational spectra of (T. Veszprémi, L. Bihátsi, M. Gál), (232)9
- Hexamethyldisilane/tetrakis(triphenylphosphine)palladium system, reductive dehalogenation of α -halogenated carbonyl and cyano compounds with (H. Urata, H. Suzuki, Y. Moro-Oka, T. Ikawa), (234)367
- 1,1,1,3,3-Hexaphenyl-1,3-disilapropane, crystal and molecular structure of (C. Glidewell, D.C. Liles), (234)15
- Highly sterically hindered organosilicon compounds, properties of (Review) (C. Eaborn), (239)93
- Hydrogen-containing cyclosiloxanes, dehydrocondensation of (T.N. Martynova, V.P. Korchkov), (248)241
- Iodotris- and tetrakis-(pentacarbonylmetal)silane highly hindered derivatives containing manganese and rhenium, preparation and spectra of (B.J. Aylett, M.T. Taghipour), (249)55
- $M(o\text{-C}_6\text{H}_4\text{CH}_2\text{PR}_2)_2$ ($M = \text{Pd, Pt}$) cyclo-metallated complexes, metallation reactions of (H.-P. Abicht, P. Lehniger, K. Issleib), (250)609
- $M(\text{CO})_n\text{L}$ ($M = \text{Cr, Mo, W}$) complexes with chelating ligands: (2-Me $_2$ E'C $_6$ H $_4$)-Si(EMe $_2$)Me $_2$ and (4-XC $_6$ H $_4$)SiMe-(EMe $_2$)CH $_2$ CH $_2$ E'Me $_2$ ($X = \text{F, Cl}$; E, E' = N, P, As) (P. Aslandis, J. Grobe), (249)103
- Me $_2$ Si[$\eta^5\text{C}_5\text{H}_4\text{Fe}(\text{CO})_2(\eta^1\text{CH}_2\text{C}_6\text{H}_4)]_2$, evidence for enhanced reactivity in photofragmentation of (G.O. Nelson, M.E. Wright), (239)353
- Metallavioles, ESR study of (W. Kaim), (241)157

- Methyl(aroyloxymethyl)fluorosilanes, intramolecular coordination in (Yu.L. Frolov, M.G. Voronkov, G.A. Gavrilova, N.N. Chipanina, L.I. Gubanova, V.M. D'yakov), (244)107
- Methylcyclopolsilanes, synthesis and properties of (B.J. Helmer, R. West), (236)21
- Methylene-triosmium cluster, Os₃(CO)₁₀-(μ-CO)(μ-CHSiMe₃), crystal structure of (M.R. Churchill, H.J. Wasserman), (248)365
- Methylphenyltriphenylgermylsilanes, cleavage of the Si—Ge bond in (R.J.P. Corriu, S. Ould-Kada, G.F. Lanneau), (248)39
- Methylphenyltriphenylgermylsilanes, synthesis and stereochemistry of (R.J.P. Corriu, S. Ould-Kada, G. Lanneau), (248)23
- Methylpolysilanyl groups, σ⁺ constants of chemical shifts in and electron-donation by (L.F. Brough, R. West), (229)113
- Methylsiloxanes, redistribution reactions catalysed by transition metal complexes (W.A. Gustavson, P.S. Epstein, M.D. Curtis), (238)87
- 3-Methyl-5-(trimethylsilylmethyl)-1,2,4-oxadiazole and 3-methyl-4-nitro-5-(trimethylsilylmethyl)isoxazole, synthesis via organolithium reagents of (R. Pepino, A. Ricci, M. Taddei, P. Tedeschi), (231)91
- Methyltris(dialkylphosphino)silanes, reactions with carbonyl cluster complexes of (D.F. Foster, B.S. Nicholls, A.K. Smith), (244)159
- Molybdenum *cis*-disubstituted carbonyl complexes, correlation of NMR chemical shifts and CO stretching force constants for (G.M. Gray, C.S. Kraihanzel), (241)201
- Mono- and di-alkoxy(triphenylsilyl)-carbene complexes of rhenium, structural investigations of (U. Schubert, K. Ackermann, P. Rustemeyer), (231)323
- Nickel complexes with vinylsilanes, preparation of (L.S. Isaeva, T.A. Peganova, P.V. Petrovskii, F.F. Kayumov, F.G. Yusupova, V.P. Yur'ev), (248)375
- Octamethylcyclotetrasilane, crystal structure at 87 K of (C. Kratky, H.G. Schuster, E. Hengge), (247)253
- 2,2,3,3,5,5,6,6-Octamethyl-1,4-dithia-cyclohexasilane, -1,4-diselenacyclohexasilane and -1-selena-4-thiacyclohexasilane, preparation of (E. Hengge, H.G. Schuster), (240)C65
- Organoelement compounds, kinetics and mechanism of oxidation by ozone of (Review) (Yu.A. Alexandrov, B.I. Tarunin), (238)125
- Organopentafluorosilicates, chemistry of (Review) (M. Kumada, K. Tamao, J.-I. Yoshida), (239)115
- Organorhodium complexes with chelating phosphine ligands, synthesis, NMR spectral *cis, trans* influence and molecular structure of (E. Arpac, L. Dahlenburg), (241)27
- Organo-silanol and -siloxanes, highly sterically hindered (C. Eaborn, K.D. Safa), (234)7
- Organosilicon peroxides, preparation, properties and applications of (Review) (Yu.A. Alexandrov), (238)1
- Organosilicon tertiary iodide, (Me₃Si)₃-CSiMe₂I, S_N1 methanolysis of (S.A.I. Al-Shali, C. Eaborn, F.M.S. Mahmoud), (232)215
- Organotin chlorides, one-step syntheses of tri-n-butyltin bromide or iodide and di-n-butyltin dibromide or diiodide from (E.C. Friedrich, C.B. Abma, G. Delucca), (228)217
- Organotin surface-active complexes (H. Schumann, B. Pachaly), (233)281
- [Os₃H₂(CO)₁₀] and [Os₃H(CO)₁₁]⁻, reaction with [N₃SiMe₃] and formation of [Os₃H(CO)₁₀(μ-NHPh)] using [Os₃(CO)₁₁(NCMe)] of; X-ray structures of [Os₃(μ-H)(CO)₁₀(η-N₃H₂)] and [Os₃(μ-H)(CO)₁₀(μ-NHSiMe₃)] (B.F.G. Johnson, J. Lewis, P.R. Raithby, S.W. Sankey), (228)135
- Palladium(0)-catalysed dechlorinative silylation of benzylic chlorides with methylchlorodisilanes; facile route to benzylmethylchlorosilanes (H. Matsumoto, M. Kasahara, I. Matsubara, M. Takahashi, T. Arai, M. Hasegawa, T. Nakano, Y. Nagai), (250)99
- Pentacoordinate silicon derivatives, relative apicophilicity of functional groups attached to silicon in (R.J.P. Corriu, M. Poirier, G. Royo), (233)165
- Penta-2,4-dienyl-silanes, -germanes and -stannanes, regiochemistry of electrophilic cleavages of (M. Jones, W. Kitching), (247)C5
- N,N'*-Phenylcyclodisilazanes, UV spectroscopic investigation of (T. Veszprémi, L. Bihátsi, J. Nagy), (236)163

- Phenyllithium and phenylsodium *o*-functional derivatives of IVB and VB elements, synthesis and rearrangements of (J. Heinicke, E. Nietzschmann, A. Tzschach), (243)1
- Phosphineborane analogues of trimethylsilyl amides (C.H. Yoder, L.A. Miller), (228)31
- Polygermanes and polygermasilanes, synthesis and UV spectra and theoretical study of substitution effects in (A. Castel, P. Riviere, B. Saint-Roch, J. Satgé, J.P. Malrieu), (247)149
- Propargylsilanes, action on α -ethylenic carbonyls of (J. Pernet, N.B. Kolai, D. Mesnard, L. Miginiac, K. Jaworski), (236)177
- Protodesilylation of dihalomethylsilanes (G.L. Larson, C. Cádiz), (232)113
- Reductive silylation of conjugated trienes to 1,6-disilyl dienes (L. Birkofner, M. Bockhorst, A. Steigel, D. Eichstädt), (233)291
- Regioselective asymmetric hydrosilylation, synthesis of optically active allylic alcohols via (T. Kogure, I. Ojima), (234)249
- SiH and GeH stretching frequency variations in rotational conformers of $>\text{MHCH}_x\text{X}$ compounds (D.C. McKean, I. Torto, A.R. Morisson), (226)C47
- Silatranes (*Review*) (M.G. Voronkov, V.M. Dyakov, S.V. Kirpichenko), (233)1
- Silica-supported iridium-phosphine catalysts for the reaction of silanes with alcohols (J. Dwyer, H.S. Hilal, R.V. Parish), (228)191
- Silicinium ylids, stabilisation by adduct formation with aluminium trihalides; crystal structure of $[(\text{Me}_3\text{C})_2\text{SiNCMe}_3]_2\text{-AlClF}_2$, (W. Clegg, U. Klingebiel, J. Neemann, G.M. Sheldrick), (249)47
- Silicon— and germanium—transition metal bonds, dependence of the stereochemistry on the ligands and geometry of complexes on cleavage of (G. Cerveau, E. Colomer, R.J.P. Corriu), (236)33
- Silicon atom abstraction reactions, mechanism of (E.A. Siefert, S.D. Witt, K.-L. Loh, Y.-N. Tang), (239)293
- Silicon resins, ^{29}Si NMR investigations of the structure of (H. Jancke, G. Engelhardt, H. Grosse-Ruyken), (247)139
- Siloses, reactions with organolithium reagents of (M. Ishikawa, T. Tabohashi, H. Sugisawa, K. Nishimura, M. Kumada), (250)109
- Siloxypropanes, useful synthetic intermediates (S. Murai, I. Ryu, N. Sonoda), (250)121
- Silyl, germyl and stannyl radicals, ESR of adducts with 1,4-diaza-1,3-butadiene and the diprotonated radical cation (A. Alberti, A. Hudson), (241)313
- Silyl hydrogen exchange with deuterium gas on copper (M. Bartók, Á. Molnár), (235)161
- Silylenes, orbital symmetry analyses of, reactions with acetylenes of; dimerization of 1-silacycloprenes (E.A. Halevi, R. West), (240)129
- Silylenes, photolysis with allyl ethyl ether of (M. Ishikawa, S. Katayama, M. Kumada), (248)251
- Silylindolizines, dihydrosilanaphtho-indolizine and dihydrosilaazaaceanthrenes, mass spectra of (N.S. Prostakov, N. Saxena, P.I. Zakharov, A.V. Varlamov, D.A. Fesenko), (228)37
- Silyl-titanation of acetylenes and 1,3-dienes (K. Tamao, M. Akita, R. Kanatani, N. Ishida, M. Kumada), (226)C9
- Silyl-transition metal complexes, ^{29}Si NMR studies of bonding and molecular motions in (K.H. Pannell, A.R. Bassindale), (229)1
- Sulphinic acid-imidoamidotannanes, synthesis of (D. Hänsgen, R. Steffens), (236)53
- 1,1,2,2-Tetrafluoro-1,2-disilacyclobutene, cycloaddition reactions with aldehydes and ketones of (C.-P. Chin, C.-S. Liu), (235)7. Idem (Y.-B. Lu, C.-S. Liu), (243)393
- 2,3,4,5-Tetrakis(dimethyl)sulphocyclopentasilane and 2,3,4,5-tetrakis(dimethyl)selenacyclopentasilane, preparation of (E. Hengge, H.G. Schuster), (231)C17
- Tetrameric *meso*-tin(II) metallocycle, $\text{Sn}(\text{CHSiMe}_3\text{C}_6\text{H}_4\text{CHSiMe}_3\text{o})$, synthesis and X-ray structure of and characterisation of *meso*,*meso*- $\text{Sn}(\text{CHSiMe}_3\text{C}_6\text{H}_4\text{CHSiMe}_3\text{o})_2$ (M.F. Lappert, W.-P. Leung, C.L. Raston, A.J. Thorne, B.W. Skelton, A.H. White), (233)C28
- 1,1,2,2-Tetratolyl-3,4-bis[bis(trimethylsilyl)methylene]-1,2-disilacyclobutanes, formation and reactions of (M. Ishikawa, K. Nishimura, H. Ochiai, M. Kumada), (236)7
- Thallium(I) molecular monomeric compound with a chelating silicon-containing ligand, preparation of (M. Veith, R. Rösler), (229)131

- 1,3-Thiasilacyclopentane and 1,3- and 1,4-thiasilacyclohexane derivatives (M.G. Voronkov, S.V. Kirpichenko, E.N. Suslova, V.V. Keiko, A.I. Albanov), (243)271
- Trialkoxysilanes, interactions with organic solvents of (R. Marciniec, H. Gulińska), (236)1
- Trialkylsilanes, radical-initiated addition across alkene C=C bonds of (N.M.K. El-Durini, R.A. Jackson), (232)117
- Tri- and tetra-alkylsilanes, *N*-silylamines, ethers, trialkyl-silanols and alkoxy-silanols and hexaalkyldisiloxanes, molecular optical anisotropies of (M. Bordeau, E. Frainnet, C. Clement), (229)119
- Trialkylstannyllithium, mechanistic studies on decomposition of (K. Kobayashi (née Kuno), M. Kawanisi, T. Hitomi, S. Kozima), (233)299
- Triethylsilanes, alcoholysis catalysed by bis(trimethylphosphinedicarbonyl-dichlororuthenium (U. Oehmichen, H. Singer), (243)199
- Trimethyl-Group IV cations in the gas-phase, unimolecular and collision-induced decomposition of (G.S. Groenewold, M.L. Gross, M.M. Bursey, P.R. Jones), (235)165
- Trimethyl(methylene)phosphorane in deprotonation reactions with cationic carbeneiron complexes (G. Grötsch, W. Malisch), (246)C42
- Trimethylphenylsilane, PE and Penning ionization electron spectroscopic investigation of (T. Veszprémi, Y. Harada, K. Ohno, H. Mutoh), (244)115
- Trimethylphosphoranylidene(methyl(trimethylsiloxy)carbene complexes of chromium, molybdenum and tungsten, formation and *E/Z* isomerisation of (S. Voran, H. Blau, W. Malisch, U. Schubert), (232)C38
- Trimethylsilyl iodide, halogen redistribution reaction with alkyl halides of (E.C. Friedrich, G. De Lucca), (226)143
- 2-Trimethylsilyl-1-phenoxyethane, dissociative ionisation with formation of the non-classical ethylenetrtrimethylsilanium ion of (B. Ciommer, H. Schwarz), (244)319
- Trimethyltriphenyldisilane, crystal structure of (L. Párkányi, E. Hengge), (235)273
- Tris(trimethylsilyl)methyl derivatives of boron, aluminium and gallium, preparation and properties of (C. Eaborn, M.N. El-Kheli, N. Retta, J.D. Smith), (249)23
- [Tris(trimethylsilyl)methyl]-substituted silanes and related compounds, ^{13}C and ^{29}Si NMR spectra of (R. Damrauer, R.J. Linderman), (235)1
- Tris(trimethylsilyl)methylboron highly sterically hindered compound, preparation and molecular structure of (C. Eaborn, N. Retta, J.D. Smith, P.B. Hitchcock), (235)265
- Zirconocene complexes, regio-selectivity of addition of alkynes to (V. Skibbe, G. Erker), (241)15
- ### Silver
- Alkylsilver species, regiospecific addition to enynyl-sulphides, enynyl-sulphoxides and -phosphines of (H. Westmijze, H. Kleijn, P. Vermeer), (234)117
- Bis(1–2:5–6- η -cyclooctatetraene)silver(I) nitrate, $(\text{C}_8\text{H}_8)_2\text{AgNO}_3$, crystal and molecular structure of (T.C.W. Mak, W.C. Ho), (243)233
- Cyclooctatetraene and silver nitrate 2/3 adduct, X-ray structure of (T.C.W. Mak), (246)331
- Cyclooctatetraene-silver nitrate adduct, crystal structure of (W.C. Ho, T.C.W. Mak), (241)181
- Pentahalophenylargentate(I) complexes (R. Usón, A. Laguna, J.A. Abad), (246)341
- Silver(I) bis(pyridine-2-carbaldehyde-imine)triflate complexes, application of INEPT ^{109}Ag and ^1H -{ ^{109}Ag } NMR in solution to study the stereochemistry of (G.C. van Stein, G. van Koten, C. Brevard), (226)C27
- ### Sodium
- Acetylcylopentadienylsodium tetrahydrofuranate, formation and molecular structure of (R.D. Rogers, J.L. Atwood, M.D. Rausch, D.W. Macomber, W.P. Hart), (238)79
- Alkali metal derivatives of octamethyltrisilazane, short Na—C contacts in the molecular structure of the disodium salt (D.J. Brauer, H. Bürger, W. Geschwandtner, G.R. Liewald, C. Krüger), (248)1

- Alkali-metal promoted transfer of dimethylsilylene from dodecamethylcyclohexasilane to silanes and dienes (R.T. Conlin, L.L. Peterson), (232)C71
- Alkali metal salts of pentaphenylcyclopentadienide (R. Zhang, M. Tsutsui, D.E. Bergbreiter), (229)109
- Alkali metal solutions, effect of cryptands on solubility and spectra in THF, dioxane and toluene (J. Lacoste, F. Schue), (231)279
- Cyclopentadienylbromocobalt intermediates in cyclopentadienylation of cobalt bromide with cyclopentadienylsodium (U. Koelle, F. Sistig, J. Gersdorf), (233)253
- η^6 - and η^5 -Fluorenylchromium tricarbonyl anions, ^{13}C NMR study of reversible isomerisation of (Yu.F. Oprunenko, Yu.N. Luzikov, Yu.A. Ustynyuk, N.A. Ustynyuk), (231)137
- Heavier alkali metals; Annual Survey covering the year 1980 (E.M. Kaiser), (227)135
- Iron carbonyls, reactions with anionic nitrogen heterocycles of (V.N. Babin, Yu.A. Belousov, V.V. Gumenyuk, R.M. Salimov, R.B. Materikova, N.S. Kochetkova), (241)C41
- 1-Phenyl-2,5-diaryl(dialkyl)-arsoles, conversion with alkali metal and organolithium compounds of (G. Märkl, H. Hauptmann, A. Merz), (249)335
- Phenyllithium and phenylsodium α -functional derivatives of IVB and VB elements, synthesis and rearrangements of (J. Heinicke, E. Nietzschiemann, A. Tzschach), (243)1
- Phosphinothioylidenes, reactions with tetracarbonyliron-disodium complexes of (E. Lindner, G.A. Weiss), (244)C9
- Synthetic possibilities of addition reactions between common organometallic compounds and conjugated enynes (*Review*) (L. Miginiac), (238)235
- ### Strontium
- Synthetic possibilities of addition reactions between common organometallic compounds and conjugated enynes (*Review*) (L. Miginiac), (238)235
- ### Sulphur
- Alkylsilver species, regiospecific addition to enynyl-sulphides, enynyl-sulphoxides and -phosphines of (H. Westmijze, H. Kleijn, P. Vermeere), (234)117
- Alkylthiononacarbonyltriiron clusters, synthesis and reactions of (J. Takács, L. Markó), (247)223
- 2-Alkyl-2-trimethylsilylmethyl-1,3-dithianes, silicon migration and ring cleavage reactions of (T.A. Hase, L. Lahtinen), (240)9
- 2-Allyloxybenzothiazole-copper(I) π -complexes, selectivity in allylic substitution through neighbouring coordination (V. Calò, L. Lopez, G. Pesce), (231)179
- Allylsulphones, isomerisation catalysed by arenesulphinic acids of and the role of palladium on yield and regioselectivity (M. Julia, M. Nel, A. Righini, D. Uguen), (235)113
- Antiferromagnetic heteronuclear cluster ($\text{Cp}_4\text{Cr}_2\text{Ni}_2$) $(\mu_3\text{-S})_2(\mu_4\text{-S})$, synthesis and structure of (A.A. Pasynskii, I.L. Eremenko, O.G. Ellert, V.M. Novotortsev, Yu.V. Rakitin, V.T. Kalinnikov, V.E. Shklover, Yu.T. Struchkov), (234)315
- Arylthiomethyl(triphenyl)tin compounds, charge transfer interactions with tetracyanoethylene of (J. McM. Wigzell, R.D. Taylor, J.L. Wardell), (235)29
- Benzalkyl and β -phenethylalkyl sulphides, metalation of (S. Cabbidu, C. Floris, S. Melis, P.P. Piras, F. Sotgiu), (236)149
- Bimetallic cluster of the type: $(n\text{-C}_5\text{Me}_5)_2\text{-M}_2\text{M}'_2(\mu_3\text{-S})_4(\text{CO})_2$ ($\text{M} = \text{Cr}, \text{Mo}$; $\text{M}' = \text{Co}$), formation of (H. Brunner, J. Wachter), (240)C41
- Bis(benzthiazol-2-yl)- and bis(benzoxazol-2-yl)-methylgermanes, synthesis and reactions of (P. Jutzi, U. Gilge), (244)355
- Bis[μ -carbonyl(η^5 -pentamethylcyclopentadienyl)cobalt] $(\text{Co}-\text{Co})$, reactivity towards diazoalkanes and sulphur dioxide of (W.A. Herrmann, J.M. Huggins, C. Bauer, M. Smischek, H. Pfisterer, M.L. Ziegler), (226)C59
- Bis(pentamethylcyclopentadienyldicarbonylmolybdenum), reaction with $\text{CH}_3\text{N}=\text{C}=\text{S}$ of; formation and crystal structure of $(\text{C}_5\text{Me}_5)_2(\text{CO})_4\text{Mo}_2(\mu, \eta^2\text{-C}=\text{NCH}_3)$ (H. Brunner, H. Buchner, J. Wachter, I. Bernal, W.H. Ries), (244)247
- t-Bu_nP=S=NP-t-Bu_n, fragmentation in addition reactions to osmium clusters of; synthesis, solid state structure and dynamic properties of $\text{Os}_3(\text{CO})_{11}[\text{P-t-Bu}_n]$

- $\text{Bu}_2(\text{NH}_2)$] and $\text{HO}_3(\text{CO})_3[\text{P}-t\text{-Bu}_2\text{N}-(\text{H})\text{S}]$ (W. Ehrenreich, M. Herberhold, G. Süss-Fink, H.-P. Klein, U. Thewalt), (248)171
- t-Butylgermanium halides and chalcogenides, chemistry of (M. Wojnowska, M. Noltemeyer, H.-J. Fullgrabe, A. Meller), (228)229
- Carbanions α to sulphoxides and sulphones, structure of (G. Chassaing, A. Marquet, J. Corset, F. Froment), (232)293
- Carbon dioxide complexes of niobium, synthesis, reactivity and their use as ligands of; crystal structure of $(n\text{-C}_4\text{H}_9)(\eta^5\text{C}_5\text{H}_5)_2\text{Nb}(\mu\text{-CS}_2)\text{W}(\text{CO})_5$ (J. Amaudrut, J. Sala-Pala, J.E. Guerchais, R. Mercier, J. Douglade), (235)301
- Carbon disulphide and diselenide insertion into metal-amido bonds; mono- vs. bi-dentate dithiocarbamates formed by reactions of $\text{CS}_2 + \text{NHR}_2$ with $[\text{CpM}(\text{CO})_n]_2$, ($M = \text{Fe}$, $n = 2$; $M = \text{Mo}$, $n = 3$) (E. Román, D. Catheline, D. Astruc), (236)229
- Carbon diisulphide-bridged metal complexes, preparation of (H. Stolzenberg, W.P. Fehlhammer), (235)C7
- Carbon disulphide-iron, -palladium and -platinum complexes, reactions with electrophiles of (H. Stolzenberg, W.P. Fehlhammer, P. Dixneuf), (246)105
- Carbon disulphide-tungsten complexes, reactivity of (W.A. Schenk, T. Schwietzke, H. Müller), (232)C41
- Carbonyliron-sulphur cluster compounds, oxidative cleavage of metal-metal bonds in; synthesis and structure of $\text{Fe}_3(\text{CO})_9(\mu_2\text{-X})(\mu_3\text{-S}-t\text{-C}_4\text{H}_9)$ (A. Winter, L. Szolnai, G. Huttner), (232)47
- Carbonylmanganese(I) complexes, *fac*- $[\text{MnBr}(\text{CO})_3\{\text{Ph}_2\text{PC}(\text{S})\text{NPhH}\}]$ and $[\text{Mn}\{\text{S}(\text{NPh})\text{CPPPh}_3\}(\text{CO})_4]$, molecular and crystal structures of; neutral phosphinothioformamides and their deprotonated anionic derivatives as S,P ligands (B. Just, W. Klein, J. Kopf, K.G. Steinhäuser, R. Kramolowsky), (229)49
- Carbonyl-molybdenum(0) and -molybdenum(II) complexes with organosulphur ligands, synthesis and properties of (D. Sellmann, J. Schwarz), (241)343
- $[\text{CH}_3\text{C}(\text{S})\text{CHC}(\text{S})\text{CH}_3][\text{CH}_3\text{S}(\text{O})(\text{CH}_2)_2]\text{Ni}$, crystal and molecular structure of (D.S. Dudis, J.P. Fackler, Jr.), (249)289
- $[(3\text{-Chloro-4-}o\text{-nitrophenylthio})butyl]\text{-triphenyltin}$, formation from the reaction of 4-butene-triphenyltin and *o*-nitrobenzenesulphenyl chloride of (J. McM. Wigzell, J.L. Wardell), (235)37
- Chromium(0) π -complexes and corresponding arenes in dimethyl sulphoxide solutions, cathodic reduction of (L.P. Yur'eva, L.N. Nekrasov, S.M. Peregudova, A.P. Korotkov, L.N. Vykhodtseva, N.N. Zaitseva, Yu.A. Shevelev), (238)197
- Copper(I) borohydride, reduction of CO_2 , CS_2 and COS by; X-ray crystal structure of $[(\text{triphos})\text{Cu}(\text{O}_2\text{CH})]$ (C. Bianchini, C.A. Ghilardi, A. Meli, S. Midollini, A. Orlandini), (248)C13
- Cyclopalladation and cyclorhodation of N -(3-thienyl)pyrazole (M. Nonoyama), (229)287
- Cyclopentadienylcobalt disulphur dinitride derivative, synthesis and structure (F. Edelmann), (228)C47
- Cyclopentadienyldicarbonyl-manganese and -chromium dinuclear complexes containing germanium, sulphide, dinitrogen or phosphinidene bridges, MO study of bonding and conformations in (N.M. Kostić, R.F. Fenske), (233)337
- $[\eta^5\text{-Cyclopentadienyliron-}n^6\text{-penta-methylaniline}]^+$ and derivatives with amides and sulphur amides of (C. Moinet, E. Raoult), (231)245
- Cyclopentadienylnickel complexes with bis(phenylthio)alkylidene ligands, synthesis and reactivity of (N. Kuhn, M. Winter), (234)C1
- Cymantrene derivatives with an aryl-cymantrenyl phenyl thioketone ligand, *E-Z* isomerisation of (V.I. Bakhmutov, P.V. Petrovskii, S.P. Dolgova, V.N. Setkina, E.I. Fedin, D.N. Kursanov), (246)177
- Dialkylaminoethanethiophenylboranes, synthesis and properties of (R.H. Cragg, T.J. Miller), (243)387
- Dialkylgermylenes, $R_2\text{Ge} \cdot \text{NET}_3$, condensation reactions with various oxiranes and thirane of (J. Barrau, M. Bouchaut, H. Lavayssiére, G. Dousse, J. Satgé), (243)281
- Diazaphosphasiletidenesulphide rhenium dinuclear complex, synthesis by isomerisation of an amino(imino)thiophosphorane of (O.J. Scherer, J. Kerth), (243)C33

- Di-bridged trinuclear iron cluster, $\text{Fe}_3(\text{CO})_6(\mu_3-\text{S})(\mu_3-\text{X})$ ($\text{X} = \text{PR}_3, \text{AsR}_3, \text{SO}$), synthesis from $[\text{Fe}_3(\text{CO})_6(\mu_3-\text{S}-\text{t}-\text{C}_6\text{H}_5)]^-$ of (A. Winter, L. Zsolnai, G. Huttner), (234)337
- Dimethylacetylene dicarboxylate cyclo-addition to η^2 -coordinated trithiocarbonate (C. Bianchini, A. Meli), (236)C76
- Dimethylgermathlonine and dimethylsila-thione generation and their detection in the gas phase by PES (C. Guimon, G. Pfister-Guilhouzo, H. Lavayssiere, G. Dousse, J. Barrau, J. Satgé), (249)C17
- 3,3-Dimethyl-4-methylthio-1-butyne derivative from reaction with dichlorobis(benzonitrile)palladium; X-ray crystal structure of chloro(2,4-bis(1',1'-dimethyl-2'-(methylthio)ethyl)-3-furyl-*C,S,S*)palladium(II) (R. McCrindle, G. Ferguson, G.J. Arsenault, A.J. McAlees, M. Parvez), (246)C19
- Dimethylsilylene, steric requirements for deoxygenation of dialkyl sulphoxides by (I.S. Alnaimi, W.P. Weber), (241)171
- Dimethylthiocarbamoyl chloride, reaction with $[\text{Cr}(\text{CO})_5(\text{THF})]$ of and formation of trithiocarbonate, diselenothiocarbonate and triselenocarbonate complexes of pentacarbonylchromium(0) from one of the products containing coordinated *N,N*-dimethylthioformamide (H.G. Raubenheimer, G.J. Kruger, A. Lombard), (240)C11
- Dinuclear complex with asymmetric $\text{Co}(\text{CS})\text{Co}$ bridging groups, $\text{C}_5\text{H}_5(\text{PMe}_3)_2\text{CO}(\mu-\text{CS}), \text{CoC}_5\text{H}_5$, synthesis and crystal structure of (H. Werner, O. Kolb, U. Schubert, K. Ackermann), (240)421
- Diphenylcyclopropenethione, reaction with nonacarbonyldiiron of; crystal and molecular structure of $\text{C}_6\text{Ph}_4\text{Fe}_3\text{S}_2(\text{CO})_8$ and $\text{C}_6\text{Ph}_4\text{S}_2\text{Fe}_2(\text{CO})_6$ (G. Dettlaf, P. Hübener, J. Klimes, E. Weiss), (229)63
- Diphenylethylarsine sulphide, $\text{C}_{14}\text{H}_{11}\text{AsS}$, and *p*-tolylidethylarsine sulphide, $\text{C}_{11}\text{H}_9\text{AsS}$, crystal and molecular structures of (V.E. Zavodnik, V.K. Belsky, Yu.G. Galyametdinov), (226)41
- 2,3-Disubstituted thiophenes, synthesis via metalated acetylenes and allenes of (R.L.P. de Jong, L. Brandsma), (238)C17
- (η^2 -Disulphido)-niobium complexes, synthesis and comparison of their reactivity with that of (η^2 -dioxo) complexes of (J.-L. Migot, J. Sala-Pala, J.-E. Guerchais), (243)427
- Dithiocarbene complexes derived from CS_2 -bridged dinuclear complexes (L. Busetto, A. Palazzi, M. Monari), (228)C19
- 1,2-Dithiol-*o*-carborane, synthesis of cyclic and polymeric derivatives of (F. Teixidor, R.W. Rudolph), (241)301
- η^2 -Dithiomethyl ester group, unprecedented intramolecular attack by a phosphine on; X-ray crystal structure of the complex $[\text{Ph}_2\text{PCH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{PPH}_2)_2\text{Ni}(\text{CS}_2\text{Me})]\text{BPh}_4^-$ (C. Bianchini, C.A. Ghilardi, A. Meli, A. Orlandini), (246)C13
- Electrophiles containing chiral iron centres, asymmetric induction in C—C bond forming reactions of prochiral nucleophiles with (J.E. Jensen, L.L. Campbell, S. Nakanishi, T.C. Flood), (244)61
- $\text{Fe}_3(\text{CO})_6(\mu_3-\text{S})(\mu_3-\text{ER})$ ($\text{R} = \text{alkyl, aryl}; \text{E} = \text{P, As}$), ligand properties of (A. Winter, I. Jibril, G. Huttner), (247)259
- Ferridoporphyrins, synthesis, characterisation and insertion reactions with sulphur dioxide of (P. Cocolios, E. Laviron, R. Guillard), (228)C39
- $\text{Fe}_3(\mu_3-\text{Te})_2(\text{CO})_6$, synthesis of heterometallic clusters from and comparisons with analogous sulphide clusters (L.E. Bogan, Jr., D.A. Lesch, T.B. Rauchfuss), (250)429
- Germanones and germathiones, reactivity towards nitrilimines, nitriloxides and nitrones of (H. Lavayssiere, J. Satgé, J. Barrau, M. Traore), (240)335
- Gold—ruthenium pentanuclear clusters, metal framework arrangements in; crystal structures of $[\text{Au}_2\text{Ru}_3(\mu_3-\text{S})(\text{CO})_8(\text{PPh}_3)_3]$ and $[\text{Au}_2\text{Ru}_3(\mu-\text{H})(\mu_3-\text{COMe})(\text{CO})_8(\text{PPh}_3)_2]$ (L.J. Farrugia, M.J. Freeman, M. Green, A.G. Orpen, F.G.A. Stone, I.D. Salter), (249)273
- $[\text{Hg}_3(\mu_2-\text{Cy}_2\text{P})_5(\text{O}_3\text{SCF}_3)_5]$ and $[\text{Hg}_3(\mu_2-\text{Cy}_2\text{P})_5(\text{SO}_4\text{H})_5]$, compounds involving the 10-membered ring system ($\text{Hg}-\text{P}$)₅ (P. Peringer, J. Eichbichler), (241)281
- Hydroxo-bridged, tetranuclear η -arene-ruthenium(II) quadrivalent cation, $[(\text{Ru}(\eta-\text{C}_6\text{H}_5)(\text{OH}))_4](\text{SO}_4)_2 \cdot 12 \text{H}_2\text{O}$, preparation, X-ray crystal structure and reactions of (R.O. Gould, C.L. Jones, D.R. Robertson, D.A. Tocher, T.A. Stephenson), (226)199

- Indium porphyrins containing bi- or tri-nuclear frameworks, synthesis and vibrational spectra of (P. Cocolios, C. Moise, R. Guillard), (228)C43
- Iridium-substituted difluorophosphines, preparation and properties of; synthesis of PF₂-bridged heterometal complexes (E.A.V. Ebsworth, R.O. Gould, N.T. McManus, D.W.H. Rankin, M.D. Walkinshaw, J.D. Whitelock), (249)227
- Iron complexes with η^1 -coordinated vinyl groups, spontaneous dimethylation with methyl iodide or methylfluorosulphonic acid esters of (G. Grötsch, W. Malisch), (246)C49
- Iron(II) complexes with 2,3,11,12-dibenzo-1,4,7,10,13-pentathiadodecane, synthesis and reactions of (D. Sellmann, U. Kleine-Kleffmann), (247)307
- Metal complexes of monothio- β -diketones, dipole moment measurements of (Review) (S.E. Livingstone), (239)143
- Metal dithioformates, nucleophilic attack by tertiary phosphines on; preparation and structure of [(dppe)Fe[S₂C(H)-dppe]BPh₄⁻CH₂Cl₂] (G. Bianchini, A. Meli, F. Nuzzi, P. Dapporto), (236)245
- Metallacyclobutadiene complexes from ligand combination of CS and acetylene on osmium (G.P. Elliott, W.R. Roper), (250)C5
- Metal-metal double bonds in dinuclear cobalt and rhodium precursors, chlorogold, sulphur, selenium, tellurium and acetylene addition to (W.A. Herrman, C. Bauer, J. Weichmann), (243)C21
- Methylcyclopentadienylchromium(III) sulphide diamagnetic tetramer and anti-ferromagnetic copper(II) bromide adduct of the tetrานuclear cluster (MeC₅H₄)₄Cr₄(μ_3 -O)(μ_3 -S)₃, synthesis and molecular structures of (A.A. Pasynskii, I.L. Eremenko, Yu.V. Rakitin, V.M. Novotortsev, O.G. Ellert, V.T. Kalinnikov, V.E. Shklover, Yu.T. Struchkov, S.V. Lindeman, T.Kh. Kurbanov, G.Sh. Gasanov), (248)309
- Mixed metal "manganese rhenium cubane" [Mn₃Re(CO)₁₂(SC₆H₅)₄], photoinduced synthesis of (P. Jaitner), (231)255
- Multidentate ligand stabilised metal carbonyl cluster complexes, reactions with phosphine and immobilisation on silica or organic polymers of (D.F. Foster, J. Harrison, B.S. Nicholls, A.K. Smith), (248)C29
- [Nb(η^5 -C₅H₅)₂[PS₂(OR)₂]₂], EPR study of the electronic structure of; formation of derivatives by cleavage of S-S bonds in (J. Sala-Pala, J.-L. Migot, J.E. Guerchais, L. Le Gall, F. Grosjean), (248)299
- Nickel complexes as catalyst in substitution reactions of diethyl malonate by allylic acetates or sulphones (T. Cuvigny, M. Julia), (250)C21
- Octa-t-butyltetrastadtannachalcogen cyclic compounds, preparation and structure of (H. Puff, A. Bongartz, W. Schuh, R. Zimmer), (248)61
- Octacarbonyltriiron cluster complex, structure of a carbonic precursor of tetrathiafulvalene coordinated to (A. Benoît, J.-Y. Le Marouille, C. Mahé, H. Patin), (233)C51
- 2,2,3,3,5,5,6,6-Octamethyl-1,4-dithia-cyclohexasilane, -1,4-diselenacyclohexasilane and -1-selena-4-thiacyclohexasilane, preparation of (E. Hengge, H.G. Schuster), (240)C65
- Organic and organometallic compounds, analysis of the near infrared by photo-acoustic spectroscopy of (L.N. Lewis), (234)355
- Organolithium compounds derived from thioamides, RCH₂CSNMe₂, reactions with α -enones of (C. Goasdoué, N. Goasdoué, M. Gaudemar, M. Mladenova), (226)209
- Organometallic Ph_nMX (M = Hg, Sn, Pb, Sb; X = O, S, NR) and HX groups, determination of σ -constants of (L.M. Epstein, L.D. Ashkinadze, E.S. Shubina, D.N. Kravtsov, L.A. Kazitsyna), (228)53
- Osmium coordinated formaldehyde, synthesis of selenoformaldehyde and telluroformaldehyde complexes from (C.E.L. Headford, W.R. Roper), (244)C53
- Paramagnetic heterobimetallic η^2 -CS₂-bridged vanadium complexes (C. Moise), (247)27
- Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), (247)203
- Pentacarbonyl(dimethylsulphoxide)vana-date(-I), preparation and replacement reactions of (K. Ihmels, D. Rehder), (232)151

- Penta-2,4-dienyl-silanes, -germanes and -stannanes, regiochemistry of electrophilic cleavages of (M. Jones, W. Kitching), (247)C5
- Phenyldichalcogenides, cleavage by dialkyl- and diaryl-zirconocenes of; synthesis of ($\eta^5\text{-RC}_5\text{H}_4$)₂Zr(EPh)CH₃ and ($\eta^5\text{-RC}_5\text{H}_4$)₂Zr(EPh)₂ (R = H, t-Bu; E = Se, S) (S. Pouly, G. Tainturier, B. Gautheron), (232)C65
- Phenylisothiocyanate nickel dihapto-bonded complex, synthesis and crystal structure of (C. Bianchini, D. Masi, C. Mealli, A. Meli), (247)C29
- Phosphine and phosphite derivatives of bimetallic Group VI complexes, ligand transfer and oxidative decarbonylation in; crystal structure of [(C₅H₅)(CO)₂W(μ -SMe)(μ -I)W(CO)₃I] (J.L. Le Quéré, F.Y. Pétillon, J.E. Guerchais, L.J. Manojlovic-Muir, K.W. Muir, D.W.A. Sharp), (249)127
- Phosphinothioylidenes, reactions with tetracarbonyliron-disodium complexes of (E. Lindner, G.A. Weiss), (244)C9
- Platinum(II) three coordinate cationic complex, [(Ph₃PCH₂)(Ph₃P)PtCl]_n[AlCl₄]_n, preparation and derivatives of (O.J. Scherer, H. Jungmann), (228)C61
- Pyridine replacement reactions of Mo(S₂)(π -allyl)(CO)Py (S₂S = xanthate and dithiocarbamate) complexes of molybdenum and tungsten with sulphur donors (M.F. Perpiñán, L. Ballester, A. Santos), (241)215
- [Re₃H₄(CO)₁₀]⁻, reactions with mercaptans of; synthesis and X-ray characterisation of the anion [Re₃H₃(CO)₉(μ -SBu-t)]⁻ (R. Bonfichi, G. Ciani, G. D'Alfonso, P. Romiti, A. Sironi), (231)C35
- Rhenium carbonyl halide binuclear complexes of disulphides and diselenides, synchronous ligand atom pyramidal inversions in; X-ray crystal structure of [Re₂Br₂(CO)₆(C₆H₅CH₂SeSeCH₂C₆H₅)] (E.W. Abel, S.K. Bhargava, M.M. Bhatti, M.A. Mazid, K.G. Orrell, V. Šík, M.B. Hursthouse, K.M.A. Malik), (250)373
- Rhodium diolefin cationic complexes with sulphur donors, X-ray structure of [Rh(NBD)₂(SET₂)]ClO₄ (A. Tiripicchio, M. Tiripicchio Camellini, C. Claver, A. Ruiz, L.A. Oro), (241)77
- Silver complexes with trimeric thio-formaldehyde and trimeric seleno-formaldehyde, synthesis and structures of (H. Hofmann, P.G. Jones, M. Noltemeyer, E. Peymann, W. Pinkert, H.W. Roesky, G.M. Sheldrick), (249)97
- Sulphinic acid-imidoamidotannanes, synthesis of (D. Hänsgen, R. Steffens), (236)53
- Sulphinyl carbanions, reactions with organometallic compounds of; preparation of ($\eta^5\text{-C}_5\text{H}_4$)₂TiCH₂SC₆H₄ (C.R. Lucas), (236)281
- Sulphur-substituted organotin compounds, preparation and reactions of Ph_nSn(CH₂)_nSO₂C₆H₄Me-p (n = 3,4) and Ph_nSn(CH₂)_nSO₂C₆H₄Me-p (n = 2-4) (J.L. Wardell, L. McM. Wigzell), (244)225
- 2,3,4,5-Tetrakis(dimethyl)sulphocyclopentasilane and 2,3,4,5-tetrakis(dimethyl)selenacyclopentasilane, preparation of (E. Hengge, H.G. Schuster), (231)C17
- Tetra-organoantimony mercaptides, thermal decomposition of (B.S. Bedi, D.W. Grant, L. Tewnion, J.L. Wardell), (239)251
- Thiaphane conversion to cyclophane via iron pentacarbonyl (A.R. Koray), (243)191
- 1,3-Thiasilacyclopentane and 1,3- and 1,4-thiasilacyclohexane derivatives (M.G. Voronkov, S.V. Kirpichenko, E.N. Suslova, V.V. Keiko, A.I. Albanov), (243)271
- 5-exo-Thiocyanate and -isothiocyanate substituted tricarbonyl(μ -cyclohexa-1,3-diene)iron and tricarbonyl(η -cyclohepta-1,3-diene)iron and tricarbonyl(η -cyclohepta-1,3-diene)iron, linkage isomerism in (D.A. Brown, N.J. Fitzpatrick, W.K. Glass, P.K. Sayal), (234)C52
- Thionocarbonate fixation by Group VIB metal carbonyls, chemistry, spectroscopy and molecular structure of the products of (J. Daub, J. Kappler, K.H. Jogun, J.J. Stezowski, H. Binder), (240)239
- Thiophosphoranes as ligands in cyclopentadienylnickel complexes (N. Kuhn, M. Winter), (239)C81
- Tin and mercury thiophenolate charge transfer complexes with tetracyanoethylene, electron absorption spectroscopy of (P.G. Sennikov, A.A. Tumanov, A.N. Egorochkin, D.N. Kravtsov, L.S. Golovchenko, S.I. Pombrik), (248)17

- Titanocene derivatives with aminothiophenolates as ligands (H. Köpf, S. Grabowski, B. Block), (246)243
- Tricarbonylthiophenechromium, ring metallation with butyllithium of (M.N. Nefedova, V.N. Setkina, D.N. Kursanov), (244)C21
- Triethylphosphinecarbon disulphide adduct, Et₃PCS₂, reactivity toward iron(II) cations of; X-ray crystal structure of the complexes [(depe)₂Fe(S₂CPEt₃)]- (BPh₄)₂ and [(depe)₂Fe(S₂CH)](BPh₄) (C. Bianchini, P. Innocenti, A. Meli, A. Orlandini, G. Scapacci), (233)233
- Trimethylplatinum(IV) thiol compounds, preparation and characterisation of (E.W. Abel, K. Kite, B.L. Williams), (231)271

Tantalum

- Carbon—hydrogen—transition metal bonds (M. Brookhart, M.L.H. Green), (250) 395
- Carbonyl metolate anions (M = V, Nb, Ta), preparation of (F. Calderazzo, G. Pampaloni), (250)C33
- Di- η^5 -cyclopentadienyldimethyltantalum and deuterated analogues, photo-degradation studies on (D.F. Foust, M.D. Rausch), (226)47
- Dicyclopentadienyltantalum complexes (A. Antíñolo, M. Fajardo, A. Otero, P. Royo), (246)269
- Dicyclopentadienyltrihydrido-niobium and -tantalum, photoinitiated reactions with decacarbonyldimanganese of; structure of (η^5 -C₅H₅)₂(CO)Ta(μ -H)-Mn₂(CO)₆ (F.J. Timmers, W.R. Scheidt, J.A. Labinger, S. Baral), (240)153
- (η^2 -Disulphido)-niobium complexes, synthesis and comparison of their reactivity with that of (η^2 -dioxo) complexes of (J.-L. Migot, J. Sala-Pala, J.-E. Guerchais), (243)427
- Heterobimetallic complexes of tantalum prepared from dicyclopentadienylcarbonyltantalum hydride and carbonylmetal compounds (J.C. Leblanc, J.F. Reynoud, C. Moise), (244)C24
- Metallatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199
- Mono(η^5 -pentamethylcyclopentadienyl)-tantalum(V) compounds, preparation of (R.D. Sanner, S.T. Carter, W.J. Bruton, Jr.), (240)157

- Octacarbonyldicobalt, reactions with tantalum and niobium hydrides of; synthesis of bi- and poly-nuclear complexes (C. Moise, J.F. Reynoud, J.C. Leblanc, R. Broussier), (240)C15
- Organometallic compounds containing oxygen- or nitrogen-donor ligands, steric and stereochemical aspects of (Review) (D.C. Bradley), (239)17
- Organotantalum dinuclear asymmetric complex with three different bridging ligands, structure of (M.R. Churchill, H.J. Wasserman), (247)175
- {[Ta(η^5 -C₅Me₅)Cl₂]₂(μ -Cl)₃]⁺₂ · {[TaCl₅(μ -O)-TaCl₃]₂(μ -Cl)₂}²⁻, synthesis and crystal structure of (J.C. Green, C.P. Overton, K. Prout, J.M. Marin), (241)C21
- Vanadium, niobium and tantalum; Annual Survey covering the year 1980 (J.A. Labinger), (227)359

Technetium

- Manganese, technetium and rhenium; Annual Survey covering the year 1980 (P.M. Treichel), (237)61
- Manganese, technetium and rhenium; Annual Survey covering the year 1981 (P.M. Treichel), (242)205

Tellurium

- 1-Allyl-1-bromo-3,4-benzo-1-telluracyclopentane, [C₆H₅Te(C₂H₅)Br], 1-phenacyl-1-bromo-3,4-benzo-1-telluracyclopentane, [C₆H₅Te(C₆H₅O)Br] and 1-deuteromethyl-1-iodo-3,4-benzo-1-telluracyclopentane, [C₆H₅Te(CD₃)I], crystal structures of; trans-effect in organotellurium bromides and iodides (R.H. Jones, T.A. Hamor), (234)299
- Copper(I) and mercury(II) halides in reactions with unsymmetrical ditellurides (A.Z. Al-Rubaie, W.R. McWhinnie), (235)59
- Cyclopentadienylnickel complexes with seleno- and telluro ethers as ligands, synthesis and reactivity of (N. Kuhn, M. Winter), (249)C28
- Fe₃(μ ₃-Te)₂(CO)₆, synthesis of heterometallic clusters from and comparisons with analogous sulphide clusters (L.E. Bogan, Jr., D.A. Lesch, T.B. Rauchfuss), (250)429
- Metal—metal double bonds in dinuclear cobalt and rhodium precursors, chloro-

- gold, sulphur, selenium, tellurium and acetylene addition to (W.A. Herrmann, C. Bauer, J. Weichmann), (243)C21
- Nonacarbonyditelluriumtriiron, crystal and molecular structure of (H. Schumann, C. Bauer, J. Weichmann), (240)407
- Octa-t-butyltetrastannachalcogen cyclic compounds, preparation and structure of (H. Puff, A. Bongartz, W. Schuh, R. Zimmer), (248)61
- Organotellurium halides, ^{125}Te NMR spectra of (H. Schumann, M. Magerstädt), (232)147
- Osmium coordinated formaldehyde, synthesis of selenoformaldehyde and telluroformaldehyde complexes from (C.E.L. Headford, W.R. Roper), (244)C53
- Oxytelluration of olefins to (β -alkoxy- and β -hydroxy-alkyl)aryltellurium dihalides and their reactions with reducing agents and aqueous NaOH (S. Uemura, S.-I. Fukuzawa, A. Toshimitsu), (250)203
- Phosphine-nickel(II), -cobalt(II), -palladium(0) and -palladium(II) complexes as catalysts in cross-coupling reactions of aryl- and alkyl-Grignard reagents with organic tellurides (S. Uemura, S.-I. Fukuzawa, S.R. Patil), (243)9
- Selenato- and tellurolato-bridged dimolybdenum complexes, synthesis and spectroscopic properties of (P. Jaitner), (233)333
- Selenium and tellurium carboranyl derivatives, synthesis of (V.I. Bregadze, V.Ts. Kampel, A.Ya. Usiatinsky, O.B. Ponomareva, N.N. Godovikov), (233)C33
- Telluronium salts, synthesis of and spectroscopic examination based on 1-organo-3,4-benzo-1-telluracyclopentane cation of (A.Z. Al-Rubaie, W.R. McWhinnie, P. Granger, S. Chapelle), (234)287
- Tetrachlorotellurium as catalyst in cationic oligomerisations and polymerisations (M. Albeck, T. Tamari), (238) 357
- ### Thallium
- Germanium pentafluorophenyl hydrides, interaction with triethylthallium of (M.N. Bochkarev, T.A. Basalgina, G.S. Kalinina, G.A. Razuvaev), (243)405
- Organothallium(III) and -mercury(II) compounds, reactions with nitronate ion and *N*-benzyl-1,4-dihydropyridonocinamide; electron-transfer activation of the metal-carbon bond toward homolysis (H. Kurosawa, H. Okada, M. Sato, T. Hattori), (250)83
- Selenium and tellurium carboranyl derivatives, synthesis of (V.I. Bregadze, V.Ts. Kampel, A.Ya. Usiatinsky, O.B. Ponomareva, N.N. Godovikov), (233)C33
- Thallium; Annual Survey covering the year 1980 (H. Kurosawa), (277)301
- Thallium(I) molecular monomeric compound with a chelating silicon-containing ligand, preparation of (M. Veith, R. Rösler), (229)131
- Trimethyl urotropine adducts of aluminium, gallium, indium and thallium (H. Krause, H.-D. Hausen, J. Weidlein), (235)253
- ### Thorium
- Actinide-centred cyclometallation; unusually distorted thorium bishydrocarbyl: $\text{Th}[\eta^5\text{-}(\text{CH}_3)_5\text{C}_5]_2[\text{CH}_2\text{Si}(\text{CH}_3)_3]_2$ (J.W. Bruno, T.J. Marks, V.W. Day), (250)237
- Bis(pentamethylcyclopentadienyl)-uranium and -thorium complexes, cyclic voltammetric and coulometric study of (R.G. Finke, G. Gaughan, R. Voegeli), (229)179
- ### Thulium
- Cyclopentadiene-lanthanide derivatives, synthesis by the reaction of dicyclopentadienylmercury with lanthanides (G.Z. Suleimanov, L.F. Rybakova, Ya.A. Nuriev, T.Kh. Kurbanov, I.P. Beletskaya), (235)C19
- Di- and tri-valent lanthanide carboranyl derivatives, synthesis of (G.Z. Suleimanov, V.I. Bregadze, N.A. Koval'chuk, I.P. Beletskaya), (235)C17
- Lithium carborane derivatives, interaction with lanthanides chlorides of (V.I. Bregadze, N.A. Koval'chuk, N.N. Godovikov, G.Z. Suleimanov, I.P. Beletskaya), (241)C13

Tin

- η^3 -Allylmonocyanotricarbonyl metalate and η^3 -allylmononitriletricarbonyl-manganese and -rhenium, formation of (M. Moll, H. Behrens, H.-J. Seibold, P. Merbach), (248)329
- Arylthiomethyl(triphenyl)tin compounds, charge transfer interactions with tetracyanoethylene of (J. McM. Wigzell, R.D. Taylor, J.L. Wardell), (235)29
- Benzoxazol-2-yltrimethyl-silane and -stannane, synthesis of (P. Jutzi, U. Gilge), (246)159
- Benzyllic organotin compounds, synthesis and ^{119}Sn NMR spectroscopy of (B. Jousseau, J.G. Duboudin, M. Petraud), (238)171
- Bis(methylelement)dithioxamid derivatives (element = Al, Ga, In, Si, Ge, Sn); planar and fused structural metallabi-cyclic compounds (T. Halder, W. Schwarz, J. Weidlein, P. Fischer), (246)29
- Bis(tributylstanny) oxide preparation of anti-fouling trisubstituted organotin salts from (J.-L. Lecat, M. Devaud), (244)217
- (Z)-1,2-Bis(trimethylstanny)-1-alkenes, tetrakis(triphenylphosphine)palladium-catalysed synthesis by addition of hexamethyldistannane to 1-alkynes (T.N. Mitchell, A. Amamria, H. Killing, D. Rutschow), (241)C45
- L(-)Bornoxyphenyl- β -(triethoxysilyl)-ethylsulphidohydridotin, preparation and properties of (H. Schumann, B. Pachaly), (243)C75
- trans/cis*-2-Butenylchlorodi-n-butyltin addition to aldehydes, stereochemistry of (A. Gambaro, D. Marton, V. Peruzzo, G. Tagliavini), (226)149
- 1-Buten-3-yldi-n-butylchlorotin, *cis*-preference in addition to aldehydes of (A. Gambaro, P. Ganis, D. Marton, V. Peruzzo, G. Tagliavini), (231)307
- Carbonyltungstate anion, reaction with triphenyltin chloride of; X-ray structure of $[\text{Me}_3\text{N}][(\text{Ph}_3\text{Sn})_2(\text{Ph}_3\text{Sn})_2\text{O}-\text{i-Pr}] \cdot \text{W}(\text{CO})_6$ (G.L. Rochfort, J.E. Ellis), (250)277
- [(3-Chloro-4-*o*-nitrophenylthio)butyl]-triphenyltin, formation from the reaction of 4-butenyltriphenyltin and *o*-nitrobenzenesulphenyl chloride of (J. McM. Wigzell, J.L. Wardell), (235)37
- Chlorotris(carbonylmethallato)tin(IV) chiral complexes, synthesis and crystal structure of (F.H. Carré, R.J.P. Corriu, B.J.L. Henner), (228)139
- Cobalt, rhodium and iridium trimethyl-phosphite complexes, synthesis and reactivity of; crystal and molecular structure of $[\text{IrH}(\text{P}(\text{OMe})_3)_4(\text{P}(\text{OMe})_2-\text{OSnMe}_2\text{Cl}_2)][\text{SnCl}_3\text{Me}_2]$ (P.B. Hitchcock, S.I. Klein, J.F. Nixon), (241)C9
- Crotyltri-n-butylstannane, hydrogen transfer to carbon radicals from (G.E. Keck, J.B. Yates), (248)C21
- Cyclic tin—oxygen compounds, insertion reactions into (A. Shanzer, J. Libman), (239)301
- Deuterostannation of ethylenic hydrocarbons, Karplus relationship of $^3J(\text{SnD})$ and stereochemistry of (J.-P. Quintard, M. Degeuil-Castaing, B. Barbe, M. Petraud), (234)41
- Di- and tri-organotin(IV) derivatives of 2-benzoic acid (S.W. Ng, J.J. Zuckerman), (249)81
- Di- and tri-organotin(IV) monophosphate esters, synthesis and vibrational spectra of (F.A.K. Nasser, J.J. Zuckerman), (244)17
- 1,3-Diaza-2-sila-4 λ^2 -stannetidins, rearrangements with cyclic dienes of (M. Veith, F. Töllner), (246)219
- Dimethyltin dichloride, $^{119}\text{m}\text{Sn}$ Mössbauer study of the state of association of a dispersion in PVC of (J.S. Brooks, R.W. Clarkson, D.W. Allen), (243)411
- Dichlorodimethyltin(IV) 1/1 tetramethyl-urea adduct, crystal structure of (G. Valle, S. Calogero, U. Russo), (228)C79
- 2,6-Dimethoxybenzoquinone and substituted pyrazines, ESR study of regio-selective addition of Group IVB organometallic radicals to (A. Alberti, G.F. Pedulli), (248)261
- Dimethylchlorotin 2-pyridinecarboxylate, crystal and molecular structure of (I.W. Nowell, J.S. Brooks, G. Beech, R. Hill), (244)119
- Dimethylmetal tripoloniates of gallium, indium and tin (I. Waller, T. Halder, W. Schwarz, J. Weidlein), (232)99
- 1,3-Diselena-[3]ferrocenophanes of C, Si and Sn, synthetic and structural studies on; crystal and molecular structure of bis(ferrocene-1,1'-diselenoato)-tin(IV) at 163 K (A.G. Osborne, R.E. Hollands, R.F. Bryan, S. Lockhart), (226)129

- Germyl anions, germylenes and functional germanium derivatives, formation from reactions of halogermanes under nucleophilic assistance (P. Rivière, A. Castel, J. Satgé), (232)123**
- Germyl anions and functional germanium derivatives, formation from reduction reactions of halogermanes under nucleophilic assistance (A. Castel, P. Rivière, J. Satgé), (232)137**
- Group IVA thioppiranes, UV photoelectron spectroscopy of M—S σ -bonding energy and spiroconjugation effects in (E. Andoni, M. Bossa, C. Cauletti, C. Furlani, A. Palma), (244)343**
- Heptaphosphanortricyclenes: derivatives and homologues of $P_7(SiMe_3)_3$, (G. Fritz, K.D. Hoppe, W. Höngle, D. Weber, C. Mujica, V. Manriquez, H.-G. v. Schnerring), (249)63**
- Heterocyclic substituted stannanes, synthesis of (P. Jutzi, U. Gilge), (246)163**
- Hydrometallation of alkynes in the presence of copper(I) derivatives (D. Masure, P. Courtot, J.F. Normant), (226)C55**
- Imininet-enaminetin metallotropic equilibria (B. De Jeso, J.-C. Pommier), (235)17**
- Iridium(I) and rhodium(I) five-coordinate trichlorostannate complexes, $(PPN)[M(SnCl_3)_3, (\text{diolefin})(PR_3)]$, synthesis and NMR spectroscopy of (M. Kretschmer, P.S. Pregosin, M. Garralda), (244)175**
- Manganese and rhenium η^3 -allyl complexes, ^{13}C NMR spectra of (M. Moll, H.-J. Seibold), (248)343**
- Metallatrances (Review) (M.G. Voronkov, V.P. Baryshok), (239)199**
- Methylphenylisopropyltrityltin, asymmetric synthesis and optical activity of (M. Lequan, R.M. Lequan, M.J. Brienne, J. Jacques), (238)335**
- Methylin chlorides in carbon tetrachloride and water, UV degradation of (S.J. Blunden), (248)149**
- Octa-t-butyltetrastannachalcogen cyclic compounds, preparation and structure of (H. Puff, A. Bongartz, W. Schuh, R. Zimmer), (248)61**
- Olefin hydroformylation and hydrocarboalkoxylation competitively catalysed by $[PtCl_2(PPh_3)_2]/SnCl_2$ system (G. Cavinato, L. Toniolo), (241)275**
- Organoelement compounds, kinetics and mechanism of oxidation by ozone of (Review) (Yu.A. Alexandrov, B.I. Tarunin), (238)125**
- Organometallic compounds, rôle of ion pairs in S_E reactions of (O.A. Reutov), (250)145**
- Organometallic Ph_nMX ($M = \text{Hg}, \text{Sn}, \text{Pb}, \text{Sb}; X = \text{O}, \text{S}, \text{NR}$) and HX groups, determination of σ -constants of (L.M. Epstein, L.D. Ashkinadze, E.S. Shubina, D.N. Kravtsov, L.A. Kazitsyna), (228)53**
- Organotin alkyl exchange reactions, solvent effects on the rates of (V.S. Petrosyan), (250)157**
- Organo-tin and -lead asymmetric substituted compounds, $^1J(M-C)$ coupling constants and their relation to the s -character of the metal hybrid orbital of (D. Steinborn, R. Taube, R. Radeglia), (229)159**
- Organotin and -lead derivatives of N -(2,4-dinitrophenyl)glycin (F. Huber, G. Roge, R. Barbieri, F. Di Bianca), (233)185**
- Organo-tin and -lead seven-coordinate chelates, ^{119}Sn and ^{207}Pb NMR spectra of (J. Otera, A. Kusaba, T. Hinoishi, Y. Kawasaki), (228)223**
- Organotin chemistry (Review) (R.C. Poller), (239)189**
- Organotin chlorides, one-step syntheses of tri-n-butyltin bromide or iodide and di-n-butyltin dibromide or diiodide from (E.C. Friedrich, C.B. Abma, G. Delucca), (228)217**
- Organotin chlorohydride additions to methyl *E*-disubstituted propenoates (J.C. Podesta, A.B. Chopra), (229)223**
- Organotin complexes of crown ethers, synthesis and spectroscopic studies on (P.J. Smith, B.N. Patel), (243)C73**
- Organotin derivatives of 3-hydroxyflavone, synthesis and spectroscopic studies of (S.J. Blunden, P.J. Smith), (226)157**
- Organotin(IV) oxinates in solution, stereochemistry and ^{119}Sn NMR study of (H.C. Clark, V.K. Jain, I.J. McMahon, R.C. Mehrotra), (243)299**
- Organotin surface-active complexes (H. Schumann, B. Pachaly), (233)281**
- 1-Oxa-2-sila-3-aza-4 λ^2 -stannetidine tetramer, X-ray crystal structure of (M. Veith, M. Grosser), (229)247**
- Pentacarbonylmanganese-substituted tin hydrides, observations on (S.P. Foster, K.M. Mackay), (247)21**

- Penta-2,4-dienyl-silanes, -germanes and -stannanes, regiochemistry of electrophilic cleavages of (M. Jones, W. Kitching), (247)C5
- Pentagonal fused bipyramidal metallo-carboranes containing wedge ligands as B—H, Sn, and Ge, EHMO calculations on (M.J. Calhorda, D.M.P. Mingos), (229)229
- Pentakis(methoxycarbonyl)cyclopentadienyl ligand, introduction into stannocene of (F.X. Kohl, E. Schlüter, P. Jutzi), (243)C37
- Phenyllithium and phenylsodium *o*-functional derivatives of IVB and VB elements, synthesis and rearrangements of (J. Heinicke, E. Nietzschmann, A. Tzschach), (243)1
- Phenyltriethyltin in reactions with mercury(II) salts, effects of alcoholic solvents on (M.R. Sedagha-Herati, P. Nahid), (239)307
- 2-Phosphinyl and 2-phosphonylethyl diorganotin halides, synthesis, molecular structure and stereoisomerization of (H. Weichmann, C. Mügge, A. Grand, J.B. Robert), (238)343
- Phosphorus and tin containing metallacyclic compounds of platinum, syntheses and structures of (H. Weichmann), (238)C49
- Platinum(II)-tin bonded compounds, ^{31}P , ^{119}Sn and ^{195}Pt NMR studies on (S. Carr, R. Colton, D. Dakternieks), (249)327
- Rhodium(I), iridium(I) and platinum(II) five-coordinate complexes containing three trichlorostannate ligands, synthesis and NMR studies of (M. Kretschmer, P.S. Pregosin, H. Rüegger), (241)87
- Rhodium(III)- and iridium(III)-tin(II) systems as catalysts in hydrogen-transfer reactions (J. Kaspar, R. Spogliarich, M. Graziani), (231)71
- Silyl, germyl and stanny radicals, ESR of adducts with 1,4-diaza-1,3-butadiene and the diprotonated radical cation (A. Alberti, A. Hudson), (241)313
- Stannio complexes of oxa-bridged stannyles (M. Grenz, W.-W. Du Mont), (241)C5
- Stannylcopper(I)-induced substitution in propargylic substrates, regio- and stereo-chemical features of (K. Ruitenberg, H. Westmijze, J. Meijer, C.J. Elsevier, P. Vermeer), (241)417
- Sulphinic acid-imidoamidostannanes, synthesis of (D. Hänsgen, R. Steffens), (236)53
- Sulphur-substituted organotin compounds, preparation and reactions of $\text{Ph}_3\text{Sn}-(\text{CH}_2)_n\text{SOC}_6\text{H}_4\text{Me}-p$ ($n = 3, 4$) and $\text{Ph}_3\text{Sn}(\text{CH}_2)_n\text{SO}_2\text{C}_6\text{H}_4\text{Me}-p$ ($n = 2-4$) (J.L. Wardell, L. McM. Wigzell), (244)225
- Tetrabutyltin, direct synthesis from butyl chloride of (J.W. Nicholson, J.A. Douek, J.D. Collins), (233)173
- Tetrameric *meso*-tin(II) metallocycle, $\tilde{\text{Sn}}(\text{CHSiMe}_3\text{C}_6\text{H}_4\text{CHSiMe}_3-\text{o})$, synthesis and X-ray structure of and characterisation of *meso*,*meso*- $\tilde{\text{Sn}}(\text{CHSiMe}_3\text{C}_6\text{H}_4\text{CHSiMe}_3-\text{o})_2$ (M.F. Lappert, W.-P. Leung, C.L. Raston, A.J. Thorne, B.W. Skelton, A.H. White), (233)C28
- Tetraorganotin compounds, direct synthesis of straight-chain tetraalkyltins (J.W. Nicholson, J.A. Douek, J.D. Collins), (233)169
- Tetraorganotin optically active compounds, synthesis of and dynamic stereochemistry at the metal atom in (M. Lequan, R.M. Lequan), (226)35
- Tetraphenyltin and tetra(*o*-tolyl)tin, redetermination of the structure of (V.K. Belsky, A.A. Simonenko, V.O. Reikhsfeld, I.E. Saratov), (244)125
- Tetrastannacyclohexane, synthesis and characterisation of (K. Jurkschat, M. Gielen), (236)69
- Tin-manganese low symmetry compounds, Mössbauer spectra of (B. Mahieu, D. Apers, I. Vanden Eynde, M. Gielen), (246)49
- Tin and mercury thiophenolate charge transfer complexes with tetracyanoethylene, electron absorption spectroscopy of (P.G. Sennikov, A.A. Tumanov, A.N. Egorochkin, D.N. Kravtsov, L.S. Golovchenko, S.I. Pombrik), (248)17
- Tin, mercury and copper organic derivatives, cross-coupling reactions of organic halides catalysed by (I.P. Beletskaya), (250)551
- Trialkylstannylolithium, mechanistic studies on decomposition of (K. Kobayashi (née Kuno), M. Kawanisi, T. Hitomi, S. Kozima), (233)299
- Trialkyltin hydride, addition to unsaturated systems under high pressure of (A. Rahm, M. Degueil-Castaing, M. Pereyre), (232)C29

- Tributylstannyl anionoids, reactions with alkyl bromides of (M. Newcomb, M.G. Smith), (228)61
- Tributyltin hydride, reduction reactions of γ -chlorobutyrophenone and 6-chlorohexanal with (B. Maillard, C. Gardrat, M.-J. Bourgeois), (236)61
- Tricarbonylmstellates(6-) of chromium, molybdenum and tungsten, derivatives of (G.L. Rochfort, J.E. Ellis), (250)265
- Triethylorganotin compounds, ^{13}C NMR spectroscopic investigation of interaction in (D. Steinborn, M. Butzge, R. Taube, R. Radeglia, K. Schlothauer, K. Nowak), (234)277
- Trimethyl-Group IV cations in the gas-phase, unimolecular and collision-induced decomposition of (G.S. Groenwold, M.L. Gross, M.M. Bursey, P.R. Jones), (235)165
- Trimethyltin(IV) chloride, chlorine-bridged linear polymer, crystal and molecular structure of (J.L. Lefferts, K.C. Molloy, M.B. Hossain, D. van der Helm, J.J. Zuckerman), (240)349
- Triphenylphosphonopropionbetainetri-organotin(IV) salts, $[(\text{C}_6\text{H}_5)_3\text{P}(\text{CH}_2)_2\text{CO}_2\text{SnR}_3]^+ \text{X}^-$, synthesis by nucleophilic displacement of anions from triorganotins of (S.-W. Ng, J.J. Zuckerman), (234)257
- Triphenyltin(IV) four- and five-coordinate compounds, ^{13}C and ^{119}Sn NMR study of (J. Holeček, M. Nádvorník, K. Handlřík, A. Lyčka), (241)177
- Vinyl- and allyl-tin compounds, determination of $^n\text{J}(\text{SnD})$ constants in and their application to structure determination (J.-P. Quintard, M. Degueil-Castaing, G. Dumartin, B. Barbe, M. Petraud), (234)27
- ## Titanium
- Benchrotrene, titanocene and zirconocene, negative chemical ionization mass spectra with methane of (J. Tirouflet, J. Besançon, B. Gautheron, F. Gomez, D. Fraisse), (234)143
- Benzyltitanium halides (RTiX_2 and R_2TiX), synthesis and chemical properties of (B.A. Dolgoplosk, E.I. Tinyakova, I.Sh. Gusman, L.L. Afinogenova), (244)137
- Butadiene-transition metal complexes of Ti, Zr, Hf, Mo, W and Co, structure of and fluxional behaviour of butadiene in (R. Benn, G. Schroth), (228)71
- Carbon-hydrogen-transition metal bonds (M. Brookhart, M.L.H. Green), (250)395
- Carbonyl and trifluorophosphine adducts of bis(2,4-dimethylpentadienyl)-titanium and -vanadium (R.D. Ernst, J.-Z. Liu, D.R. Wilson), (250)257
- $[(\text{C}_5\text{H}_5)_2\text{TiCl}]_2/\text{LiAlH}_4$, catalytic system in aromatic solvents, ESR study of formation of titanocene hydride complexes (K. Mach, H. Antropiusová), (248)287
- $\eta^6\text{C}_6\text{H}_6\text{Ti}(\text{Cl}_2\text{AlCl}_2)_2$, X-ray structure analysis of (U. Thewalt, F. Stollmaier), (228)149
- Cyclopentadienylmetal compounds, spin lattice relaxation time studies of ring rotation in (D.F.R. Gilson, G. Gomez), (240)41
- π -Cyclopentadienyltrinitrotitanium, $\pi\text{-C}_5\text{H}_5\text{Ti}(\text{NO}_3)_3$, structure of (H.-P. Klein, U. Thewalt), (232)41
- Diazasilametallacycles, crystal and molecular structure of $\text{Ti}(\text{NBu}-t\text{-SiMe}_2\text{N-Bu}-t\text{Cl}_2$ (R.A. Jones, M.H. Seeberger, J.L. Atwood, W.E. Hunter), (247)1
- Dicyclopentadienyldichlorotitanium-magnesium, ^{13}C and ^1H NMR spectroscopy application to investigation of the dinitrogen fixation process in (P. Sobota, Z. Janas), (243)35
- Dicyclopentadienyloxalatotitanium(IV) and dicyclopentadienyldimaleinato-titanium(IV), preparation, structure and properties of (K. Döppert, R. Sanchez-Delgado, H.-P. Klein, U. Thewalt), (233)205
- Dicyclopentadienyltitanium dichloride, ESR study of photolysis of (P.B. Brindley, A.G. Davies, J.A.-A. Hawari), (250)247
- Hydride-halide compounds of titanium and aluminium, isomerization of olefins on and geometry of the ligand environment of the Ti atom in (B.M. Bulichev, E.V. Evdokimova, A.I. Sizov, G.L. Soloveichik), (239)313
- Metalatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199
- Organometallic compounds containing oxygen- or nitrogen-donor ligands, steric and stereochemical aspects of (Review) (D.C. Bradley), (239)17
- Organometallic titanoxane, $[\text{Cp}_2\text{TiC}(\text{Ph})=\text{CH}(\text{Ph})]_2\text{O}$, synthesis and X-ray structure determination of; evidence for a titanocene complex (V.B. Shur,

- S.Z. Bernadyuk, V.V. Burlakov, V.G. Andrianov, A.I. Yanovsky, Yu.T. Struchkov, M.E. Vol'pin), (243)157
- Propargylsilanes, action on α -ethylenic carbonyls of (J. Pernet, N'B. Kolai, D. Mesnard, L. Miginiac, K. Jaworski), (236)177
- Silyl-titanation of acetylenes and 1,3-dienes (K. Tamao, M. Akita, R. Kanatani, N. Ishida, M. Kumada), (226)C9
- Sulphinyl carbanions, reactions with organometallic compounds of; preparation of $(\eta^5\text{C}_5\text{H}_5)_2\text{TiCH}_2\text{SC}_6\text{H}_4$ (C.R. Lucas), (236)281
- Tetrakis(1-norbornyl)titanium(IV), spectroscopy and photochemistry of (H.B. Abrahamson, M.E. Martin), (238)C58
- Titanium and zirconium complexes containing cyclopentadienyl-diphenyl-phosphine and -ethyldiphenylphosphine ligands, access to heterobimetallic structures (J.C. Leblanc, G. Moise, A. Maisonnat, R. Poilblanc, C. Charrier, F. Mathey), (231)C43
- Titanium(IV) hydroxyquinolinolate complexes, halide and complex halogeno anions in (G.S. Sodhi, A.K. Sharma, N.K. Kaushik), (238)177
- Titanium, zirconium and hafnium; Annual Survey covering the year 1980 (J.A. Labinger), (227)341
- ansa*-Titanocene chiral derivatives with bridged tetrahydroindenyl ligands, synthesis and molecular structures of (F.R.W.P. Wild, L. Zsolnai, G. Huttner, H.H. Brintzinger), (232)233
- Titanocene derivatives with aminothiophenolates as ligands (H. Köpf, S. Grabowski, B. Block), (246)243
- Titanocene dihalides, electrochemical behaviour under CO pressure of; electrogeneration of titanocene carbonyl dihalide and titanocene dicarbonyl (N. El Murr, A. Chaloyard), (231)1
- Titanocene, interaction with benzene and tolane of; route to titanaindene and titanacyclopentadiene complexes (V.B. Shur, E.G. Berkovich, M.E. Vol'pin, B. Lorenz, M. Wahren), (228)C36
- Trinuclear titanium(IV) complex, $(\pi\text{-C}_5\text{H}_5)_2\text{TiCl}-\text{O}-\text{Ti}(\pi\text{-C}_5\text{H}_5)\text{Cl}-\text{O}-\text{TiCl}(\pi\text{-C}_5\text{H}_5)_2 \cdot \text{CHCl}_3$, preparation, structure and properties of (H.P. Klein, U. Thewalt, K. Döppert, R. Sanchez-Delgado), (236)189
- ### Transition metals — General
- Complexes containing heteronuclear metal—metal bonds, recent advances 1980—81; compounds containing two different transition metals, excluding mixed-metal clusters (M.I. Bruce), (242)147
- Dinitrogen-metal complexes, reactions of dinitrogen in (Review) (J. Chatt, R.L. Richards), (239)65
- Fast atom bombardment mass spectrometry, a new technique for the organometallic chemist (J.M. Miller), (249)299
- Metal complexes of monothio- β -diketones, dipole moment measurements of (Review) (S.E. Livingstone), (239)143
- Metal phenoxides (Review) (K.C. Malhotra, R.L. Martin), (239)159
- Organic reactions of selected π -complexes; Annual Survey covering the year 1980 (B.W. Rockett, G. Marr), (230)261
- Organic reactions of selected π -complexes; Annual Survey covering the year 1981 (B.W. Rockett, G. Marr), (242)1
- 1,2,3,4,5-Pentamethylcyclopentadiene, improved synthesis of (F.X. Kohl, P. Jutzi), (243)119
- Transition metals in organic synthesis; Annual Survey covering the year 1980 (L.S. Hegedus), (237)231
- ### Tungsten
- Alkylarsinidene and arsinidene complexes with Group VIA metal carbonyl compounds, preparation and reactions of (B. Sigwarth, L. Zsolnai, O. Scheidsteiger, G. Huttner), (235)43
- (Alkyl- and perfluoroalkyl-)C-nitroso-transition metal complexes, ^{15}N NMR comparisons of (D.H. Evans, D.M.P. Mingos, J. Mason, A. Richards), (249)293
- 2,2'-Bipyridine- and 1,10-phenanthroline-triphenylphosphinetricarbonyl-molybdenum and -tungsten complexes, reactions with mercury halides and pseudohalides of (M.P. Pardo, M. Cano), (247)293
- Bis(phosphoryl)phosphine assemblage of Group VI metal complexes containing diphosphoxane P—O—P linkages, co-ordinated tautomers of (E.H. Wong, F.C. Bradley, E.J. Gabe), (244)235

- Butadiene-transition metal complexes of Ti, Zr, Hf, Mo, W and Co, structure of and fluxional behaviour of butadiene in (R. Benn, G. Schroth), (228)71
- Carbon dioxide complexes of niobium, synthesis, reactivity and their use as ligands of; crystal structure of ($n\text{-C}_4\text{H}_9$) $(\eta^5\text{C}_5\text{H}_5)_2$ $\text{Nb}(\mu\text{-CS}_2)\text{W}(\text{CO})_5$ (J. Amaudrut, J. Sala-Pala, J.E. Guerchais, R. Mercier, J. Douglade), (235)301
- Carbon disulphide-bridged metal complexes, preparation of (H. Stolzenberg, W.P. Fehlhammer), (235)C7
- Carbon disulphide-tungsten complexes, reactivity of (W.A. Schenk, T. Schwietzke, H. Müller), (232)C41
- Carbonyltungstate anion, reaction with triphenyltin chloride of; X-ray structure of $[\text{Me}_3\text{N}] [\text{Ph}_3\text{Sn}]_2 \{(\text{Ph}_3\text{Sn})_2\text{O-i-Pr}\}\text{W}(\text{CO})_6$ (G.L. Rochfort, J.E. Ellis), (250)277
- Chromium, molybdenum and tungsten; Annual Survey covering the year 1980 (J.D. Atwood), (237)95
- Chromium, molybdenum and tungsten anionic decacarbonyls, synthesis of and synthesis and properties of $\text{Mg}(\text{THF})_2\text{-}[\text{M}_2(\text{CO})_{10}]$ (P. Sobota, J. Utko, Z. Janas), (233)C38
- Chromium(0), molybdenum(0) and tungsten(0) carbonyl complexes, bifunctional aminophosphanes as ligands in (K. Diemert, W. Kuchen, J. Kutter), (238)113
- Chromium triad carbenes, mechanistic study of tertiary phosphine and phosphite addition to (H.S. Choi, D.A. Sweigart), (228)249
- Complex catalysts for olefin metathesis, structure-activity relationships of (R. Taube, K. Seyferth), (249)365
- Coordinatively unsaturated diolefin complexes of tungsten, synthesis of (J.L. Davidson, G. Vasapollo), (241)C24
- 2-Cyano-2-triphenylphosphoranylidene dithioacetic acid and its alkyl esters, coordination chemistry, IR and NMR spectroscopic investigations of (U. Kunze, R. Merkel, M. Moll), (248)205
- cis- and trans-Cyclopentadienyldicarbonyltungsten-arsane complexes with MeNC and t-BuNC as ligands, synthesis, characterisation and cleavage with phosphorus ylids of (M. Luksza, K. Fiederling, U. Wanka, W. Malisch), (236)C1
- $(\eta^5\text{-Cyclopentadienyl})\text{tricarbonyl(hydrido)}$ -molybdenum and -tungsten complexes, IR evidence for stepwise substitution of ethylene and insertion into the metal-hydrogen bond of (H.G. Alt, K.A. Mahmoud, A.J. Rest), (243)C5
- $(\eta^5\text{-Cyclopentadienyl})\text{tricarbonyl}$ -molybdenum and -tungsten radicals, IR matrix isolation evidence for the formation in carbon monoxide matrices at 12 K of (K.A. Mahmoud, A.J. Rest, H.G. Alt), (246)C37
- Cyclopropyl-carbene- and -carbyne-chromium and -tungsten complexes, preparation and reactions of; synthesis and X-ray structure of *trans*- $(\mu\text{-bromopentacarbonylchromium})\text{tetracarbonyl(cyclopropylcarbyne)chromium}$ (E.O. Fischer, N.H. Tran-Huy, D. Neugebauer), (229)169
- Diaromatic, As₂, as side-on bonded six-electron ligand (B. Sigwarth, L. Zsolnai, H. Berke, G. Huttner), (226)C5
- Dicyclopentadienyl-molybdenum and -tungsten dihydrides, insertion reactions with cyanoacetylene and dicyanoacetylene into the M-H bonds of (H. Scordia, R. Kerfoot, M.M. Kubicki, J.E. Guerchais), (249)371
- Dicyclopentadienyl-molybdenum and -tungsten dihydrides, reactions with octacarbonyldicobalt and nonacarbonyldiiron forming ionic heteronuclear complexes of (Y. Mugnier, C. Moise), (248)C33
- Dicyclopentadienyltetracarbonyl-dimolybdenum and -ditungsten, reactions with elemental selenium of (H. Brunner, J. Wachter, H. Wintergerst), (235)77
- 1,4-Diferrocenyl-1,4-dibora-2,5-cyclohexadiene complexes with carbonyl-metal fragments (G.E. Herberich, M.M. Kucharska-Jansen), (243)45
- Dinitrogen-metal complexes, reactions of dinitrogen in (Review) (J. Chatt, R.L. Richards), (239)65
- $\text{Fe}_3(\text{CO})_9(\mu_3\text{-S})(\mu_3\text{-ER})$ (R = alkyl, aryl; E = P, As), ligand properties of (A. Winter, I. Jibril, G. Huttner), (247)259
- Fischer-type carbene complexes, reactions with ethene of (J. Kadelki, H. Loevenich, W. Keim), (231)219
- Free radicals, application to catalytic synthesis of carbon monoxide derivatives of (P. Sobota, E. Kaczurba), (235)295

- Group VI metal carbonyl complexes containing the ligands: 1,6-bis(diphenylphosphino)-*trans*-hex-3-ene and 1,6-bis(diphenylarsino)-*trans*-hex-3-ene; crystal and molecular structures of tri-carbonyl-1,6-bis(diphenylphosphino)-*trans*-hex-3-enemolybdenum(0) (G.R. Clark, C.M. Cochrane, P.W. Clark), (236)197**
- Group VIA pentacarbonyl complexes of 2- and 4-vinylpyridine and copolymers, preparation, spectroscopic characterisation and photochemical properties of (J.M. Kelly, C. Long), (235)315**
- Halonitrosylcarbonyltungsten complexes and their triphenylphosphine derivatives as olefin metathesis catalysts (A.E. Crease, H. Egglestone, N. Taylor), (238)C5**
- Heterobimetallic complexes of tantalum prepared from dicyclopentadienyl-carbonyltantalum hydride and carbonyl-metal compounds (J.C. Leblanc, J.F. Reynoud, C. Moise), (244)C24**
- Hexacarbonyl-chromium, -molybdenum and -tungsten, preparation and characterisation of 4,4'-disubstituted 2,2'-bipyridine derivatives of (J.A. Connor, C. Overton), (249)165**
- Hexacarbonyl-Group VI metal compounds, photochemistry in polyvinyl-chloride film matrices at 12–298 K; reactivity of M(CO)₅ and M(CO)₄·THF (R.H. Hooker, A.J. Rest), (249)137**
- Indium porphyrins containing bi- or tri-nuclear frameworks, synthesis and vibrational spectra of (P. Cocolios, C. Moise, R. Guillard), (228)C43**
- Ligand exchange of metal carbonyls by chain mechanism; electrochemical kinetics of electron transfer catalysis (J.W. Hershberger, C. Amatore, J.K. Kochi), (250)345**
- M(CO)_nL (M = Cr, Mo, W) complexes with chelating ligands: (2-Me₂E'C₆H₄)-Si(EMe₂)Me₂ and (4-XC₆H₄)SiMe(EMe₂)-CH₂CH₂E'Me₂ (X = F, Cl; E, E' = N, P, As) (P. Aslanidis, J. Grobe), (249)103**
- cis-(S)(-)(Methylphenyl-1-naphthylgermyl)-(methylethoxycarbene)tetracarbonyl-manganese, synthesis, crystal structure and absolute configuration of; introduction of optically active triorganogermyl ligands into transition metal complexes (F. Carré, G. Cerveau, E. Colomer, R.J.P. Corriu), (229)257**
- Molybdenum and tungsten bent metallocene complexes, nucleophilic attack on (A.R. Dias, C.C. Romão), (233)223**
- Molybdenum and tungsten carbonylcyclopentadienyl hydrides, reactions with α-aminoacetylenes of (H. Brix, W. Beck), (234)151**
- Mono-P-donor crown ether hybrid ligand complexes with potential for activation of coordinated CO via selective cation binding (J. Powell, K.S. Ng, W.W. Ng, S.C. Nyburg), (243)C1**
- Niobocene carbonyl heteronuclear derivatives; molecular structures of Cp₂Nb(CO)(μ-CO)Mn(CO)₄, Cp₂Nb(CO)(μ-H)Ni(CO)₃ and [Cp₂Nb(CO)(μ-H)]₂·Mo(CO)₄ (Yu.V. Skripkin, A.A. Pasynskii, V.T. Kalinnikov, M.A. Porai-Koshits, L.Kh. Minacheva, A.S. Antsyshkina, V.N. Ostrikova), (231)205**
- Organozinc-transition metal internally coordinated compounds, crystal structure of (CH₃)₂N(CH₂)₃ZnW(η-C₅H₅)(CO)₃ (P.H.M. Budzelaar, H.J. Alberts-Jansen, K. Mollema, J. Boersma, G.J.M. van der Kerk, A.L. Spek, A.J.M. Duisenberg), (243)137**
- Pentacarbonyl heteroligand complexes of Group VIA transition metals, theoretical and spectroscopic investigations of (M.C. Böhm, R. Gleiter, J. Grobe, D. Le Van), (247)203**
- Pentamethylcyclopentadienylcopper, a metal ligand fragment isolobal with methylene (G.A. Carriedo, J.A.K. Howard, F.G.A. Stone), (250)C28**
- Phosphine and phosphite derivatives of bimetallic Group VI complexes, ligand transfer and oxidative decarbonylation in; crystal structure of [(C₅H₅)(CO)₂W(μ-SMe)(μ-I)W(CO)₃I] (J.L. Le Quéré, F.Y. Pétillon, J.E. Guerchais, Lj. Manojlovic-Muir, K.W. Muir, D.W.A. Sharp), (249)127**
- Phosphorus and arsenic di-bridged heterometal–metal bonds (A. Trenkle, H. Vahrenkamp), (236)71**
- Pyridine replacement reactions of Mo(S,S)(π-allyl)(CO)₂Py (S,S = xanthate and dithiocarbamate) complexes of molybdenum and tungsten with sulphur donors (M.F. Perpiñán, L. Ballester, A. Santos), (241)215**
- Silicon– and germanium–transition metal bonds, dependence of the stereochemistry on the ligands and geometry of complexes on cleavage of (G. Cerveau, E. Colomer, R.J.P. Corriu), (236)33**

- trans*-(Tetracarbonylcobalt)tetracarbonyl(phenylcarbyne)tungsten, synthesis and physical-chemical investigations (E.O. Fischer, P. Friedrich, T.L. Lindner, D. Neugebauer, F.R. Kreissl, W. Uedelhoven, N.Q. Dao, G. Huttner), (247)239
- Tetracarbonyl(3,3,4,4-tetramethyl-3,4-dihydrodiazete)tungsten dimer, $[W(N_2C_2Me_4)(CO)_4]_2$, crystal and molecular structure of (B. Bovio), (241)363
- Tetracyanocyclobutenyl—metal complex, $W[C=CPhC(CN)_2C(CN)_2](CO)_3(\eta-C_5H_5)$, formation of and cleavage of the cyclobutenyl ring in (M.I. Bruce, T.W. Hambley, J.R. Rodgers, M.R. Snow, A.G. Swincer), (226)C1
- 3,3,4,4-Tetramethyl-3,4-dihydrodiazete bis(pentacarbonyltungsten), crystal and molecular structure of (B. Bovio), (244)257
- Tetraphenyldiphosphine oxide complexes with Group VIB metal carbonyls (E.H. Wong, R.M. Ravenelle, E.J. Gabe, F.L. Lee, L. Prasad), (233)321
- Tetraphenyldiphosphoxane ($Ph_4P\text{OPPh}_3$) ligand, chelating and monodentate coordination modes of (E.H. Wong, L. Prasad, E.J. Gabe, F.C. Bradley), (236)321
- Thionocarbonate fixation by Group VIB metal carbonyls, chemistry, spectroscopy and molecular structure of the products of (J. Daub, J. Kappler, K.H. Jorgun, J.J. Stezowski, H. Binder), (240)239
- Transition metal phosphaalkyne complexes; synthesis, crystal and molecular structure of $[Co_2(CO)_6(\mu^t\text{BuCP})W(CO)_5]$ (J.C.T.R. Burkett-St. Laurent, P.B. Hitchcock, H.W. Kroto, M.F. Meidine, J.F. Nixon), (238)C82
- Transition metal-substituted carbonic acid derivatives (K. Eberl, M. Wolfgruber, W. Sieber, F.R. Kreissl), (236)171
- Tricarbonylbis(trimethylphosphine)- η^2 -chloro- or -bromo-fumaric acid dimethylester octahedral tungsten complexes, oxidative rearrangement of the olefin in and loss of CO ligands from (C.G. Kreiter, U. Koemann), (238)C67
- Tricarbonyl-chromium, -molybdenum and -tungsten complexes of the tropylium cation, relative electrophilic reactivities of (C.A. Bunton, K. Lal, W.E. Watts), (247)C14
- Tricarbonylmstellates(6-) of chromium, molybdenum and tungsten, derivatives of (G.L. Rochfort, J.E. Ellis), (250)265
- Tricarbonyl(triquinacene)-molybdenum and -tungsten, synthesis and characterisation of (P.W. Codding, K.A. Kerr, A. Oudemans, T.S. Sorensen), (232)193
- Trimethylphosphine-dinitrogen-molybdenum and -tungsten complexes, preparation and properties of (E. Carmona, J.M. Marin, M.L. Poveda, R.D. Rogers, J.L. Atwood), (238)C63
- Trimethylphosphoranylidinemethyl(trimethylsiloxy)carbene complexes of chromium, molybdenum and tungsten, formation and E/Z isomerisation of (S. Voran, H. Blau, W. Malisch, U. Schubert), (232)C33
- Tris(butadiene)-molybdenum and -tungsten, UV photoelectron spectral and theoretical studies on (J.C. Green, M.R. Kelly, P.D. Grebenik, C.E. Briant, N.A. McEvoy, D.M.P. Mingos), (228)239
- Tungsten and molybdenum phosphine hexahydrides, the first examples of nine coordination among mononuclear molybdenum complexes (R.H. Crabtree, G.G. Hlatky), (238)C21
- Tungsten mononuclear complex with an alkylidene ligand and a double bond, synthesis and structural study of (C.A. Toledano, J. Levisalles, M. Rudler, H. Rudler, J.-C. Daran, Y. Jeannin), (228)C7
- Tungsten octahedral complexes with asymmetrical olefinic ligands, hindered olefin rotation in (U. Koemann, C.G. Kreiter), (240)27
- Vinyl organometallic monomers: $(\eta^5-C_5H_4CH=CH_2)M(CO)_2(NO)$ ($M = Cr, Mo, W$) and $(\eta^5-C_5H_4CH=CH_2)M(CO)_2$ ($M = Co, Rh, Ir$), synthesis and 1H NMR study of (D.W. Macomber, W.C. Spink, M.D. Rausch), (250)311
- Vinylalkylidenetungsten mononuclear, heteratom-substituted complexes, dinuclear μ -alkylidene complexes from (A. Parlier, F. Rose, M. Rudler, H. Rudler), (235)C13
- Uranium
- Bis(pentamethylclopentadienyl)-dichlorouranium, electrochemical reduction of stable complexes of (P. Reeb, Y. Mugnier, A. Dormond, E. Laviron), (239)C1

Bis(pentamethylcyclopentadienyl)-uranium and -thorium complexes, cyclic voltammetric and coulometric study of (R.G. Finke, G. Gaughan, R. Voegeli), (229)179

Diaquatrakis(η^5 -cyclopentadienyl)uranium(IV) cation, isolation and properties of the salt [$(C_5H_5)_3U(OH_2)_2$]NO₃ (R.D. Fischer, E. Klähne, G.R. Sienel), (238)99

Isopropyltricyclopentadienyluranium(IV), photolysis proceeding by homolytic cleavage rather than β -hydride elimination of (M. Burton, H. Marquet-Ellis, G. Folcher, C. Giannotti), (229)21

Tetraallyluranium, reactions with Lewis bases of (J.C. Vanderhooft, R.D. Ernst), (233)313

Vanadium

Alkylvanadium(III) alkoxides, synthesis and properties of (G.A. Razuvayev, L.I. Vyshanskaya, V.V. Drobotenko, G.Ya. Mal'kova, N.N. Vyshinsky), (239)335

Carbonyl metalate anions ($M = V, Nb, Ta$), preparation of (F. Calderazzo, G. Pampaloni), (250)C33

Carbonyl and trifluorophosphine adducts of bis(2,4-dimethylpentadienyl)-titanium and -vanadium (R.D. Ernst, J.-Z. Liu, D.R. Wilson), (250)257

η^5 -Cyclopentadienyltetracarbonylvanadium, photochemical and thermal reactions with bis(pentafluorophenyl)acetylene of (D.F. Foust, M.D. Rausch), (239)321

Dicyclopentadienyl-vanadium and -chromium, oxidative addition of HN₃ and NCN₃ to (M. Morán, M. Gayoso), (243)423

Metalatranes (Review) (M.G. Voronkov, V.P. Baryshok), (239)199

Paramagnetic heterobimetallic η^2 -CS₂-bridged vanadium complexes (C. Moise), (247)27

Pentacarbonyl(dimethylsulphoxide)-vanadate(-I), preparation and replacement reactions of (K. Ihmels, D. Rehder), (232)151

Phosphine stabilised carbonylnitrosyl-vanadium compounds, crystal structure of V(CO)₃(NO)(PMe₃)₂ (J. Schiemann, E. Weiss), (232)229

Phosphine stabilised carbonylnitrosyl-vanadium compounds, preparation and spectroscopic properties of (J. Schie-

mann, E. Weiss, F. Näumann, D. Rehder), (232)219

Sulphinyl carbanions, reactions with organometallic compounds of; preparation of (η^5 -C₅H₅)₂TiCH₂SC₆H₄ (C.R. Lucas), (236)281

Vanadium, niobium and tantalum; Annual Survey covering the year 1980 (J.A. Labinger), (227)359

Vanadocene derivatives in reaction with octacarbonyldicobalt, formation of oxy-methylidyne-nonacarbonyltricobalt derivatives (J. Martin, C. Moise), (232)C55

Ytterbium

Cyclopentadiene-lanthanide derivatives, synthesis by the reaction of dicyclopentadienylmercury with lanthanides (G.Z. Suleimanov, L.F. Rybakova, Ya.A. Nuriev, T.Kh. Kurbanov, I.P. Beletskaya), (235)C19

Di- and tri-valent lanthanide carboranyl derivatives, synthesis of (G.Z. Suleimanov, V.I. Bregadze, N.A. Koval'chuk, I.P. Beletskaya), (235)C17

Lithium carborane derivatives, interaction with lanthanides chlorides of (V.I. Bregadze, N.A. Koval'chuk, N.N. Godovikov, G.Z. Suleimanov, I.P. Beletskaya), (241)C13

Organolanthanide σ -bonded complexes, synthesis, properties and IR spectra of (C. Qian, C. Ye, H. Lu, Y. Li, J. Zhou, Y. Ge, M. Tsutsui), (247)161

Organolanthanide chemistry, recent advances in (W.J. Evans), (250)217

Yttrium

Dicyclopentadienylchloroyttrium complex with aluminium hydride monoetherate, [(η^5 -C₅H₅)₂YCl]_nAlH_m·OEt_n, crystal and molecular structure of (E.B. Lobkovskii, G.L. Soloveichik, A.B. Erofeev, B.M. Bulychev, V.K. Bel'skii), (235)151

Zinc

1,2-Bis(imino)ethylpalladium(II) complexes, preparation and reactivity of (B. Crociani, A. Mantovani, A. Scrivanti), (233)387

1,4-Diaza-1,3-butadiene(α -diimine)-zinc and -aluminium stable radicals formed in single electron transfer reactions;

- their consequences for organic syntheses (G. van Koten, J.T.B.H. Jastrzebski, K. Vrieze), (250)49
- Metallaviolenes, ESR study of (W. Kaim), (241)157
- Organozinc-transition metal internally coordinated compounds, crystal structure of $(\text{CH}_3)_2\text{N}(\text{CH}_2)_2\text{ZnW}(\eta^5\text{-C}_5\text{H}_5)_2(\text{CO})_3$, (P.H.M. Budzelaar, H.J. Alberts-Jansen, K. Mollema, J. Boersma, G.J.M. van der Kerk, A.L. Spek, A.J.M. Duisenberg), (243)137
- Reformatsky reaction used for the synthesis of β -amino acids (M. Bellassoued, R. Arous-Chtara, M. Gaudemar), (231)185
- Synthetic possibilities of addition reactions between common organometallic compounds and conjugated enynes (*Review*) (L. Miginiac), (238)235
- Zinc and cadmium; Annual Survey covering the year 1980 (J. Boersma), (237)1

Zirconium

- Benchrotrene, titanocene and zirconocene, negative chemical ionization mass spectra with methane of (J. Tirouflet, J. Besançon, B. Gautheron, F. Gomez, D. Fraisse), (234)143
- Butadiene-transition metal complexes of Ti, Zr, Hf, Mo, W and Co, structure of and fluxional behaviour of butadiene in (R. Benn, G. Schroth), (228)71
- Di- η^5 -cyclopentadienylzirconacyclopentadiene compounds, one-step synthesis of (S. Thanedar, M.F. Farona), (235)65
- Diphenylacetylene in reaction with $[(\eta^5\text{-C}_5\text{H}_5)_2\text{ZrH}(\mu\text{-H})]_2$, mechanistic and theoretical considerations (D.G. Bickley, N. Hao, P. Bougeard, B.G. Sayer, R.C. Burns, M.J. McGlinchey), (246)257
- Mono- and di-hydrido-zirconocenes and -hafnocenes, reactions with diphenylacetylene of (P. Meunier, B. Gautheron, S. Couturier), (231)C1
- Organometallic compounds containing oxygen- or nitrogen-donor ligands, steric and stereochemical aspects of (*Review*) (D.C. Bradley), (239)17
- Phenyldichalcogenides, cleavage by dialkyl- and diaryl-zirconocenes of; synthesis of $(\eta^5\text{-RC}_5\text{H}_5)_2\text{Zr}(\text{EPH})\text{CH}_3$ and $(\eta^5\text{-RC}_5\text{H}_5)_2\text{Zr}(\text{EPH})_2$ ($\text{R} = \text{H}, \text{t-Bu}; \text{E} = \text{Se}, \text{S}$) (S. Pouly, G. Tainturier, B. Gautheron), (232)C65
- Silyl-titanation of acetylenes and 1,3-dienes (K. Tamao, M. Akita, R. Kanatani, N. Ishida, M. Kumada), (226)C9
- Titanium and zirconium complexes containing cyclopentadienyl-diphenylphosphine and -ethyldiphenylphosphine ligands, access to heterobimetallic structures (J.C. Leblanc, C. Moise, A. Maisonnat, R. Poilblanc, C. Charrier, F. Mathey), (231)C43
- Titanium, zirconium and hafnium; Annual Survey covering the year 1980 (J.A. Labinger), (227)341
- Tricyclopentadienyl-zirconium and -hafnium hydrides and deuterides, vibrational spectra of (B.V. Lokshin, Z.S. Klemenkova, M.G. Ezernitskaya, L.I. Strunkina, E.M. Brainina), (235)69
- Zirconocene complexes, regio-selectivity of addition of alkynes to (V. Skibbe, G. Erker), (241)15

Book reviews

- Advances in catalysis, Vol. 28; ed. by D.D. Eley, H. Pines and P.B. Weisz (J. Chatt), (234)C55
- Advances in inorganic and bioinorganic mechanisms, Vol. 1; edited by A.G. Sykes (G.J. Leigh), (244)C50
- Advances in inorganic chemistry and radiochemistry, Vol. 24; ed. by H.J. Emeléus and A.G. Sharpe (J.F. Nixon), (234)C44
- Advances in organometallic and inorganic polymer science; ed. by C.E. Carraher, Jr., J.E. Sheats and C.U. Pittman, Jr. (A.D. Jenkins), (239)C39
- Advances in organometallic chemistry, Vol. 19; edited by F.G.A. Stone and R. West (M.F. Lappert), (229)C39
- Advances in organometallic chemistry, Vol. 20; edited by F.G.A. Stone and R. West (G.J. Leigh), (243)C31
- Advances in physical organic chemistry, Vol. 18; ed. by V. Gold and D. Bethell (C. Eaborn), (234)C45
- Catalysis and chemical processes; edited by R. Pearce and W.R. Patterson (M.F. Lappert), (229)C37
- Catalysis by supported complexes; by Yu.I. Yermakov, B.N. Kuznetsov, V.A. Zakharov (G.J. Leigh), (238)C15
- Catalysis, science and technology; edited by J.R. Anderson and M. Boudart (G.J. Leigh), (229)C31

- Chemically modified surfaces in catalysis and electrocatalysis; edited by J.S. Miller (K.R. Seddon), (243)C18
- ¹³C NMR data for organometallic compounds; by B.E. Mann and B.F. Taylor (C. Eaborn), (234)C43
- Coordination chemistry Reviews, Vol. 37; edited by C.D. Garner and K.R. Seddon (M.F. Lappert), (229)C37
- Electrophilic additions to unsaturated systems; by P.B.D. De la Mare and R. Bolton (C. Eaborn), (238)C15
- Extended linear chain compounds, Vol. 3; edited by J.S. Miller (K.R. Seddon), (248)C5
- Gas chromatography of organometallic compounds; by T.R. Crompton (C.F. Simpson), (248)C6
- Gmelin handbook of inorganic chemistry, 8th ed., F — Perfluorohalogenoorgano compounds of Main Group elements, Part 9, Aliphatic and aromatic nitrogen compounds (Conclusion); by A. Haas (J.F. Nixon), (234)C16
- Gmelin handbook of inorganic chemistry; 8th ed., Fe — Organoiron compounds, Part A: Ferrocene 5; by J. Füssel; ed. by A. Slawisch (P.L. Pauson), (234)C56
- Gmelin handbook of inorganic chemistry, 8th edit., Fe — Organoiron compounds, Part B7: Mononuclear compounds 7; edited by A. Slawisch (P.L. Pauson), (241)C34
- Gmelin handbook of inorganic chemistry; 8th ed., Fe — Organoiron compounds, Part C5: Binuclear compounds 5; by U. Behrens and B. Lubke; ed. by U. Kruerke (P.L. Pauson), (234)C56
- Gmelin handbook of inorganic chemistry, 8th ed., Rh — rhodium, Suppl. Vol. B1: Compounds of rhodium (J.F. Nixon), (244)C38
- Gmelin handbook of inorganic chemistry, 8th ed., Sb — Organoantimony compounds. Part 2; by M. Wieber (C. Eaborn), (239)C38
- Gmelin handbook of inorganic chemistry, 8th ed., Sb — Organoantimony compounds, Part 3. Compounds of pentavalent antimony with six, five and four Sb—C bonds; by M. Wieber (C. Eaborn), (247)C45
- Gmelin handbook of inorganic chemistry, 8th ed., Sc, Y, La—Lu rare earth elements — Part 4a. Chlorides, comparative data; by I. Flachsbart et al., ed. by H. Bergmann, Part D2. Coordination compounds (continuation); by E.R. Birnbaum and J.H. Forsberg, ed. by T. Moeller and E. Schleitzer-Rust (M.F. Lappert), (235)C25
- Gmelin handbook of inorganic chemistry, 8th ed., Sc, Y, La—Lu rare earth elements — Part C4b. Data on individual chlorides; ed. by H. Bergmann (M.F. Lappert), (246)C86
- Gmelin handbook of inorganic chemistry; 8th ed., Silicon supplement, Volume B1 (C. Eaborn), (240)C38
- Gmelin handbook of inorganic chemistry 6, 8th ed., Sn — Organotin compounds, Part 8: Organotin iodides, organotin pseudohalides; by H. Schumann and I. Schumann (C. Eaborn), (231)C38
- Gmelin handbook of inorganic chemistry, 8th ed., Sn — Organotin compounds, Part 9: Triorganotin—sulfur compounds; by H. Schumann and I. Schumann (C. Eaborn), (246)C85
- Gmelin handbook of inorganic chemistry, 8th ed., Uranium supplement, Vol. 5A: Spectra, (240)C51
- Inorganic chemistry concepts, Vol. 6, Inorganic stereochemistry; by D.L. Kepert (P.B. Hitchcock), (240)C51
- Inorganic syntheses, Vol. XXI; ed. by J.P. Fackler, Jr. (K.R. Seddon), (243)C17
- Intercalation chemistry; edited by M.S. Wittingham and A.J. Jacobson (M.L.H. Green), (240)C57
- Landolt-Börnstein. Numerical data and functional relationships in science and technology. New series. Group II; Atomic and molecular physics; Vol. 11. Magnetic properties of coordination and organometallic transition metal compounds, Suppl. 3; edited by K.-H. and A.M. Hellwege (C. Eaborn), (228)C25
- Metal ions in biological systems, Vol. 11: Metal complexes as anticancer agents; ed. by H. Sigel (B. Ridge), (236)C55
- Metal ions in biological systems. Vol. 12, Properties of copper. Vol. 13, Copper proteins; edited by H. Sigel (B. Ridge), (238)C37
- New synthetic methodology and biologically active substances; edited by Z.-I. Yoshida (C. Eaborn), (228)C27
- Optical resolution procedures for chemical compounds, Vol. 2, Acids; by P. Newman (C. Eaborn), (238)C87

- Organometallic chemistry reviews; including Plenary Lectures from the Third International Conference on the Organometallic and Coordination Chemistry of Germanium, Tin and Lead (*J. Organometal. Chem. Libr.* 12); edited by D. Seyferth et al. (*B.J. Aylett*), (232)C81
- Organometallic syntheses.** Vol. 2. Non-transition-metal compounds; by J.J. Eisch (*C. Eaborn*), (240)C59
- Organotransition metal chemistry:** Application to organic synthesis; by S.G. Davies (*J.W. Cornforth*), (248)C36
- Reactive intermediates,** Vol. 2; ed. by R.A. Abramovitch (*C. Eaborn*), (247)C45
- Rodd's chemistry of carbon compounds, supplements to the 2nd edition (Ed. M.F. Ansell), Vol. III, Aromatic compounds, Parts B and C (*C. Eaborn*), (231)C38
- Silane coupling agents; by E.P. Pluedemann (*K.M. Roch*), (246)C27
- Silicon in organic synthesis; by E. Colvin (*C. Eaborn*), (228)C25
- Specialist periodical reports, Organometallic chemistry, Vol. 10; reported by E.W. Abel and F.G.A. Stone (*M.F. Lappert*), (240)C39
- Specialist periodical report. Spectroscopic properties of inorganic and organometallic compounds. Vol. 14; reported by D.M. Adams and E.A.V. Ebsworth (*M.F. Lappert*), (238)C39
- Stability and reactivity of crown-ether complexes; by F. de Jong and D.N. Reinhoudt (*A. Pidcock*), (244)C38
- Sulfur in organic and inorganic chemistry, Vol. 4; edited by A. Senning (*J.F. Nixon*), (243)C18
- Synthesis of acetylenes, allenes and cumulenes. A laboratory manual; by L. Brandsma and H.D. Verkruyse (*C. Eaborn*), (239)C38
- The inorganic heterocyclic chemistry of sulfur, nitrogen and phosphorus; by H.G. Heal (*J. Chatt*), (231)C84
- The organic and bio-organic activation of carbon dioxide; edited by S. Inone and N. Yamazaki (*G.J. Leigh*), (240)C58
- The organic chemistry of iron, Vol. 2; edited by E.A. Koerner von Gustorf, F.-W. Grevels, I. Fischler (*P.L. Pauson*), (232)C63
- Topics in current chemistry, 96: Inorganic chemistry (*C. Eaborn*), (226)C65
- Topics in current chemistry. Vol. 97; ed. by F.L. Boschke (*J.F. Nixon*), (234)C43
- Topics in current chemistry, Vol. 104, Organotin compounds; ed. by F.L. Boschke (*C. Eaborn*), (246)C85
- Topics in inorganic and organometallic stereochemistry (Topics in stereochemistry, Vol. 12); edited by G. Geoffroy (*R.L. Richards*), (232)C62
- Transition metal chemistry; edited by G.A. Melson and B.N. Figgis (*M.F. Lappert*), (248)C4