

POLYHEDRON
VOLUME 16, 1997
SUBJECT INDEX

Compiled by
John Light

A

Ab initio calculations

chromium(VI) oxo geometries, 3835
electrophilic attack on manganese(I),
rhenium(I) cyclopentadienyl phosphines,
3663

nitrogen tribromide, 2701

oxatellurazines hydroxide, 4209

uranium(VI) oxo nitrate tributylphosphates
X-ray absorption spectra, 2233

See also Natural bond order analysis

Acetamide complexes

See Ethylenediaminetetraacetanilide

Acetates

cadmium(II), 423,1803,2625

chromium(II), 2897

chromium(III), 327

cobalt(II), 423,1377,2109,2625,2651,3615

cobalt(III), 2109

copper(I), 327

copper(II), 187,259,327,423,1013,1279,
1535,1595,1771,1895,1999,2625,2991,
3345,3399,3525,3549,3655,3815,4097,
4221,4371

iron(III), 327,1497

lanthanide(III), 1629,1907,2755,2971

lead(II), 1663

lithium, 327

magnesium(II), 327

manganese(II), 423,1471,2365,2547,2741,
2755,3511,4247

manganese(III), 1365,2553,3511,3787

manganese(III,IV), 1471

manganese(IV), 3493

mercury(II), 327,613,781,1223,2689

molybdenum, 1407

molybdenum(II), 3399,3655

nickel(II), 179,253,327,423,1439,1895,2625,
2727,2991,3549,3615,4097

palladium(II), 1291,1439,2405,2789

platinum(IV), 2421

rhenium(III), 3649

ruthenium(II,III), 3399,3655

silver, 327,2375,3695

sodium, 327,1771,3357

thallium(I), 3469

thallium(III), 681

uranium(VI), 4205

vanadium(IV), 1863,2991

yttrium(III), 1907

zinc(II), 423,1663,3475,3947,3985

See also Amino-, Cyano-, Dimethyl-,
Iminodi-, Nitrilotri-, Phenoxy-, Phenyl-,
Trichloro-, Trifluoro-acetate

Acetone complexes and solvates

iridium(III), 1811

palladium(II), 1963

rhenium(III), 2087

See also Benzylidene-, Dibenzylidene-
acetone

Acetonitrile complexes

aluminium, 4385

cobalt(II), 1731

copper(I), 67,207,377,1529,2193,2299,3499,
4163,4257,4273

copper(I,II), 2059

copper(II), 1505

indium(III), 2183

iridium(III), 2029

iron(II), 2223,2797,3827

iron(III), 1567

lanthanide(III), 321,1149,1491

lithium, 2637,3671

manganese(II,III), 1719

manganese(III), 3787

molybdenum(II), 1095,3655

niobium(V), 351

osmium, 3463

osmium(0), 3463

palladium(II), 2509,2531,4305,4337

platinum(II), 3795

ruthenium(II), 291,433,1921

silver(I), 453,3899,4257

silver(II), 2375

tantalum(V), 351

tungsten(0), 2141

tungsten(II), 1599

vanadium(III), 1517

Acetyl

platinum(II), 2455

See also Chloro-, Ethylthio-, Methylthio-
acetyl

Acetylthiolate, platinum(II), 2455

Acetophenone complexes

See Amidoacetophenone

Acetophenoneoximes, palladium(II), 2257

Acetyl complexes

nickel(II), 3641

See also Di-, Pyridyl-acetyl

Acetylacetonates

chromium(III), 4217

cobalt(II), 2651

cobalt(III), 2771

iron(III), 2553

lanthanide(III), 515,1907

manganese(II), 71

manganese(III), 71,2553

molybdenum(VI), 1323,2169,3977

nickel(II), 1331

palladium(II), 2257,2405

ruthenium(II), 3039

sodium, 1907

titanium(IV), 777

- tungsten(VI), 3977
 vanadium(IV), 643,1517
 yttrium(III), 1907
See also Hexafluoro-, Trifluoro-acetylacetonate
- Acetylcyclopentadienyl complexes
 iron(II), 335
 molybdenum, molybdenum(0), 2387
 sodium, 2387
- Acetylene complexes
 molybdenum(III), 839
See also Dichloro-, Diphenyl-acetylene
- Acetylenedicarboxylates
See Dimethyl(acetylenedicarboxylate)
- Acetylides
 copper(I), mercury(II), silver, 327
See also Chloro-, Phenyl-acetylides
- Acetylpyridine complexes
 manganese(II), 2877
See also Bis(acetyloxime)pyridine
- Acetylpyridine(alkyl)thiosemicarbazones
 palladium(II), 3625
- Acetylpyridine(ethyl)thiosemicarbazones
 zinc(II), 3947
- Acrylates, *See* Methacrylate
- Actinides, inorganic and organometallic compounds syntheses, book review, 3483
- Activation energy
 barium, calcium, strontium cyclohexanediaminetetraacetate nitrogen inversion, 3317
 molybdenum(VI) diethyldithiocarbamate oxo oxidation of triphenylphosphine, 2163
- Acyclovir complexes
See (Hydroxyethoxy)methylguanine
- Acyl complexes *See below and* Acetyl, Formyl
- Acylcyclopentadienyl complexes
 molybdenum, molybdenum(0), 2387
 sodium, 2387
See also Acetyl-, Formyl-cyclopentadienyl
- Acylmethylphenylpyrazolonates
 lanthanide(III), 1381
- Adamantane *See* Triazaphosphaadamantane
- Adenosinemonophosphate complexes
 osmium(II), 1993
 platinum(II), 4297
 ruthenium(II), 1993
- Adipates, cobalt(II), 3941
- Alanine complexes
 copper(II), yttrium(III), 1357
See also Bis(pyridylmethyl)alanine
- Alcohol complexes and solvates, *See* But-, Eth-, Meth-, Pent-, Prop-anol, Benzyl alcohol, Galactarate, Macrocyclicpolyaminepolyol, Tetraethyleneglycol
- Aldehyde complexes, *See* Phenylpropenal
- Alkene complexes
 platinum(0), 765
See also Benzylideneacetone, Butenediyl, Cyclooct-, Di-, Eth-, Prop-, Sty-, Tri-ene, Cyclooctatetraenyl, Vinyl
- Alkenyl complexes
See Buten-, Butenedi-, Penten-yl
- Alkoxide compounds
 hydrodenitrogenation catalysis review, 3139
 silicon(IV), 1513
See also But-, Eth-, Meth-, Pent-, Prop-oxide, Ascorbate, Bis(hydroxyethyl)glycinate, Bis(pyridylethyl)malamide, Bis(pyridylmethyl)-hydroxyglutaramide, -malamide, Diolate
- (Alkoxyphenylethyl)piperidinedithiocarbamates, copper(II), nickel(II), palladium(II), sodium, zinc(II), 315
- Alkyl
 carbaboranes, 2517
 siloxanes, 3357
 telluride, 2509
See also Acetonyl, Butyl, Diyl, Ethyl, Methyl, Pentyl, Propyl, Xylylenyl
- (Alkylaza)heptadiyls
 germanium(IV), tin(IV), 4005
- Alkylidene complexes
See Imidazolylidene, Vinyl
- Alkylidyne complexes
See Ethylcarboxypropyl-, Methyl-idyne
- Alkylisocyanide complexes
 copper(I), 2397
See also Butylisocyanide,
- Alkylsulfates, *See* Dodecylsulfate
- Alkyne complexes
See Acetylene, Propyne, Thiacycloalkyne
- Alkynyl complexes, *See* Acetylides
- Aluminium(0) compounds and complexes
 alloys, metal, 2963
- Aluminium(III) compounds and complexes
 acetonitrile, 4385
 amidoacetophenone, 1337
 bromide, bromo, 4081
 calixarene, 4385
 catechol, 1271
 chloride, chloro, 869,2491,3571,4081
 dibutylmethylphenoxide, 4389
 dinuclear, 3429,4081,4385
 diphenylsulfide, 4081
 ethoxide, 663,4389
 ethyl, 4389
 fluorouracilate, 2491
 heterometallic, 663,1767,1855,2387,2797, 3429,3985
 histidine, 2491
 hydride, 1767,1855,2387,2797
 hydroxide, hydroxo, 2491
 methyl, 1337,3429,4385,4389
 methylmethacrylate, 4389
 methylphenoxide, 3429
 methylpyridine, 1337
 montmorillonite, 2785
 nitrate, nitrate, 2785,3985
 oxide, oxo, 335,1937,2785,3985
 propoxide, 663
 water, 2491,3985,4081
See also Boehmite
- Amide complexes
See Acet-, Bis(oxyaryl)-, Butyl-, Di-, Dicyan-,

- Dicyclohexyl-, Diethyl-, Dimethyl-, Diphenyl-, Form-, Macrocyclotetra-, Phenyl-, Picolin-, Propyl-, Sulfon-, Thio-, Trimethylsilyl-amide, Amido-compounds, (Benzothiazolyl)aminofornate, Bis(oxybenzamidato)benzene, Bis(pyridylethyl)malamide, Bis(pyridylmethyl)-alanineamide, -glycineamide, -hydroxyglutaramide, -malamide, Di(dimethylglycinoyl)-, Dipicolinoyl-triazaoctane, Isatin, Lactam, Pyruvoylamideoximate
- Amidates, *See* Formamidinate
- Amidine complexes, *See* Diphenylbenz-, Form-amidine
- Amidoacetophenone complexes
aluminium, 1337
- Amine complexes
palladium(II), 1291,2405
See also (Alkylaza)heptadiyl, Amino, Aniline, Bis(benzimidazolylmethyl)-, Bis(benzimidazolylmethyl)methyl-, Bis(methylbenzimidazolylmethyl)-, Butyl-, Cyclopropyl-, Di-, Dibutyl-, Dimethyl-, Ethyl-, Methyl-, Phenyl-, Poly-, Tri-, Trimethyl-, Tris(aminoethyl)-, Tris(pyridylmethyl)-amine, (Carboxylato-oxopropylidene)tetramethylimidazolidine-oxyl, Di(dimethylglycinoyl)triazaoctane, (Dimethylamino-methyl)phenyl, -phenyl Formamidine, Piperidine, Pyrazine, Pyridine, Pyrrolidine
- Amino acid complexes and salts
cobalt(III), 3757
See also below and Alanine, Aspartic, Cysteine, Glutamate, Glycine, Histidine, Macrocyclicpolyaminocarboxylic acid, Oxidoarylideneaminocarboxylate, Tyrosine, Valine
- Aminoacetate complexes, *See* Cyclohexane-, Ethylene-, Phenylene-diaminetetraacetate, Triethylenetetraaminehexaacetate, Diethylenetriaminedi(acetylphenylalanine-), Diethylenetriaminedi(acetyltyrosine-octadecylester)triacetate
- Aminobenzoates, iron(III), 3353
- Aminocyclohexanecarboxylic acid
calcium, lanthanide(III), 507
- Aminoethanol complexes
copper(II), 3601
See also Triethanolamine
- (Aminoethyl)(aminopropyl)glycinates
cobalt(III), 3757
- Aminoethylpiperidine complexes
nickel(II), 3305
- Aminoethylpropanediamine
cobalt(III), 3757,4087
nickel(II), 39
- Amino(methylmercaptan)naphthoquinone complexes, copper(II), nickel(II), palladium(II), vanadium(IV), 933
- (Aminomethyl)pyridine complexes
copper(II), 1651
silver(I), 921
- Aminophenylthiol complexes, iron(II), 999
- Aminopropanol complexes
copper(II), 3345
See also Dimethylaminopropanol
- Aminopyridinium salts, *See* Dimethyl-, Methyl-amino(methyl)pyridinium
- Aminopyrrolidine complexes
See Diethyl-, Dimethyl-, Ethylmethyl-, Methylpropyl-aminopyrrolidine
- Aminotriethoxides, *See* Triethanolamine
- Ammonia complexes and solvates
cobalt(III), 2135,3565,4087
copper(II), 383
iron(II), 1023
nickel(II), 4197
platinum(II), 2421,3705
platinum(IV), 2421
silver(I), 863
zinc(II), 267
- Ammonium salts
beryllium, 441
chromium(III), 4217
diphenylphosphinothioate, 949
dipropyldithiophosphate, 3899
hexafluorophosphate, 377,921,1775,1921, 2369,2375,2381,2553,2705,3003,3039, 3615,4087
iodate, 441
lanthanide, 3415
molybdenum(II), 473
molybdenum(VI), 629,801,2483
peroxodisulfate, 921
phosphate, 2957
rhenium(VII), 2263
technetium(VII), 3311
thiocyanate, 267,2229
tungsten(VI), 217,801,833,2483
uranium(VI), 4205
vanadium(V), 629,1081,2837,4121
See also Butyl-, Calixarene-, (Cyclopentadienylmethyl)trimethyl-, Diethyl-, Dimethyl-, Dimethylamino(methyl)pyridyl-, Macrocyclicdiaminedi-, Mesityl-, Tetrabutyl-, Tetraethyl-, Tetramethyl-, Tetrapropyl-, Triethyl-, Trimethyl-ammonium, Diammoniumpropane
- Amyloxides, *See* Pentoxides
- Aniline complexes, *See* Cyano-, Nitro-aniline
- Anion recognition by complexes
palladium(II), platinum(II) bipyridine-bisamides chloride, 815
- Anthraquinone complexes
See Dihydroxyanthraquinonate
- Antifungal activity
copper(II) thiosemicarbazones, 1895
copper(II) Schiff bases, 2909
palladium(II) acetylpyridine(alkyl)thiosemicarbazones, 3625

- Antimicrobial activity
 copper(II) Schiff bases, 2909
- Antimony(0), elemental, 1161
- Antimony(I,V), bromide, bromo, 1161
- Antimony(III) compounds and complexes
 bromide, bromo, 1161
 diethyl-, iminodiethanoldi-,
 methylaminoethanol-dithiocarbamate,
 oxide, oxo, 1212
See also Stibine
- Antimony(V) compounds and complexes
 chloride, chloro, 2563,2643
 dimethylphosphinate, 2643
 dimethylpyridinium, 2563
 diphenylphosphinate, 2643
 dithiolethionedithiolate, 2563
 fluoride, heterometallic, 1529
 hydroxo, methyl, 2643
 phenyl, 2563,2643
 tetraethylammonium, tolyl, water, 2563
- Antipyrine complexes, vanadium(IV), 1247
- Antitumour activity
 aluminium(III), chromium(III), iron(III)
 fluorouracilate histidine chloro, 2491
 palladium(II) acetylpyridine(alkyl)thiosemi-
 carbazones, 3625
 platinum(II) chloride
 dialkylaminopyrrolidines, 4297
- Apatite, calcium, chromium(III), 2047
- Arene complexes
See Benzene, Cyclopentadienyl, Fullerene
- Aroylhydrazone complexes, *See* Benzoyl-,
 Isonicotinoyl-, Salicyloyl-hydrazone
- Arsenic(0), elemental, 3055
- Arsenic(II), alloys, heterometallic, 3055
- Arsenic(III) compounds and complexes
 chloride, diethyldithiocarbamate, 1212
 iminodi-, methylamino-
 ethanoldithiocarbamate, 1212
 phenyl, 1663
- Arsenic(V) compounds and complexes
 heterometallic, methyl, oxo, 2761
See also Hexafluoroarsenate
- Arsine complexes, *See* Bis(dimethylarsino)-
 compounds, Dimethylarsinoethylamine
- Arsonium salts, *See* Tetraphenylarsonium
- Aryl
 carbaboranes, 2517
 molybdenum(II), 409
 palladium(II), 1291,2405
 ruthenium(II), 1343
See also Phenyl, Tolyl, Xylylenyl
- Arylazoimidazole complexes
 copper(I), silver(I), 4163
- Arylazophenophenoxides
 ruthenium(II), ruthenium(III), 81,3047
- Arylazopyridines complexes
See Tolylazopyridine
- Aryldithiadiazolylum complexes
 chloride, hexafluoroarsenate, 4239
- (Aryliminoethyl)cyclopentadienyl complexes
 iron(II), palladium(II), 335
- Aryloxide complexes
 hydrodenitrogenation catalysis review, 3139
See also Bis(oxyaryl)amide, Phenoxide,
 Quinolineolate
- Aryltelluroalkylethers complexes
 palladium(II), platinum(II), 2509,4337
- Ascorbates
 chromium(VI), 2081
 cobalt(II), lanthanide(III), 2155
 sodium, 2081
- Aspartic acid and aspartate complexes
 uranium(VI), 4205
See also Transferrin
- Atomic absorption spectroscopy, aluminium
 copper lithium magnesium alloys, 2963
- Atrolactates, lanthanide(III), 4229
- Azacrown complexes, sodium, 3865
- Azacryptate complexes
 cadmium(II), 223,1301
 lanthanide(III), 321
 silver(I), 453
 sodium, 321
- Azacyclononanone complexes
 lanthanide(III), 3519
- Azamacrocyclic complexes
 cobalt(II), 2229
 copper(II), 2229,3997
 lanthanide(III), 1907,4233
 lead(II) review, 551
 nickel(II), 253,2229,2599,3713,3997
 palladium(II), 975
 platinum(II), 3539
 silver(I), silver(II), 2375
 yttrium(III), 1907
 zinc, 975
See also above and Macrocyclic-tetraamide,
 -diamidodiamine, -polyazapolyether,
 Phthalocyaninate, Porphyrinate
- Azapolyether complexes
See Aza-crown, -cryptate
- Azetidinonates
 palladium(II), platinum(II), 1663
- Azides
 bromine, 2701
 cadmium(II), 235
 cobalt(III), 3747
 copper(I), 2193
 copper(II), 825,2239
 explosion hazard, 2701
 potassium, 825
 sodium, 1535,2193,2239,2701,3747
 thorium(IV), 989
- Azine complexes, *See* Di-, Tetr-azine
- Azo complexes *See* Arylazo, Phenylazo
- Azole complexes, *See* Imid-, Ox-, Pyr-, Tetr-,
 Thi-azole

B

- Barium compounds and complexes
 carbonate, 2105,2871

- chloride, chloro, 2087
cyclohexanediaminetetraacetate, 3317
dihydrotetrazinedicarboxylate, 2871
dinuclear, 2527,4347
dithian-, dithiepane-ylidenemalonate, 3705
heterometallic, 1663,2105,3953,4347
malonate, 3953
metal, 2527
methanol, methoxide, 4347
methoxytrimethylheptanedionate, 2527
nitrate, nitrate, 1663,2871,3317
nitride, 3635
nitrite, nitrito, 805,2447
oxo, polynuclear, 2105
propylidenemalonate, 2421
triethanolamine, 2087
water, 2087,2421,2527,2871
- Bentonite, manganese(II), sodium, 1403
- Benzene complexes, *See* Mesitylene,
Methylpropylbenzene, Toluene
- Benzene solvates
platinum, 2353
rhenium(I), 3003
- Benzenebis(carbonylcyclopentadienyl)
complexes, molybdenum, molybdenum(0),
sodium, tungsten, tungsten(0), 3067
- Benzenebis(ethenylphenoxide), -(phenoxide)
molybdenum(II), 4353
- Benzenedicarboxylates, *See* Iso-, Tere-phthalate
- Benzenedithiolates
See Dipropylthiobenzenedithiolate
- Benzimidazole complexes, *See* Bis(benzimidazolyl)-
compounds, Pyridylbenzimidazole
- Benzoates
chromium(III), 1371
cobalt(III), 1377
manganese(II,III), 1377,1719
manganese(III), 1371
sodium, thallium(III), tin(IV), 1621
See also Amino-, Benzoyl-, Chloro-,
Dihydroxy-, Methyl-, Thio-, Thiolato-
benzoate, Salicylate
- Benzonitrile complexes
palladium(II), 1003,1111,1889,3641
platinum(II), 1003
ruthenium(II,III), 2429
- Benzothiazolathione complexes
cobalt(II), 1731
- Benzothiazole complexes
heterometallic, 1585
See also (Benzothiazolyl)aminoformates
- Benzothiazolate complexes
See Pyridylbenzothiazolate
- (Benzothiazolyl)aminoformates
See Ethyl(benzothiazolyl)aminoformates
- Benzotriazolate, copper(II), 423
- Benzotriazole complexes
cadmium(II), cobalt(II), nickel(II), zinc(II),
423
See also Cyanobenzotriazole
- Benzoxazolylphenol complexes
palladium(II), 1889
- Benzoylacetoinimate, nickel(II), 3713
- Benzoylbenzoate, *See* (Chlorobenzoyl)benzoate
- Benzoylcyclopentadienyl complexes
molybdenum, molybdenum(0), sodium,
tungsten, tungsten(0), 3273
See also (Methylacetato)benzoyl-
cyclopentadienyl
- Benzoylhydrazones, *See* Phenyltriazolyl-
carbaldehydebzoylhydrazone
- Benzoylpyridine complexes
manganese(II), 2877
- Benzoylvalinates
palladium(II), platinum(II), 3743
- Benzyl alcohol solvates, ruthenium(II,III), 2429
- Benzylidithiocarbazates, *See* (Methylpyrazolyl)-
formylbenzylidithiocarbazate
- Benzylcyclopentadienyl alcohol complexes
molybdenum, 3273
- Benzylideneacetone complex, platinum(0), 765
- Benzylthiolate
iron(III), 999
palladium(II), sodium, 2531
- Beryllium compounds and complexes
ammonium, iodate, oxide, 441
sulfate, 1663
water, 441
- Betaines, *See* Butane-, Propane-
bis(dimethylammonioacetate),
Dimethylaminopyridinio-, Pyridinio-
acetate, Trimethylammonioacetate,
Diazoniobicyclooctanedipropionate,
Triphenylphosphoniobutyrate
- Bicine, *See* Bis(hydroxyethyl)glycinate
- Bicycloheptadiene complexes
See Norbornadiene
- Biimidazole complex, silver(I), 2893
- Binaphthol complex, molybdenum(VI), 1323
- Binaphtholates, molybdenum(VI), osmium(VI),
palladium(II), platinum(II), tetrabutyl-,
tetramethyl-ammonium, tungsten(VI), 1323
- Biphenylbis(phenoxide)s
molybdenum(II), 4353
- Biphenylthiolate, platinum(II), 3185
- Bipyridines complexes
cadmium(II), 3929
chromium(III), 3371
copper(I), 4033
copper(II), 281,531,733,1999,2341,2447,
3655
iron(II), 1023
iron(III), 849
manganese(II), 689,897,1411,2547
manganese(III,IV), 2199
manganese(IV), 3493
molybdenum(0), molybdenum(II), 1095
nickel(II), 2667,2827,2863
palladium(II), 1663,3743
platinum(II), 1555,3743
ruthenium(II), 81,103,143,393,983,1755,
1793,1921,2705,3039,3047,3293,3847,
4073,4313
ruthenium(III), 1023,1755,3039,3047

tungsten(0), 2193
vanadium(III), 2917
vanadium(IV), 1863,4379
zinc, 2475
See also below and Dibutyl-, Dimethyl-,
Diphenyl-, Vinyl-bipyridine,
Bis(methylbipyridine-ethyl)benzene
Bipyridinebisamide complexes
palladium(II), platinum(II), 815
Biquinoline complex, rhodium(III), 1483
Bis(acetyloxime)pyridine complexes
indium(III), 2183,2291
Bis(aminoethyl)amine complexes
See Diethylenetriamine
Bis(aminoethyl)dithiocyclohexane complexes
cobalt(III), 3807
Bis(aminopropyl)glycinate, cobalt(III), 1739
Bis(anilinoethyl)bipyridine complexes
ruthenium(II), 2705
Bis(benzimidazolylmethyl)amine complexes
nickel(II), 2819
Bis(benzimidazolylmethylene)benzene
complexes, cobalt(II), copper(II),
nickel(II), palladium(II), platinum(II),
zinc(II), 1315
Bis(benzimidazolylmethyl)ether complexes
manganese(II), manganese(III), 3511
Bis(benzimidazolylloxamethyl)benzene
complex, manganese(III), 3511
Bis(benzimidazolylmethyl)methylamine
complex, nickel(II), 2819
Bis(benzimidazolyl)pyridine complexes
iridium(-I), -(III), rhodium(-I), -(III), 1169
See also Bis(methylbenzimidazolyl)pyridine
Bis(bromopyrazolyl)methane complexes
cadmium(II), mercury(II), zinc(II), 3435
Bis(butylmethylpyrazolyl)borates
lithium(I), thallium(I), 3469
Bis(butylphenyl)(pyridyl)methylthiolates
copper(II), lithium(I), nickel(II),
palladium(II), platinum(II), platinum(III),
rhenium(I), rhodium(I), ruthenium(II),
zinc(II), 3641
Bis(butylpropylpyrazolyl)borates
lithium(I), thallium(I), 3469
Bis(chlorodimethyl-, Bis(chloro-
pyrazolyl)methane complexes
cadmium(II), mercury(II), zinc(II), 3435
Bis(dibutylpyrazolyl)borates
lithium(I), thallium(I), 3469
Bis(dichlorosalicylidene)cyclohexanedisulfon-
amide complex, manganese(III), 2365
Bis(dicyclohexylphosphino)methane complex
ruthenium(0), 1453
Bis(diethylphosphino)ethane complexes
manganese(I), 2041
Bis(dimethylarsino)benzene complexes
rhodium(III), 1307
Bis(dimethylarsino)propane complexes
cobalt(III), 2771
Bis(dimethylnitrosopyrimidinedionyl)propyl-
enediamine complex, copper(II), 281
Bis(dimethylphosphino)benzene complexes
rhodium(III), 1307
Bis(dimethylphosphino)ethane complexes
cobalt(III), 2771
Bis(dimethylphosphino)methane complexes
ruthenium(0), 1453
tantalum(III), 1177
Bis(dimethylphospholano)benzene complexes
molybdenum(II), 473
Bis(dimethylpyrazolylmethyl)pyridine
complex, rhenium(I), 3003
Bis(diphenylphosphino)benzene complexes
tungsten(0), 2141
Bis[(diphenylphosphino)benzylidene]ethylene
diamine complexes
iron(II), ruthenium(II), 433
Bis(diphenylphosphino)butane complexes
iron(II), 1775
Bis(diphenylphosphino)ethane complexes
cobalt(II), 1731
iron(II), 999,1775
iron(II,III), 2797
iron(III), 999
manganese(I), 2041
molybdenum(II), 1095
nickel(II), 1971,4353
palladium(II), 801,2509,2531,2827,4337
platinum(II), 2509,4337
rhenium(V), 1979
ruthenium(II), 927
Bis(diphenylphosphino)ethene complexes
nickel(II), palladium(II), 2827
ruthenium(II), 927
Bis(diphenylphosphino)methane complexes
copper(I), 4033
iron(0), 2797
iron(II), 1775,2797
iron(II,III), 2797
molybdenum(0), 1095
molybdenum(II), 1095,4137
palladium, 2353,2789
palladium(0), 2789
platinum, 2353,3861
platinum(0), 2353
platinum(II), 1663,2353
ruthenium(0), 1453
ruthenium(II), 927
silver(I), 1957
tungsten(III), 4137
Bis(diphenylphosphinomethyl)pyridine
complex, ruthenium(II), 291
Bis(diphenylphosphino)propane complexes
iron(II), 1775
manganese(I), 2041
molybdenum(II), 1095
palladium(II), 2531
ruthenium(II), 927
tungsten(III), tungsten(III,IV), 3893
Bis(hydroxyacetophenyl)ethylenediamine
complex, copper(II), 2175
Bis(hydroxyaryl)ethylenediaminobutane-
oxime, copper(II), 2175

- Bis(hydroxybenzyl)ethylenediamine complex copper(II), 2175
- Bis(hydroxyethyl)glycinates manganese(II), 3267
- Bis(hydroxypropylphenyl)ethylenediamine complex, copper(II), 2175
- Bis(methylbenzimidazolylmethyl)amine complex, nickel(II), 2819
- Bis(methylbenzimidazolyl)pyridine complexes iridium(III), rhodium(-I), -(III), 1169
- Bis(methylbipyridine-ethyl)benzene complexes copper(II), silver(I), 1505
- Bis(methyl)diphenylphosphonium salts lanthanide(III), lithium, 2013
- Bis(methyl)phenylphosphine complexes copper(I), 1529
rhenium(I), 3663
silver(I), 1529
- Bis(methyl)phenylphosphinesulfide complexes palladium(II), 1963
- Bis(methylpyridyl)methane complexes copper(I), copper(II), 2299
- Bismuth(III) compounds and complexes chloro, dichloromethane, 2381
diethyldithiocarbamate, dinuclear, 1212
heterometallic, hexafluorophosphate, 2381
iminodi-, methylamino-
ethanoldithiocarbamate, nitrate, oxo, 1212
- Bis(nitrophenyl)phosphate, sodium, 733
- Bis(oxyaryl)amide complexes tellurium(IV), 4209
- Bis(oxybenzamidato)benzene complexes copper(II), potassium, 4105
- Bis(phenoxy)-carbonyl, -thioether complexes molybdenum(I), molybdenum(II), 4353
- Bis(phenyliminoethyl)pyridine complexes indium(III), 2183
- Bis(phenylsulfinyl)butane complexes lanthanide(III), 1123, 1787
- Bis(phosphonomethyl)glycinates copper(II), 3447
- Bis(pyrazolyl)borates, copper(I), potassium, 207
See also Bis(butylmethyl-, Bis(butylpropyl-, Bis(dibutyl-pyrazolyl)borate
- Bis(pyrazolyl)methane complexes
See Bis(bromo-, Bis(chlorodimethyl-, Bis(chloro-pyrazolyl)methane
- Bis(pyrazolylmethyl)pyridine complexes platinum(IV), rhenium(I), 3003
See also Bis(dimethylpyrazolylmethyl)-pyridine
- Bis(pyrazolylmethyl)tetraazacyclododecane complexes cadmium(II), mercury(II), zinc(II), 3585
- Bis(pyridyl)ethylene complexes iron(II), ruthenium(III), 1023
- Bis(pyridylethyl)malamide complexes copper(II), 3815
- Bis(pyridylmethyl)-alaninate, -alanineamide, -glycinate, -glycineamide, copper(II), 3765
- Bis(pyridylmethyl)hydroxyglutaramide complex, copper(II), 3815
- Bis(pyridylmethyl)malamide complexes copper(II), nickel(II), 3815
- Bis(pyridyl)propane complexes iron(II), ruthenium(III), 1023
- Bisterpyridylbenzene complexes ruthenium(II), 2369
- Bis(tricyclohexylphosphonium)ethane salts chloride, rhenium(III), 3649
- Bis(trimethylsilyl)amides lanthanide(III), 1223
lithium, 4239
zinc(II), 3593
- Bis(trimethylsilyl)cyclooctatetraenyl complexes lanthanide(III), lithium, 2067
- Bis(trimethylsilyl)cyclopentadienyl complexes lanthanide(III), lithium, potassium, 2067
- Bis(triphenylphosphino)iminium salts chloride, 3505
iridium(-I), 3861
nickel(II), nickel(III), palladium(III), platinum(III), 3505
- Bis(triphenylphosphonium)ethane salts chloride, osmium(III), rhenium(III), 3649
- Bis[tris(trifluoromethyl)phenyl]boronous acid, 2637
- Bis[tris(trifluoromethyl)phenyl]boroxides lithium, molybdenum(III), 2637
- Bis(tritolylporphyrinatophenoxy)ethane complexes copper(II), heterometallic, iron(III), 3779
- Bisulfate, copper(II), 2447
- Boehmite, 2785
- Bond valence calculations lanthanum(III) oxyfluoride, 3421
- Book reviews energetics of organometallic species, 993
metal complexes in aqueous solutions, 993
silicon fluorine hydrogen, noble gases compounds, 1267
syntheses of lanthanides, actinides inorganic and organometallic compounds, 3483
transition metal coordination chemistry, 4189
- Boron compounds and complexes butyl, 603
chloride, chloro, 2325, 2637, 3879
dibutyldiazabutadiene, 2325
diethylether, 2413
dimethylamide, dimethylammonium, 2325
dinuclear, 2325
fluoride, heterometallic, 2413
hydrides, 741, 869, 1581
hydroxide, hydroxo, 2325, 2499
macrocyclicpolyamineglyoximate, 2413
methoxide, oxo, 2325
polynuclear, 603, 2325
tetrachlorocatecholate, 2325
tris(trifluoromethyl)phenyl, 2637
See also Carba-, Di-, Metalla-, Phospha-borane, Fluoro-, Pyrazolyl-, Tetrahydro-, Tetraphenyl-, Triethyl-borate
- Boronous acids, *See* Bis[tris(trifluoromethyl)-phenyl]boronous acid

Boroxides, *See* Dimesityl-,
 Bis[tris(trifluoromethyl)phenyl]-boroxide
 Bromide and bromo complexes
 aluminium, 4081
 antimony(I,V), antimony(III), 1161
 cadmium(II), 199,417,1679,3435,3455
 caesium, 2455
 chromium(III), 3879,4253
 cobalt(II), 1679,2229,3455
 cobalt(III), 1739
 copper(I), 1433,3479,3499,4023
 copper(II), 805,1535,1679,2145,2229,2637,
 2909,3455,3479
 gallium, 4081
 gold(III), 4039
 iridium(I), iridium(III), iridium(IV), 1169
 iron(III), 3779
 lithium, 143,2229,2455,3625
 magnesium(II), 1855,4353
 manganese(II), 1679
 mercury(II), 3435
 nickel(II), 695,1679,1925,2229,2573,3455
 nitrogen, 2701
 palladium, 2353
 palladium(II), 1963,2353,3625
 platinum(II), 2455,3795
 rhenium(I), 3003
 rhenium(III), rhenium(V), 2093
 rhodium(I), 1169
 rhodium(III), 1169,1307,1483
 ruthenium(II), 143,1793,1921
 ruthenium(II,III), 2429
 ruthenium(III), 143,2429
 selenium(II), 1081
 sodium, 2145,4283
 tetrabutylammonium, 1921,3865
 tetraethylammonium, 2689
 tetraphenylphosphonium, 1111,1433,3061,
 3911
 thallium(III), 3609
 tin(II), 2621
 tin(IV), 2621,4005,4283
 vanadium-(II), -(III), -(IV), 1517
 zinc, 1407,1679,3435
 Bromine azide, explosion hazard, 2701
 Bromophenylthiolate, iron(III), 999
 Bromophenylthiosemicarbazides
 ruthenium(II), 4313
 Bromotetrachlorocyclopentadienyl complexes
 manganese(I), 2681
 Butadienylyl complexes
 See Tetra(methylcarboxylato)butadienylyl
 Butadienylthiolates
 rhodium(I), 3099
 See also Methylbutadienylthiolate
 Butanebis(dimethylammonioacetate)
 complexes, lanthanide(III), 749
 Butanedioate, manganese(II), 2547
 Butanedionates, *See* Trifluorophenyl-,
 Trifluorothienyl-butanedionate
 Butanedithiolate, iron(III), 999
 Butanol complexes, lanthanide(III), 1223
 Butenebis(phenoxide), molybdenum(II), 4353
 Butenediyl
 molybdenum(II,VI), tungsten(II,VI), 839
 Butenyl complexes
 iron(II), 869
 See also Dimethylsilabutenyl-
 diphenylphosphine
 Butoxides
 molybdenum(II,VI), molybdenum(III), 839
 potassium, 1315,2321,3099
 tungsten(II,VI), tungsten(III), 839
 Butoxycarbonylthiourea complexes
 See Nitrophenylbutoxycarbonylthiourea
 Butoxynorbornadiene, silver(I), 2147
 Butyl compounds
 boron, 603
 gallium(III), 3407
 indium(III), 1763
 iron(II), 869
 lithium, 133,403,541,1081,1505,1513,1767,
 2005,2067,2637,2681,2705,2941,3327,
 3593,3699,3879,4061
 tin(IV), 2213,3699,3729
 zinc(II), 3593
 See also Hydroxybutyl
 Butylamide complexes
 lithium, niobium(V), tantalum(V), 1081
 See also Butyl(phenylselenyl)-, Dibutyl-
 amide
 Butylamine complexes
 niobium(V), tantalum(V), 1081
 Butylammonium salts
 chloride, molybdenum(VI), 2589
 Butylcyclopentadienyl complexes
 lanthanide(III), lithium, 2013
 Butylimides
 chromium(V), 3879
 niobium(V), tantalum(V), 1081
 Butylisocyanide complexes
 gold(I), 2681
 platinum(II), 1663
 Butylmesitylphosphine, 1855
 Butylmesitylphosphine-chloride, -oxide,
 -selenide, -sulfide, 1855
 (Butylphenyl)imide, chromium(V), 3879
 (Butylphenyl)(phenyl)thioamide, lithium, 3879
 Butyl(phenylselenyl)amide complexes
 niobium(V), tantalum(V), 1081
 (Butylphenyl)terpyridine complexes
 cobalt(II), cobalt(III), iron(II), nickel(II),
 ruthenium(II), ruthenium(III), 3615
 Butylthiolate
 iron, iron(0), iron(I), iron(III), 999
 niobium(V), 3911
 rhodium(I), rhodium(III), 3099
 sodium, 3911
 Butyrates
 platinum(IV), 2421
 sodium, tin(IV), 881
 See also Dimethylacetate,
 Ethylhydroxybutyrate

C

Cadmium compounds and complexes

acetate, 423,1803,2625
azacryptates, 223,1301
azide, 235
benzotriazole, 423
bipyridine, 3929
bis(bromo-, bis(chlorodimethyl-, bis(chloro-
pyrazolyl)methane, 3435
bis(pyrazolylmethyl)tetraazacyclododecane,
3585
bromide, bromo, 199,417,1679,3435,3455
chloride, chloro, 199,223,297,417,423, 671,
1399,1679,2413,2483,2925,3363,3435,
3455
cyanobenzotriazole, 423
cyclohexanediaminetetraacetate, 3317
diacetylpyridinedioximate, 877
diethyldithiocarbamate, 1573
dihydroxy-benzoate, -benzoic acid, 1399
dinuclear, 223,915,1301,1679,1803,2925,
3435
furylpropenalsemicarbazone, 3455
heterometallic, 1803,2413,2483
hexafluorophosphate, 3585
hydrogen chloride, 1399
iodide, iodo, 199,417,1679,2483,2857,3435
macrocyclic, 915
macrocyclicpolyamine, 599,2413
macrocyclicpolyaminocarboxylates, 599
methanol, 223,915
methylidynecarboxylate, 1803
methylnitroaniline, 3929
nitrate, nitrato, 1679,3317,3363,3435
nitroaniline, 1263,3929
perchlorate, 223,915,1263,1301,2059,3363,
3435,3585,3929
phenanthroline, 1263
phenoxides, 1301
phenylenediaminetetraacetate, 2925
phenylenedimethylenebispyrazole, 1679
picolinate, 235
polynuclear, 2925,3363
polypyridine, 2059
pyrazine, 417
Schiff base, 223,915,1301,2857,4191
sulfide, 2483
tetraethyleneglycoldimethylether, 1803
tetrafluoroborate, 3435
tetrakis(methylpyrazolyl)borate, 671
tetrakis(pyrazolylmethyl)tetraazacyclo-
dodecane, 3585
tetraphenylborate, 3585
thiazolinyldiazine, 297
thiocyanate, 235,1679
trimethylammonioacetate, 3363
triphenylphosphoniobutyrate, 199
tris(methylpyrazolyl)borate, 671
water, 199,223,297,915,1301,1399,1803,
2059,2413,2483,2625,3363,3435,3455,
3585,3929

Caesium compounds and complexes

bromide, bromo, 2455
chloride, chloro, 1513,1663,2087
heterometallic, 1663,2455,2851,3921
polysulfide, sulfide, 3921
triethanolamine, 2087

Calcium compounds and complexes

aminocyclohexanecarboxylic acid, 507
apatite, 2047
chloride, chloro, 2087,2145
cyclohexanediaminetetraacetate, 3317
dibenzoyl-methanate, -methane, 2581
di(ethylhexyl)methanediphosphonate, 1843
ethanol, ethoxide, 2581
hydroxide, 2047
macrocyclicdiamidodiether, 2335
nitrate, nitrato, 1843,2047,3317
nitride, 3635
pentamethyldiethylenetriamine, 2581
perchlorate, 507
picrate, 2335
polynuclear, 507,2047
Schiff base, 4191
toluene, 2581
triethanolamine, 2087
water, 507,1843,2047,2087

Calixarene complexes

aluminium, 4385
See also Pyridylcalixarene

Calixareneammonium complexes

chromium(VI), 1581

Calixarene-carboxylate complexes

lanthanide(III), lithium, potassium, sodium,
yttrium(III), 1655

Calixarenesorcinolate, molybdenum(II), 2329

Calorimetric titrations of complexes

aluminium bromide with water, 4081
chromium(VI) oxo acidification, 3835
cobalt(II), copper(II), nickel(II) ethylenedi-
aminetetraacetanilide perchlorate, 4323
lanthanide(III) hydroxycarboxylates
coordination with phenanthroline, 4229
molybdenum(VI) malate oxo, 243

Camphorsulfonates

lanthanide(III), 427,535
sodium, 427

Cantharidates, platinum(II), sodium, 57

Carborane compounds and complexes

alkyl, aryl, 2517
dithiolethione, 1819
fluoride, 2517
fluorophenyl, 2499,2517
tetrabutylammonium, 1819,2499,2517
thiol, zinc(II), 1819

Carbohydrate compounds and complexes

chromium(VI) oxidation of ribonolactone,
701
tin(IV), 881
See also Monosaccharide

Carbon-chalcogen bond cleavage in cyclo- pentadienyl-molybdenum, review, 3089

Carbonates

barium, 2105,2871
cobalt, 3013
cobalt(II), 3941
cobalt(III), 3807,4187
copper, 3013
copper(II), 1535,2341
heterometallic, 3013
lithium, 1307,3807
nickel, 3013
potassium, 3357
rhodium(II), 3399,3655
silver, 983,3013
zinc, 3013
See also Transferrin

Carbonyl complexes

chromium(0), 403,1937,2005
cobalt, 2387,3067,3273
cobalt(-I), 1425
cobalt(0), 1425,2387,3067
cobalt(I), 1803
cobalt(I,III), 1425
iridium, iridium(-I), 3861
iridium(I), 341,1169
iron, 707,1549,1689,2249,3273,3475
iron(0), 707,869,1549,1689,2737,2797,2979, 3475
iron(I), 869,2249,2737,3475
iron(II), 481,869,2797,3327
iron(II,III), 2797
manganese(0), 2041
manganese(I), 2041,2681
molybdenum, 707,1549,2249,2387,3067, 3273
molybdenum(0), 229,403,409,1095,1101, 1365,1391,1407,1433,1937,1945,2279, 2387,3067,3273,3533,4363
molybdenum(I), 481,707,1549,2249
molybdenum(II), 409,1095,1391,2249,4363
molybdenum(II,VI), 839
molybdenum(IV), 229
osmium, 3463,3775
osmium(0), 3463
palladium, 2353,2789
palladium(0), 2789
palladium(II), 1963
platinum, 2353,3861
platinum(0), 2353
rhenium(0), 3489
rhenium(I), 3003,3641
rhodium(I), 869,1169,3099,3641
rhodium(I,III), 1483
rhodium(III), 1169
ruthenium, 593,2387,3061,3067,3253
ruthenium(0), 577,593,1453,2387,3061, 3067,3253
ruthenium(I), 3339
ruthenium(II), 577,1343,3641
tungsten, 707,1549,1689,3067,3273
tungsten(0), 403,1101,1937,2141,2193,2279, 3067,3273,4137,4363
tungsten(I), 481,707,1549,1689

tungsten(II), 1599,4363

tungsten(II,VI), 839

zirconium(IV), 3489

Carboxybenzoylthiosemicarbazide complexes
copper(I), 1477

Carboxylates

copper(II), 489

vanadium(IV), vanadium(V), 643

See also Calixarene-, Macrocyclicpolyamine-
Methylidyne-, Norbornene-, Pyridine-,
Quinoline-, Di-carboxylate, Acetate,
Acrylate, Amino acid, Atrolactate, Benzoate,
Butyrate, Carboxy, Citrate, Formate,
Glycolate, Lactate, Levulinate, Mandelate,
Octanoate, Propionate, Pyrazinate

Carboxylatobenzoylthiosemicarbazone
complexes, copper(II), 1477

(Carboxylatooxopropylidene)tetramethyl-
imidazolidineoxyl complexes
copper(II), 1279

Carboxylic acid complexes, *See*

Cyclopentadienyl-, Di-, Pyridine-carboxylic
acid, Amino-, Dihydroxybenzoic-,
Nitrilotriacetic-, Propionic-acid, Betaines,
Carboxybenzoylthiosemicarbazide

Carboxymethylidyne complex, cobalt(I), 1803
Carbyne complexes, *See* Alkylidyne

Catalysis

debenzotriazolation of bis(benzotriazolyl)-
methylimine by metal(II) acetates, 423

dechlorination of pentachlorophenol by

lanthanide(III) phthalocyaninate, 2971

decomposition of butyl hydroperoxide by
cobalt(II) octanoate and diketonates, 2651

decomposition of tetraphenylcyclopenta-
dienone by manganese(III) Schiff bases
with aldehyde, 2553

denitrogenation, deoxygenation,

desulfurization by palladium review, 3197

dimerization of alkynes by copper(I)
carboxylates, 327

disproportionation of hydrogen peroxide by
manganese(II) dioates bipyridine,

phenanthroline with imidazole, 2547,2741

electro-reduction of carbon dioxide by
nickel(II) macrocyclicpolyamine, 3557

electro-reduction of phenylhydrazinium by
ruthenium(III) ethylenediaminetetraacetate,
1235

epoxidation of cyclohexene by hydrogen
peroxide with iron(II)

macrocyclicpolyamine, 3827

epoxidation of methylstyrene by
chromium(VI) oxo glutathione, 2897

epoxidation of olefins by manganese(III)
bis(dichlorosalicylidene)cyclohexane-
disulfonamide, unsuccessful, 2365

esterolysis of nitrophenyl acetate by metal(II)
diacetylpyridinedioximate, 877

fixation of dinitrogen by rhenium(V)

hydride organophosphine, 1979

- formation of hydrogen peroxide from air and hydroxylamine by manganese(II) bentonite, 1403
- formation of palladium(II) glutathione by sodium dodecylsulfate micelles, 1157
- hydro-demetalation, -denitrogenation, -deoxygenation, -desulfurization fossil fuels review, 3071,3073
- hydrodenitrogenation of propylaniline, quinolines by molybdenum nickel sulfide on alumina, 3235
- hydrodenitrogenation in homogeneous solution review, 3139
- hydrodesulfurization, thiophenes by cobalt, iridium, rhodium complexes review, 3115
- hydrodesulfurization of thiophenes review, 3213
- hydrodesulfurization by dual metal surfaces review, 3177
- hydrodesulfurization of thiols by metal surfaces review, 3165
- hydrogenation of styrene by rhodium(I) bis(butylphenyl)(pyridyl)methylthiolate cyclooctadiene, 3641
- hydrogenation of thiophenes by rhodium tris(diphenylphosphinomethyl)ethane ester, hydride, thiolates, 3099
- hydrogen transfer by ruthenium(II) chloride norbornadiene polypyridines, triphenylphosphine, 3847
- hydrolysis of acetonitrile by ruthenium(II) bipyridine terpyridine, 1921
- hydrolysis of bis(benzotriazolyl)methylimine by metal(II) chlorides, 423
- hydrolysis of mononucleotides by cerium(IV) and lanthanide(III) salts, 3415
- hydrolysis of nitrophenylacetate by zinc(II) phenolic cyclams, 3285
- hydrolysis of Sarin and phosphate triester by lanthanum(III) azamacrocyclic, 4233
- oxidation of alcohols, alkane, dibutylcatechol by peroxide with ruthenium-(II), -(III) bipyridine diketone, chloride, 3039
- oxidation of cyclohexane by hydrogen peroxide, copper(II) bis(pyridylmethyl)-aminoacids, -aminoacidamides, 3765
- oxidation of cyclohexene, styrene, sulfur dioxide, triphenylphosphine by uranium(VI) aspartate, salicylate oxo peroxy, 4205
- oxidation of dibutylcatechol by oxygen with cobalt-(II), -(III), copper(II), nickel(II) macrocyclic Schiff bases, 1201
- oxidation of dibutylcatechol by oxygen with copper(II) bis-, pyridyl-(methylpyridyl)methane, 2299
- oxidation of phenols and deoxyribose with hydrogen peroxide by iron(III) polyaminopropoxides, 1497
- oxidation of triphenylphosphine, rhenium(V) dimethylpyrimidinethiolate halo oxo, 2087
- polymerisation of alkyne by tungsten(III), molybdenum(III) butoxide, 839
- rearrangement of siloxane cages by alkali metal salts, 3357
- water gas shift reaction by ruthenium(II) chloride norbornadiene polypyridines, triphenylphosphine, 3847
- Catechol complexes, aluminium, 1271
- Catecholates, *See* Tetrachlorocatecholate
- Cerium(III) compounds and complexes bis(trimethylsilyl)cyclooctatetraenyl, 2067
- camphorsulfonate, 427
- chloride, chloro, 427,1057,3415
- diethylether, 567
- heterometallic, 2067
- macrocyclicpolyazapolyether, 567
- montmorillonite, 2785
- nitrate, nitrate, 567,2785
- oxide, oxo, 3415
- phenanthroline, 427
- Schiff base, 567
- tris(pyrazolyl)borate, 1057
- water, 567
- Cerium(IV) compounds and complexes ammonium, 3415
- dinuclear, 1129
- nitrate, 3415
- oxide, oxo, 1129,3415
- polynuclear, propanol, propoxide, 1129
- sulfate, 3415
- Chirality
- butylmesitylphosphine, 1855
- cobalt iron molybdenum, tungsten carbonyl acylcyclopentadienyl sulfide, 3273
- cobalt(III) bis(aminopropyl)glycinate halo, perchlorate, nitrate, nitrite water, 1739
- cobalt(III) boron cadmium(II) chloro macrocyclicpolyamineglyoxime pyridine, 2413
- iridium(III) chloro pentamethylcyclopentadienyl Schiff base, 2321
- iron molybdenum tungsten selenium carbonyl cyclopentadienyl, 707
- iron tungsten selenium carbonyl cyclopentadienyl, 707
- lanthanide(III) camphorsulfonate chloride phenanthroline, 427
- lanthanide(III) Schiff base, 535
- manganese(III) bis(dichlorosalicylidene)-cyclohexanedisulfonamide sodium, tetraphenylphosphonium, 2365
- molybdenum(II) bis(dimethylphospholano)-benzene chloro dinuclear, 473
- molybdenum(II) carbonyl chloro Schiff base, 409
- platinum(II) chloro triethylphosphine phenylphosphide molybdenum(0) carbonyl, 1945
- rhodium(III) chloro pentamethylcyclopentadienyl Schiff base, 2321
- ruthenium cobalt carbonyl sulfide molybdenum, tungsten benzene-bis(carbonylcyclopentadienyl), 3067
- See also* Isomerism-optical

Chlorides and chloro complexes

- aluminium, 869,2491,3571,4081
- antimony(V), 2563,2643
- arsenic(III), 1212
- aryldithiadiazolylium, 4239
- barium, 2087
- bismuth(III), 2381
- bis(tricyclohexylphosphonium)ethane, 3649
- bis(triphenylphosphino)iminium, 3505
- bis(triphenylphosphonium)ethane, 3649
- boron, 2325,2637,3879
- butylammonium, 2589
- cadmium(II), 199,223,297,417,423,671, 1399,1679,2413,2483,2925,3363,3435, 3455
- caesium, 1513,1663,2087
- calcium, 2087,2145
- chromium(II), 2631,3879
- chromium(III), 1371,2223,2491,2897,4253
- chromium(V), 3879
- chromium(VI), 1371,3879
- cobalt(II), 133,423,671,1047,1137,1177, 1315,1513,1679,1731,2229,2413,2851, 2925,3455,3577,3735,3757
- cobalt(III), 1137,1739,2109,2413,3395, 3735,3807,4087,4187
- copper(I), 1433,1477,2193,2397,2605,2711, 3253,4023
- copper(II), 315,423,489,671,805,855,933, 939,1003,1111,1315,1477,1535,1651,1679 1701,1771,2145,2175,2229,2299,2605, 2673,2909,2925,2991,3261,3323,3379, 3455,3641,3765,3779,3815,3997,4163
- cyanuric, 3671
- gallium, 3407,4081
- germanium(IV), 949,1767,2843,4005
- gold(I), 125,1577,2681
- gold(III), 125,1111,1885,4039
- hafnium(IV), 3635
- heteropolyoxometallates, 629
- indium(III), 1763,2183,2291
- iodide, 3571
- iridium(I), 341,1169
- iridium(III), 1169,1811,2029,2321,3129
- iridium(IV), 1169
- iron(II), 671,869,1873,2307,2797,3779,4121, 4279
- iron(II,III), 2797,4279
- iron(III), 1831,1873,2491,2553,2797,3779, 4279
- lanthanide(III), 321,345,427,623,1057,1643, 1655,1907,2013,2067,3385,3415,3429, 3635,4143
- lead(IV), 949,1585
- lithium, 335,1291,1513,1663,2013,2087, 2405,2553,2963,3625,3635,3671,4197
- magnesium, 541,2087,2145
- manganese(I), 2041
- manganese(II), 71,133,671,897,1403,1679, 2877,3267,3511
- manganese(III), 2223,2553,2885
- mercury(II), 61,403,1223,1529,2283,2483, 3435,3585
- molybdenum(I), 4353
- molybdenum(II), 409,473,1095,1391,1439, 1831,4137,4353
- molybdenum(II,III), 1831
- molybdenum(V), 3695
- molybdenum(VI), 2169,2631
- nickel(II), 113,133,171,275,315,423,671,933, 1111,1315,1331,1439,1925,1931,1971, 2229,2323,2573,2673,2681,2711,2777, 2819,2827,2925,2991,3455,3505,3557, 3577,3641,3873,3997,4197,4353
- niobium(III), 1081
- niobium(V), 351,1081,3911
- osmium(III), 3649
- palladium, 2353,2789
- palladium(II), 33,171,315,335,369,801,815, 933,975,1003,1111,1291,1315,1323,1563, 1663,1889,1931,1963,2257,2405,2509, 2531,2727,2827,3505,3625,3641,3743, 4305,4337
- palladium(IV), 2353,2789
- phosphorus(V), 1247
- platinum, 2353
- platinum(II), 33,57,171,275,815,1003,1315, 1323,1555,1563,1663,1931,1945,2353, 2455,2509,2727,2809,3333,3505,3539, 3641,3743,3795,4297,4337
- platinum(IV), 1315,1885,2353,2809
- potassium, 1513,1663,2087
- rhenium(I), 3003,3641
- rhenium(III), 2087, 2263,3649
- rhenium(V), 2087
- rhodium(I), 869,1169,3641
- rhodium(I,III), 1483
- rhodium(III), 307,1169,1307,1483,1811, 2223,2321,4045
- rubidium, 1513,2087
- ruthenium, 3253
- ruthenium(II), 81,103,143,291,393,577,927, 983,1343,1605,1793,1811,1921,1993, 2369,2705,3039,3129,3293,3641,3847, 4073,4313
- ruthenium(II,III), 3399,3655
- ruthenium(III), 81,143,433,927,1023,1235, 1605,1755,1793,2705,2951,3039,3047, 3615,3851
- scandium(III), 1057,3415,3485
- silicon, 1081,1831,2941,4055
- silver(I), 2681
- sodium, 1513,1663,2087
- strontium, 2087
- sulfur, 1247
- tantalum(III), 1081,1177
- tantalum(IV), 721
- tantalum(V), 351,721,1081,1177,2941
- tellurium(IV), 2441
- tetrabutylammonium, 1323,2183
- tetraethylammonium, 3911,4121
- tetramethylammonium, 1323
- tetraphenylarsonium, 4305

- tetraphenylphosphonium, 447,2183,2365, 2483
- thallium(III), 681,1621
- thorium(IV), 989
- tin(II), 1599,1621,2263,2621
- tin(IV), 573,881,949,1095,1585,2213,2621, 3671,3699,4005,4283
- titanium(III), 195,3635
- titanium(IV), 25,635,869,2941
- tungsten(II), 1599,4137
- tungsten(III), 3893,4137
- tungsten(III,IV), 3893
- tungsten(IV), 3635,4137
- tungsten(VI), 4137
- vanadium(II), 1517
- vanadium(III), 1517,2613,2917,3635
- vanadium(IV), 1247,1517
- vanadium(V), 1081,4055
- yttrium(III), 1057,1655,1907,3415,3635
- zinc, 297,315,423,433,671,975,1193,1315, 1637,1679,1783,1819,2073,2223,2393, 2483,2925,3435,3455,3641
- zirconium(IV), 635,1105,2537,2941,3635
- See also* Hydrogen chloride
- Chloroacetyl complexes, platinum(II), 2455
- Chloroacetyl, platinum(II), 3333
- Chlorobenzoate complexes
- ruthenium(II), sodium, 1343
- (Chlorobenzoyl)benzoate, silver(I), 863
- Chlorocarbonylcyclopentadienyl complexes
- iron(II), 1713,2271
- Chloroethanol complexes, manganese(I), 2041
- Chloroform complexes and solvates
- copper(II), 2991
- nickel(II), 2667
- palladium(II), 33,2827
- rhodium(III), 307
- thallium(III), 1621
- zinc, 671
- [(Chlorophenyl)azo]hydroxyquinoline-sulfonates, *See* [(Hydroxychlorophenyl)-azo]hydroxyquinolinesulfonate
- Chlorophenylimidazophenanthroline complexes, ruthenium(II), 103
- Chlorophenylthiosemicarbazides
- ruthenium(II), 4313
- Chromium(0) compounds and complexes
- carbonyl, 403,1937,2005
- cyclopentadienylcarboxylic acid, 403
- cyclopentadienyltoluene, dinuclear, 2005
- ethyl(cyclopentadienylcarboxylate), 403
- fluorenyltoluene, fluorotoluene, 2005
- heterometallic, 403
- indenyltoluene, 2005
- methyl(cyclopentadienylcarboxylate), 403
- pentabenzylcyclopentadienyl, 403
- triphenylphosphine, 1937
- Chromium(I) complex, pentafluorophenylthiolate, xylylisocyanide, 2631
- Chromium(II) compounds and complexes
- acetate, 2897
- chloride, 2631,3879
- diisopropyl-dimethylimidazolylidene, -phenyl)amide, heterometallic, 3879
- mesityl, 2631,3879
- mesitylamide, mesitylimide, 3879
- pentafluorophenylthiolate, 2631
- tetrahydrofuran, 2631,3879
- xylylisocyanide, 2631
- Chromium(III) compounds and complexes
- acetate, 327
- acetylacetonate, ammonium, 4217
- apatite, 2047
- benzoate, 1371
- bipyridine, 3371
- bromide, bromo, 3879,4253
- chloride, 1371,2223,2491,2897,4253
- cluster, 1371
- dimethylformamide, 2223
- dinuclear, 3879
- fluorouracilate, 2491
- glycinate, 2145
- heterometallic, 531,1119,2047
- hexafluorophosphate, 4253
- histidine, 2491
- hydrogen chloride, 2223
- hydroxide, hydroxo, 2047,2223,2491,4217
- macrocyclicpolyamine, 2223
- mesitylammonium, 3879
- nitrate, nitrate, 1119,2047
- nitrilotriacetate, 3371,4217
- nitrilotriacetic acid, 3371
- oxalate, 531
- oxide, oxo, 1371
- pentafluorophenylthiolate, 2631
- pentamethylcyclopentadienyl, 3879
- peptide, 4171
- phenanthroline, 3371
- phosphate, 2047
- pyridine, 1371
- Schiff base, 1119
- tetrahydrofuran, 4253
- tetrakis(selenocyclohexadecane), 4253
- thiocyanate, 1119,2223
- tris(methylselenomethyl)ethane, 4253
- triselenoundecane, 4253
- water, 1119,1371,2047,2223,2491,2897, 3371,4217
- xylylisocyanide, 2631
- Chromium(V) compounds and complexes
- butylimide, (butylphenyl)imide, chloro, 3879
- ethylhydroxybutyrate, heterometallic, 2897
- (isopropylphenyl)imide, 3879
- oxo, 2897
- pentamethylcyclopentadienyl, 3879
- phenylthiolate, tolylimide, 3879
- water, 2897
- Chromium(VI) compounds and complexes
- ascorbate, 2081
- calixareneammonium, 1581
- chloride, chloro, 1371,3879
- dinuclear, 521,701,1581,2897,3835
- heterometallic, 521,701,1371,1581,2081, 2897

mesitylamide, 3879
 mesitylimide, 2631,3879
 oxo, 521,701,1371,1581,2081,2897,3835, 3879
 pentafluorophenylthiolate, 2631
 triphenylsiloxide, 3879
 Cinnamaldehyde, *See* Phenylpropenal
 Circular dichroism of complexes
 copper(II) lanthanide(III) nitrate Schiff bases
 aminopropanol methanol, 3345
 copper(II), nickel(II) bis(pyridylalkyl)-
 malamide, -hydroxyglutaramide, 3815
 lanthanide(III) camphorsulfonate chloride
 phenanthroline, 427
 lanthanide(III), sodium Schiff base, 535
 molybdenum(II) bis(dimethylphospholano)-
 benzene chloro dinuclear, 473
 platinum(II) chloride dialkylamino-
 pyrrolidines nucleotides, 4297
 vanadium(III) histidine, 2613
 Citrates, molybdenum(VI), potassium, 75
 Clays, *See* Montmorillonites
 Cluster complexes
 chromium manganese, 1371
 cobalt, 1425
 cobalt iron, 3273
 cobalt iron molybdenum, 3273
 cobalt iron tungsten, 3273
 cobalt manganese, 1377
 cobalt molybdenum ruthenium, 2387,3067
 cobalt ruthenium, 2387,3067
 cobalt ruthenium tungsten, 3067
 copper, 2731
 copper molybdenum, 1433,2987
 iridium platinum, 3861
 iron molybdenum, 481,707,1549,2249
 iron molybdenum tungsten, 707,1549
 iron tungsten, 481,707,1549,1689
 iron vanadium, 4121
 manganese molybdenum, 1365
 molybdenum, 1407
 molybdenum silver, 945,1543,2987
 rhenium, 1615
 ruthenium, 3061
 silver tungsten, 945,1543
 Cobalt compounds and complexes
 carbonate, 3013
 carbonyl, 2387,3067,3273
 cluster, 2387,3067,3273
 heterometallic, 2387,3013,3067,3273
 hydrodesulfurization review, 3177
 oxide, oxo, 3013
 sulfide, 2387,3067,3273
 Cobalt(-I) compounds and complexes
 carbonyl, heterometallic, 1425
 Cobalt(0) compounds and complexes
 carbonyl, 1425,2387,3067
 dinuclear, 2387
 metal hydrodesulfurization review, 3165
 Cobalt(I) compounds and complexes
 carbonyl, carboxymethylidyne, 1803
 heterometallic, 1803
 hydrodesulfurization review, 3115
 polynuclear, 1803
 tetrasulfophthalocyaninate, 3279
 Cobalt(I,III) complexes, carbonyl, cluster,
 pyridinethiolate, sulfide, 1425
 Cobalt(II) compounds and complexes
 acetate, 423,1377,2109,2625,2651,3615
 acetonitrile, 1731
 acetylacetonate, 2651
 adipate, 3941
 ascorbate, 2155
 azamacrocyclic, 2229
 benzothiazolatethione, 1731
 benzotriazole, 423
 bis(benzimidazolymethylene)benzene, 1315
 bis(diphenylphosphino)ethane, 1731
 bromide, bromo, 1679,2229,3455
 (butylphenyl)terpyridine, 3615
 carbonate, 3941
 chloride, chloro, 133,423,671,1047,1137,
 1177,1315,1513,1679,1731,2229,2413,
 2851,2925,3455, 3577,3735,3757
 cyanobenzotriazole, 423
 cyclopentadienyl, 1439,4353
 cysteine, 3279
 diacetylpyridinedioximate, 877
 dicyanamide, 463
 diketonates, 2651
 dinuclear, 1047,1201,1315,2925,3941
 dioxygen, 1047
 diphenylbenzamidine, 133
 diphenylformamidine, 1177
 ethylacetoacetate, 2651
 ethylenediaminetetraacetanilide, 4323
 furylpropenalsemicarbazone, 3455
 heterometallic, 2925,3013,3279
 hexafluoroacetylacetonate, 2651
 hexafluorophosphate, 3615
 histidine, 3279
 hydroxide, hydroxo, 2651
 imidazole, 463
 iminodipyridinium, 2851
 iodide, iodo, 1679
 macrocyclic, 1201
 methanol, 1201,2651
 methoxide, 2651
 methylimidazole, 463,3941
 nitrate, 463,1047,1679,2229,2925, 3013
 nitrosodicyanomethanide, 463
 octanoates, 2651
 oxalate, 2155,3013
 perchlorate, 1201,3577,3735,4323
 phenylaminebis(methylphenylamido), 1177
 phenylenediaminetetraacetate, 2925
 phenylenedimethylenebispyrazole, 1679
 polynuclear, 2925
 pyrazolymethylpyridine, 3577
 pyridinethiolate, 1425
 Schiff bases, 1201,4191
 sulfate, superoxide, 1047
 terpyridine, 3615
 tetraethylammonium, 1425

tetrafluoroborate, 3735
 tetrakis(methylpyrazolyl)borate, 671
 tetramethyl(trimethylenecoligoethylene-
 glycolether)cyclopentadienyl, 1513
 tetrasulfophthalocyaninate, 3279
 thiocyanate, 1679,2229
 tributylphosphine, 1731
 triethanolamine, 1047
 trifluoroacetylacetonate, 2651
 tris(methylpyrazolyl)borate, 671
 water, 423,463,1047,1201,1315,1731,2109,
 2155,2413,2625,2651,2925,3013,3279,
 3455,3577,3615,3757,3941,4323
Cobalt(III) compounds and complexes
 acetate, 2109
 acetylacetonate, 2771
 amino acid salts, 3757
 (aminoethyl)(aminopropyl)glycinate, 3757
 aminoethylpropanediamine, 3757,4087
 ammonia, 2135,3565,4087
 azide, 3747
 benzoate, 1377
 bis(aminoethyl)dithiocyclohexane, 3807
 bis(aminopropyl)glycinate, 1739
 bis(dimethylarsino)propane, 2771
 bis(dimethylphosphino)ethane, 2771
 bromide, bromo, 1739
 (butylphenyl)terpyridine, 3615
 carbonate, 3807,4187
 chloride, chloro, 1137,1739,2109,2413,3395,
 3735,3807,4087,4187
 cluster, 1377
 cyclopentadienyl, 4353
 diethyldithiocarbamate, 1573
 diethylenetriamine, 4087
 dimethylarsinoethyl-, dimethylethylenedi-,
 dimethylphosphinoethyl-amine, 2771
 dimethylpyridines, 3747
 dinuclear, 1047,1201,2851
 dioxygen, 1047
 dipyrrophenazine, 3395
 ethanol, 3807
 ethylenediamine, 2771,4187
 ethylmethylpyridine, 3747
 glycinate, 2145
 heterometallic, 1377,1513,2135,2145,2413,
 2851,3807,4353
 hexafluorophosphate, 1513,3615,4087
 hydroxide, hydroxo, 1047,2109,2851
 macrocyclic, 1201
 macrocyclicpolyamines, 4087
 macrocyclicpolyamineglyoximate, 2413
 methanol, 1201
 methoxide, 2109
 (methylpyrazolyl)formyl-
 benzylidithiocarbamate, 3735
 nitrate, nitrato, 1739,2155,3747
 nitrilotriacetate, 2135,2851
 nitrite, nitrito, 1739,3565,3757,3807
 oxide, oxo, 1377,2109
 perchlorate, 1201,1739,2135,2771,3395,
 3735
 phenanthroline, 3395
 phosphates, 4187
 picolinate, picolinic acid, 2135
 polynuclear, 2109
 pyridine, 1377,2413
 Schiff base, 1201
 superoxide, 1047
 tetrafluoroborate, 3735
 tetramethylethylenediamine, 2771
 tetramethyl(trimethylenecoligoethylene-
 glycolether)cyclopentadienyl, 1513
 tetrasulfophthalocyaninate, 3279
 thiazolinyldiazine, 1137
 thiocyanate, 3807
 transferrins, 1069
 triethanolamine, 1047
 tris(pyrazolyl)borate, 4087
 water, 1047,1137,1201,1739,2109,2155,
 2851,3747,3757,3807,4087
Cobaltocene See Cobalt(II), cyclopentadienyl
Comproportionation constants, molybdenum-
(II) bis(phenoxide)s chloro nitrosyl tris-
(dimethylpyrazolyl)borate dinuclear, 4353
Conformational study, silver azacryptates, 453
Coordination chemistry book review, 4189
Copper compounds and complexes
 cluster, 2731
 hydrodesulfurization review, 3177
 sulfides, triphenylphosphine, 2731
 triazaphosphaadamantane, 2731
Copper(0) compounds and complexes
 alloys, 2963
 carbonate, heterometallic, 3013
 metal, 161,263,327,1487,1707,1723,2963,
 3253,3601,3921
 oxide, oxo, 3013
Copper(I) compounds and complexes
 acetate, 327
 acetonitrile, 67,207,377,1529,2193,2299,
 3499,4163,4257,4273
 acetylides, 327
 alkylisocyanides, 2397
 arylazoimidazoles, 4163
 azide, 2193
 bipyridine, 4033
 bis(diphenylphosphino)methane, 4033
 bis(methyl)phenylphosphine, 1529
 bis(methylpyridyl)methane, 2299
 bis(pyrazolyl)borate, 207
 bromide, bromo, 1433,3479,3499,4023
 carboxybenzoylthiosemicarbazide, 1477
 chloride, chloro, 1433,1477,2193,2397,2605,
 2711,3253,4023
 cluster, 1433,2987
 cyanide, cyano, 113,2335,2397,2987
 dibutylphosphine, 3253
 diethoxyphosphinodithioate, 2987
 dimethylphenanthroline, 733,2711
 dimethylsilabutenyldiphenylphosphine, 3479
 dinuclear, 1477,1529,2711,2987,3479,4023,
 4033
 ethene, 67

heterometallic, 377,1433,2193,2397,2979, 2987,3499
 hexafluorophosphate, 377,1529,4273
 hydroxybenzylthiosemicarbazone, 3499
 iodide, iodo, 1433,1487,2979,3499,4023
 (isobutylphenyl)propionate, 733
 methanol, 4033,4273
 methyl, 2979
 (methylpyridyl)pyridylmethane, 2299
 nitrate, nitrato, 207,377,4033
 nitrophenylbutoxycarbonylthiourea, 2605
 nitrophenylethoxycarbonylthiourea, 2605
 norbornenecarboxylates, 3399
 oxide, oxo, 327,2193,3601
 perchlorate, 67,2193,2299,4163
 phenanthroline, 4033
 phenylacetylde, 327
 polynuclear, 1487,3253,4273
 pyridine, 4033
 pyridinedicarboxylic acid, 4033
 pyridinethione, 4023
 pyridyl(dimethoxyphenyl)pyrazoles, 4257
 Schiff base, 4273
 selenide, 1433
 sulfide, 377,2731,2987,3499
 tetrafluoroborate, 2193,2397,4257
 tetrakis(pyrazolyl)borate, 207
 tetramethylethylenediamine, 67
 thiacycloalkynes, 1529
 thiocyanate, 889
 thiolates, 4273
 tributylphosphine, 327
 tricyclohexylphosphine, 207
 trimethylamine, 1487
 triphenylphosphine, 327,377,1433,1529, 2987,3399,3499
 tris(chlorodimethyl-, tris(dimethyl-, tris(methyl-, tris(-pyrazolyl)borate, 207
 tritolylphosphine, 4023
 water, 1477
Copper(I,II) compounds and complexes
 acetonitrile, 2059
 cyanide, cyano, 161,1747
 diethylenetriamine, 1747
 dimethylformamide, 161
 dinuclear, 2059
 levulinate, 2341
 perchlorate, 2059
 polynuclear, 161,2341
 polypyridine, 2059
 thiocyanate, 161
 triphenylphosphine, 2341
Copper(II) compounds and complexes
 acetate, 187,259,327,423,1013,1279,1535, 1595,1771,1895,1999,2625,2991,3345, 3399,3525,3549,3655,3815,4097,4221, 4371
 acetonitrile, 1505
 alanine,1357
 (alkoxyphenylethyl)piperidinedithio- carbamate, 315
 aminoethanol, 3601
 amino(methylmercaptan)naphthoquinone, 933
 (aminomethyl)pyridine, 1651
 aminopropanol, 3345
 ammonia, 383
 azamacrocyclic, 2229,3997
 azide, 825,2239
 benzotriazolate, 423
 bipyridine, 281,531,733,1999,2341,2447, 3655
 bis(benzimidazolylmethylene)benzene, 1315
 bis(butylphenyl)(pyridyl)methylthiolate, 3641
 bis(dimethylnitrosopyrimidinedionyl)- propylenediamine, 281
 bis(hydroxyacetophenyl)ethylenediamine, 2175
 bis(hydroxyaryl)ethylenediaminobutane- oximes, 2175
 bis(hydroxybenzyl)ethylenediamine, 2175
 bis(hydroxypropiofenyl)ethylenediamine, 2175
 bis(methylbipyridine-ethyl)benzene, 1505
 bis(methylpyridyl)methane, 2299
 bis(oxybenzamidato)benzene, 4105
 bis(phosphonomethyl)glycinate, 3447
 bis(pyridylethyl)malamide, 3815
 bis(pyridylmethyl)-alaninate, -alanineamide, -glycinate, -glycineamide, 3765
 bis(pyridylmethyl)-hydroxyglutaramide, -malamide, 3815
 bis(tritolylporphyrinatophenoxy)ethane, 3779
 bisulfate, 2447
 bromide, bromo, 805,1535,1679,2145,2229, 2637,2909,3455,3479
 carbonate, 1535,2341
 carboxylate, 489
 carboxylatobenzoylthiosemicarbazone, 1477
 (carboxylatooxopropylidene)tetramethyl- imidazolidineoxyl, 1279
 chloride, chloro, 315,423,489,671,805,855, 933,939,1003,1111,1315,1477,1535,1651, 1679,1701,1771,2145,2175,2229,2299, 2605,2673,2909,2925,2991,3261,3323, 3379,3455,3641,3765,3779,3815,3997, 4163
 chloroform, 2991
 creatinine, 3379
 cyanide, cyano, 909,3779
 cyanobenzotriazole, 423
 cyanoguanidine, 805
 diacetylpyridinedioximate, 877
 diamine, 903
 diamidonaphthoquinone, 933
 diaminopropane, diammoniumpropane, 3261
 diazafluorenehydrazine, 187
 dibenzoyltartrate, 3655
 dichloromethane, 1535
 dicyanamide, 463
 di(dimethylglycinoyl)triazaoctane, 89
 diethylaminomethylenephosphonate, 355

diethyldithiocarbamate, 1573,3967
 diethylenetriamine, 805,1747
 di(ethylhexyl)methanediphosphonate, 1843
 diglycolate, 963
 dimesitylboroxide, 2637
 dimethanolpyridine, 2721
 dimethylaminoethoxide, 263
 dimethylformamide, 4105
 dimethylphenanthroline, 733
 dimethylpropylenediamine, 3997
 dimethylpteridinedione, 607
 dimethylpyrazolate, 2659
 dimethylpyrazolylmethylpyridine, 4331
 dimethylpyridine, 2239
 dimethylsulfoxide, 263
 dinuclear, 259,281,489,733,825,1013,1201,
 1279,1315,1535,1747,1771,2341,2909,
 2925,3323,3399,3641,3655,3815
 dioxypyridyldihydrodibenzocycloheptene,
 1693
 diphenyltetrakis(pyrazolyl)cyclotri-
 phosphazene, 1003
 dipicolinoyltriazaoctane, 89
 dipropyldithiophosphate, 3967
 ethanol, 281,1279
 ethyl (benzothiazolyl)aminoformate, 1013
 ethylenediamine, 599,1315,1723,3687,3997
 ethylenediaminedicarboxylate, 1723
 ethylenediaminetetraacetanilide, 4323
 formamide, 2239
 furylpropenalsemicarbazone, 3455
 galactosebis(thiosemicarbazone), 3549
 glucosebis(thiosemicarbazone), 3549
 glycinate, 889,2145
 glycinecarboxylate, 1723
 heterometallic, 263,825,909,963,1003,1357,
 1573,1663,1723,2105,2135,2145,2193,
 2637,3013,3345,3779,3815,4105
 hexafluoroacetylacetate, 1999
 hexafluorophosphate, hydroperoxide, 3765
 hydroxide, hydroxo, 259,1747,2205,2909,
 3399,3779,3815,4105
 (hydroxyethoxy)methylguanine, 1701
 hydroxy(methylmercaptan)naphthoquinone,
 933
 imidazole, 383,463,805,1477,2465,3765
 iminodi-acetate, 3447
 iminodi-methylenephosphonate, 3447
 iodide, iodo, 263
 isatinthiosemicarbazones, 855
 (isobutylphenyl)propionate, 733
 levulinate, 2341
 macrocyclic, 1201
 macrocyclicdiamidodiamines, 741,2021,
 3525
 macrocyclicpolyamine, 259,741,2073
 macrocyclicpolyaminepolyol, 2205
 macrocyclictetraamides, malonate, 3261
 methanol, 3345,3399
 methoxy(methoxymethylpyrazolyl)methyl-
 pyrimidine, 939
 methylimidazole, 383,463,2465
 methylpyridine, 383,2465
 (methylpyridyl)pyridylmethane, 2299
 (methylthiophenylazo)hydroxy-naphthalene-
 sulfonate, -quinolinesulfonate, 3033
 niflumate, 1461,2721
 nitrate, nitrate, 355,463,531,607,805,825,889,
 963,1595,1663,1679,1693,1701,1843,
 2021,2229,2909,3013,3345,4033
 nitrilotriacetate, 2135,3447
 nitrilotrimethylenephosphonate, 3447
 nitrite, nitrito, 805,2447,3815,4331
 nitrosodicyanomethanide, 463
 norbornenecarboxylates, 3399
 oxalate, 531,3013
 oxide, oxo, 607,2105,2193,3323,3601
 pentamethyldiethylenetriamine, 805
 perchlorate, 119,187,259,281,383,489,599,
 909,1201,1315,1357,1505,1747,1771,
 2059,2073,2135,2205,2239,2465,2659,
 2909,3765,3997,4221,4323,4331
 phenanthroline, 733,1595,1999,2447,3655
 phenoxide, 489
 phenylenediaminetetraacetate, 2925
 phenylenedimethylenebispyrazole, 1679
 phenylpyrazole, 1535
 (phosphonomethyl)glycinate, 3447
 (phosphonomethyl)iminodiacetate, 3447
 phthalocyaninates, 1877,2335
 picolinate, 2135
 picolylpicolinamide, 383
 pivaloyltrifluoroacetate, 1999
 polynuclear, 263,531,909,963,1477,2105,
 2659,2925
 propylenebis(acetylpyridineimine), 119
 propylenediamine, 3997
 pyrazinate, 825
 pyrazolate, 2659,3815
 pyridine, 187,383,489,1013,1477,2341,3323,
 3687
 pyridinediyl-diethylidenedioxamohydrazides,
 4221
 pyridinemethanol, 1461
 pyridyldihydrophenalenedionate, 1693
 pyridyl(dimethoxyphenyl)pyrazole, 4257
 (pyridylethyl)picolinamide, 2465
 (pyridylethyl)toluenesulfonamide, 1707
 pyruvoylamideoximate, 1723
 ribosebis(thiosemicarbazone), 3549
 Schiff bases, 489,903,1201,1771,2659,2673,
 2909,2991,3345,4097,4371
 sulfate, 741,805,2447,3323,3601
 tetrafluoroborate, 383,939,1535,2447,2465,
 3687,4257
 tetrakis(methylpyrazolyl)borate, 671
 tetramethylammonium, 4105
 tetramethylheptanedionate, 1595,1999
 theophylline, 3601
 thiocyanate, 889,1771,2229,3997
 thiosalicylate, 3323
 thiosemicarbazones, 1895
 triflate, 3641
 tris(aminoethyl)amine, 187,909

- tris(methylpyrazolyl)borate, 671
 tris(phenylpyrazolyl)borate, 1535
 water, 119,187,259,281,383,423,463,489,
 531,607,733,805,825,889,909,963,1013,
 1201,1279,1315,1357,1477,1505,1535,
 1595,1651,1701,1723,1747,1771,1843,
 1999,2059,2073,2135,2175,2205,2239,
 2341,2447,2465,2605,2625,2659,2673,
 2909,3013,3033,3345,3379,3399,3455,
 3525,3601,3641,3655,3765,3815,3997,
 4033,4105,4163,4221,4257,4323,4331,
 4371
- Copper(III) compounds and complexes
 dithiaoxadithiolate, 1111
 macrocyclic-diamidodiamine, 741
 macrocyclic-polyamine, 741
 tetraphenylphosphonium, 1111
- Creatinine complexes
 copper(II), 3379
 iridium(III), 2029
- Crown ligand complexes
 lanthanide(III), 1149
See also Azacrown
- Cryptate complexes, *See* Azacryptate
- Cyanates and cyanato complexes
 manganese(II), 2877
 sodium, 2877,3357
See also Telluro-, Thio-cyanate
- Cyanides and cyano complexes
 copper(I), 113,2335,2397,2987
 copper(I,II), 161,1747
 copper(II), 909,3779
 iron(II), 909,1023,1585
 iron(III), 1585,3779
 lithium, 3671
 molybdenum(IV), 1259,3857
 molybdenum(V), 3857
 nickel(II), 2827
 potassium, 1241,1259,2199
 ruthenium(II), 3851
 ruthenium(II,III), 3851
 sodium, 681,1747
 tetrabutylammonium, 3779
 thallium(III), 681
See also Nitrile, Tricyanomelamine
- Cyanoacetates, silver, sodium, titanium(IV), 25
- Cyanoanilines complexes, vanadium(V), 4055
- Cyanobenzotriazole complexes, cadmium(II),
 cobalt(II), copper(II), manganese(II),
 nickel(II), zinc, 423
- Cyanoethylpyrrole complexes,
 rhodium(III), 4045
- Cyanoguanidine complexes, copper(II), 805
- Cyanopyridines complex, vanadium(V), 4055
- Cyanuric chloride, 3671
- Cyclam, *See* Macrocyclicpolyamine
- Cyclic voltammetry of complexes
 antimony(III) dithiocarbamates, 1212
 arsenic(III) dithiocarbamates, 1212
 arylldithiadiazolylium hexafluoroarsenate,
 4239
 bismuth(III) dithiocarbamates, 1212
 cobalt(I,III) carbonyl cluster pyridinethiolate
 sulfide, 1425
 cobalt(II) terpyridines hexafluorophosphate,
 3615
 cobalt(II) triethanolamine water, 1047
 cobalt(II) benzothiazolatethione
 bis(diphenylphosphino)ethane,
 tributylphosphine acetonitrile, 1731
 cobalt(III) ammonia nitrilotriacetate
 copper(II) perchlorate water, 2135
 copper(I) acetonitrile Schiff base methanol
 hexafluorophosphate tetranuclear, 4273
 copper(I) alkyl(arylazo)imidazoles
 perchlorate, 4163
 copper(I) bis(diphenylphosphino)methane
 bipyridine, phenanthroline, pyridine, pyrid-
 inedicarboxylic acid nitrate dinuclear, 4033
 copper(I,-(II) pyridyl(dimethoxyphenyl)-
 pyrazole tetrafluoroborate, 4257
 copper(II) acetate tris(phenylpyrazolyl)-
 borate, 1535
 copper(II) bipyridine, phenanthroline
 dibenzoyltartrate water, 3655
 copper(II) bis(hydroxyaryl)ethylenediamin-
 e, -obutaneoximes chloride water, 2175
 copper(II) bis(pyridylmethyl)aminoacid-
 amides, 3765
 copper(II) bis-, pyridyl-
 (methylpyridyl)methane catalytic oxidation
 of dibutylcatechol by oxygen, 2299
 copper(II) bromide, chloride phenylpyrazole
 tris(phenylpyrazolyl)borate, 1535
 copper(II) chloride, perchlorate Schiff bases
 water dinuclear, 489
 copper(II) chloro creatinine, 3379
 copper(II) dimethylpyrazolylmethylpyridine
 nitrite perchlorate, 4331
 copper(II) hexylthiophthalocyaninates, 1877
 copper(II) macrocyclicdiamidodiamine, 3525
 copper(II) macrocyclic-diamidodiamines,
 -polyamines, 741
 copper(II) macrocyclic Schiff bases, 2673
 copper(II) macrocyclic Schiff bases
 perchlorate dinuclear, 1201
 copper(II) perchlorate propylenebis-
 (acetylpyridineimine) water, 119
 copper(II) platinum(II) chloro diphenyltetra-
 kis(pyrazolyl)cyclotriphosphazene, 1003
 copper(II) Schiff bases, 4371
 copper(III), gold(III) dithiaoxadithiolate
 tetraphenylphosphonium, 1111
 iron(II) cyclopentadienyl diphosphino-
 alkanes mono-, di-nuclear, 1775
 iron(II) organoformamido-, (organo-
 thioureacarbonyl)-cyclopentadienyl, 2271
 iron(II) organothioureacarbonyl-,
 formamido-cyclopentadienyl, 1713
 iron(II) ruthenium(III) bipyridines, pyrazine
 cyanide ethylenediaminetetraacetate, 1023
 iron(II) terpyridines hexafluorophosphate,
 3615
 lanthanide(III) phthalocyaninates, 515

lanthanide(III) pyridylbenzimidazoles
thiocyanate, 1417

manganese(II) bis(benzimidazolyl-
methyl)ether acetate, thiocyanate, 3511

manganese-(II), -(III) dihydroxyanthra-
quinone quinolinecarboxylate, 2903

manganese(III) bis(benzimidazolyl-
methyl)ether, -oxamethylbenzene acetate,
perchlorate, thiocyanate, 3511

manganese(III) Schiff bases acetate, chloride,
perchlorate methanol dinuclear, 2553

manganese(III) Schiff bases mono-, poly-
nuclear acetonitrile, 3787

molybdenum(II) bis(phenoxide)s chloro
nitrosyl tris(dimethylpyrazolyl)borate
dinuclear, 4353

molybdenum(II) nickel(II), palladium(II)
chloro nitrosyl (Schiff bases) tris(dimethyl-
pyrazolyl)borate, 1439

molybdenum(V) cyclophanes oxo
tris(dimethylpyrazolyl)borate, 3695

molybdenum(V) oxo sulfide tetraphenyl-
phosphonium dinuclear water thiolato-
benzoate, -propionate, 447

molybdenum(VI) cadmium(II), zinc(II) iodo
sulfido tetraphenylphosphonium, 2483

molybdenum(VI) oxo phosphorus
butylammonium polynuclear water, 2589

nickel(II) bis(benzimidazolylmethyl)amines
sodium mercaptoethylsulfonate, 2819

nickel(II) bis(butylphenyl)(pyridyl)-
methylthiolate, 3641

nickel(II) bis(triphenylphosphino)iminium
dithiolethionedithiolate methanol, 3505

nickel(II) (butylphenyl)terpyridine
hexafluorophosphate, 3615

nickel(II) halide, nitrate thiosemicarbazones
water, 1925

nickel(II) macrocyclicdiamidodiamine, 179

nickel(II) macrocyclic-diamidodiamines,
-polyamines, 741

nickel(II) macrocyclicpolyamine, 3557

nickel(II) macrocyclic Schiff bases, 2673

nickel(II) methylthiocarbazates, 275

nickel(II) Schiff base pyrazolate tetranuclear,
2659

nickel(II) pyridinedithiolate dinuclear, 1931

nickel(II) Schiff bases, 1439

nickel(III) dithiaoxadithiolate
tetraphenylphosphonium, 1111

niobium(V) methylphenoxythiolate
triethylammonium, 1447

palladium(II) acetylpyridine(alkyl)thiosemi-
carbazones, 3625

palladium(II) Schiff bases, 1439

palladium(III) bis(triphenylphosphino)-
iminium dithiolethionedithiolate, 3505

palladium(III) dithiaoxadithiolate
tetraphenylphosphonium, 1111

platinum(II) bis(butylphenyl)(pyridyl)-
methylthiolate, 3641

platinum(II) methylthiocarbazates, 275

platinum(II) tetraphenylporphyrinates, 2809

platinum(IV) chloro
tetraphenylporphyrinates, 2809

rhenium(I) bis(butylphenyl)(pyridyl)-
methylthiolate carbonyl, 3641

rhenium(III) chloride thiourea water, 2263

rhenium(III) dimethylpyrimidinethiolate
halide triphenylphosphine, 2087

rhenium(V) dimethylpyrimidinethiolate
halide oxo triphenylphosphine, 2087

rhodium(III) halides bis(dimethylarsino)-,
bis(dimethylphosphino)-benzenes, 1307

ruthenium(II) arylazophenolates bipyridine,
3047

ruthenium(II) arylazophenolates, quinolineo-
late, Schiff base bipyridine, phenanthroline
chloro perchlorate triphenylphosphine, 81

ruthenium(II) aryl benzoate, chloro carbonyl
Schiff base, 1343

ruthenium(II) arylthiosemicarbazides
bipyridine perchlorate, 4313

ruthenium(II) bipyridine diketonates, 3039

ruthenium(II) bipyridine, phenanthroline,
triphenylphosphine dithioate, dialkyl-
dithiocarbamate, 983

ruthenium(II) bipyridine Schiff bases, 1755,
4073

ruthenium(II) bis(anilino)vinyl)bipyridine
bipyridine hexafluorophosphate, 2705

ruthenium(II) bis(butylphenyl)(pyridyl)-
methylthiolate carbonyl, 3641

ruthenium(II) chloride norbornadiene
polypyridines, triphenylphosphine, 3847

ruthenium(II) chloro cyclopentadienyl ter-
pyridylbenzene triphenylphosphine, 2369

ruthenium(II) cyclopentadienyl (cyclopenta-
dienylmethyl)triazacyclononane
perchlorate trinuclear, 2889

ruthenium(II) halide pyridylbenzo-
thiazolines, Schiff bases amines, 143,1793

ruthenium(II) Schiff base picolinate,
tolylazopyridine, tolylpicolinamide, 1605

ruthenium(II) terpyridines
hexafluorophosphate, 3615

ruthenium(II,III) potassium cyanide
ethylenediaminetetraacetate, 3851

ruthenium(III) arylazophenolate, quinolineo-
late, Schiff base chloro
triphenylphosphine, 81

ruthenium(III) bipyridine chloro, 3039

ruthenium(III) bipyridines, pyrazine
ethylenediaminetetraacetate, 1023

ruthenium(III) chloride Schiff base
triphenylphosphine, 2951

ruthenium(III) ethylenediaminetetraacetate
phenylhydrazinium, water, 1235

silver(I) alkyl(arylazo)imidazoles perchlorate,
4163

silver(I) azamacrocyclic
hexafluorophosphate water, 2375

silver(I) pyridyl(dimethoxyphenyl)pyrazoles
tetrafluoroborate, 4257

tungsten(VI) aluminium, gallium, indium
 potassium zinc oxo polynuclear, 3985
 tungsten(VI) cadmium(II), zinc(II) iodo
 sulfido tetraphenylphosphonium, 2483
 vanadium(III) picolinate water, 2917
 vanadium(IV) oxo Schiff bases dinuclear,
 643, 1825
 vanadium(V) oxo quinolineolate Schiff
 bases, 4179
 zinc(II) hexylthiophthalocyaninates, 1877
 Cycloheptatriene complexes, *See* Tropolonate
 Cyclohexanediaminetetraacetates
 barium(II), cadmium(II), calcium,
 mercury(II), strontium, zinc(II), 3317
 Cyclohexanedisulfonamide, *See* Bis(dichloro-
 salicylidene)cyclohexanedisulfonamide
 Cyclohexylidenemalonates
See Dithian-, Dithiepane-ylidenemalonates
 Cyclohexylphosphandiyls, zirconium(IV), 2537
 Cyclohexylphosphide complexes
 lithium, zirconium(IV), 2537
 Cyclohexylphosphino-dithioformates,
 -(phenyl)thioamides, zirconium(IV), 2537
 Cyclooctadiene complexes
 nickel(0), 2711
 palladium(II), 369,2353
 platinum(II), 1663,2455,3641
 rhodium(I), 3641
 Cyclooctatetraenyl complexes, *See* Bis-, Tris-
 (trimethylsilyl)cyclooctatetraenyl
 Cyclooctene complexes, iridium(I), 341
 Cyclopentadienyl complexes
 cobalt(II), 1439,4353
 cobalt(III), 4353
 iron(0), iron(I), 869
 iron(II), 433,869,999,1513,1775,2689,3327
 iron(III), 999,1513,1831
 manganese(I), 3663
 molybdenum, 707,1549,2249
 molybdenum(I), 707,1549,2249
 molybdenum(III), molybdenum(IV), 3089
 ruthenium(I), 3339
 ruthenium(II), 2369,2889
 sodium, 195,3067
 titanium(III), 61
 titanium(IV), 25,61
 tungsten, tungsten(I), 707,1549,1689
See also below and Acyl-, (Aryliminoethyl)-,
 Benzenebis(carbonyl-, Benzoyl-,
 Bromotetrachloro-, Butyl-,
 Chlorocarbonyl-, Dimethylaminoethyl-,
 Dimethyl-, Diphenylphosphino-,
 Ethyltetramethyl-, Hydroxyethyl-, Methyl-,
 Methylcarbonyl-, Pentabenzyl-,
 Pentabromo-, Pentamethyl-, Pyridinebis-,
 Tetrabromo-, Tetrachloro-, Tetramethyl-,
 Tribromo-, Trichloro-, (Trimethylsilyl)-
 cyclopentadienyl, Benzylcyclopentadienyl
 alcohol, Fluorenyl, Indene, Indenyl
 Cyclopentadienylcarboxylic acid complexes
 chromium(0), molybdenum(0), tungsten(0),
 403
See also Ethyl-, Methyl-
 (cyclopentadienylcarboxylate)
 Cyclopentadienyldithiolates
See Trichlorocyclopentadienyldithiolates
 Cyclopentadienylethanol complexes
 molybdenum, 2387
 (Cyclopentadienylmethyl)triazacyclononane
 complexes, ruthenium(II), 2889
 (Cyclopentadienylmethyl)trimethylammonium
 complexes and salts
 iodide(II), 2689,2889
 iron(II), 2689
 ruthenium(II), 2889
 zinc(II), 2689
 Cyclopentadienylthiolates, *See* Tetra-, Tri-
 chlorocyclopentadienylthiolates
 Cyclopentadienyltoluene complexes
 chromium(0), 2005
 Cyclopropylamine complex, platinum(II), 3705
 Cyclotriphosphazenes, *See* Phosphazene
 Cymantrene
See Manganese(I), cyclopentadienyl
 Cymene complexes, *See* Methylpropylbenzene
 Cysteine complexes, cobalt(II), 3279

D

Deoxyguanosinemonophosphate complexes
 osmium(II), ruthenium(II), 1993
 Deuterium, *See* Labelling of complexes, (H-2)
 Diacetylmonoximates, rhodium(III), 307
 Diacetylpyridinedihydrazone complexes
 lead(II), 3681
 Diacetylpyridinedioximate complexes
 cadmium(II), cobalt(II), copper(II), lead(II),
 manganese(II), mercury(II), nickel(II),
 zinc(II), 877
 Dialkoxides, *See* Diolate
 Diamide complexes, *See* Azamacrocyclic,
 Bipyridinebis-, Macrocylicdi-,
 Tetraphenyltrioxaundercanedi-amide,
 Dibutyl diazabutadiene
 Diamine complexes
 copper(II), 903
See also Azamacrocyclic, Bis(aminoethyl)-
 dithiocyclohexane, Diamino, Diazabicyclo-
 octane, Ethylene-, Propylene-,
 Trimethylene-diamine,
 Diazafluorenehydrazine, Guanidine
 Diaminocyclohexane complexes
 platinum(II), 3705
 Diaminoethane, *See* Ethylenediamine
 Diaminonaphthoquinone complexes
 copper(II), nickel(II), palladium(II),
 vanadium(IV), 933
 Diaminopropane complexes
 copper(II), 3261
 platinum(II), 57
 Diammoniumpropane salts, copper(II), 3261
 Diazabicyclooctane complexes, zinc(II), 267
 Diazafluorenehydrazine complexes
 copper(II), 187

- Diazafluorenone complexes, nickel(II), 2863
 Diazene complexes, *See* Azo
 Diazine complexes, *See* Pyrazine, Pyrimidine
 Diazolines, *See* Telluradiazoline
 Diazoniobicyclooctanedipropionate
 silver(I), 153
 Dibenzoylmethanate
 calcium, 2581
 lanthanide(III), 1907
 ruthenium(II), 3039
 sodium, yttrium(III), 1907
 Dibenzoylmethane complex, calcium, 2581
 Dibenzoyltartrates, copper(II), molybdenum(II),
 rhodium(II), ruthenium(II,III), 3655
 Dibenzylideneacetone complex, iron(0), 2979
 Diborane complexes, tantalum(II), 1177
 Diboranylditolylformamidinates
 tantalum(V), 1177
 Dibutylamides
 lithium, 3593
 tungsten(III), tungsten(III,IV), 3893
 zinc(II), 3593
 Dibutylamine complexes, tungsten(III), 3893
 Dibutylbipyridine complexes
 platinum(II), 1555
 Dibutyldiazabutadiene complexes
 boron, lithium, 2325
 Dibutylmethylphenoxides, aluminium, 4389
 Dibutylphosphide complexes, ruthenium, 3253
 Dibutylphosphine complexes
 copper(I), 3253
 iridium(I), 341
 ruthenium, 3253
 Dicarboxylates, *See* Adipate, Cantharidinate,
 Diglycolate, Fumarate, Galactarate,
 Glycinecarboxylate, Malate, Malonate,
 Oxalate, Tartrate, Acetylene-, Butane-,
 Heptane-, Hexane-, Undecane-dioate,
 Benzene-, Dihydratetrazine-,
 Ethylenediamine-, Pyridine-dicarboxylate
 Dicarboxylic acid complexes
See Pyridinedicarboxylic acid
 Dichloroacetylene complex, platinum(0), 3333
 Dichloroethane complexes and solvates
 rhenium(III), 3649
 Dichloromethane complexes and solvates
 bismuth(III), 2381
 copper(II), 1535
 heterometallic, 1543
 iron(II), 433
 molybdenum(II), 473,2329
 molybdenum(V), 2987
 molybdenum(VI), 1259,1543
 nickel(II), 1971,2323,2711,2827
 osmium(III), 3649
 platinum(II), 1663,2381
 ruthenium(II), 1605,1793
 silver(I), 1543,2711,2987
 thallium(III), 681
 tungsten(VI), 1543
 Di(chloromethyl)oxatelluranes, chloride, 2441
 Dicyanamide complexes
 cobalt(II), copper(II), 463
 lithium, 3671
 nickel(II), potassium, 463
 sodium, tin(IV), 3671
 Dicyclohexylamides
 lithium, titanium(IV), zirconium(IV), 635
 Di(dimethylglycinoyl)triazaoctane complexes
 copper(II), 89
 Dielectrometric titrations of complexes
 gallium halide with water, 4081
 Diene complexes
See Cycloocta-, Norborna-diene
 Diethoxyphosphinodithioates
 copper(I), 2987
 silver(I), 945
 Diethylamides
 lithium, 3593
 titanium(IV), 4017
 tungsten(III,IV), 3893
 zinc(II), 3593
 Diethylaminomethylenephosphonates
 copper(II), lead(II), 355
 Diethylaminopyrrolidine complexes
 platinum(II), 4297
 Diethylammonium salts, indium(III), 2183
 Diethyldithiocarbamates
 antimony(III), arsenic(III), bismuth(III),
 1212
 cadmium(II), cobalt(III), 1573
 copper(II), 1573,3967
 heterometallic, 1573
 indium(III), 2183
 iron(II), 4121
 iron(III), 1573
 manganese(III), 1573,2885
 mercury(II), 1573
 molybdenum(IV), 2163
 molybdenum(V), 165
 molybdenum(VI), 165,2163
 nickel(II), 1573
 ruthenium(II), 983
 sodium, 983,2183,2885,3967,4121
 vanadium(V), 4121
 zinc(II), 1573
 Diethyldithiopiperazinedione complexes
 gold(I), 1577
 Diethylenetriamine complexes
 cobalt(III), 4087
 copper(I,II), 1747
 copper(II), 805,1747
 nickel(II), 39
See also Pentamethyldiethylenetriamine
 Diethylenetriaminedi(acetyl-phenylalanine-,
 -tyrosine-octadecylester)triacetates
 lanthanide(III), manganese(II), 2755
 Diethylether complexes and solvates
 boron, 2413
 lanthanide(III), 567,1907
 lead(II), 2435
 lithium, 541,3879
 ruthenium(II), 577

- sodium, 3865
 tantalum(V), 1177
 tin(IV), 1095
- Di(ethylhexyl)methanediphosphonates
 calcium, copper(II), iron(III), lanthanide(III),
 sodium, thorium(IV), uranium(VI), 1843
- Diethylphosphinodithioates
 sodium, thallium(III), 3609
- Diethylphosphinothioates, germanium(IV),
 lead(IV), sodium, tin(IV), 949
- Differential pulse polarography of complexes
 copper(II) potassium, tetramethylammonium
 bis(oxybenzamidato)benzene, 4105
 ruthenium(III) ethylenediaminetetraacetate
 phenylhydrazinium, water, 1235
- Differential pulse voltammetry of complexes
 molybdenum(II) bis(phenoxide)s chloro
 nitrosyl tris(dimethylpyrazolyl)borate
 dinuclear, 4353
 molybdenum(II) nickel(II), palladium(II)
 chloro nitrosyl (Schiff bases) tris(dimethyl-
 pyrazolyl)borate, 1439
 ruthenium(II) bis(anilinovinyl)bipyridine
 bipyridine hexafluorophosphate, 2705
 ruthenium(III) ethylenediaminetetraacetate
 phenylhydrazinium, water, 1235
 tungsten(VI) aluminium, gallium, indium
 potassium zinc oxo polynuclear, 3985
- Diformylphenoxides, sodium, 223,1301
- Diglycolates, copper(II), lanthanide(III), 963
- Dihydrodithiindithiolates
See Methyl-, Phenyl-dihydrodithiindithiolate
- Dihydrogen complexes
 iron(II), labelled complexes, 2797
 osmium(II), 1993
- Dihydrotetrazine complexes
See Dihydrotetrazinedicarboxylate
- Dihydrotetrazinedicarboxylates, barium, 2871
- Dihydroxyanthraquinonates
 manganese(II), manganese(III), 2903
- Dihydroxybenzoates
 cadmium(II), 1399
 tin(IV), 3729
- Dihydroxybenzoic acid complexes
 cadmium(II), 1399
- Diimine complexes, *See* Bis[(diphenyl-
 phosphino)benzylidene]ethylenediamine
- Diisopropylamides
 lithium, 1505,3593
 zinc(II), 3593
- Diisopropyldimethylimidazolylidene
 complexes, chromium(II), 3879
- (Diisopropylphenyl)amides
 chromium(II), 3879
 lithium, 3879
- (Diisopropylphenyl)imides
 molybdenum(V), 165
 molybdenum(VI), 165,2631
- Diketonates
 cobalt(II), 2651
See also Acetyl-, Ethylaceto-acetonate,
 Pivaloyl-, Thenoyl-trifluoroacetate,
- Acylmethylphenylpyrazolonates, Butane-,
 Heptafluorodimethyloctane-, Heptane-,
 Pyridyldihydrophenalene-dionate, Di-
 benzoylmethanate, Dioxopyridyldihydro-
 dibenzocycloheptene, Tetraacetylene
 Dimesitylboroxides, copper(II), lithium, 2637
 Dimethanolpyridine complex, copper(II), 2721
 Dimethoxyethane complexes
 molybdenum(VI), 2631
 Di(methoxy)phenylpyrazolate, potassium, 4257
 Dimethylacetate, lead(II), 19
 Dimethyl(acetylenedicarboxylate) complexes
 rhodium(I), 3099
 Dimethylamide complexes
 boron, 2325
 lithium, 2941
 molybdenum(III), 2637
 tantalum(V), 2941
 titanium(IV), 2941,4017
 zinc(II), 3593
 zirconium(IV), 2941,4017
 Dimethylaminoethoxides
 copper(II), 263
 lanthanide(III), 1223
 lead(II), 263
 Dimethylaminoethylcyclopentadienyl
 complexes, sodium, titanium(III), 195
 (Dimethylaminomethyl)phenyl compounds
 palladium(II), 2257
 Dimethylamino(methyl)pyridinium salts
 iodide, molybdenum(VI), 95
 Dimethylamino(methyl)pyridylammonium
 salts, iodide, tungsten(VI), 713
 (Dimethylamino-oxide)phenyl compounds
 gallium(III), 3407
 Dimethylaminophenyl compounds
 gallium(III), lithium, 3407
 Dimethylaminopropanol, nickel(II), 4197
 Dimethylaminopropoxides
 nickel(II), sodium, 4197
 Dimethylaminopyridinioacetate
 manganese(II), 897
 silver(I), 153
 Dimethylaminopyrrolidine complexes
 platinum(II), 4297
 Dimethylammonium salts
 boron, 2325
 lanthanide(III), 1643
 Dimethylarsinoethylamine complexes
 cobalt(III), 2771
 Dimethylbipyridine complexes
 iron(II), 1023
 nickel(II), 2863
 platinum(II), 1555
 ruthenium(III), 1023
 vanadium(IV), 4379
 Dimethylcyclopentadienyl complexes
 rhenium(I), 3663
 Dimethyldithiocarbamates
 lanthanide(III), 1643
 Dimethylethylenediamine complexes
 cobalt(III), 2771

- Dimethylformamide complexes and solvates
 chromium(III), 2223
 copper(I,II), 161
 copper(II), 4105
 heterometallic, 217,713
 lanthanide(III), 321,833
 molybdenum(VI), 95
 nickel(II), palladium(II), 2827
 potassium, 4105
 silver(II), 217
 tungsten(VI), 217,713
 zinc(II), 267
- Dimethylformamidocyclopentadienyl
 complexes, iron(II), 2271
- Dimethylglyoxime complexes
 molybdenum(0), -(IV), -(VI), 229
- Dimethylhydrazido complexes
 tungsten(VI), 2113
- Dimethylphenanthroline complexes
 copper(I), 733,2711
 copper(II), 733
 molybdenum(0), molybdenum(II), 1095
 nickel(0), nickel(II), 2711
 ruthenium(II), 3847
 silver(I), zinc(II), 2711
- Dimethylphosphinates
 antimony(V), sodium, 2643
- Dimethylphosphine, *See* Dimethylphosphino
- Dimethylphosphinoethylamine complexes
 cobalt(III), 2771
- Dimethylphosphinothioates, germanium(IV),
 lead(IV), sodium, tin(IV), 949
- Dimethylpropylenediamine complexes
 copper(II), nickel(II), 3997
- Dimethylpteridinedione complexes
 copper(II), 607
- Dimethylpyrazolates
 copper(II), nickel(II), 2659
- Dimethylpyrazolymethylpyridine complexes
 copper(II), 4331
- Dimethylpyridines complexes
 cobalt(III), 3747
 copper(II), 2239
- Dimethylpyridinium salts
 antimony(V), 2563
 tin(IV), 4283
 zinc(II), 2563,4283
- Dimethylpyrimidinethiolate/thionates
 rhenium(III), rhenium(V), 2087
- Dimethylsilabutenyldiphenylphosphine
 complexes, copper(I), 3479
- Dimethylsulfide complexes
 platinum(II), 1555
 tantalum(III), 1177
- Dimethylsulfoxide complexes
 copper(II), lead(II), 263
 mercury(II), 613
 platinum(II), 815,3795
 ruthenium(II), 393,1993,3293
 zinc(II), 267
- (Dimethylthioureaacarbonyl)cyclopentadienyl
 complexes, iron(II), 2271
- Dimethylurea complexes, manganese(II), 2903
- Dinitrogen complexes
 iron molybdenum cofactor of nitrogenase,
 653
 rhenium(V), 1979
- Dinitrophenyldiethylphosphate
 hydrolysis by metal complexes, 4233
 toxicity, 4233
- Dinitrophenylhydrazone complexes
 molybdenum(I), 481
- Diolates, *See* Catecholate, Naphthadiolate,
 Methylenebisphenoxide, Resorcinolate
- Dionates, *See* Diketones
- Dione complexes, *See* Dibenzoylmethane,
 Dimethylpteridine-, Tetramethylheptane-
 dione
- Dioxane complexes, potassium, 721
- Dioximate complexes, *See* Diacetylpyridine-
 dioximate, Glyoximate, Bis(dimethylnitro-
 sopyrimidinedionyl)propylenediamine
- Dioxime complexes, *See* Glyoxime
- Dioxypyridyldihydrodibenzocycloheptene
 complexes, copper(II), zinc(II), 1693
- Dioxygen complexes, cobalt-(II), -(III), 1047
- Diphenylacetylene complexes
 molybdenum(II), 409
- Diphenylamides
 ethyltriphenylphosphonium, 4393
 lanthanide(III), 345,2013
 sodium, 2013
- Diphenylbenzamidine complex, cobalt(II), 133
- Diphenylbipyridine complexes
 ruthenium(II), 393
- Diphenyldimethylenephosphorane complexes
 lithium, 345,2013
- Diphenyldisilane, 1255
- Diphenylformamidinates
 lithium, 1177
 magnesium, 541
 molybdenum(II), molybdenum(II,III), 1831
 nickel(II), 133
 tantalum(V), 1177
- Diphenylformamidine complexes
 cobalt(II), 1177
 manganese(II), nickel(II), 133
 silver(I), 1837
 tantalum(V), 1177
- Diphenylformamidinemethanebis(phenyl-
 amido) complexes, tantalum(V), 1177
- Diphenylmethylmethylenephosphorane
 complexes, lanthanide(III), 2013
- Diphenylphenanthroline complexes
 ruthenium(II), 393,3293
- Diphenylphosphides
 lithium, 4033
 potassium, tantalum(V), 721
- Diphenylphosphinates
 antimony(V), sodium, 2643
- Diphenylphosphine complexes
 See Dimethylsilabutenyldiphenylphosphine,
 Diphenylphosphino

- (Diphenylphosphinito)(diphenylphosphino)-diphenylphosphazene complexes
palladium(II), platinum(II), 1563
- (Diphenylphosphinoamino)diphenylphosphine-oxide complexes
palladium(II), platinum(II), 1563
- Diphenylphosphinocyclopentadienyl complexes, iron(II), nickel(II), palladium(II), platinum(II), 171
- Diphenylphosphino(phenylthio)methane complexes, iridium(III), rhodium(III), ruthenium(II), 1811
- Diphenylphosphinothioamide, lithium, 4061
- Diphenylphosphinothioates
ammonium, germanium(IV), lead(IV), 949
mercury, 781
tin(IV), 949,4113
- Diphenylpropanedionates
See Dibenzoylmethanate
- Diphenylpropanedione complexes
See Dibenzoylmethane
- Diphenylsulfide complexes, aluminium, 4081
- Diphenyltetrakis(dimethylpyrazolyl)cyclotri-phosphazene complexes
palladium(II), platinum(II), 1003
- Diphenyltetrakis(pyrazolyl)cyclotriphos-phazene complexes
copper(II), palladium(II), platinum(II), 1003
- Diphenyltolylphosphine complex, gold(I), 125
- Diphenyltriazenide complexes
titanium(IV), zirconium(IV), 4017
- Diphosphinates, *See* Imidodiphosphinate
- Diphosphine complexes
See Bis(dicyclohexylphosphino)methane,
Bis(diethylphosphino)ethane,
Bis(dimethylphosphino)-compounds,
Bis(dimethylphospholano)benzene,
Bis(diphenylphosphino)-compounds
- Diphosphinedisulfide complexes
See Tetrabutyl-, Tetraethyl-, Tetramethyl-,
Tetrapropyl-diphosphinedisulfide
- Diphosphonate complexes
See Di(ethylhexyl)methanediphosphonate
- Dipicolinoyltriazaoctane complexes
copper(II), 89
- Dipole moments
aluminium, gallium halide water, 4081
zinc(II) dioxypyridyldihydrodibenzocyclo-heptene, 1693
- Dipropyldithiocarbamates
ruthenium(II), sodium, 983
- Dipropyldithiophosphates
ammonium, 3899
copper(II), 3967
silver(I), 3899
- Dipropylthiobenzenedithiolates
nickel(II), nickel(III), 1351
- Dipyridophenazine complex, cobalt(III), 3395
- Diselanes, *See* Diphenyldiselane
- Diselenoimidodiphosphinates
See Tetraphenyldiselenoimidodiphosphinate
- Dithiadiazolylium, *See* Aryldithiadiazolylium
- Dithianylidenemalonates
barium, platinum(II), potassium, 3705
- Dithiaoxadithiolates, copper(III), gold(III), nickel(III), palladium(III), potassium, 1111
- Dithiepaneylidenemalonates
barium, platinum(II), potassium, 3705
- Dithiindithiolates, *See* Dihydrodithiindithiolate
- Dithioates
ruthenium(II), 983
See also Dithio-carbamate, -formate,
Phosphinodithioate
- Dithiobenzodithiolethione complexes
nickel(II), nickel(III), 1351
- Dithiocarbamates
See Diethyl-, Dimethyl-, Dipropyl-, Ethanol-,
Methyl-, Piperidine-dithiocarbamate
- Dithiocarbazates
See Methyl-, Benzyl-dithiocarbamate
- Dithiocarbonates
See Ethyl-, Propyl-dithiocarbonate
- Dithioformates
iron(II), 2797
See also Phosphinodithioformate
- Dithiolates, *See* Benzene-, Butane-,
Cyclopentadienyl-, Dithiaoxa-, Dithiin-,
Dithioleone-, Dithiolethione-, Ethane-,
Maleonitrile-, Phenyl-, Propane-, Pyridine-
dithiolate, Diethyldithiopiperazinedione,
Dithio-carbonate
- Dithioleonedithiolates
sodium, 2689
tin(IV), 4283
zinc(II), 2689,4283
- Dithiolethiones, carbaboranes, 1819
- Dithiolethionedithiolates
antimony(V), 2563
nickel(II), nickel(III), palladium(III),
platinum(III), sodium, 3505
zinc(II), 1111,2563,2689
See also Dithiobenzodithiolethione
- Dithionites, sodium, 447,3311
- Dithiophosphates, *See* Dipropyldithiophosphate
- Dithiophosphinates, *See* Phosphinodithioate
- Ditolylformamidinates
lithium, 541,1177
molybdenum(II), molybdenum(II,III), 1831
tantalum-(II), -(III), -(V), 1177
- Ditolylformamidine complex, nickel(II), 133
- Ditolylformamidinium tetrafluoroborate, 541
- Divinylketene complexes, iron(0), 2979
- Diyl complexes, *See* (Alkylaza)hepta-,
Butadien-, Butene-, Oxahepta-diyl
- Dodecylsulfate, sodium, 1157
- Durene complexes, *See* Tetramethylbenzene
- Dysprosium compounds and complexes
acetate, 2971
camphorsulfonate, 535
chloride, chloro, 623,1057,1643,3415,4143
dimethyl-ammonium, -dithiocarbamate, 1643
macrocyclicpolyamine, 3991
methylpyridylbenzimidazole, 1417
nitrate, 1417,3991

oxide, 535,1417,3415
perchlorate, 535
phenanthroline, 4143
phenol, 535
phthalocyaninate, 2971
pyridylbenzimidazole, 1417
Schiff base, 535
tetrahydrofuran, 623
thiocyanate, 1417,4143
tris(pyrazolyl)borate, 1057
water, 623,4143

E

Electric conductance of solid complexes

iron(II,III) cyanide lead-,tin-methyls amino-
thiazoles polymeric composites, 1585
nickel(III) bis(triphenylphosphino)iminium
dithioethionedithiolate iodo, 3505
niobium(IV) selenido tellurium(II) iodo
dinuclear, 995
palladium(III) iodo bis(triphenylphosphino)-
iminium dithioethionedithiolate, 3505
Electric conductance of dissolved complexes
cadmium(II) azacryptate perchlorate
dinuclear, 223,1301
cadmium(II) bis(halopyrazolyl)methanes
halide, nitrate, perchlorate, 3435
cadmium(II) furylpropenalsemicarbazone
halide, 3455
cadmium(II) macrocyclic Schiff base
dinuclear, 915
cadmium(II) (methylpyrazolyl)borates, 671
carbaborane sulfur compounds, 1819
chromium(III) chloride macrocyclic-
polyamine, 2223
cobalt(II) azamacrocyclic halide, nitrate,
thiocyanate, 2229
cobalt(II) chloride, perchlorate
pyrazolylmethylpyridine water, 3577
cobalt(II) furylpropenalsemicarbazone
halide, 3455
cobalt(II),-(III) macrocyclic Schiff bases
perchlorate dinuclear, 1201
cobalt(II) (methylpyrazolyl)borates, 671
cobalt(III) ammonia nitrilotriacetate
copper(II) perchlorate water, 2135
cobalt(III) dipyridophenazine
phenanthroline perchlorate, 3395
cobalt(III) manganese(II,III) benzoate oxo
pyridine, 1377
cobalt(III) (methylpyrazolyl)-
formylbenzylidithiocarbazates, 3735
copper(I) alkyl(arylazo)imidazoles
perchlorate, 4163
copper(I) alkylisocyanides tetrafluoroborate,
2397
copper(I) bis(diphenylphosphino)methane
bipyridine, phenanthroline, pyridine, pyrid-
inedicarboxylic acid nitrate dinuclear, 4033
copper(I) bis-, tris-(pyrazolyl)borates
tricyclohexylphosphine, 207

copper(I) carboxybenzoylthiosemicarbazide
chloride water dinuclear, 1477
copper(I) platinum(II) sulfide triphenyl-
phosphine nitrate, 377
copper(II) (aminomethyl)pyridine chloride
water, 1651
copper(II) azamacrocyclic halide, nitrate,
thiocyanate, 2229
copper(II) azamacrocyclic perchlorate, 3997
copper(II) bipyridine, phenanthroline
dibenzoyltartrate water, 3655
copper(II) bis(hydroxyaryl)ethylenediamine,
-obutaneoximes chloride water, 2175
copper(II) diazafluorenehydrazine, pyridine
perchlorate tris(aminoethyl)amine, 187
copper(II) dimethylpteridinedione nitrate,607
copper(II) furylpropenalsemicarbazone
halide, 3455
copper(II) imidazoles, pyridines fluorobor-
ate, perchlorate picolylpicolinamide, 383
copper(II) macrocyclic Schiff bases
perchlorate dinuclear, 1201
copper(II) methyl-imidazoles, -pyridines per-
chlorate (pyridylethyl)picolinamide 2465
copper(II) (methylpyrazolyl)borates, 671
copper(II) naphthoquinones, 933
copper(II) perchlorate pyridinediyl-
diethylidenedioxamohydrazide water, 4221
copper(II) potassium, tetramethylammonium
bis(oxybenzamidato)benzene, 4105
iron(II) (methylpyrazolyl)borates, 671
lanthanum(III) azamacrocyclic nitrate, 4233
lanthanide(III) camphorsulfonate chloride
phenanthroline, 427
lanthanide(III) dimethylammonium
dimethyldithiocarbamate, 1643
lanthanide(III) hexaazacyclooctadecane
nitrate, 3247
lanthanide(III) macrocyclicpolyamine nitrate,
3991
lanthanide(III) phenanthroline thiocyanate,
4143
lanthanide(III) pyridylbenzimidazoles
thiocyanate, 1417
lanthanide(III) Schiff base, 535
manganese(II) butanedioate bipyridine,
phenanthroline water dinuclear, 2547
manganese(II) heptanedioate, hexanedioate
phenanthroline water dinuclear, 2741
manganese(II) (methylpyrazolyl)borates, 671
manganese(II) trioxaundecanedioate
phenanthroline water ethanol, 4247
manganese(III) bis(dichlorosalicylidene)-
cyclohexanedisulfonamide sodium,
tetraphenylphosphonium, 2365
mercury(II) bis(halopyrazolyl)methanes
halide, nitrate, perchlorate, 3435
mercury(II) sulfanilamidopyrimidine
dimethylsulfoxide, 613
molybdenum(II) bipyridine, phenanthrolines
bis(diphenylphosphino)methane carbonyl
chloro tin(IV), 1095

molybdenum(V) oxo sulfide tetraphenylphosphonium dinuclear water thiolatobenzoate, -propionate, 447
 molybdenum(VI) oxo Schiff bases, 3977
 nickel(II) aminoethylpropanediamine thiocyanate, 39
 nickel(II) azamacrocyclic halide, nitrate, thiocyanate, 2229
 nickel(II) azamacrocyclics benzoylacetoinates perchlorate, 3713
 nickel(II) azamacrocyclics chloride, perchlorate, 3997
 nickel(II) chloride, perchlorate pyrazolylmethylpyridine water, 3577
 nickel(II) furylpropenalsemicarbazone halide, 3455
 nickel(II) macrocyclicpolyamine perchlorate, 3557
 nickel(II) macrocyclic Schiff bases perchlorate dinuclear, 1201
 nickel(II) (methylpyrazolyl)borates, 671
 nickel(II) naphthoquinones, 933
 nickel(II) nitrate propylethylenediamine, 2361
 nickel(II) propyldithiocarbonate tris(diphenylphosphinomethyl)ethane dinuclear, 2573
 nickel(II) pyridinedithiolate dinuclear, 1931
 palladium(II) aryltelluroalkylethers organophosphine, phenanthroline chloro, perchlorate, 2509,4337
 palladium(II) azamacrocyclics chloride perchlorate thiocyanate, 975
 palladium(II) bis(pyridylethyl)tellurium chloro, 33
 palladium(II) carbonyl quinolinylmethyl organophosphinesulfides perchlorate, 1963
 palladium(II) naphthoquinones, 933
 platinum(II) aryltelluroalkylethers organophosphine, phenanthroline chloro, perchlorate, 2509,4337
 platinum(II) bismuth(III) chloride sulfide triphenylphosphine fluorophosphate, 2381
 platinum(II) bis(pyridylethyl)tellurium chloro, 33
 platinum(IV) bis(pyrazolylmethyl)pyridine methyl iodide, 3003
 rhenium(I) bis(dimethylpyrazolylmethyl)pyridine carbonyl halides, 3003
 rhenium(III) chloride thiourea water, 2263
 ruthenium(II) arylazophenolates, quinolineolate, Schiff base bipyridine, phenanthroline chloro perchlorate triphenylphosphine, 81
 ruthenium(II) arylthiosemicarbazides bipyridine perchlorate, 4313
 ruthenium(II) bipyridine diketonates, 3039
 ruthenium(II) bis(diphenylphosphinomethyl)pyridine triphenylphosphine chloride acetonitrile, 291
 ruthenium(II) halide pyridylbenzothiazolines, Schiff bases amines, 143,1793
 ruthenium(II,III) chloro norbornenecarboxylates, 3399
 ruthenium(III) arylazophenolates bipyridine, 3047
 ruthenium(III) bipyridine chloro, 3039
 ruthenium(III) bipyridine Schiff bases perchlorate, 1755
 silver(I) alkyl(arylazo)imidazoles perchlorate, 4163
 silver(I) azacryptates acetonitrile methanol perchlorate water polynuclear, 453
 silver(I) azamacrocyclic hexafluorophosphate water, 2375
 silver(II) azamacrocyclic acetonitrile tetrafluoroborate, 2375
 tungsten(VI) oxo Schiff bases, 3977
 uranium(VI) amino acids ammonium oxo peroxy water, 4205
 vanadium(IV) (antipyrine Schiff bases) oxo, chloro, 1247
 vanadium(IV) oxo isophthalate bipyridines, phenanthrolines sulfate dinuclear, 4379
 vanadium(IV) oxo naphthoquinones, 933
 vanadium(V) chloride cyano-aniline, -pyridine methoxyphenoxide oxo, 4055
 zinc(II) azamacrocyclics chloride perchlorate thiocyanate, 975
 zinc(II) bis(halopyrazolyl)methanes halide, nitrate, perchlorate, 3435
 zinc(II) furylpropenalsemicarbazone halide, 3455
 zinc(II) (methylpyrazolyl)borates, 671
 Electrochemical synthesis of complexes
 cobalt(III) triethanolamine water, 1047
 copper(II) (pyridylethyl)toluenesulfonamide, 1707
 manganese(II,III) semiquinone quinolinecarboxylate, 2903
 molybdenum(I) bis(phenoxide)s chloro nitrosyl tris(dimethylpyrazolyl)borate dinuclear, 4353
 nickel(I) pyridinedithiolate, 1931
 nickel(II) propoxide, 4197
 nickel(II) (pyridylethyl)toluenesulfonamide, 1707
 ruthenium(II) bis(anilinovinyl)bipyridine bipyridine polymers, 2705
 silver(II) azamacrocyclic acetonitrile tetrafluoroborate, 2375
 vanadium(IV) oxo quinolineolate Schiff bases, 4179
 zinc(II) ethylenediamine telluride, 1193
 Electrolysis of complexes
 nickel(II) pyridinedithiolate dinuclear, 1931
 Electron diffraction studies of complexes
 boron butyl tetranuclear, 603
 Electronic spectra of complexes
 cadmium(II) aroylhydrazones, 2625
 cadmium(II) azacryptates perchlorate dinuclear, 223,1301
 cadmium(II) iodide Schiff base, 2857

cadmium(II) macrocyclic Schiff base perchlorate dinuclear methanol, 915
 cadmium(II) (methylpyrazolyl)borates, 671
 chromium(III) chloride hydroxo, water macrocyclicpolyamine, 2223
 chromium(III) fluorouracilate histidine chloro hydroxo water, 2491
 chromium(III) nitrilotriacetate bipyridine, phenanthroline, water, 3371
 chromium(III) nitrilotriacetate water, 4217
 chromium(III) oligopeptide, 4171
 chromium(VI) extraction by calixareneammonium, 1581
 chromium(VI) oxidation, ribonolactone, 701
 chromium(VI) oxo, 521
 cobalt(II) aroylhydrazones, 2625
 cobalt(II) azamacrocycle halide, nitrate, thiocyanate, 2229
 cobalt(II) bis(benzimidazolylmethylene)-benzene chloride, 1315
 cobalt(II) chloride, perchlorate pyrazolylmethylpyridine water, 3577
 cobalt(II) dicyanamide, nitrosodicyanomethanide imidazoles, 463,1269
 cobalt(II) furylpropenalsemicarbazone halide, 3455
 cobalt(II) halide, nitrate phenylenedimethylenebispyrazole, 1679
 cobalt(II) (methylpyrazolyl)borates, 671
 cobalt(II) octanoate, diketonate dimers, 2651
 cobalt(II) tetrasulfophthalocyaninate, 3279
 cobalt(II),-(III) triethanolamine water, 1047
 cobalt(II),-(III) macrocyclic Schiff bases perchlorate dinuclear, 1201
 cobalt(III) amines tris(pyrazolyl)borate, 4087
 cobalt(III) amines, phosphines, arsines, 2771
 cobalt(III) ammonia nitrilotriacetate copper(II) perchlorate water, 2135
 cobalt(III) azide dialkylpyridines, 3747
 cobalt(III) bis(aminoethyl)dithiocyclohexane carbonate, chloride, nitrite, thiocyanate, 3807
 cobalt(III) caesium hydroxo nitrilotriacetate water dinuclear, 2851
 cobalt(III) dipyridophenazine phenanthroline bound to DNA, 3395
 cobalt(III) ethylenediamine phosphates, 4187
 cobalt(III) (methylpyrazolyl)-formylbenzylthiocarbazates, 3735
 copper(I) alkyl(arylazo)imidazoles perchlorate, 4163
 copper(I) alkylisocyanides tetrafluoroborate, 2397
 copper(I) azide, chloride, perchlorate, tetrafluoroborate tungsten(0) bipyridine carbonyl, 2193
 copper(I) bis(diphenylphosphino)methane bipyridine, phenanthroline, pyridine, pyridinedicarboxylic acid nitrate dinuclear, 4033
 copper(I) carboxybenzylthiosemicarbazide chloride water dinuclear, 1477
 copper(I) chloride dimethylphenanthroline dinuclear, 2711
 copper(I) halide pyridinethione tritolylphosphine dinuclear, 4023
 copper(I) hydroxybenzylthiosemicarbazones bromide, iodide acetonitrile, 3499
 copper(I) (isobutylphenyl)propionate dimethylphenanthroline, 733
 copper(I) molybdenum(VI) halide selenide triphenylphosphine, 1433
 copper(I,II) levulinate triphenylphosphine tetranuclear, 2341
 copper(I),-(II) bis-, pyridyl-(methylpyridyl)methane catalytic oxidation of dibutylcatechol by oxygen, 2299
 copper(I),-(II) pyridyl(dimethoxyphenyl)-pyrazole tetrafluoroborate, 4257
 copper(II) acetate tris(phenylpyrazolyl)borate, 1535
 copper(II) (alkoxyphenylethyl)piperidine-dithiocarbamates, 315
 copper(II) (aminomethyl)pyridine chloride water, 1651
 copper(II) aroylhydrazones, 2625
 copper(II) azamacrocycles chloride, perchlorate, 3997
 copper(II) azamacrocycle halide, nitrate, thiocyanate, 2229
 copper(II) azide dimethylpyridine formamide dimer, polymer, 2239
 copper(II) bipyridine, phenanthroline dibenzoyltartrate water, 3655
 copper(II) bipyridine, phenanthroline hexafluoroacetyl-, pivaloyltrifluoroacetate, tetramethylheptanedionate, 1999
 copper(II) bis(benzimidazolylmethylene)-benzene ethylenediamine perchlorate, 1315
 copper(II) bis(butylphenyl)(pyridyl)methylthiolate chloride water dinuclear, 3641
 copper(II) bis(hydroxyaryl)ethylenediamine, -obutaneoximes chloride water, 2175
 copper(II) bis(pyridylmethyl)alanineamide chloride, 3765
 copper(II) bromide, chloride phenylpyrazole tris(phenylpyrazolyl)borate, 1535
 copper(II) carboxylatobenzylthiosemicarbazone imidazole pyridine water trinuclear, 1477
 copper(II) chloride isatinthiosemicarbazones, 855
 copper(II) chloride, perchlorate Schiff bases water dinuclear, 489,2909
 copper(II) chloro diaminopropane diammoniumpropane malonate, 3261
 copper(II) cyanoguanidine, imidazole halide, nitrate, nitrite, sulfate 805
 copper(II) diazafluorenehydrazine, pyridine perchlorate tris(aminoethyl)amine, 187
 copper(II) dicyanamide, nitrosodicyanomethanide imidazoles, 463,1269
 copper(II) di(dimethylglycinoyl)-, dipicolinoyl-triazaoctane, 89

copper(II) diethyldithiocarbamate
 dipropylthiophosphate, 3967
 copper(II) dimethylpyrazolylmethylpyridine
 nitrite perchlorate, 4331
 copper(II) furylpropenalsemicarbazone
 halide, 3455
 copper(II) galactose-, glucose-, ribose-
 bis(thiosemicarbazone), 3549
 copper(II) glycinate thiocyanate water, 889
 copper(II) halide, nitrate
 phenylenedimethylenebispyrazole, 1679
 copper(II) imidazoles, pyridines
 fluoroborate, perchlorate
 picolylpicolinamide water, 383
 copper(II) iminodiacetate, nitrilotriacetate,
 and their phosphonate derivatives 3447
 copper(II) iron(II) cyano tris(aminoethyl)-
 amine water, 909
 copper(II) (isobutylphenyl)propionate
 bipyridine, phenanthrolines, 733
 copper(II) lanthanide(III) nitrate Schiff bases
 aminopropanol methanol, 3345
 copper(II) levulinate pyridines, 2341
 copper(II) macrocyclicdiamidodiamines,
 3525
 copper(II) macrocyclicdiamidodiamines acid
 dissociation, 2021
 copper(II) macrocyclicpolyaminepolyol
 perchlorate water, 2205
 copper(II) macrocyclic Schiff bases, 2673
 copper(II) macrocyclic Schiff bases
 perchlorate dinuclear, 1201
 copper(II) methyl-imidazoles, -pyridines
 perchlorate, fluoroborate
 (pyridylethyl)picolinamide water, 2465
 copper(II) (methylpyrazolyl)borates, 671
 copper(II) (methylthiophenylazo)hydroxy-
 quinoline-, -naphthalene-, -sulfonate, 3033
 copper(II) naphthoquinones, 933
 copper(II), nickel(II) bis(pyridylalkyl)-
 malamide, -hydroxyglutaramide, 3815
 copper(II) norbornenecarboxylates, 3399
 copper(II) perchlorate propylenebis-
 (acetylpyridineimine) water, 119
 copper(II) phthalocyaninates, 2335
 copper(II) potassium azide pyrazinate, 825
 copper(II) purines chloro, nitrate water, 1701
 copper(II) pyridine thiosalicylate dinuclear,
 3323
 copper(II) Schiff bases, 2991,4097,4371
 copper(II) Schiff base pyrazolates
 tetranuclear, 2659
 copper(II) Schiff bases mono-, di-nuclear,
 1771
 copper(II) thiosemicarbazones, 1895
 copper-(II), -(III) macrocyclic-
 diamidodiamines, -polyamines, 741
 copper(III) dithiaoxadithiolate
 tetraphenylphosphonium, 1111
 esterolysis of nitrophenyl acetate by metal(II)
 diacetylpyridinedioximate, 877
 fluxionality, 187
 gadolinium(III) azacryptate acetonitrile dim-
 ethylformamide potassium-thiocyanate,321
 gallium(III) [(hydroxychlorophenyl)azo]-
 hydroxyquinolinesulfonate, 363
 gold(III) chloro pyridylcalixarene, 1885
 gold(III) dithiaoxadithiolate
 tetraphenylphosphonium, 1111
 indium(III) [(hydroxychlorophenyl)azo]-
 hydroxyquinolinesulfonate, 363
 iodine trithiacyclohexane, 1983
 iridium(III) bis(benzimidazolyl)pyridines
 halo, 1169
 iron(II) acetonitrile macrocyclicpolyamine,
 3827
 iron(II) cyclopentadienyl diphosphino-
 alkanes mono-, di-nuclear, 1775
 iron(II) (methylpyrazolyl)borates, 671
 iron(II) ruthenium(III) bipyridines, pyrazine
 cyanide ethylenediaminetetraacetate, 1023
 iron(II,III) cyanide lead-,tin-methyls amino-
 thiazoles polymeric composites, 1585
 iron(III) bromide, cyanide copper(II) bis-
 (tritolylporphyrinatophenoxy)ethane, 3779
 iron(III) cyclopentadienyl thiolates, 999
 iron(III) fluorouracilate histidine chloro
 hydroxo water, 2491
 iron(III) macrocyclicpolyamine triflate, 2223
 iron(III) nitrilotriacetate water, 849
 iron(III) perchlorate pyridylbenzimidazole
 water, 47
 lanthanide(III) acylmethylphenyl-
 pyrazolonates water, 1381
 lanthanide(III) azacyclononanone picrate,
 3519
 lanthanide(III) azamacrocyclic diketonates,
 1907
 lanthanide(III) bis(phenylsulfinyl)butane
 nitrate, 1123,1787
 lanthanide(III) camphorsulfonate chloride
 phenanthroline, 427
 lanthanide(III) dimethylammonium
 dimethyldithiocarbamate, 1643
 lanthanide(III) hexaazacyclooctadecane
 nitrate, 3247
 lanthanide(III) phenanthroline thiocyanate
 water, 4153
 lanthanide(III) phthalocyaninates, 515,2971
 lanthanide(III) pyridylbenzimidazoles
 thiocyanate, 1417
 lanthanide(III), sodium Schiff base, 535
 lanthanide(III) tris(pyrazolyl)borate, 1057
 manganese(II) bis(benzimidazolyl-
 methyl)ether acetate, thiocyanate, 3511
 manganese-(II), -(III) dihydroxyanthra-
 quinonate quinolinecarboxylate, 2903
 manganese(II) (methylpyrazolyl)borates, 671
 manganese(III) bis(benzimidazolyl-
 methyl)ether, -oxamethyl)benzene acetate,
 perchlorate, thiocyanate, 3511
 manganese(III) bis(dichlorosalicylidene)-
 cyclohexanedisulfonamide sodium,
 tetraphenylphosphonium, 2365

manganese(III) chloride
 macrocyclicpolyamine water, 2223
 manganese(III) Schiff bases mono-, poly-
 nuclear acetonitrile, 3787
 manganese(III) tetraphenylporphyrinate
 thiolates, 2885
 manganese(III,IV) polypyridines oxo water
 reduction by thiosulfate, 2199
 manganese(IV) acetate bipyridine dinuclear
 oxide perchlorate water reduction, 3493
 mercury(II) sulfanilamidopyrimidine
 dimethylsulfoxide, 613
 molybdenum(0) dimethylglyoxime, 229
 molybdenum(II) acetonitrile dibenzoyl-
 tartrate tetrafluoroborate water, 3655
 molybdenum(II) bis(dimethylphospholano)-
 benzene chloro dinuclear, 473
 molybdenum(II) nickel(II), palladium(II)
 chloro nitrosyl (Schiff bases) tris(dimethyl-
 pyrazolyl)borate, 1439
 molybdenum(II,III) chloride diphenyl-,
 ditolyl-formamidinate dinuclear, 1831
 molybdenum(IV) carbonyl
 dimethylglyoxime oxo dinuclear, 229
 molybdenum(V) oxo sulfide tetraphenyl-
 phosphonium dinuclear water thiolato-
 benzoate, -propionate, 447
 molybdenum(VI) cadmium(II), mercury(II),
 zinc(II) iodo sulfido tetraphenyl-
 phosphonium, 2483
 molybdenum(VI) diethyldithiocarbamate
 oxo oxidation of triphenylphosphine, 2163
 molybdenum(VI) dimethylglyoxime oxo
 dinuclear, 229
 molybdenum(VI) malate oxo, 243
 molybdenum(VI) oxo Schiff bases, 3977
 molybdenum(VI) oxo Schiff base
 deoxygenation by thionyl chloride, 2169
 molybdenum(VI) diethoxyphosphinodithio-
 ate silver sulfide triphenylphosphine, 945
 molybdenum(VI) silver(I) sulfide pyridine-
 thiol triphenylphosphine dichloromethane,
 1543
 nickel(0) dimethylphenanthroline, 2711
 nickel(II) alkylpentaazacyclotetradecanes
 perchlorate, 2777
 nickel(II) aminoethylpiperidine
 trifluoroacetate, 3305
 nickel(II) aminoethylpropanediamine
 thiocyanate, 39
 nickel(II) aroylhydrazones, 2625
 nickel(II) azamacrocycles, 253
 nickel(II) azamacrocycle halide, nitrate,
 thiocyanate, 2229
 nickel(II) azamacrocycles
 benzoylacetoinimates perchlorate, 3713
 nickel(II) azamacrocycles chloride,
 perchlorate, 3997
 nickel(II) azamacrocycles tetrafluoroborate,
 2599
 nickel(II) bipyridine, phenanthroline Schiff
 base, 2863
 nickel(II) bis(benzimidazolylmethyl)amines
 sodium mercaptoethylsulfonate, 2819
 nickel(II) bis(benzimidazolylmethylene)-
 benzene chloride, 1315
 nickel(III) bis(butylphenyl)(pyridyl)-
 methylthiolate, 3641
 nickel(II), -(III) bis(triphenylphosphino)-
 iminium dithioethionedithiolate, 3505
 nickel(II) chloride dimethylaminopropanol,
 4197
 nickel(II) chloride, perchlorate
 pyrazolylmethylpyridine water, 3577
 nickel(II) dicyanamide, nitrosodicyano-
 methanide imidazoles, 463,1269
 nickel(II) diethylenetriamine thiocyanate
 water, 39
 nickel(II) dimethylaminopropoxide, 4197
 nickel(II) furylpropenalsemicarbazone
 halide, 3455
 nickel(II) galactose-, glucose-, ribose-
 bis(thiosemicarbazone), 3549
 nickel(II) halide, nitrate
 phenylenedimethylenebispyrazole, 1679
 nickel(II) halide, nitrate thiosemicarbazones
 water, 1925
 nickel(II) lithium chloride dimethylamino-
 propoxide propanol, 4197
 nickel(II) macrocyclicdiamidodiamine, 179
 nickel(II) macrocyclicpolyamine perchlorate,
 3557
 nickel(II) macrocyclicpolyamine perchlorate
 ethylenediamine, water, 2223
 nickel(II) macrocyclicpolyaminepolyol
 perchlorate water, 2205
 nickel(II) macrocyclic Schiff bases, 2673
 nickel(II) macrocyclic Schiff bases
 perchlorate dinuclear, 1201
 nickel(II) methylthiocarbazates, 275
 nickel(II) methylethanoldithiocarbamate
 organophosphines, 1971
 nickel(II) (methylpyrazolyl)borates, 671
 nickel(II) naphthoquinones, 933
 nickel(II) nitrate propylethylenediamine,
 2361
 nickel(II) nonylpiperidinedithiocarbamate,
 315
 nickel(II) oxalate perchlorate
 tris(aminoethyl)amine, 1331
 nickel(II) phthalocyaninate, 113
 nickel(II) pyridinedithiolate dinuclear, 1931
 nickel(II) Schiff base pyrazolates
 tetranuclear, 2659
 nickel(II) Schiff bases, 1439,2749,4097
 nickel(II) thiosemicarbazones, 1895
 nickel-(II), -(III) macrocyclic-
 diamidodiamines, -polyamines, 741
 nickel(III) dithioxadithiolate
 tetraphenylphosphonium, 1111
 niobium(V) butylthiolate selenido
 tetraethylammonium, 3911
 niobium(V) methylphenoxythiolate
 triethylammonium, 1447

palladium(II) acetylpyridine(alkyl)thiosemi-
 carbazones, 3625
 palladium(II) aryl chloro Schiff bases
 thioethers dinuclear, 1291
 palladium(II) aryltelluroalkylethers organo-
 phosphine, phenanthroline chloro,
 perchlorate, 2509,4337
 palladium(II) azamacrocycles chloride
 perchlorate thiocyanate, 975
 palladium(II) bis(butylphenyl)(pyridyl)-
 methylthiolate chloride dinuclear, 3641
 palladium(II) bis(pyridylethyl)tellurium
 chloro, 33
 palladium(II) glutathione water, 1157
 palladium(II) molybdenum-, tungsten-(VI)
 sulfide bis(diphenylphosphino)ethane, 801
 palladium(II) naphthoquinones, 933
 palladium(III) bis(triphenylphosphino)-
 iminium dithiolethionedithiolate, 3505
 palladium(III) dithiaoxadithiolate
 tetraphenylphosphonium, 1111
 phosphiniminocyclotrihiazenes, 1089
 platinum(II) aryltelluroalkylethers organo-
 phosphine, phenanthroline chloro,
 perchlorate, 2509,4337
 platinum(II) azamacrocyclic with
 formaldehyde, 3539
 platinum(II) bis(butylphenyl)(pyridyl)-
 methylthiolate, 3641
 platinum(II) bis(pyridylethyl)tellurium
 chloro, 33
 platinum(II) chloro dibutylbipyridine, 1555
 platinum(II) methylthiocarbazates, 275
 platinum(II) tetraphenylporphyrinates, 2809
 platinum(III) bis(butylphenyl)(pyridyl)-
 methylthiolate, 3641
 platinum(III) bis(triphenylphosphino)-
 iminium dithiolethionedithiolate, 3505
 platinum(IV) chloro pyridylcalixarene, 1885
 platinum(IV) chloro
 tetraphenylporphyrinates, 2809
 rhenium(I) bis(butylphenyl)(pyridyl)-
 methylthiolate carbonyl, 3641
 rhenium(III) chloride thiourea water, 2263
 rhenium(III) dimethylpyrimidinethiolate
 halide triphenylphosphine, 2087
 rhenium(V) dimethylpyrimidinethiolate
 halide oxo triphenylphosphine, 2087
 rhodium(I) bis(butylphenyl)(pyridyl)-
 methylthiolate cyclooctadiene, 3641
 rhodium(III) bis(benzimidazolyl)pyridines
 carbonyl halo, perchlorate, 1169
 rhodium(III) halides bis(dimethylarsino)-,
 bis(dimethylphosphino)-benzenes, 1307
 rhodium(III) chloride macrocyclicpolyamine
 perchlorate, 2223
 ruthenium carbonyl tellurido clusters
 tetraphenylphosphonium, 3061
 ruthenium(I) carbonyl cyclopentadienyl
 dinuclear, 3339
 ruthenium(II) acetonitrile, hydroxo
 bipyridine terpyridine, 1921
 ruthenium(II) arylazophenolates bipyridine,
 3047
 ruthenium(II) arylazophenolates, quinoline-
 olate, Schiff base bipyridine, phenanthrol-
 ine perchlorate triphenylphosphine, 81
 ruthenium(II) aryl benzoate, chloro carbonyl
 Schiff base, 1343
 ruthenium(II) arylthiosemicarbazides
 bipyridine perchlorate, 4313
 ruthenium(II) bipyridine diketonates, 3039
 ruthenium(II) bipyridine
 imidazophenanthrolines, 103
 ruthenium(II) bipyridines, phenanthrolines
 chloride trithiacyclononane water, 393
 ruthenium(II) bipyridine, phenanthroline,
 triphenylphosphine dithioate, dialkyl-
 dithiocarbamate, 983
 ruthenium(II) bipyridine Schiff bases, 1755,
 4073
 ruthenium(II) bis(anilinovinyl)bipyridine
 bipyridine hexafluorophosphate, 2705
 ruthenium(II) bis(butylphenyl)(pyridyl)-
 methylthiolate carbonyl, 3641
 ruthenium(II) chloride norbornadiene
 polypyridines, triphenylphosphine, 3847
 ruthenium(II) chloro cyclopentadienyl
 terpyridyls triphenylphosphine, 2369
 ruthenium(II) chloro dimethylsulfoxide, 393
 ruthenium(II) halide pyridylbenzo-
 thiazolines, Schiff bases amines, 143,1793
 ruthenium(II) Schiff base picolinate,
 tolylazopyridine, tolylpicolinamide, 1605
 ruthenium(II,III) benzonitrile bromo
 dinuclear, 2429
 ruthenium(II,III) chloro
 norbornenecarboxylates, 3399
 ruthenium(II,III) potassium cyanide
 ethylenediaminetetraacetate, 3851
 ruthenium(III) arylazophenolates bipyridine,
 3047
 ruthenium(III) arylazophenolates,
 quinolineolate, Schiff base chloro
 triphenylphosphine, 81
 ruthenium(III) bipyridine chloro, 3039
 ruthenium(III) bipyridines, pyrazine
 ethylenediaminetetraacetate, 1023
 ruthenium(III) bipyridine Schiff bases
 perchlorate, 1755
 ruthenium(III) ethylenediaminetetraacetate
 phenylhydrazinium formation, 1235
 scandium(III) tris(pyrazolyl)borate, 1057
 silver(I) alkyl(arylazo)imidazoles perchlorate,
 4163
 silver(I) azacryptates perchlorate water
 dinuclear, 453
 silver(I) dimethylphenanthroline
 tetrafluoroborate, 2711
 silver(I) pyridyl(dimethoxyphenyl)pyrazole
 tetrafluoroborate, 4257
 silver(II) picolinate, 921
 thallium(III) [(hydroxychlorophenyl)azo]-
 hydroxyquinolinesulfonate, 363

- thorium(III) water, 989
 transferrins, 1069
 tungsten(O) acetonitrile, fullerene carbonyl bis(diphenylphosphino)benzene, 2141
 tungsten(II) tin(II) carbonyl chloro norbornadiene, 1599
 tungsten(VI) cadmium(II), mercury(II), zinc(II) iodo sulfido tetraphenylphosphonium, 2483
 tungsten(VI) oxo Schiff bases, 3977
 tungsten(VI) silicon oxo dimethylformamide dimethylamino(methyl)pyridylammonium, 713
 tungsten(VI) silver(I) selenido pyridinethiol triphenylphosphine dichloromethane, 1543
 tungsten(VI) silver(I) sulfide diethoxyphosphinodithioate triphenylphosphine, 945
 uranium(VI) ammonium aspartate oxo peroxy water, 4205
 vanadium(III) histidine, 2613
 vanadium(III) picolinate water, 2917
 vanadium(IV) (antipyrine Schiff bases) oxo, chloro, 1247
 vanadium(IV) bipyridine, phenanthroline methyl(phenoxymethylene)dithiocarbamate oxo, 1863
 vanadium(IV) oxo isophthalate bipyridines, phenanthrolines sulfate dinuclear, 4379
 vanadium(IV) oxo naphthoquinones, 933
 vanadium(IV) oxo Schiff bases dinuclear, 643, 1825
 vanadium(-IV), -(V) oxo quinolineolate Schiff bases, 4179
 vanadium(V) chloride methoxyphenoxide oxo, 4055
 vanadium(V) macrocyclicdiaminediammonium oxide peroxide water dinuclear, 2837
 vanadium(V) methanol methoxide oxo Schiff base, 643
 vanadium(V) oxo pyridinium water polynuclear, 643
 yttrium(III) azamacrocyclic diketonates, 1907
 yttrium(III) tris(pyrazolyl)borate, 1057
 zinc(II) azamacrocyclic chloride perchlorate thiocyanate, 975
 zinc(II) dimethylphenanthroline nitrate, tetrafluoroborate water, 2711
 zinc(II) dithiolethione-, dithioleone-dithiolate (ferrocenylmethyl)trimethylammonium, 2689
 zinc(II) (methylpyrazolyl)borates, 671
 zinc(II) octaethylporphyrinate ruthenium(II) iridium(III) cymene triflate, 3129
 zinc(II) phenolic cyclams, 3285
 zinc(II) phthalocyaninate, 113
See also Reflectance spectra
 Electron paramagnetic resonance spectra of complexes
 chromium(III) fluorouracilate histidine chloro hydroxo water, 2491
 chromium(V) in oxidation of ribonolactone, 701
 cobalt(II) benzothiazolathione bis(diphenylphosphino)ethane, tributylphosphine acetonitrile, 1731
 cobalt(III) ammonia nitrilotriacetate copper(II) perchlorate water, 2135
 copper(I,II) cyanide diethylenetriamine, 1747
 copper(II) acetate tris(phenylpyrazolyl)borate, 1535
 copper(II) azamacrocyclic chloride, perchlorate, 3997
 copper(II) azide dimethylpyridine formamide dimer, polymer, 2239
 copper(II) bis(benzimidazolylmethylene)-benzene ethylenediamine perchlorate, 1315
 copper(II) bis(hydroxyaryl)ethylenediamine, -obutaneoximes chloride water, 2175
 copper(II) bis(methylbipyridine-ethyl)-benzene perchlorate acetonitrile, 1505
 copper(II) bis(pyridylmethyl)-aminoacids, -aminoacidamides, 3765
 copper(II) bis-, pyridyl-(methylpyridyl)methane catalytic oxidation of dibutylcatechol by oxygen, 2299
 copper(II) bromide, chloride phenylpyrazole tris(phenylpyrazolyl)borate, 1535
 copper(II) carboxylatobenzoylthiosemicarbazone imidazole pyridine water trinuclear, 1477
 copper(II) chloride isatinthiosemicarbazones, 855
 copper(II) chloride, perchlorate Schiff bases water dinuclear, 489, 2909
 copper(II) chloro methoxy(methoxymethylpyrazolyl)methylpyrimidine tetrafluoroborate, 939
 copper(II) diazafluorenehydrazine, pyridine perchlorate tris(aminoethyl)amine, 187
 copper(II) di(dimethylglycinoyl)-, dipicolinoyl-triazaoctane, 89
 copper(II) diethylthiocarbamate dipropylthiophosphate, 3967
 copper(II) dimesitylboroxide lithium acetonitrile pyridine, 2637
 copper(II) dimethylpteridinedione nitrate water, 607
 copper(II) dimethylpyrazolylmethylpyridine nitrite perchlorate, 4331
 copper(II) dioxypyridyldihydrodibenzocycloheptene, 1693
 copper(II) galactose-, glucose-, ribose-bis(thiosemicarbazone), 3549
 copper(II) glycinate thiocyanate water, 889
 copper(II) halide, nitrate phenylenedimethylenebispyrazole, 1679
 copper(II) imidazoles, pyridines fluoroborate, perchlorate picolylpicolinamide, 383
 copper(II) iminodiacetate, nitrilotriacetate, and their phosphonate derivatives 3447
 copper(II) (isobutylphenyl)propionate bipyridine, phenanthrolines, 733
 copper(II) macrocyclicdiamidodiamines, 3525

copper(II) macrocyclic Schiff bases, 2673
 copper(II) methyl-imidazoles, -pyridines perchlorate, fluoroborate (pyridylethyl)picolinamide water, 2465
 copper(II) naphthoquinones, 933
 copper(II) perchlorate propylenebis-(acetylpyridineimine) water, 119
 copper(II) platinum(II) chloro diphenyltetra-kis(pyrazolyl)cyclotriphosphazene, 1003
 copper(II) potassium azide pyrazinate, 825
 copper(II) purines chloro, nitrate water, 1701
 copper(II) pyridyl(dimethoxyphenyl)-pyrazole tetrafluoroborate, 4257
 copper(II) Schiff bases, 903,1771,2991,4097
 copper(II) thiosemicarbazones, 1895
 fluxionality, 187
 gadolinium(III) pyridylbenzimidazoles thiocyanate, 1417
 iron(II) acetonitrile macrocyclicpolyamine with hydrogen peroxide, 3827
 iron(II,III) cyanide lead-,tin-methyls amino-thiazoles polymeric composites, 1585
 iron(II) perchlorate pyridylbenzimidazole water, 47
 iron(II) ruthenium(III) bipyridines, pyrazine cyanide ethylenediaminetetraacetate, 1023
 iron(III) bromide bis(tritolylporphyrinato-phenoxy)ethane dinuclear, 3779
 iron(III) bromide, cyanide copper(II) bis-(tritolylporphyrinato-phenoxy)ethane, 3779
 iron(III) polyaminopropoxides phenoxo, 1497
 manganese(II) acetyl-, benzoyl-pyridine, ethyl-, methyl-nicotinate cyanate, 2877
 manganese(II) bipyridine fumarate water polymer, 689
 manganese(II) bis(benzimidazolyl-methyl)ether acetate, thiocyanate, 3511
 manganese(II) halide phenylene-dimethylenebispyrazole water, 1679
 molybdenum(I) bis(phenoxy)s chloro nitrosyl tris(dimethylpyrazolyl)borate dinuclear, 4353
 molybdenum(V) cyclophanes oxo tris(dimethylpyrazolyl)borate, 3695
 molybdenum(V) iodo oxo tris(dimethylpyrazolyl)borate, 1391
 molybdenum(VI) silicon oxo dimethylformamide dimethylamino(methyl)pyridinium methylamino(methyl)pyridinium, 95
 nickel(I) pyridinedithiolate, 1931
 nickel(II) naphthoquinones, 933
 nickel(III) bis(triphenylphosphino)iminium dithiolethionedithiolate methanol, 3505
 palladium(II) naphthoquinones, 933
 palladium(III) bis(triphenylphosphino)-iminium dithiolethionedithiolate, 3505
 platinum(III) bis(triphenylphosphino)-iminium dithiolethionedithiolate, 3505
 rhenium(III) chloride thiourea water, 2263
 ruthenium(I) carbonyl cyclopentadienyl nitrosotetramethylbenzene dinuclear, 3339
 ruthenium(II) arylthiosemicarbazides bipyridine perchlorate, 4313
 ruthenium(II,III) potassium cyanide ethylenediaminetetraacetate, 3851
 ruthenium(III) arylazophenolates bipyridine, 3047
 ruthenium(III) arylazophenolates, quinolineolate, Schiff base chloro triphenylphosphine, 81
 ruthenium(III) bipyridine chloro iodate, 3039
 ruthenium(III) bipyridines, pyrazine ethylenediaminetetraacetate, 1023
 ruthenium(III) bipyridine Schiff bases perchlorate, 1755
 ruthenium(III) chloride Schiff base triphenylphosphine, 2951
 silver(II) azamacrocyclic acetonitrile tetrafluoroborate, 2375
 silver(II) picolinate, 921
 thorium(III) water, 989
 tungsten(III,IV) bis(diphenylphosphino)-propane chloride dibutyl-, diethyl amide dinuclear, 3893
 tungsten(VI) silicon oxo dimethylformamide dimethylamino(methyl)pyridylammonium, 713
 vanadium(IV) bipyridine, phenanthroline methyl(phenoxy)methylene)dithiocarbamate oxo, 1863
 vanadium(IV) oxo hydroxy-pyridonates, -pyridonates, 789
 vanadium(IV) oxo naphthoquinones, 933
 vanadium(IV) oxo Schiff bases dinuclear, 643,1825
 vanadium(IV) oxo quinolineolate Schiff bases, 4179
 Electron probe microanalysis, calcium chromium(III) hydroxo apatite, 2047
 Enthalpy of activation of complexes chromium(III) nitrilotriacetate water with bipyridine, phenanthroline, 3371
 chromium(III) nitrilotriacetate water with acetylacetone, 4217
 cobalt(III) copper(II) ammonia nitrilotriacetate perchlorate water dissociation, 2135
 copper(II) macrocyclicamidopolyamines oxidation by peroxodisulfate, 741
 copper(II) macrocyclicdiamidodiamines acid dissociation, 2021
 manganese(III,IV) polypyridines oxo water reduction by thiosulfate, 2199
 molybdenum(VI) oxo Schiff base deoxygenation by thionyl chloride, 2169
 nickel(II) macrocyclicamidopolyamines oxidation by peroxodisulfate, 741
 platinum(II) azamacrocyclic with formaldehyde, 3539
 ruthenium(II) acetonitrile bipyridine terpyridine hydrolysis, 1921
 Enthalpy of decomposition of complexes cobalt(III) azide dimethylpyridines, 3747

- copper(III) macrocyclicamidodiamines, 741
nickel(III) macrocyclicamidodiamines, 741
Enthalpy of dehydration of water complexes
copper(II) dimethylpteridinedione nitrate water, 607
Enthalpy of dissociation of complexes
iron(III) bipyridine nitrilotriacetate, 849
Enthalpy of formation of complexes
aluminium halide water, 4081
cobalt(II) ethylenediaminetetraacetanilide perchlorate water, 4323
copper(II) ethylenediaminetetraacetanilide perchlorate water, 4323
dichloroiodine tetrachloroaluminium, 3571
gallium halide water, 4081
iodine trithiacyclohexane, 1983
iron(III) bipyridine nitrilotriacetate, 849
molybdenum(VI) malate oxo, 243
nickel(II) ethylenediaminetetraacetanilide perchlorate water, 4323
nickel(II) ethylpentaazacyclotetradecane perchlorate octahedral from planar, 2777
ruthenium(II,III) potassium cyanide ethylenediaminetetraacetate, 3851
zinc(II) dioxypyridyldihydrodibenzo-cycloheptene, 1693
Enthalpy of isomerization, ruthenium(I) carbonyl cyclopentadienyl dinuclear, 3339
Enthalpy of phase transition in complexes
metal(II) (alkoxyphenylethyl)piperidine-dithiocarbamates, 315
nickel(II) aminoethylpiperidine trifluoroacetate, 3305
Enthalpy of reaction
chromium(VI) oxo acidification, 3835
Entropy of activation in complexes
chromium(III) nitrilotriacetate water with bipyridine, phenanthroline, 3371
chromium(III) nitrilotriacetate water with acetylacetone, 4217
cobalt(III) copper(II) ammonia nitrilotriacetate perchlorate water dissociation, 2135
copper(II) macrocyclicamidopolyamines oxidation by peroxodisulfate, 741
copper(II) macrocyclicdiamidodiamines acid dissociation, 2021
manganese(III,IV) polypyridines oxo water reduction by thiosulfate, 2199
molybdenum(VI) oxo Schiff base deoxygenation by thionyl chloride, 2169
nickel(II) macrocyclicdiamidopolyamines oxidation by peroxodisulfate, 741
platinum(II) azamacrocyclic with formaldehyde, 3539
ruthenium(II) acetonitrile bipyridine terpyridine hydrolysis, 1921
Entropy of decomposition of complexes
copper(III), nickel(III) macrocyclicdiamidopolyamines, 741
Entropy of dissociation of complexes
iron(III) bipyridine nitrilotriacetate, 849
Entropy of formation of complexes
cobalt(II) ethylenediaminetetraacetanilide perchlorate water, 4323
copper(II) ethylenediaminetetraacetanilide perchlorate water, 4323
iron(III) bipyridine nitrilotriacetate, 849
molybdenum(VI) malate oxo, 243
nickel(II) ethylenediaminetetraacetanilide perchlorate water, 4323
nickel(II) ethylpentaazacyclotetradecane perchlorate octahedral from planar, 2777
ruthenium(II,III) potassium cyanide ethylenediaminetetraacetate, 3851
Entropy of isomerization, ruthenium(I) carbonyl cyclopentadienyl dinuclear, 3339
Entropy of reaction
chromium(VI) oxo acidification, 3835
Enzymes
zinc(II) phenolic cyclams model, 3285
Erbium compounds and complexes
acetonitrile, 1491
aminocyclohexanecarboxylic acid, 507
butanebis(dimethylammonioacetate), 749
calixarene-carboxylate, 1655
camphorsulfonate, 535
chloride, chloro, 1057,1655,2013,3415,3635, 4143
dimethyl-ammonium, -dithiocarbamate, 1643
dinuclear, 507,749
diphenylamide, 2013
heterometallic, 1655,2013,3345
macrocyclicpolyamine, 3991
methanol, 3345
nitrate, 3345,3991
oxide, 535,749,3415
perchlorate, 507,535,749
phenanthroline, 4143,4153
phenol, 535
picrate, 1491
propanebis(dimethylammonioacetate), 749
Schiff base, 535,3345
(tetramethylbutyl)phenoxyacetate, 1655
tetraphenyltrioxaundecanediamide, 1491
thiocyanate, 4143,4153
tris(pyrazolyl)borate, 1057
water, 507,749,1491,4143,4153
Ester complexes, *See* Benzothiazolylamino-formates, Dimethyl(acetylenedicarboxylate), Methyl-carboxypropyl-, -methacrylate, Pyridinecarboxylate-, Thio-esters
Ethanedithiolates, molybdenum(V), 2987
Ethanol complexes and solvates
calcium, 2581
cobalt(III), 3807
copper(II), 281,1279
heterometallic, 1585
iron(III), 2553
lanthanide(III), 1381
manganese(II), 2877,4247
mercury(II), 3435
molybdenum(VI), 2169
nickel(II), 2667

- palladium, 2353
 palladium(II), platinum(II), 1323
 strontium, 2581
 zinc(II), 2711
See also Amino-, Chloro-ethanol
 Ethanoldithiocarbamates, *See* Iminodi-, Methyl-,
 Methylamino-ethanoldithiocarbamate
 Ethene complexes
 copper(I), 67
 nickel(0), 2681
 platinum(0), 765
See also Stilbene,
 Tetrakis(benzylidene)ethene
 Ethenebis(phenoxide)s, molybdenum(II), 4353
 Ether complexes, *See* Butoxynorbornadiene,
 Cantharidinate, Aryltelluroalkyl-, Diethyl-,
 Poly-ether, Diglycolate, Dimethoxyethane,
 Dioxane, Macrocyclicdiamidodiether,
 Methoxypropoxide, Oxaheptadiyl,
 Tetraethyleneglycol, Tetrahydrofuran
 Ethoxides
 aluminium, 663,4389
 calcium, 2581
 hafnium(IV), heterometallic, 663
 niobium(V), 1447
 rhenium(V), 2087
 sodium, 2689
 strontium, 2581
 tellurium(IV), 4209
 tin(IV), 881
See also Dimethylamino-, Methoxy-ethoxide,
 Triethanolamine
 Ethoxycarbonylthiourea complexes
 See Nitrophenylethoxycarbonylthiourea
 Ethyl compounds
 aluminium, 4389
 germanium, 1767
 zinc(II), 3593
See also Pyridylethyl
 Ethylacetoacetates, cobalt(II), 2651
 Ethylamine complexes, *See* Diethylamino,
 Dimethylarsino-, Dimethylphosphino-
 ethylamine
 Ethyl(benzothiazolyl)aminoformates
 copper(II), 1013
 Ethylcarboxypropylidyne complexes
 ruthenium, 593
 Ethyl(cyclopentadienylcarboxylate) complexes
 chromium(0), 403
 molybdenum, 2249
 molybdenum(0), 403
 molybdenum(I), 481,2249
 molybdenum(II), 2249
 tungsten(0), 403
 tungsten(I), 481
 Ethyldithiocarbonate, nickel(II), 2315,2667
 Ethylenediamine complexes
 cobalt(III), 2771,4187
 copper(II), 599,1315,1723,3687,3997
 heterometallic, 3055
 nickel(II), 2223,3557,3997
 osmium(II), 1993
 palladium(II), 1315
 platinum(II), 1315,3705
 zinc(II), 1193
See also Bis(hydroxyaryl)ethylenediamino-
 butaneoximes, Bis(hydroxybenzyl)-,
 Bis[(diphenylphosphino)benzylidene]-,
 Bis(hydroxyacetophenyl)-,
 Bis(hydroxypropylphenyl)-, Dimethyl-,
 Propyl-, Tetramethyl-ethylenediamine,
 Ethylenediaminedicarboxylates
 copper(II), 1723
 Ethylenediaminetetraacetates
 iron(III), 1069
 ruthenium(II,III), 3851
 ruthenium(III), 1023,1235,3851
 Ethylenediaminetetraacetanilide complexes
 cobalt(II), copper(II), nickel(II), 4323
 Ethylenediaminetetra(methylenephosphonate)s
 iron(III), 1069
 Ethylhydroxybutyrates
 chromium(V), sodium, 2897
 Ethylisonicotinate complexes
 manganese(II), 2877
 Ethylmethylaminopyrrolidines complexes
 platinum(II), 4297
 Ethylmethylpyridine complex, cobalt(III), 3747
 Ethylnicotinate complexes
 manganese(II), 2877
 Ethylsarcosinatedithioates
 platinum(II), 3795
 Ethylsarcosinate(methyl)dithioate complexes
 platinum(II), 3795
 Ethylsulfonates, *See* Mercaptoethylsulfonate
 Ethyltetramethylcyclopentadienyl complexes
 zirconium(IV), 2537
 Ethylthioacetyl, platinum(II), 2455
 Ethylthiolates, iron(I), 2249
 Ethyltrioxaphosphabicyclooctane complexes
 molybdenum(0), 3533
 Ethyltriphenylphosphonium salts
 diphenylamide, 4393
 Ethyne complexes, *See* Acetylene
 Europium(III) compounds and complexes
 acetate, 1907
 acetylacetonate, 515,1907
 atrolactate, 4229
 azacyclononane, 3519
 azamacrocycles, 1907
 bis(phenylsulfinyl)butane, 1123
 calixarencarboxylate, 1655
 camphorsulfonate, 427,535
 chloride, chloro, 427,1057,1643,1655,1907,
 3415,3635,4143
 dibenzoylmethanate, 1907
 diethylether, 567
 di(ethylhexyl)methanediphosphonate, 1843
 dimethyl-ammonium, -dithiocarbamate, 1643
 glycolate, 4229
 heterometallic, 1655,3345
 hydroxide, hydroxo, 1907
 lactate, 4229
 macrocyclicpolyamine, 3991

macrocyclicpolyazapolyether, 567
 mandelate, 4229
 methanol, 3345
 methylpyridylbenzimidazole, 1417
 nitrate, nitrato, 567,1123,1417,1843,3345,
 3991
 oxide, oxo, 535,1417,3415
 perchlorate, 535,1907
 phenanthroline, 427,4143,4229
 phenol, 535
 phthalocyaninate, 515
 picrate, 3519
 polynuclear, 1123
 pyridylbenzimidazole, 1417
 Schiff base, 535,567,3345
 (tetramethylbutyl)phenoxyacetate, 1655
 thiocyanate, 1417,4143
 tris(pyrazolyl)borate, 1057
 water, 515,567,1907,4229
 Extended X-ray absorption fine structure
 chromium(III) halide polyselenoethers, 4253
 nickel(II),(III) dipropylthiobenzenedithiolate,
 dithiobenzodithiolethione, 1351
 uranium(VI) oxo nitrate tributylphosphates,
 2233
 vanadium(IV) oxo hydroxy-pyronates,
 -pyridonates, 789
 Explosion hazards
 bromine azide and bromine reaction, 2701
 hydrazoic acid, 989
 metathesis of nitrides, 3635
 perchlorates, 983,3435

F

Fenamates, *See* Niflumate
 Fenske-Hall semiempirical calculations, electro-
 philic attack on manganese(I), rhenium(I)
 cyclopentadienyls phosphines, 3663
 Ferrocene *See* Iron(II), cyclopentadienyl
 Fluorene complexes
See Diazafluorenehydrazine
 Fluorenone complexes, *See* Diazafluorenone
 Fluorenyl complexes, lithium, 2005
 Fluorenyltoluene complex, chromium(0), 2005
 Fluorescence spectra of complexes
 cobalt(III) dipyridophenazine
 phenanthroline bound to DNA, 3395
 copper(II) europium(III) nitrate Schiff bases,
 3345
 lanthanide(III) acylmethylphenyl-
 pyrazolonates water, 1381
 lanthanide(III) camphorsulfonate chloride
 phenanthroline, 427
 lanthanide(III) pyridylbenzimidazoles
 thiocyanate, 1417
 lanthanide(III) Schiff base, 535
 Fluorides and fluoro complexes
 antimony(V), 1529
 boron, 2413
 carbaboranes, 2517
 gallium(III), 61

lanthanide(III), 3421
 silver(I), 61
 tetrabutylammonium, 2499,2517
 titanium(III), titanium(IV), 61
See also Hexafluorophosphate
 Fluorine, silicon hydrogen, noble gases book
 review 1267
 Fluoroborates, 2499
See also Tetrafluoroborate
 Fluorophenyl complexes
 carbaborane, 2499,2517
 Fluorouracilates
 aluminium, chromium(III), iron(III), 2491
 Fluorotoluene complex, chromium(0), 2005
 Fluxional processes in complexes
 cadmium(II) tetrakis(pyrazolylmethyl)tetra-
 azacyclododecane hexafluorophosphate,
 3585
 cerium(IV) oxo propoxide polynuclear, 1129
 copper(I) tetrakis(pyrazolyl)borate
 tricyclohexylphosphine, 207
 copper(II) diazafluorenehydrazine
 perchlorate tris(aminoethyl)amine, 187
 iridium platinum cluster carbonyl triphenyl-
 phosphite bis(diphenylphosphino)methane,
 3861
 lanthanide(III) bis(trimethylsilyl)cyclo-
 octatetraenyl, -pentadienyl, 2067
 metal(II) (methylpyrazolyl)borates, 671
 molybdenum(IV) carbonyl
 dimethylglyoxime oxo dinuclear, 229
 molybdenum(VI) dimethylglyoxime oxo
 dinuclear, 229
 palladium(0) bis(diphenylphosphino)-
 methane carbonyl polynuclear, 2353
 platinum(II) chloro triethylphosphine
 phenylphosphide molybdenum(0)
 carbonyl, 1945
 ruthenium(II) chloride polypyridines
 thiamacrocycles, 393,3293
 silver(I) thiacycloalkynes, 1529
 tantalum(V) dimethylamide methylene-
 bis(butylmethylphenoxide), 2941
 tin(IV) butyl indenyl, 3699
 titanium(IV) methylenebis(butylmethyl-
 phenoxide), 2941
 zirconium(IV) methylenebis(butylmethyl-
 phenoxide) toluene, 2941
 Formamide complexes
 copper(II), 2239
See also Dimethylformamide
 Formamidinates
See Diphenyl-, Ditolyl-formamidinate
 Formamidine complexes
See Diphenyl-, Ditolyl-formamidine
 Formamidinium salts
See Ditolyl-formamidinium
 Formamidocyclopentadienyl complexes
 iron(II), 1713
See also Dimethyl-, Piperidine-
 formamidocyclopentadienyl

- Formates
 thallium(I), 2435
See also (Benzothiazolyl)amino-, Dithioformate
- Formation constants of complexes
 cadmium(II) chloride thiazolonylhydrazine water, 297
 cadmium(II) macrocyclicpolyamine-carboxylate, 599
 cadmium(II) phenylenediaminetetraacetate polynuclear, 2925
 cobalt(II) ethylenediaminetetraacetanilide perchlorate water, 4323
 cobalt(II) phenylenediaminetetraacetate polynuclear, 2925
 cobalt(III) chloro thiazolonylhydrazine water, 1137
 copper(II) ethylenediaminetetraacetanilide perchlorate water, 4323
 copper(II) iminodiacetate, nitrilotriacetate, and their phosphonate derivatives 3447
 copper(II) phenylenediaminetetraacetate polynuclear, 2925
 dimethylarsinate protonation, 2761
 iodine trithiacyclohexane, 1983
 lead(II), manganese(II), mercury(II) macrocyclicpolyaminocarboxylate, 599
 molybdenum(VI) malate oxo, 243
 nickel(II) ethylenediaminetetraacetanilide perchlorate water, 4323
 nickel(II) ethylpentaazacyclotetradecane perchlorate octahedral from planar, 2777
 nickel(II) phenylenediaminetetraacetate polynuclear, 2925
 zinc(II) chloride thiazolonylhydrazine, 297
 zinc(II) dimethylphenanthroline, 2711
 zinc(II) macrocyclicpolyaminocarboxylate, 599
 zinc(II) phenylenediaminetetraacetate polynuclear, 2925
- Formylcyclopentadienyl complexes
 molybdenum, molybdenum(0), sodium, 2387
See also Formamido-, Formylisothiocyanato-(Thioureacarbonyl)-cyclopentadienyl
- Formylisothiocyanatocyclopentadienyl complexes, iron(II), 1713,2271
- Formylpyrrole complex, osmium, 3775
- Fourier transform ion cyclotron resonance mass spectra of compounds and complexes
 copper sulfide clusters with phosphines, 2731
- Free energy of activation in complexes
 beryllium ammonium iodate water thermal decomposition, 441
 cadmium(II) tetrakis(pyrazolylmethyl)tetraazacyclododecane isomerization, 3585
 ruthenium(II) chloride polypyridines thiamacrocycles fluxionality, 3293
 thallium(III) acetate
 tetra(methoxyphenyl)porphyrinate, 681
 tin(IV) butyl indenyl fluxionality, 3699
- Free energy of formation of complexes
 cobalt(II), copper(II) ethylenediaminetetraacetanilide perchlorate water, 4323
 molybdenum(VI) malate oxo, 243
 nickel(II) ethylenediaminetetraacetanilide perchlorate water, 4323
- Free energy of intramolecular hydrogen bond
 gallium(III) butyl (dimethylamino-oxide)-, dimethylamino-phenyl hydroxo, 3407
- Free energy of reaction
 chromium(VI) oxo acidification, 3835
- Free energy of rotation
 butylmesitylphosphine compounds, 1855
- Fullerene complexes, tungsten(0), 2141
- Fumarates
 manganese(II), piperidinium, 689
- Furan, deoxygenation by palladium review, 3197
- Furylpropenalsemicarbazone complexes
 cadmium(II), cobalt(II), copper(II), nickel(II), zinc(II), 3455

G

- Gadolinium(III) compounds and complexes
 acetate, 2755
 acetonitrile, 321
 acetylacetonate, 515
 acylmethylphenylpyrazolonates, 1381
 ascorbate, 2155
 azacryptate, 321
 calixarene-carboxylate, 1655
 camphorsulfonate, 535
 chloride, 321,1057,1643,1655,3385,3415, 3635
 diethylenetriaminedi(acetylphenylalanine-octadecylester)triacetate, 2755
 diethylenetriaminedi(acetyltyrosineoctadecylester)triacetate, 2755
 diethylether, 567
 diglycolate, 963
 dimethyl-ammonium, -dithiocarbamate, 1643
 dimethylformamide, 321
 dinuclear, 963
 heterometallic, 321,963,1655,3345
 macrocyclicpolyamine, 3991
 macrocyclicpolyazapolyether, 567
 methanol, 3345
 methylpyridylbenzimidazole, 1417
 nitrate, nitrato, 567,963,1417,2155,3345, 3991
 oxalate, 2155
 oxide, oxo, 535,1417,3415
 perchlorate, 535,1381
 phenol, 535
 phthalocyaninate, 515
 pyridylbenzimidazole, 1417
 Schiff base, 321,535,567,3345
 tetrahydrofuran, 3385
 (tetramethylbutyl)phenoxyacetate, 1655
 thiocyanate, 321,1417
 tris(pyrazolyl)borate, 1057

- water, 321,515,567,963,1381,2155,3385
Galactarates, potassium, 2055
Galactosebis(thiosemicarbazone) complexes
 copper(II), nickel(II), 3549
Gallium(0), metal, 61,363
Gallium(III) compounds and complexes
 bromide, bromo, 4081
 butyl, 3407
 chloride, chloro, 3407,4081
 (dimethylamino-oxide)phenyl, 3407
 dimethylaminophenyl, 3407
 dinuclear, 3407,4081
 fluoride, fluoro, 61
 heterometallic, 61,3985
 hydroxide, hydroxo, 363,3407
 [(hydroxychlorophenyl)azo]hydroxy-
 quinolinesulfonate, 363
 nitrate, nitrato, oxide, oxo, 3985
 polynuclear, triphenylphosphine oxide, 3407
 water, 4081
Germanium(IV) compounds and complexes
 (alkylaza)heptadiyl, 4005
 chloride, chloro, 949,1767,2843,4005
 diethyl-, dimethyl-, diphenyl-
 phosphinothioate, 949
 ethyl, hydride, 1767
 hydroxide, methoxide, 2843
 phenyl, 949
 polystyrene, 1767
 polystyryl-ethylene, -methylene, 1767
 tetraphenylporphyrinate, 2843
 vinylphenethyl, 1767
Glucosebis(thiosemicarbazone) complexes
 copper(II), nickel(II), 3549
Glucose tolerance factor, 4171
Glutamates, uranium(VI), 4205
Glutathione complexes, palladium(II), 1157
Glycine complexes and glycinate
 chromium(III), cobalt(III), 2145
 copper(II), 889,2145
 See also (Aminoethyl)(aminopropyl)-,
 Bis(aminopropyl)-, Bis(hydroxyethyl)-,
 Bis(pyridylmethyl)-, (Phosphonomethyl)-
 glycinate
Glycinecarboxylates, copper(II), 1723
Glycolates, lanthanide(III), 4229
Glyoximate complexes
 See Macrocyclicpolyamineglyoximate
Glyoxime complexes, *See* Dimethylglyoxime
Gold(I) compounds and complexes
 butylisocyanide, 2681
 chloride, chloro, 125,1577,2681
 diethyldithiopiperazinedione, 1577
 dinuclear, 1,1577,2681
 diphenyltolylphosphine, 125
 heterometallic, 1,125,2681
 labelled complexes, nitrato, 125
 oxidative addition review, 1,1271
 polynuclear, 1
 tetrabromocyclopentadienyl, 2681
 tetrachlorocyclopentadienyl, 2681
 tetrachlorocyclopentadienylthiolate, 2681
 thiocyanate, 125
 tribromocyclopentadienyl, tributylphosphine,
 trichlorocyclopentadienyl-, -dithiolate,
 -thiolate, 2681
 triethylphosphine, trimethylphosphine, 125
 triphenylphosphine, 125,1577,2681
 tripropyl-, tris(cyanoethyl)-phosphine, 125
Gold(III) compounds and complexes
 bromide, bromo, 4039
 chloride, chloro, 125,1111,1885,4039
 dithiaoxadithiolate, 1111
 heterometallic, 125,1111,1885,4039
 pyridylamino-phenyl, -tolyl, 4039
 pyridylcalixarene, 1885
 pyridyl(methyl)aminophenyl, 4039
 pyrimidineaminotolyl, 4039
 tetraphenylphosphonium, 1111
 tritolyphosphine, water, 4039
Guanidine complexes
 See Cyanoguanidine, Creatinine
Guanine complexes
 See (Hydroxyethoxy)methylguanine
Guanosinemonophosphate complexes
 platinum(II), 4297
 ruthenium(II), 1993
 See also Deoxyguanosinemonophosphate

H

- Hafnium nitride, 3635
Hafnium(0), metal, 663
Hafnium(IV) compounds and complexes
 chloride, chloro, 3635
 ethoxide, heterometallic, propanol,
 propoxide, 663
Hartree-Fock calculations, technetium(V) iodo
 oxo trimethylenediamine water, 3311
Hazards
 dinitrophenyldiethylphosphate toxicity, 4233
 lithium indenyl preparation, 3699
 norbornenecarboxylates smell, 3399
 See also Explosion, Mutagenicity
Heptafluorodimethyloctanedionates
 silver(I), 2147
Heptanedioates, manganese(II), 2741
Heptanedionates
 See Tetra-, Tri-methylheptanedionate
Hexafluoroacetylacetonates
 cobalt(II), 2651
 copper(II), 1999
 ruthenium(II), 3039
 silver(I), 2147
Hexafluoroarsenates
 aryldithiadiazolylum, silver(I), 4239
Hexafluorophosphates
 ammonium, 377,921,1775,1921,2369,2375,
 2381,2553,2705,3003,3039,3615,4087
 bismuth(III), 2381
 cadmium(II), 3585
 chromium(III), 4253
 cobalt(II), 3615
 cobalt(III), 1513,3615,4087

- copper(I), 377,1529,4273
 copper(II), 3765
 heterometallic, 377
 iron(II), 999,1567,1775,3615
 iron(III), 999,1513,1567
 mercury(II), 3585
 nickel(II), 3615
 platinum, 3861
 platinum(II), 2353,2381
 platinum(IV), 3003
 potassium, 1371,1513,1567
 rhenium(I), 3003
 rhodium(I), 3099
 ruthenium(II), 1921,2369,2705,3039,3615,
 3847
 ruthenium(III), 3039
 silver(I), 2375,3847,3899
 sodium, 2353,4087
 thallium(I), zinc(II), 3585
Hexanedioates, manganese(II), 2741
Histidine complexes
 aluminium, chromium(III), 2491
 cobalt(II), 3279
 iron(III), 2491
 vanadium(III), 2613
See also Transferrin
Histidinates, uranium(VI), 4205
Holmium compounds and complexes
 calixarene-carboxylate, 1655
 camphorsulfonate, 427,535
 chloride, chloro, 427,1057,1643,1655,3415,
 3635,4143
 diethylether, 567
 dimethyl-ammonium, -dithiocarbamate, 1643
 heterometallic, 1655,3345
 macrocyclic polyazapolyether, 567
 methanol, 3345
 nitrate, nitrate, 567,3345
 oxide, 535,3415
 perchlorate, 535
 phenanthroline, 427,4143,4153
 phenol, 535
 Schiff base, 535,567,3345
 (tetramethylbutyl)phenoxyacetate, 1655
 thiocyanate, 4143,4153
 tris(pyrazolyl)borate, 1057
 water, 567,4143,4153
Hückel calculations
 copper(II) ammonia formamide
 hydroperoxide, 3765
 copper(II) bipyridine bis(dimethylnitroso-
 pyrimidinedionyl)propylenediamine
 dinuclear perchlorate ethanol, water, 281
 germanium(IV) butyl, (butylaza)heptadiyl
 chloride, 4005
 iridium platinum cluster carbonyl
 bis(phosphino)methane, 3861
 palladium(II) hydroxyphenylthiolate
 oxyphenylthiolate tetraethylammonium
 dinuclear, 369
 palladium(II) oxopyridinethiolate, 369
 rhodium(III) chloride phenyl pyrazine
 triphenylstibine, 4045
 silver(I) cyanoacetate, 25
Hydrazide complexes, *See*
 Pyridinediyl-diethylidenedioxamohydrazide
Hydrazido complexes, *See* Dimethylhydrazido
Hydrazine complexes
See Diazafluorene-, Thiazolanyl-hydrazine
Hydrazinium salts, *See* Phenylhydrazinium
Hydrazoic acid, explosion hazard, 989
Hydrazone complexes, *See* Aroyl-,
 Diacetylpyridinedi-, Phenyl-hydrazone
Hydrides and hydrido complexes
 aluminium, 1767,1855,2387,2797
 boron, 741,869,1581
 germanium, 1767
 iron, 707,1549
 iron(0), 707,1549,1689
 iron(II), 2797
 labelled complexes, 2797
 manganese(I), 2041
 molybdenum, 1549
 osmium, 3463,3775
 potassium, 3429
 rhenium(V), 1979
 rhodium(I), 869
 rhodium(III), 3099,3115
 ruthenium, 593,3253
 sodium, 1517,2797,4061
 tungsten, 707,1549,1689
 tungsten(III), 4137
 tungsten(IV), 2113
See also Pyrazolyl-, Tetrahydro-borate,
 Dihydrogen
Hydrodemetallation
 fossil fuels review, 3071,3129
Hydrodenitrogenation
 fossil fuels review, 3071,3073
 homogeneous catalysis review, 3139
 propylaniline, quinolines by molybdenum
 nickel sulfide on alumina catalysts, 3235
Hydrodeoxygenation
 fossil fuels review, 3071,3073
Hydrodesulfurization
 fossil fuels review, 3071,3073,3213
 metal surfaces catalysis review, 3165,3177
 thiophenes review, 3115,3213
 thiophenes transition metals bonding review,
 3219
Hydrogen chloride complexes
 cadmium(II), 1399
 chromium(III), 2223
Hydrogen peroxide
 oxidation of cyclohexane, 3765
 oxidation of phenols, deoxyribose, 1497
Hydroperoxides, copper(II), 3765
Hydrosulfides, iron, 3475
Hydroxides and hydroxo complexes
 aluminium, 2491
 antimony(V), 2643
 boron, 2325,2499
 calcium, 2047

chromium(III), 2047,2223,2491,4217
 cobalt(II), 2651
 cobalt(III), 1047,2109,2851
 copper(II), 259,1747,2205,2909,3399,3779,
 3815,4105
 gallium(III), 363,3407
 germanium(IV), 2843
 indium(III), 363
 iron(III), 849,1497,2491,3779,4191
 lanthanide(III), 1907,4265
 lead(II), 355
 mercury(II), 781
 nickel(II), 3713
 platinum(IV), 2421
 potassium, 4105,4205
 ruthenium(II), 1921
 silicon, 1223,4005
 sodium, 3357
 tellurium(IV), 4209
 thallium(III), 363,3609
 thorium(IV), 989
 tin(IV), 795,881,949
 yttrium(III), 1907
 Hydroxybenzylthiosemicarbazone complexes
 copper(I), 3499
 Hydroxybutyl compounds, iron(II), 869
 [(Hydroxychlorophenyl)azo]hydroxy-
 quinolinesulfonate complexes
 gallium(III), 363
 indium(III), thallium(III), 363
 (Hydroxyethoxy)methylguanine complexes
 copper(II), 1701
 Hydroxyethylcyclopentadienyl complexes
 molybdenum(I), 481
 Hydroxyethylpyronate, vanadium(IV), 789
 Hydroxy(methylmercaptan)naphthoquinone
 complexes
 copper(II), nickel(II), vanadium(IV), 933
 Hydroxymethylpyronates, vanadium(IV), 789
 Hydroxynaphthalenesulfonates, *See* (Methyl-
 thiophenylazo)hydroxynaphthalene-
 sulfonate
 Hydroxypentyl compounds, iron(II), 869
 Hydroxyphenylimidazophenanthroline
 complexes, ruthenium(II), 103
 Hydroxyphenylthiolates, palladium(II), 369
 Hydroxypyridonates, vanadium(IV), 789
 Hydroxyquinolinesulfonates
See Phenylazohydroxyquinolinesulfonate
 Hypochlorite, sodium, 2365
 Hypophosphites, zinc, 495

I

Ibuprofenate, *See* (Isobutylphenyl)propionates
 Imidazolates complexes, uranium(VI), 4205
 Imidazole complexes
 cobalt(II), 463
 copper(II), 383,463,805,1477,2465,3765
 nickel(II), 463
 ruthenium(II), 1793
See also Arylazo-, Benz-, Bi-, Methyl-

imidazole, Histidine, Purine
 Imidazolidineoxyl complexes
See (Carboxylatooxopropylidene)-
 tetramethylimidazolidineoxyl
 Imidazoline complexes
See Methylimidazolinethionate
 Imidazolium complexes, manganese(III), 1273
 Imidazolylidene complexes
See Diisopropylidimethylimidazolylidene
 Imidazophenanthroline complexes
 ruthenium(II), 103
See also Phenylimidazophenanthroline
 Imides, *See* Butyl-, Phenyl-imide
 Imidodiphosphinates, *See* Diselenoimido-,
 Thioimido-diphosphinate
 Imine complexes, *See* (Aryliminoethyl)cyclo-
 pentadienyl, Di-, Pyridine-imine,
 Formamidine, Guanidine, Oxidoarylidene-
 aminocarboxylate, Schiff base, Thiazolinate
 Iminium salts, *See* Bis(triphenylphosphino)-
 iminium, Formamidinium
 Iminodiacetates
 copper(II), 3447
 iron(III), 2307
See also (Phosphonomethyl)-glycinate,
 -iminodiacetate
 Iminodiethanoldithiocarbamates, antimony(III),
 arsenic(III), bismuth(III), 1212
 Iminodimethylenephosphonates
 copper(II), 3447
 Iminodipyridinium salts, cobalt(II), 2851
 Indene complexes, iron(I), 2737
See also Tetrahydroindene
 Indenyls
 lanthanide(III), 3723
 lithium, 2005,3699
 silicon, 2737
 tin(IV), 3699
See also Tetrahydroindenyl
 Indenyltoluene complexes, chromium(0), 2005
 Indium(0), metal, 61
 Indium(III) compounds and complexes
 acetonitrile, 2183
 bis(acetyloxime)pyridine, 2183,2291
 bis(phenyliminoethyl)pyridine, 2183
 butyl, 1763
 chloride, chloro, 1763,2183,2291
 diethyl-ammonium, -dithiocarbamate, 2183
 heterometallic, 3985
 hydroxo, [(hydroxychlorophenyl)azo]-
 hydroxyquinolinesulfonate, 363
 maleonitriledithiolate, 2291
 methanol, 2183,2291
 nitrate, nitrate, 3985
 oxalate, 2291
 oxide, oxo, 3985
 pyridinethiolate, 2291
 tetrabutylammonium, 2183
 tetraphenylphosphonium, 2183
 water, 2183,2291

Infrared spectra of complexed ligands

- acetylides, 327
- acyls, 481,577,1241,2387,3641
- alcohols, 223,481,643,915,1223,1585,2055,2205,2291,2387,2581,2877,3601,4197
- alkenes, 67,3847
- alkoxides, 581,587,1223,3723,4197
- alkyls, 33,1241,1585,1963,2067,2509,2517,2643,3609,3729,4337
- alkynes, 1529
- amides, 89,95,179,217,267,383,833,855,1013,1081,1605,1663,1713,2239,2271,2465,2755,3601,3743,3815,3911,4105,4323
- amidines, 133
- amines, 39,57,95,187,217,507,613,805,889,909,915,983,999,1013,1201,1235,1263,1315,1331,1585,1651,1723,1783,2175,2223,2393,2491,2705,3247,3601,3991,4055,4087,4187,4197
- ammonia, 383,863
- ammoniums, 441,1447,4205
- aryls, 2509,2517,4045,4337
- arylazo, 3047,4163
- aryloxides, 223,1323,1447,3047,4055
- azamacrocycles, 253,259,1907,2229,2375,2599,3713,3997,4233
- azide, 223,825,989,2193,2239,2701,3747
- azines, 2871
- betaines, 153
- biimidazole, 2893
- bipyridines, 1023,2193,2475,3847,3929,4313,4379
- bromide, bromo, 1161,2701,2909,3435,3795,4023,4039,4253
- calixarenes, 1885
- carbaboranes, 2499,2517
- carbonyl, 229,403,409,481,577,593,707,839,869,1095,1101,1169,1343,1391,1425,1453,1549,1599,1803,1937,1945,1963,2005,2041,2141,2193,2249,2279,2353,2387,2681,2737,2789,2797,2979,3003,3061,3067,3253,3273,3327,3339,3475,3489,3533,3641,3861,4363
- carboxylates, 25,57,75,223,423,447,573,581,643,733,825,863,889,921,963,1023,1235,1343,1361,1371,1399,1535,1605,1723,1803,1907,1957,2037,2055,2135,2155,2279,2291,2307,2341,2405,2421,2475,2491,2755,2871,2917,3267,3323,3435,3511,3729,3743,3815,3851,3947,4205,4379
- carboxylic acid, 403,507,1023,1291,1357,1399,2055,2135
- chloride, chloro, 33,81,143,291,341,427,623,927,939,1095,1247,1291,1343,1563,1599,1679,1793,1873,1963,2257,2405,2491,2509,2537,2797,2909,2951,3039,3385,3435,3485,3625,3795,3847,4023,4039,4045,4055,4253,4337
- creatinine, 3379
- crown, 3865
- cyanate, cyanato, 2877
- cyanide, 909,1023,1585,1747,2397,2827,3671,3779,3851,4273
- cyanoguanidine, 805
- cyclopentadienyl, 25,335,999,2369
- deuterium, 2499,4081,4205
- dicarboxylate, 1331,2421,2741,3013,3655,3941
- dicyanamide, 463,3671
- diketonates, 1223,1323,1331,1693,1907,2147,2257,2405,2581,2651,3039
- diselenoimidodiphosphinates, 2727
- dithiadiazolyliums, 4239
- dithiindithiolates, 1465
- dithioates, 983,2537,2797
- dithiocarbamates, 983,1643,1971,3795,4121
- dithiocarbazates, 275,1863,3735
- dithiocarbonate, 2573
- dithiolethionedithiolate, 2689
- esters, 1013,2155,2249,2755,3795,4283,4389
- ethers, 57,623,963,3385,3485,3865
- fluoride, 2413,3421
- fluoroborates, 383,939,2193,2375,2447,3435
- fluorocarbon, 2499
- fluorophosphates, 377,999,2369,2375,2381,2705,3003,3039
- formamidinates, 541,1831
- heteropolyoxometallates, 629
- hydrazides, 1137,4221
- hydrazido, 2113
- hydrazones, 481,1241,2625,3681
- hydride, 207,671,1057,1767,1819,2113,2435,2499,2517,2797,3911,4087,4137,4353
- hydroxide, 1907,2047,2421,2491,2643,2909,3267
- hypophosphite, 495
- imidazoles, 383,463,805,1169,1417,2465,3511,4163
- imido, 2113
- imines, 335,433,933,2599 *See also Schiff bases*
- indenyl, 3723
- iodate, 441,3039
- iodide, 2087,2483,2857,3435,4023
- iodine, 1983
- isocyanide, 2397,2681
- ketoiminates, 3713
- ketones, 427,607,2341,2581,2689,3039,3519
- macrocycles, 567,1783,2223,2393,2673,3991
- nitrate, nitrato, 377,525,567,805,1123,1315,1787,2229,2233,2361,2893,2909,3247,3435,3681,3991,4033,4233
- nitride, nitrido, 3635
- nitriles, 25,291,1637,2059,2291,2375,2429,2797,4055,4305
- nitrite, nitrito, 805,2447,3815,4331
- nitrosodicyanomethanide, 463
- nitrosyl, 927,1439,2329,4353
- oximates, 2413
- oximes, 229,2175,2183,2257,2291,2413

oxide, oxo, 75,95,229,447,581,643,713,789,
1143,1223,1247,1323,1371,1517,1825,
1863,1873,2087,2169,2233,2307,2589,
2837,3421,3695,3865,3911,3977,3985,
4055,4179,4205,4379
perchlorate, 81,119,143,187,223,307,383,
489,507,567,915,983,1169,1201,1263,
1301,1315,1331,1793,1907,1963,2059,
2193,2223,2465,2509,2765,2819,2909,
3395,3435,3511,3577,3713,3735,3929,
3997,4163,4221,4313,4323,4331,4337
peroxide, peroxy, 4205
phenanthrolines, 427,733,1263,1331,2475,
3395,3847,4143,4379
phenazines, 3395
phenols, 535,1323,1399,2175,3729
phenoxides, 369,1301,1863
phosphates, 171,2047,4187,4233
phosphazenes, 1003
phosphides, 2537
phosphinates, 2643
phosphines, 81,207,335,999,1433,1957,2531,
2537,2573,4023,4033
phosphine sulfides, 1101,1963
phosphiniminocyclotriazines, 1089
phosphinodithioate, 3609
phosphinothioates, 781,949
phosphonates, 1843
phthalocyaninates, 113,515,2335
picrate, 3519
pteridine, 607
purines, 1701
pyrazines, 825,1023,1417
pyrazoles, 3435
pyrazolonates, 1381
pyrazolylborates, 207,671,1057,1439,1535,
1567,3469,3695,4087
pyridines, 33,119,143,187,223,291,383,525,
1371,1637,1651,1693,1793,1931,2059,
2135,2229,2369,2375,2917,3323,3625,
3681,4023,4055,4233
pyridine oxides, 369
pyridonates, 789
pyrimidines, 613
pyronates, 789
quinoline, 1963
quinones, 933
Schiff bases, 119,223,321,453,535,567,643,
915,1119,1143,1201,1247,1291,1301,
1331,1439,1517,1605,1771,1793,1825,
2183,2213,2321,2375,2405,2659,2673,
2749,2765,2857,2863,2909,2951,2991,
3345,3977,4073,4097,4179,4371
selenide, 1433,3911
semicarbazones, 3455
sulfates, 805,2447,3489,4379
sulfide, 217,447,833,1425,2483,3911,4121,
4305
sulfonamides, 613
sulfonates, 427,535,2279
sulfoxide, 267,613,1123,1787,3795
tellurocyanate, 1241
thiazoles, 1013,1585,1873,4045,4279
thiazolines, 143,1137,1793
thioamides, 2537
thioates, 3327
thiocyanate, 39,125,223,267,321,889,1119,
1417,1679,2223,2229,2393,3511,3997,
4143,4283
thioethers, 933,1291
thioimidodiphosphinates, 4061
thiols, 999,3323
thiolates, 369,1111,1637,1793,1931,2531
thiones, 1819,4023
thiosemicarbazides, 1477,4313
thiosemicarbazones, 855,1477,1895,1925,
3499,3549,3625,3947
thioureas, 1713,2263,2271
triazenides, 4017
triazoles, 423
triflate, 2223,3129,3641
uracils, 2491
vinyls, 2705
water, 119,383,441,447,453,495,525,607,
733,889,909,1023,1201,1301,1357,1361,
1399,1477,1651,1783,1843,1907,1925,
2037,2047,2175,2223,2307,2315,2375,
2465,2475,2491,2499,2819,2837,2877,
2909,3013,3267,3435,3485,3577,3681,
4081,4143,4205
Iodates
ammonium, beryllium, 441
ruthenium(III), sodium, 3039
Iodide and iodo complexes
cadmium(II), 199,417,1679,2483,2857,3435
chloride, 3571
cobalt(II), 1679
copper(I), 1433,1487,2979,3499,4023
copper(II), 263
(cyclopentadienylmethyl)trimethyl-
ammonium, 2689,2889
dimethylamino(methyl)pyridinium, 95
dimethylamino(methyl)pyridylammonium,
713
iron(II), 999,1775
lanthanide(III), 3635
lead(II), 263
lithium, 2827
mercury(II), 2483,3435
molybdenum(II), 1391,2329
molybdenum(V), 1391
nickel(III), 3505
niobium(IV), 995
palladium(II), 1963,2827
palladium(III), 3505
platinum(II), 57,2421,2455,3705
platinum(IV), 3003
potassium, 57,2145,2483
rhenium(I), 3003
rhenium(III), 1615
rhenium(V), 2087
rhodium(III), 1169,1307
ruthenium(III), 3047
silicon, 1517

sodium, 1169,3311,4283
 technetium(V), 3311
 tellurium(II), 995,1615
 thallium(III), 3609
 tin(IV), 881,4283
 trimethylammonium, 1487
 vanadium(IV), 1517
 zinc, 1679,2483,3435
Iodine complexes
 triseleno-, trithia-cyclohexane, 1983
Ionisation potentials, nickel(II) halide
 methylthiosemicarbazide, 695
Iridium complex, carbonyl, cluster,
 heterometallic, triphenylphosphite, 3861
Iridium(-I) complex, bis(triphenylphosphino)-
 iminium, carbonyl, 3861
Iridium(I) compounds and complexes
 bis(benzimidazolyl)pyridine, bromo, 1169
 carbonyl, chloro, 341,1169
 cyclooctene, dibutylphosphine, dinuclear,
 341
 water, 1169
Iridium(III) compounds and complexes
 acetone, 1811
 acetonitrile, 2029
 bis-, bis(methyl-benzimidazolyl)pyridine,
 bromo, 1169
 chloride, chloro, 1169,1811,2029,2321,3129
 creatinine, 2029
 dinuclear, 1811,2321,3129
 diphenylphosphino(phenylthio)methane,
 1811
 octaethylporphyrinate, 3129
 pentamethylcyclopentadienyl, 1811,2321,
 3129
 Schiff base, 2321
 tetrafluoroborate, 1811,2029
 tetra(methylcarboxylato)butadiendiyl, 2029
 triflate, 3129
 triphenylphosphine, 2029
Iridium(IV) compounds and complexes
 bromo, chloro, heterometallic, 1169
 hydrodesulfurization review, 3115
Iron compounds and complexes
 butylthiolate, 3475
 carbonyl, 707,1549,1689,2249,3273,3475
 cluster, 707,1549,1689,2249,3273
 heterometallic, 707,1549,1689,2249,3273
 hydride, hydrido, 707,1549
 hydrodesulfurization review, 3177
 hydrosulfide, 3475
 nitrogenase cofactor, 653
 polynuclear, 3475
 selenide, selenido, 707,1689
 telluride, tellurido, 1549
 sulfide, sulfido, 2249,3273
Iron(0) compounds and complexes
 bis(diphenylphosphino)methane, 2797
 butylthiolate, 3475
 carbonyl, 707,869,1549,1689,2737,2797,
 2979,3475
 cyclopentadienyl, 869
 dibenzylideneacetone, 2979
 dinuclear, 3475
 divinylketenes, 2979
 heterometallic, 869
 hydride, hydrido, 707,1549,1689
 metal, 3953
 polynuclear, 707,1549,1689
 selenide, selenido, 707,1689
 telluride, tellurido, 1549
 tetrakis(benzylidene)ethene, 2979
 triethylammonium, 3475
 vinylketones, 2979
Iron(I) compounds and complexes
 butylthiolate, 3475
 carbonyl, 869,2249,2737,3475
 cyclopentadienyl, 869
 dinuclear, 869,2249,2737,3475
 ethylthiolate, 2249
 heterometallic, indene, 2737
 phenylthiolate, 2249
 tetrahydroindene, 2737
Iron(II) compounds and complexes
 acetonitrile, 2223,2797,3827
 acetylcyclopentadienyl, 335
 aminophenylthiol, 999
 ammonia, 1023
 (aryliminoethyl)cyclopentadienyl, 335
 bipyridine, 1023
 bis[(diphenylphosphino)benzylidene]-
 ethylenediamine, 433
 bis(diphenylphosphino)butane, 1775
 bis(diphenylphosphino)ethane, 999,1775
 bis(diphenylphosphino)methane, 1775,2797
 bis(diphenylphosphino)propane, 1775
 bis(pyridyl)-ethylene, -propane, 1023
 butenyl, butyl, 869
 (butylphenyl)terpyridine, 3615
 carbonyl, 481,869,2797,3327
 chloride, chloro, 671,869,1873,2307,2797,
 3779,4121,4279
 chlorocarbonylcyclopentadienyl, 1713,2271
 cluster, 481,4121
 cyanide, cyano, 909,1023,1585
 cyclopentadienyl, 433,869,999,1513,1775,
 2689,3327
 (cyclopentadienylmethyl)trimethyl-
 ammonium, 2689
 dichloromethane, 433
 diethyldithiocarbamate, 4121
 dihydrogen, 2797
 dimethylbipyridine, 1023
 dimethylformamidocyclopentadienyl, 2271
 (dimethylthioureacarbonyl)cyclopentadienyl,
 2271
 dinuclear, 481,1775
 diphenylphosphinocyclopentadienyl, 171
 dithioformate, 2797
 formamidocyclopentadienyl, 1713
 formylisothiocyanatocyclopentadienyl, 1713,
 2271
 heterometallic, 171,481,909,1023,1513,1585,
 2689,4121

hexafluorophosphate, 999,1567,1775,3615
 hydride, hydrido, 2797
 hydroxybutyl, hydroxypentyl, 869
 iodide, iodo, 999,1775
 labelled complexes, 2797
 macrocyclicpolyamine, 3827
 mesitylene, 433
 pentenyl, pentyl, 869
 perchlorate, 47
 phosphate, 171
 piperidine-formamido-, (-thioureacarbonyl)-
 cyclopentadienyl, 2271
 polynuclear, 1567,4121
 pyrazine, 1023
 pyridylbenzimidazole, 47
 sulfate, 1567,3615
 sulfide, 481,4121
 terpyridine, 3615
 tetraethylammonium, 4121
 tetrafluoroborate, 433,2797,3827
 tetrahydrofuran, 2797
 tetrakis(methylpyrazolyl)borate, 671
 tetramethylcyclopentadienyl, 1513
 tetramethyl(trimethyleneoligoethyleneglycol-
 ether)cyclopentadienyl, 1513
 thiazole, 1873,4279
 thioterephthaloyl-amides, -anhydrides,
 -chloride, -esters, -thioesters, 3327
 (thioureacarbonyl)cyclopentadienyl, 1713
 triflate, 2223
 tris(methylpyrazolyl)borate, 671
 tris(pyridylpyrazolyl)borate, 1567
 water, 47,909,1023,1567,2307,2797,3615
Iron(II,III) compounds and complexes
 bis(diphenylphosphino)-ethane, -methane,
 carbonyl, 2797
 chloride, chloro, 2797,4279
 dinuclear, 2797
 oxo, polynuclear, thiazole, 4279
Iron(III) compounds and complexes
 acetate, 327,1497
 acetonitrile, 1567
 acetylacetonate, 2553
 aminobenzoate, 3353
 benzylthiolate, 999
 bipyridine, 849
 bis(diphenylphosphino)ethane, 999
 bis(tritolylporphyrinatophenoxy)ethane,
 3779
 bromide, bromo, 3779
 bromophenyl-, butanedi-, butyl-thiolate, 999
 chloride, chloro, 1831,1873,2491,2553,2797,
 3779,4279
 cyanide, cyano, 1585,3779
 cyclopentadienyl, 999,1513,1831
 diethyldithiocarbamate, 1573
 di(ethylhexyl)methanediphosphonate, 1843
 dinuclear, 999,1497,1567,1873,2307,3779
 ethanol, 2553
 ethylenediaminetetra-acetate,
 -(methylenephosphonate), 1069
 fluorouracilate, 2491
 heterometallic, 1585,2307,3779,3953
 hexafluorophosphate, 999,1513,1567
 histidine, 2491
 hydroxides, hydroxo, 849,1497,2491,3779,
 4191
 iminodiacetate, 2307
 labelled complexes, malonates, 3953
 macrocyclicpolyamine, 2223
 malonate, 3953
 methanol, 1567
 methylthiolate, 999
 nitrate, nitrate, 849,1497,1843,3353,3953
 nitrilotriacetate, 849
 oxide, oxo, 1567,1873,2307,3779
 perchlorate, 47
 peroxide, peroxy, 1497
 phosphate, phosphite, 171
 polyaminopropoxides, 1497
 polynuclear, 1567
 propylthiolate, 999
 pyridylbenzimidazole, 47
 pyridylpyrazolate, pyridylpyrazole, 1567
 Schiff base, 2553,4191
 sulfate, 1567,3953
 tetramethyl(trimethyleneoligoethyleneglycol-
 ether)cyclopentadienyl, 1513
 thiazole, 1873,4279
 transferrins, 1069
 triflate, 2223
 water, 47,849,1567,1843,2223, 2307,2491,
 3953
Isatinthiosemicarbazones complexes
 copper(II), 855
 (Isobutylphenyl)propionates
 copper(I), copper(II), 733
Isocyanide complexes
 See Alkyl-, Toly-, Xylyl-isocyanide
Isodiazone complexes
 See Tetramethylpiperidylnitrene
Isomaleonitriledithiolates
 palladium(II), 4305
 potassium, 1637
 sodium, 4305
 zinc(II), 1637
Isomerism, geometrical
 cobalt(III) bis(aminoethyl)dithiocyclohexane
 carbonate, chloride, nitrite, thiocyanate,
 3807
 iron(I) bis(indenyl)dimethylsilanes carbonyl
 dinuclear, 2737
 molybdenum carbonyl alkyl(cyclopentadienyl-
 carboxylate) phenylthiolate dinuclear,
 2249
 nickel(II) macrocyclicpolyamine, 2223
 nickel(II) macrocyclic Schiff bases, 2673
 platinum(0) alkene triphenylphosphine, 765
 platinum(II) bromide, chloride
 ethylsarcosinate(methyl)dithioate, 3795
 platinum(IV) alkylcarboxylates amine,
 ammonia propylidenemalonate, 2421
 platinum(IV) amine, ammonia hydroxo
 propylidenemalonate, 2421

rhenium(V) dimethylpyrimidinethiolate halide oxo triphenylphosphine, 2087
 rhodium(I) bis(benzimidazolyl)pyridines, 1169
 rhodium(III) diacetylmonoximate triphenylphosphine perchlorate, 307
 rhodium(III) halides bis(dimethylarsino)-, bis(dimethylphosphino)-benzenes, 1307
 ruthenium(II) bis(diphenylphosphino)alkane chloro nitrosyl, 927
 ruthenium(II) carbonyl chloro pyridylacetyl triphenylphosphine diethylether, 577
 ruthenium(II) halide pyridylbenzothiazolate triphenylphosphine, 1793
 tin(IV) halide trioctylphosphineoxide, 2621
 tungsten(0) bis(diphenylphosphino)benzene carbonyl fullerene, 2141
 tungsten(VI) dimethylhydrazido propoxide, 2113
Isomerism, optical
 copper(I), copper(II), molybdenum(II) norbornenecarboxylates, 3399
 copper(II), nickel(II) bis(pyridylalkyl)-malamide, -hydroxyglutaramide, 3815
 copper(II) dibenzoyltartrate phenanthroline water, 3655
 palladium(II) bis(arylminoethyl)ferrocenyl, 335
 rhodium(II), ruthenium(II,III) norbornenecarboxylates, 3399
 silver(I) tungsten(VI) sulfide tris(hydroxymethyl)methylammonium dimethylformamide, water polymers, 217
See also Chirality
Isomerism, structural, silver(I) dipropyl-dithiophosphate hexanuclear, 3899
Isomerization of complexes
 cadmium(II) tetrakis(pyrazolylmethyl)tetraazacyclododecane salts, 3585
 cobalt(II) chloride, perchlorate pyrazolylmethylpyridine water, 3577
 gallium(III) [(hydroxychlorophenyl)azo]-, hydroxy-quinolinesulfonate, 363
 platinum(0) dichloroacetylene triphenylphosphine, -phosphite, 3333
 platinum(II) diamines dithiopenyldenemalonate, 3705
 ruthenium(I) carbonyl cyclopentadienyl dinuclear, 3339
Isonicotinates
 manganese(II), manganese(III), 71
 molybdenum(0), 2279
 sodium, 71,2279
 tungsten(0), 2279
See also Ethyl-, Methyl-isonicotinate
Isonicotinoylhydrazones, See Phenyltriazolyl-carbaldehydeisonicotinoylhydrazone
Isophthalates
 manganese(II), 1411
 piperidinium, 1411,4379
 vanadium(IV), 4379
Isopropylmethylfluorophosphonate, 4233

(Isopropylphenyl)(phenyl)thioamides lithium, 3879
 (Isopropylphenyl)imides chromium(V), 3879
See also (Diisopropylphenyl)imide

K

Ketoimines, See Benzoylacetoinimate
Ketone complexes See Acetone, Acetophenone, Azacyclononanone, Camphorsulfonate, (Carboxylatooxopropylidene)tetramethylimidazolidineoxyl, Dione, Vinylketone
Kinetic studies of complexes
 beryllium ammonium iodate water thermal decomposition, 441
 carbaborane deboration by fluoride, 2499
 chromium(III) nitrilotriacetate water with bipyridine, phenanthroline, 3371
 chromium(III) nitrilotriacetate water with acetylacetone, 4217
 chromium(VI), ribonolactone oxidation, 701
 chromate(VI) reduction by ascorbate, 2081
 cobalt(II) octanoate and diketonates, butyl hydroperoxide decomposition, 2651
 cobalt(II) tetrasulfophthalocyaninate oxidation, reduction by amino acids, 3279
 cobalt(II),(III) triethanolamine water, 1047
 cobalt(III) copper(II) ammonia perchlorate nitrilotriacetate water dissociation, 2135
 copper(II) bis-, pyridyl-(methylpyridyl)methane catalytic oxidation of dibutylcatechol by oxygen, 2299
 copper(II) diethyldithiocarbamate dipropyl-dithiophosphate photoreduction, 3967
 copper(II) (isobutylphenyl)propionate bipyridine, phenanthroline hydrolysis of sodium bis(nitrophenyl)phosphate, 733
 copper(II) macrocyclicdiamidopolyamines oxidation by peroxodisulfate, 741
 copper(II) macrocyclicdiamidodiamines acid dissociation, 2021
 copper(II) macrocyclicpolyamine formation, 2073
 copper(II) macrocyclicpolyaminepolyol formation and dissociation, 2205
 copper(II) (methylthiophenylazo)hydroxy-quinolinesulfonate, -naphthalenesulfonate formation, 3033
 copper(II) Schiff bases reduction, 4371
 copper(III) macrocyclic-diamidodiamine, -polyamines decomposition, 741
 gallium(III) [(hydroxychlorophenyl)azo]-hydroxyquinolinesulfonate formation, 363
 germanium(IV) methoxide tetraphenylporphyrinate hydrolysis, 2843
 indium(III) [(hydroxychlorophenyl)azo]-hydroxyquinolinesulfonate formation, 363
 iron(II) acetonitrile macrocyclicpolyamine with hydrogen peroxide, 3827
 iron(II) ruthenium(III) bipyridines, pyrazine cyanide ethylenediaminetetraacetate, 1023

iron(III) bipyridine nitrilotriacetate, 849
 iron(III) removal from transferrins, 1069
 lanthanum(III) azamacrocyclic hydrolysis of
 Sarin and phosphate triester, 4233
 lanthanide(III) hydroxycarboxylates
 coordination with phenanthroline, 4229
 lanthanide(III) phthalocyaninate
 dechlorination of pentachlorophenol, 2971
 manganese(III) Schiff bases decomposition
 of tetraphenylcyclopentadienone by
 aldehyde, 2553
 manganese(III,IV) polypyridines oxo water
 reduction by thiosulfate, 2199
 manganese(IV) acetate bipyridine dinuclear
 oxide perchlorate water reduction, 3493
 metal(II) diacetylpyridinedioximate
 esterolysis of nitrophenyl acetate, 877
 molybdenum nickel sulfide on alumina
 hydrodenitrogenation of propylaniline,
 quinolines, 3235
 molybdenum(IV) cyano oxidation by nitrous
 acid, 3857
 molybdenum(VI) diethyldithiocarbamate
 oxo oxidation of triphenylphosphine, 2163
 molybdenum(VI) oxo Schiff base
 deoxygenation by thionyl chloride, 2169
 nickel(II) macrocyclic-diamidopolyamines
 oxidation by peroxodisulfate, 741
 nickel(II) macrocyclicpolyamine perchlorate,
 2223
 nickel(III) macrocyclic-diamidodiamine,
 -polyamines decomposition, 741
 palladium(II) aryltelluroalkylethers
 phenanthroline perchlorate quenching of
 singlet oxygen, 4337
 palladium(II) glutathione water, 1157
 platinum(II) azamacrocyclic with
 formaldehyde, 3539
 platinum(IV) alkylcarboxylates, hydroxo
 amine, ammine propylidenemalonate, 2421
 rhenium(III) chloride thiourea
 decomposition, 2263
 rhenium(III) dimethylpyrimidinethiolate
 halide triphenylphosphine oxidation, 2087
 ruthenium(II) acetonitrile bipyridine
 terpyridine hydrolysis, 1921
 ruthenium(II) chloride norbornadiene
 polypyridines, triphenylphosphine
 hydrogen transfer, 3847
 ruthenium(II) chloride polypyridines
 thiamacrocyclic fluxionality, 3293
 ruthenium(II,III) potassium cyanide ethyl-
 enediaminetetraacetate formation, 3851
 ruthenium(III) ethylenediaminetetraacetate
 phenylhydrazinium formation, 1235
 thallium(III) [(hydroxychlorophenyl)azo]-
 hydroxyquinolinesulfonate formation, 363
 zinc(II) macrocyclicpolyamine formation,
 2073
 zinc(II) phenolic cyclams hydrolysis of
 nitrophenylacetate, 3285

L

Labelling of complexes
 (H-2), gallium bromide water, 4081
 (H-2), iron(II) bis(diphenylphosphino)-
 methane dihydrogen hydride
 tetrafluoroborate, 2797
 (H-2), tetrabutylammonium fluoride hydrate,
 2499
 (H-2), uranium(VI) ammonium aspartate oxo
 peroxo water, 4205
 (C-13), gold(I) phosphines thiocyanate, 125
 (N-15), gold(I) phosphines thiocyanate, 125
 (Fe-57), iron(III) malonates, 3953
 Lactams, *See* Azetidionate
 Lactates, lanthanide(III), 4229
 Lanthanides, inorganic and organometallic
 compounds syntheses, book review, 3483
 See also individual lanthanides
 Lanthanum(III) compounds and complexes
 acetate, 1907
 atrolactate, 4229
 azamacrocyclics, 1907,4233
 calixarene-carboxylate, 1655
 camphorsulfonate, 427,535
 chloride, chloro, 427,1057,1643,1655,1907,
 3415,3635,4143
 dibenzoylmethanate, 1907
 diethylether, 567,1907
 dimethyl-ammonium, -dithiocarbamate, 1643
 dimethylformamide, 833
 fluoride, fluoro, 3421
 glycolate, 4229
 heterometallic, 1057,1361,1655,3345
 iodide, iodo, 3635
 lactate, 4229
 macrocyclicpolyamine, 3991
 macrocyclicpolyazapolyether, 567
 mandelate, 4229
 methanol, 3345
 methylpyridylbenzimidazole, 1417
 nitrate, nitrate, 567,833,1417,3345,3991,
 4233
 oxide, oxo, 535,1361,1417,3415,3421
 perchlorate, 535
 phenanthroline, 427,4143,4229
 phenol, 535
 pyridylbenzimidazole, 1417
 Schiff base, 535,567,3345
 sulfide, 833
 (tetramethylbutyl)phenoxyacetate, 1655
 thenoyltrifluoroacetate, 1907
 thiocyanate, 1417,4143
 triethylenetetraaminehexaacetate, 1361
 tris(pyrazolyl)borate, 1057
 water, 567,833,1361,1907,4229
 Lattice energies
 dichloroiodine tetrachloroaluminium, 3571
 Lead(II) compounds and complexes
 acetate, 1663
 azamacrocyclic review, 551
 coordination chemistry review, 551

diacetylpyridinedihydrazone, 3681
 diacetylpyridinedioximate, 877
 diethylaminomethylenephosphonate, 355
 diethylether, 2435
 dimethylacetate, 19
 dimethylaminoethoxide, 263
 dimethylsulfoxide, 263
 dinuclear, 2765
 heterometallic, 263,1663
 hydroxide, hydroxo, 355
 iodide, iodo, 263
 macrocyclicpolyamine, -carboxylates, 599
 macrocyclicpolyazapolyether, 567
 nitrate, nitrato, 567,1663,2435,3681
 oxide, 19
 perchlorate, 567,2765
 polynuclear, 19
 Schiff bases, 567,2765
 tris(pyridylpyrazolyl)borate, 2435
 water, 19,355,567,2765,3681
Lead(IV) compounds and complexes
 chloride, chloro, 949,1585
 diethyl-, dimethyl-, diphenyl-
 phosphinothioate, 949
 heterometallic, methyl, 1585
 phenyl, 949
Levulinates, copper(I,II), copper(II), 2341
Ligand field parameters in complexes
 cobalt(II), copper(II) dicyanamide,
 nitrosodicyanomethanide imidazoles, 463
 copper(II) di(dimethylglycinoyl)-,
 dipicolinoyl-triazaoctane, 89
 copper(II) imidazoles, pyridines fluorobor-
 ate, perchlorate picolylpicolinamide, 383
 copper(II) methyl-imidazoles, -pyridines
 perchlorate, fluoroborate (pyridylethyl)-
 picolinamide water, 2465
 nickel(II) dicyanamide,
 nitrosodicyanomethanide imidazoles, 463
 nickel(II) halo methylthiosemicarbazide, 695
 nickel(II) macrocyclic Schiff bases, 2673
Ligand synthesis
 (alkoxyphenylethyl)piperidinedithio-
 carbamates, 315
 alkyl(arylazo)imidazoles, 4163
 aroylhydrazones, 2625
 azacryptands, 321,453
 benzylamines, 2405
 bis(acetyloxime)pyridine, 2183
 bis(aminoethyl)dithiocyclohexane, 3807
 bis(anilinoethyl)bipyridine, 2705
 bis(benzimidazolylmethylene)benzene, 1315
 bis(benzimidazolyl-methyl)ether,
 -oxamethyl)benzene, 3511
 bis(dichlorosalicylidene)cyclohexane-
 disulfonamide, 2365
 bis(halopyrazolyl)methanes, 3435
 bis(hydroxyaryl)ethylenediamines, 2175
 bis(hydroxyaryl)ethylenediaminobutane-
 oximes, 2175
 bis(methylbipyridine-ethyl)benzene, 1505
 bis(phenoxy)s, 4353
 bis(phenyliminoethyl)pyridine, 2183
 bis(pyridylalkyl)-malamide,
 -hydroxyglutamamide, 3815
 (butylphenyl)(phenyl)thioamide, 3879
 (butylphenyl)terpyridine, 3615
 calixareneammonium, 1581
 carboxybenzoylthiosemicarbazide, 1477
 di(dimethylglycinoyl)triazaoctane, 89
 diethylaminomethylenephosphonic acid, 355
 diethyldithiopiperazinedione, 1577
 diethylenetriaminedi(acetyl-phenylalanine-
 -tyrosine-octadecylester)triacetate, 2755
 diketones, 2651
 dimethylpteridinedione, 607
 diphenyltrakis(pyrazolyl)cyclotri-
 phosphazene, 1003
 ethyl (benzothiazolyl)aminofornate, 1013
 ethylenediaminetetraacetanilide, 4323
 furylpropenalsemicarbazone, 3455
 imidazophenanthrolines, 103
 isatinthiosemicarbazones, 855
 macrocyclicdiamidodiamines, 3525
 macrocyclicpolyaminecarboxylates,
 599,2697
 macrocyclicpolyamineglyoximate, 2413
 macrocyclicpolyaminepolyol, 2205
 macrocyclicpolyazapolyether, 567
 methyl(nitrobenzal)methylenedithio-
 carbazate, 4097
 methyl(phenoxyethylene)dithiocarbazates,
 1863
 (methylpyrazolyl)formylbenzylidithio-
 carbazate, 3735
 methylpyridylbenzimidazole, 1417
 methylpyridylbenzothiazoline, 143
 (methylthiophenylazo)hydroxy-naphthalene-
 sulfonate, -quinolinesulfonate, 3033
 nitrophenylalkoxycarbonylthioureas, 2605
 norbornenecarboxylates, 3399
 phenylenedimethylenebispyrazole, 1679
 phthalocyanines, 113,2335
 picolylpicolinamide, 383
 polypyridines, 2059
 pyrazolylborates, 671
 pyridylcalixarene, 1885
 pyridyl(dimethoxyphenyl)pyrazole, 4257
 (pyridylethyl)picolinamide, 2465
 (pyridylethyl)toluenesulfonamide, 1707
 Schiff bases, 409,489,535,567,643,1247,
 1291,1343,1517,1825,2213,2659,2749,
 2909,2991,4073,4273,4371
 tetraphenylthioimidodiphosphinic acid, 4061
 thiosemicarbazones, 1895
 tris(dimethylpyrazolyl)borate, 1297
 tris(methoxyphenylpyrazolyl)borate, 2435
Lithium(0) compounds and complexes
 alloys, 2963
 metal, 4033
Lithium(I) compounds and complexes
 acetate, 327
 acetonitrile, 2637,3671
 bis(butylmethylpyrazolyl)borate, 3469

bis(butylphenyl)(pyridyl)methylthiolate, 3641
bis(butylpropylpyrazolyl)borate, 3469
bis(dibutylpyrazolyl)borate, 3469
bis(methyl)diphenylphosphonium, 2013
bis(trimethylsilyl)amide, 4239
bis(trimethylsilyl)cyclooctatetraenyl, 2067
bis(trimethylsilyl)cyclopentadienyl, 2067
bis[tris(trifluoromethyl)phenyl]boroxide, 2637
bromide, bromo, 143,2229,2455,3625
butyl, 133,403,541,1081,1505,1513,1767, 2005,2067,2637,2681,2705,2941,3327, 3593,3699,3879,4061
butylamide, 1081
butylcyclopentadienyl, 2013
(butylphenyl)(phenyl)thioamide, 3879
calixarene-carboxylate, 1655
carbonate, 1307,3807
chloride, chloro, 335,1291,1513,1663,2013, 2087,2405,2553,2963,3625,3635,3671, 4197
cyanide, cyano, 3671
cyclohexylphosphide, 2537
dibutylamide, 3593
dibutyl-diazabutadiene, 2325
dicyanamide, 3671
dicyclohexylamide, 635
diethylamide, 3593
diethylether, 541,3879
diisopropylamide, 1505,3593
(diisopropylphenyl)amide, 3879
dimesitylboroxide, 2637
dimethylamide, 2941
dimethylaminophenyl, 3407
dinuclear, 541,1081,2637,2681,2941,3879
diphenyldimethylenephosphorane, 345,2013
diphenylformamidinate, 1177
diphenylphosphide, 4033
diphenylphosphinothioamide, 4061
ditolylformamidinate, 541,1177
fluorenyl, 2005
heterometallic, 335,403,1081,1517,1663, 1767,1855,2013,2067,2387,2637,2681, 2797,2979,3625,3879,4197
indenyl, 2005,3699
iodide, iodo, 2827
(isopropylphenyl)(phenyl)thioamide, 3879
mesitylamide, mesitylimide, 3879
methyl, 541,1177,1517,2979
methylenebis(butylmethylphenoxide), 2941
nitride, 3635
pentabenzylcyclopentadienyl, 403
perchlorate, 1793,2223,4313
phenyl, 4005,4033
phthalocyaninate, 515
polystyrene, 1767
propanol, 4197
pyridine, 2637,3671
Schiff base, 1517
tetrachlorocyclopentadienylthiolate, 2681
tetrahydroborate, 1177,2353,2797,3469

tetrahydrofuran, 345,2013,2067,2637,3879
(tetramethylbutyl)phenoxyacetate, 1655
tetramethyl(trimethyleneoligoethyleneglycol-
ether)cyclopentadienyl, 1513
(tolyl)(phenyl)thioamide, 3879
trichlorocyclopentadienyl, -dithiolate,
-thiolate, 2681
tricyanomelamine, 3671
triethanolamine, 2087
tris(trifluoromethyl)phenyl, 2637
Lumazine, *See* Dimethylpteridinedione
Luminescence
copper(I) azide, chloride, perchlorate, tetra-
fluoroborate tungsten(0) bipyridine
carbonyl, 2193
europium(III) azacyclononanone picrate,
3519
europium(III) azamacrocyclic diketones,
1907
europium(III) bis(phenylsulfinyl)butane
nitrate polynuclear, 1123
ruthenium(II) bipyridine
imidazophenanthrolines, 103
ruthenium(II) bipyridine Schiff bases, 4073
Lutetium compounds and complexes
acetate, 2971
chloride, chloro, 1057,3415
oxide, 3415
phthalocyaninate, 2971
tris(pyrazolyl)borate, 1057
Lutidine complexes, *See* Dimethylpyridine

M

Macrocyclic complexes
cadmium(II), 915
cobalt(II), cobalt(III), copper(II), nickel(II),
1201
See also Aza-, Thia-macrocyclic, Calixarene,
Crown ligands, Metallacyclopentane
Macrocyclicdiamidodiamine complexes
copper(II), 741,2021,3525
copper(III), 741
nickel(II), nickel(III), 179,741
Macrocyclicdiamidodiether complexes
calcium, magnesium, potassium, sodium,
strontium, 2335
Macrocyclicdiaminediammonium salts
vanadium(V), 2837
Macrocyclicpolyamine complexes
cadmium(II), 599,2413
chromium(III), 2223
cobalt(III), 4087
copper(II), 259,741,2073
copper(III), 741
iron(II), 3827
iron(III), 2223
lanthanide(III), 3247,3991
lead(II), manganese(II), 599
manganese(III), 2223
mercury(II), 599
nickel(II), 741,2223,2777,3557

nickel(III), 741
 rhodium(III), 2223
 yttrium(III), 3991
 zinc(II), 599,1783,2073,2223,2393,3285
See also below and Bis-, Tetrakis-
 (pyrazolylmethyl)tetraazacyclododecane
Macrocyclicpolyaminecarboxylates
 cadmium(II), 599
 lanthanide(III), 2697
 lead-, manganese-, mercury-, zinc-(II), 599
Macrocyclicpolyaminecarboxylic acid
 complexes, lanthanide(III), 2697
Macrocyclicpolyamineglyoximates
 boron, cobalt(III), 2413
Macrocyclicpolyaminopolyol complexes
 copper(II), nickel(II), zinc(II), 2205
Macrocyclicpolyazapolyether complexes
 lanthanide(III), lead(II), 567
Macrocyclictetraamide complexes
 copper(II), 3261
Magnesium(0) compounds and complexes
 alloys, 2963
 metal, 587,967,2963
Magnesium(II) compounds and complexes
 acetate, 327
 bromide, 1855,4353
 chloride, 541,2087,2145
 dinuclear, diphenylformamidinate, 541
 heterometallic, 2145
 macrocyclicdiamidodiether, 2335
 mesityl, 1855
 methanol, methoxide, 967
 methoxyphenyl, 4353
 methoxypropoxide, 587
 methyl, 541,1255
 nitride, 3635
 phenylselenolate, 1255
 picrate, 2335
 polynuclear, 587
 Schiff base, 4191
 tetrahydrofuran, 541
 triethanolamine, 2087
 tris(tolylpyrazolyl)borate, 1255
 water, 2087,2145
Magnetochemistry of complexes
 chromium(III) fluorouracilate histidine
 chloro hydroxo water, 2491
 chromium(III,VI) manganese(III) benzoate
 chloro oxo pyridine, 1371
 cobalt(II) acetate cyanobenzotriazole, 423
 cobalt(II) azamacrocyclic halide, nitrate,
 thiocyanate, 2229
 cobalt(II) benzothiazolatethione
 bis(diphenylphosphino)ethane,
 tributylphosphine acetonitrile, 1731
 copper(II) bipyridine, phenanthroline
 dibenzoyltartrate water, 3655
 cobalt(II) bis(benzimidazolylmethylene)-
 benzene chloride, 1315
 cobalt(II) chloro diphenylbenzamidine, 133
 cobalt(II) chloride, perchlorate
 pyrazolylmethylpyridine water, 3577
 cobalt(II) furylpropenalsemicarbazone
 halide, 3455
 cobalt(II) macrocyclic Schiff bases
 perchlorate dinuclear, 1201
 cobalt(II) nitrosodicyanomethanide
 imidazole, 463
 cobalt(III) acetate chloro hydroxo methoxide
 oxo water polynuclear, 2109
 cobalt(III) ammonia nitrilotriacetate
 copper(II) perchlorate water, 2135
 cobalt(III) manganese(II,III) benzoate oxo
 pyridine, 1377
 copper(I,II) cyanide diethylenetriamine, 1747
 copper(I,II) levulinate triphenylphosphine
 tetranuclear, 2341
 copper(II) acetate cyanobenzotriazole, 423
 copper(II) azamacrocyclic chloride,
 perchlorate, 3997
 copper(II) azamacrocyclic halide, nitrate,
 thiocyanate, 2229
 copper(II) bipyridine bis(dimethylnitroso-
 pyrimidinedionyl)propylenediamine
 dinuclear perchlorate ethanol, water, 281
 copper(II) bipyridine oxalate nitrate water
 polynuclear, 531
 copper(II) bis(benzimidazolylmethylene)-
 benzene ethylenediamine chloride,
 perchlorate, 1315
 copper(II) bis(butylphenyl)(pyridyl)methyl-
 thiolate chloride, triflate water dinuclear,
 3641
 copper(II) bis(hydroxyaryl)ethylenediamin-
 e, -obutaneoximes chloride water, 2175
 copper(II) (carboxylatooxopropylidene)-
 tetramethylimidazolidineoxyl water, 1279
 copper(II) chloride isatinthiosemi-
 carbazones, 855
 copper(II) chloride, perchlorate Schiff bases
 water dinuclear, 489,2909
 copper(II) cyanoguanidine, imidazole halide,
 nitrate, nitrite, sulfate 805
 copper(II) diazafluorenehydrazine, pyridine
 perchlorate tris(aminoethyl)amine, 187
 copper(II) dimethylpteridinedione nitrate
 water, 607
 copper(II) dimethylpyrazolylmethylpyridine
 nitrite perchlorate, 4331
 copper(II) ethylenediamine pyridine
 tetrafluoroborate, 3687
 copper(II) furylpropenalsemicarbazone
 halide, 3455
 copper(II) gadolinium(III) nitrate Schiff
 bases, 3345
 copper(II) glycinate thiocyanate water, 889
 copper(II) (isobutylphenyl)propionate
 bipyridine, phenanthrolines, 733
 copper(II) levulinate, 2341
 copper(II) macrocyclic Schiff bases
 perchlorate dinuclear, 1201
 copper(II), nickel(II) bis(pyridylalkyl)-
 malamide, -hydroxyglutaramide, 3815

copper(II) nitrosodicyanomethanide
 methylimidazole, 463
 copper(II) norbornenecarboxylates, 3399
 copper(II) potassium, tetramethylammonium
 bis(oxybenzamido)benzene, 4105
 copper(II) purines chloride, nitrate, 1701
 copper(II) pyridine thiosalicylate dinuclear,
 3323
 copper(II) Schiff base pyrazolate
 tetranuclear, 2659
 copper(II) Schiff bases mono-, di-nuclear,
 1771
 copper(II) Schiff bases, 4097,4371
 copper(II) thiosemicarbazones, 1895
 iron(II) vanadium(V) diethyldithiocarbamate
 sulfide tetraethylammonium, 4121
 iron(II,III) cyanide lead-,tin-methyls amino-
 thiazoles polymeric composites, 1585
 iron(II), iron(III) perchlorate
 pyridylbenzimidazole water, 47
 iron(III) fluorouracilate histidine chloro
 hydroxo water, 2491
 iron(III) potassium iminodiacetate oxo water
 dinuclear, 2307
 lanthanide(III) hydroxide nitrate pyridinio-
 acetate perchlorate water polynuclear, 4265
 lanthanide(III) pyridylbenzimidazoles
 thiocyanate, 1417
 lanthanide(III) Schiff base, 535
 manganese(II) acetate cyanobenzotriazole,
 423
 manganese(II) acetyl-, benzoyl-pyridine,
 ethyl-, methyl-nicotinate cyanate, 2877
 manganese(II) bipyridine fumarate water
 polymer, 689
 manganese(II) bipyridine isophthalate
 perchlorate water dinuclear, 1411
 manganese(II) bis(benzimidazolyl-
 methyl)ether acetate, thiocyanate, 3511
 manganese(II) bis(hydroxyethyl)glycinate
 chloride water dinuclear, 3267
 manganese(II) butanedioate bipyridine,
 phenanthroline water dinuclear, 2547
 manganese(II) chloride
 diphenylformamidine dinuclear, 133
 manganese(II) heptanedioate, hexanedioate
 phenanthroline water dinuclear, 2741
 manganese(II) trioxaundecanedioate
 phenanthroline water ethanol, 4247
 manganese(III) bis(benzimidazolyl-
 methyl)ether, -oxamethyl)benzene acetate,
 perchlorate, thiocyanate, 3511
 manganese(III) chloride
 macrocyclicpolyamine water, 2223
 manganese(III) dihydroxyanthraquinonate
 quinolinecarboxylate, 2903
 manganese(III) phenylthiolate
 tetraphenylporphyrinate, 2885
 manganese(III) pyridine salicylate water
 imidazolium dinuclear, 1273
 manganese(III) Schiff bases mono-, poly-
 nuclear acetonitrile, 3787
 manganese(III,IV) acetate oxo propionate
 propionic acid water polynuclear, 1471
 molybdenum(II) carbonyl chloro, iodo
 tris(dimethylpyrazolyl)borate, 1391
 molybdenum(V) cyclophanes oxo
 tris(dimethylpyrazolyl)borate, 3695
 neodymium(III) acetate nitrate
 phenanthroline dinuclear, 1629
 nickel(II) acetate cyanobenzotriazole, 423
 nickel(II) acetylacetonate oxalate
 phenanthroline dinuclear water, 1331
 nickel(II) aminoethylpiperidine
 trifluoroacetate, 3305
 nickel(II) aminoethylpropanediamine
 thiocyanate, 39
 nickel(II) azamacrocycles chloride,
 perchlorate, 3997
 nickel(II) azamacrocyclic halide, nitrate,
 thiocyanate, 2229
 nickel(II) bipyridine ethyldithiocarbonate
 chloroform ethanol polymer, 2667
 nickel(II) bis(benzimidazolylmethylene)-
 benzene chloride, 1315
 nickel(II) chloride ditolylformamidine, 133
 nickel(II) chloride, perchlorate
 pyrazolylmethylpyridine water, 3577
 nickel(II) diethylenetriamine thiocyanate, 39
 nickel(II) furylpropenalsemicarbazone
 halide, 3455
 nickel(II) halide, nitrate thiosemicarbazones
 water, 1925
 nickel(II) macrocyclic Schiff bases
 perchlorate dinuclear, 1201
 nickel(II) nitrate propylethylenediamine,
 2361
 nickel(II) oxalate perchlorate
 tris(aminoethyl)amine, 1331
 nickel(II) oxalate Schiff base dinuclear, 1331
 nickel(II) propyldithiocarbonate tris(diphen-
 ylphosphinomethyl)ethane dinuclear, 2573
 nickel(II) Schiff bases, 1439,2749
 praseodymium dimethylaminoethoxide
 tetramethylheptanedionate, 1223
 praseodymium tris(pyrazolyl)borate, 1057
 rhenium(III) dimethylpyrimidinethiolate
 halide triphenylphosphine, 2087
 ruthenium(II,III) chloro
 norbornenecarboxylates, 3399
 ruthenium(II,III) dibenzoyltartrate water
 dinuclear, 3655
 ruthenium(III) arylazophenolates,
 quinolineolate, Schiff base chloro
 triphenylphosphine, 81
 ruthenium(III) bipyridine chloro, 3039
 ruthenium(III) bipyridine Schiff bases
 perchlorate, 1755
 ruthenium(III) chloride Schiff base
 triphenylphosphine, 2951
 vanadium(III) Schiff bases, 1517
 vanadium(IV) (antipyrine Schiff bases) oxo,
 chloro, 1247

- vanadium(IV) bipyridine, phenanthroline methyl(phenoxyethylene)dithiocarbazates oxo, 1863
- vanadium(IV) oxo isophthalate bipyridines, phenanthrolines sulfate dinuclear, 4379
- vanadium(IV) oxo Schiff bases, 1517,1825, 4179
- vanadium(IV) oxo Schiff base dinuclear, 643
- Malates, molybdenum(VI), sodium, 243
- Maleonitriledithiolates
indium(III), sodium, 2291
See also Isomaleonitriledithiolate
- Malonates
barium, 3953
copper(II), 3261
iron(III), sodium, 3953
See also Cyclohex-, Prop-ylidenemalonate
- Mandelates, lanthanide(III), 4229
- Manganese(0) compounds and complexes
carbonyl, 2041
metal, 61
- Manganese(I) compounds and complexes
bis(diethylphosphino)ethane, 2041
bis(diphenylphosphino)ethane, 2041
bis(diphenylphosphino)propane, 2041
bromotetraachlorocyclopentadienyl, 2681
carbonyl, 2041,2681
chloro, chloroethanol, 2041
cyclopentadienyl, 3663
dinuclear, 2041
heterometallic, 2681
hydride, 2041
pentabromocyclopentadienyl, 2681
phosphine, 3663
tetrabromocyclopentadienyl, 2681
tetrachlorocyclopentadienyl, -thiolate, 2681
tribromocyclopentadienyl, 2681
trichlorocyclopentadienyl, -dithiolate, -thiolate, 2681
tris(dimethylphosphinomethyl)ethane, 3663
- Manganese(II) compounds and complexes
acetate, 423,1471,2365,2547,2741,2755, 3511,4247
acetylacetonate, 71
acetylpyridines, 2877
bentonite, 1403
benzoylpyridines, 2877
bipyridine, 689,897,1411,2547
bis(benzimidazolymethyl)ether, 3511
bis(hydroxyethyl)glycinate, 3267
bromide, bromo, 1679
butanedioate, 2547
chloride, chloro, 71,133,671,897,1403,1679, 2877,3267,3511
cyanate, cyanato, 2877
cyanobenzotriazole, 423
diacetylpyridinedioximate, 877
diethylenetriaminedi(acetyl-phenylalanine-, -tyrosine-octadecylester)triacetate, 2755
dihydroxyanthraquinonate, 2903
dimethylaminopyridinioacetate, 897
dimethylurea, 2903
dinuclear, 133,897,1411,2547,2741,3267
diphenylformamidine, 133
ethanol, 2877,4247
ethylisonicotinate, ethylnicotinate, 2877
fumarate, 689
heptanedioate, hexanedioate, 2741
isonicotinate, 71
isophthalate, 1411
macrocyclicpolyamine, -carboxylates, 599
methylisonicotinate, methylnicotinate, 2877
perchlorate, 689,897,1411,2903
phenanthroline, 2547,2741,4247
phenylenedimethylenebispyrazole, 1679
polymeric, 689
polythionate, 2199
quinolinecarboxylate, semiquinone, 2903
sulfate, 71
superoxide, 3511
tetrahydrofuran, 133
tetrakis(methylpyrazolyl)borate, 671
thiocyanate, 3511
trioxaundecanedioate, 4247
tris(methylpyrazolyl)borate, 671
water, 71,423,689,897,1403,1411,1471,1679, 2365,2547,2741,2877,2903,3267,3511, 4247
- Manganese(II,III) compounds and complexes
acetonitrile, 1719
benzoate, 1377,1719
cluster, 1377
dinuclear, 2903
heterometallic, 1377
oxide, oxo, 1377,1719
polynuclear, 1719
pyridine, 1377,1719
quinolinecarboxylate, semiquinone, 2903
water, 1719
- Manganese(III) compounds and complexes
acetate, 1365,2553,3511,3787
acetonitrile, 3787
acetylacetonate, 71,2553
benzoate, 1371
bis(benzimidazolymethyl)ether, 3511
bis(benzimidazoloxamethyl)benzene, 3511
bis(dichlorosalicylidene)cyclohexane-disulfonamide, 2365
chloride, 2223,2553,2885
cluster, 1365,1371
diethyldithiocarbamate, 1573,2885
dihydroxyanthraquinonate, 2903
dinuclear, 1273,2553,2903
heterometallic, 1365,2365
imidazolium, 1273
isonicotinate, 71
macrocyclicpolyamine, 2223
methanol, 2553
nitrobenzenethiolate, 2885
oxide, oxo, 1365,1371
perchlorate, 2553,2903,3511
phenylthiolate, 2885
polynuclear, 3787
propionate, 1365

pyridine, 1273,1371
 quinolinecarboxylate, 2903
 salicylate, 1273
 Schiff bases, 2553,3787
 semiquinone, 2903
 superoxide, 3511
 tetraphenylphosphonium, 2365
 tetraphenylporphyrinate, 2885
 thiocyanate, 3511
 urea, 2903
 water, 71,1273,1365,2223,3511,3787
Manganese(III,IV) compounds & complexes
 acetate, 1471
 bipyridine, dinuclear, 2199
 oxide, oxo, 1471,2199
 perchlorate, phenanthroline, 2199
 polynuclear, propion-ate, -ic acid, 1471
 water, 1471,2199
Manganese(IV) compounds and complexes
 acetate, bipyridine, dinuclear, oxo,
 perchlorate, water, 3493
Manganese(VII) compounds and complexes
 heterometallic, 71,1471,3787
 oxide, oxo, 71,1371,1377,1471,3787
 tetrabutylammonium, 1371,1377
Mass spectra of compounds and complexes
 aluminium hafnium(IV) alkoxides, 663
 aluminium zirconium(IV) propoxide, 663
 arylthiadiazoliums, 4239
 barium chloride triethanolamine, 2087
 bis(methylbipyridine-ethyl)benzene, 1505
 boron tetrachlorocatecholate, 2325
 cadmium(II) dimethylquinquepyridine
 perchlorate, 2059
 caesium chloride triethanolamine, 2087
 calcium chloride triethanolamine water, 2087
 calcium dibenzoylmethan-ate, -e,
 pentamethyldiethylenetriamine, 2581
 carbaborane sulfur compounds, 1819
 chromium(0) carbonyl cyclopentadienyl-,
 fluorenyl-, indenyl-toluene, 2005
 chromium(III) halide polyselenoethers, 4253
 chromium(V) arylimido pentamethylcyclo-
 pentadienyl phenylthiolate, chloride, 3879
 cobalt iron molybdenum carbonyl acylcyclo-
 pentadienyl sulfide, 3273
 cobalt molybdenum ruthenium sulfur cluster
 carbonyl acylcyclopentadienyl, 2387
 cobalt(II), cobalt(III) (butylphenyl)-
 terpyridine hexafluorophosphate, 3615
 cobalt(III) boron cadmium(II) chloro macro-
 cyclicpolyamineglyoxime pyridine, 2413
 copper(I) chloride dibutylphosphine
 tetranuclear, 3253
 copper(I) thiacycloalkynes phosphines
 hexafluorophosphate, 1529
 copper(I,II) dimethyldiphenylquinquepyrid-
 ine perchlorate acetonitrile dinuclear, 2059
 copper(I,-(II) pyridyl(dimethoxyphenyl)-
 pyrazole tetrafluoroborate, 4257
 copper(II) acetate tris(phenylpyrazolyl)-
 borate, 1535
 cobalt(II) bis(benzimidazolylmethylene)-
 benzene chloride, 1315
 copper(II) bis(butylphenyl)(pyridyl)methyl-
 thiolate chloride water dinuclear, 3641
 copper(II) bromide, chloride phenylpyrazole
 tris(phenylpyrazolyl)borate, 1535
 copper(II) cyanoguanidine, imidazole halide,
 nitrate, nitrite, sulfate 805
 copper(II) phthalocyaninates, 2335
 copper(II) Schiff bases, 4371
 gallium(III) butyl hydroxo (dimethylamino-
 oxide)-, dimethylamino-phenyl dinuclear,
 3407
 gallium(III) butyl dimethylaminophenyl
 dinuclear, 3407
 gallium(III) butyl dimethylaminophenyl
 triphenylphosphineoxide, 3407
 indium(III) bis(acetyloxime)pyridine
 chloride methanol, water, 2183
 indium(III) bis(acetyloxime)pyridine chloro
 maleonitriledithiolate methanol, 2291
 indium(III) bis(phenyliminoethyl)pyridine
 chloride acetonitrile, 2183
 indium(III) pyridinethiolate, 2291
 iridium(I) chloride dibutylphosphine, 341
 iron butylthiolate carbonyl hydrosulfide
 trinuclear, 3475
 iron(0) carbonyl tetrakis(benzylidene)ethene,
 2979
 iron(II) bis[(diphenylphosphino)benzyl-
 idene]ethylenediamine cyclopentadienyl
 tetrafluoroborate, 433
 iron(II) (butylphenyl)terpyridine
 hexafluorophosphate, 3615
 iron(II) carbonyl cyclopentadienyl
 hydroxyalkyl, 869
 iron(II) carbonyl sulfide molybdenum(I),
 tungsten(I) alkyl(cyclopentadienyl-
 carboxylate), 481
 iron(II) dimethylformamido-, (dimethyl-
 thioureacarbonyl)-cyclopentadienyl, 2271
 iron(II) vanadium(V) diethyldithiocarbamate
 sulfide tetraethylammonium, 4121
 iron(III) bromide copper(II) bis(tritoyl-
 porphyrinatophenoxy)ethane, 3779
 iron(III) pyridylpyrazolate pyridylpyrazole
 oxo hexafluorophosphate acetonitrile
 tetranuclear, 1567
 iron(III) pyridylpyrazole oxo sulfate
 methanol water dinuclear, 1567
 lanthanide(III) bis(trimethylsilyl)cyclo-
 octatetraenyl, -pentadienyl, 2067
 lanthanide(III) indenyl
 tetrahydrofurfurylmethoxide, 3723
 lanthanide(III) macrocyclicpolyazapolyether
 nitrate diethylether water, 567
 lanthanide(III) phthalocyaninates, 515
 lead(II) macrocyclicpolyazapolyether
 perchlorate water, 567
 lead(II) tris(pyridylpyrazolyl)borate nitrate,
 2435

lithium, magnesium chloride triethanolamine water, 2087
 magnesium methoxypropoxide tetranuclear, 587
 manganese(I) carbonyl chloro bis(diorganophosphino)alkane, 2041
 mercury(II) chloride thiacycloalkynes phosphines, 1529
 mercury(II) chromium(0), molybdenum(0), tungsten(0) carbonyl cyclopentadienyl-carboxylic acid, 403
 manganese(III) bis(dichlorosalicylidene)-cyclohexanedisulfonamide sodium, tetraphenylphosphonium, 2365
 molybdenum carbonyl alkyl(cyclopentadienylcarboxylate) thio, thiolate polynuclear, 2249
 molybdenum iron carbonyl cyclopentadienyl thio, 2249
 molybdenum(0) dimethylglyoxime, 229
 molybdenum(0) carbonyl tetraalkyldiphosphinedisulfides, 1101
 molybdenum(II) carbonyl pentamethyl-cyclopentadienyl xylylenyls, 4363
 molybdenum(II) nickel(II), palladium(II) chloro nitrosyl (Schiff bases) tris(dimethyl-pyrazolyl)borate, 1439
 molybdenum(IV) carbonyl dimethylglyoxime oxo dinuclear, 229
 molybdenum(VI) cadmium(II) iodo sulfido tetraphenylphosphonium, 2483
 molybdenum(VI) dimethylglyoxime oxo dinuclear, 229
 molybdenum(VI) arylimides tri(propyl)phenylthiolate, 2631
 nickel(0) dimethylphenanthroline, 2711
 nickel(II) azamacrocycles, 253,2599
 nickel(II) bis(butylphenyl)(pyridyl)-methylthiolate, 3641
 nickel(II) bis(diphenylphosphino)ethene bipyridine, phenanthroline tetrafluoroborate, 2827
 nickel(II) (butylphenyl)terpyridine hexafluorophosphate, 3615
 nickel(II) chloride dimethylphenanthroline dichloromethane dinuclear, 2711
 nickel(II) dimethylaminopropoxide, 4197
 nickel(II) phthalocyaninate, 113
 nickel(II) pyridinedithiolate dinuclear, 1931
 nickel(II) Schiff bases, 1439
 nickel(II) tetraphenyldiselenoimido-diphosphinate, 2727
 niobium(V) butylamide butylimide butyl(phenylselenyl)amide, 1081
 osmium carbonyl formylpyrrole hydride trimethylamine polynuclear, 3775
 palladium(II) azamacrocycles chloride perchlorate thiocyanate, 975
 palladium(II) azetidionate pyridines with metal salts, 1663
 palladium(II) bipyridinebisamides chloride, 815
 palladium(II) bis(benzimidazolylmethylene)-benzene ethylenediamine nitrate, 1315
 palladium(II) hydroxyphenylthiolate oxyphenylthiolate tetraethylammonium dinuclear, 369
 palladium(II) oxopyridinethiolate, 369
 palladium(II) pyridinedithiolate dinuclear, 1931
 palladium(II) Schiff bases, 1439
 phosphiniminocyclotriazines, 1089
 platinum(II) acetyl, alkyl halo triphenylphosphine, 2455
 platinum(II) azetidionate cyclooctadiene, phosphines, -phites with metal salts, 1663
 platinum(II) bipyridinebisamides chloro, 815
 platinum(II) bis(butylphenyl)(pyridyl)-methylthiolate, 3641
 platinum(II) pyridinedithiolate dinuclear, 1931
 platinum(IV) bis(pyrazolylmethyl)pyridine methyl iodide, 3003
 potassium chloride triethanolamine, 2087
 potassium tris(methoxyphenylpyrazolyl)-borate, 2435
 praseodymium tris(pyrazolyl)borate, 1057
 (pyridylethyl)picolinamide, 2465
 rhenium(I) bis(butylphenyl)(pyridyl)-methylthiolate carbonyl, 3641
 rhenium(I) bis(dimethylpyrazolylmethyl)-pyridine carbonyl halides, 3003
 rhodium(I) bis(butylphenyl)(pyridyl)-methylthiolate cyclooctadiene, 3641
 rhodium(II) norbornenecarboxylates, 3399
 rubidium chloride triethanolamine, 2087
 ruthenium carbonyl chloro, hydride dibutylphosphide, -phosphine trinuclear, 3253
 ruthenium cobalt carbonyl sulfide molybdenum benzenebis(carbonyl-cyclopentadienyl), 3067
 ruthenium(II) bis(anilino vinyl)bipyridine bipyridine hexafluorophosphate, 2705
 ruthenium(II) bis(butylphenyl)(pyridyl)-methylthiolate carbonyl, 3641
 ruthenium(II) bis(diphenylphosphino-methyl)pyridine triphenylphosphine chloride acetonitrile, 291
 ruthenium(II) (butylphenyl)terpyridine hexafluorophosphate, 3615
 ruthenium(II) carbonyl chloro pyridylacetyl triphenylphosphine diethylether, 577
 ruthenium(II) cyclopentadienyl (cyclopentadienylmethyl)triazacyclononane perchlorate trinuclear, 2889
 ruthenium(II,III) benzonitrile bromo dinuclear benzyl alcohol, 2429
 ruthenium(II,III) norbornenecarboxylates, 3399
 Schiff bases, 2659
 silver(I) dimethylphenanthroline tetrafluoroborate dichloromethane, 2711
 silver(I) pyridyl(dimethoxyphenyl)pyrazole tetrafluoroborate, 4257

silver(I) thiacycloalkynes phosphines hexafluoroantimonate, tetrafluoroborate, triflate, 1529
 sodium chloride triethanolamine, 2087
 sodium Schiff base, 4273
 strontium chloride triethanolamine, 2087
 strontium tetramethylheptanedion-ate, -e, 2581
 tantalum(IV) chloro methylcyclopentadienyl (tripropylphenyl)phosphinidine toluene dinuclear, 721
 tantalum(V) butylamide butylimide butyl(phenylselenyl)amide, 1081
 tantalum(V) chloro methylcyclopentadienyl (tripropylphenyl)phosphine, 721
 tantalum(V) methylcyclopentadienyl diphenylphosphide toluene dinuclear, 721
 tellurium(IV) alkoxides bis(oxyaryl)amides, 4209
 thallium(I) tris(methoxyphenylpyrazolyl)-borate, 2435
 tin(IV) halide trioctylphosphineoxide, 2621
 titanium(III) chloride aminocyclopentadienyls, 195
 titanium(III) fluoro tetranuclear (trimethylsilyl)cyclopentadienyl, 61
 titanium(III) gallium(III) fluoro cyclopentadienyl, 61
 titanium(IV) chloro dicyclohexylamide, 635
 titanium(IV) diethylamide diphenyltriazene, 4017
 tungsten(0) bis(diphenylphosphino)benzene carbonyl fullerene, 2141
 tungsten(0) carbonyl tetraalkyldiphosphinedisulfides, 1101
 tungsten(II) carbonyl pentamethylcyclopentadienyl xylylenyls, 4363
 tungsten-(III), -(III,IV) bis(diphenylphosphino)propane chloride dialkylamide dinuclear, 3893
 tungsten(VI) cadmium(II) iodo sulfido tetraphenylphosphonium, 2483
 vanadium(IV) bipyridine, phenanthroline methyl(phenoxymethylene)dithiocarbazates oxo, 1863
 vanadium(IV) oxo hydroxy-pyronates, -pyridonates, 789
 zinc(II) (alkoxyphenylethyl)piperidine-dithiocarbamates, 315
 zinc(II) azamacrocycles chloride, perchlorate, thiocyanate, 975
 zinc(II) bis(butylphenyl)(pyridyl)-methylthiolate, 3641
 zinc(II) dimethylphenanthroline nitrate, tetrafluoroborate ethanol water, 2711
 zinc(II) macrocyclicpolyamine, 2393
 zinc(II) octaethylporphyrinate ruthenium(II), iridium(III) cymene triflate, 3129
 zinc(II) phthalocyaninate, 113
 zirconium(IV) chloro dicyclohexylamide, 635
 zirconium(IV) chloro ethyltetramethylcyclopentadienyl cyclohexyl-phosphide, -phosphinodithioformate, -phosphino(phenyl)thioamide, 2537
 zirconium(IV) Schiff bases, 1105
See also Fourier transform ion cyclotron resonance mass spectra
 Mercaptoethylsulfonates nickel(II), sodium, 2819
 Mercaptopyridineoxide complexes *See* Oxopyridinethiolates
 Mercury compounds and complexes acetate, 327,613,781,1223,2689 acetylde, 327
 bis(bromo-, bis(chlorodimethyl-, bis(chloropyrazolyl)methane, 3435
 bis(pyrazolylmethyl)tetraazacyclododecane, 3585
 bromide, bromo, 3435
 chloride, chloro, 61,403,1223,1529,2283, 2483,3435,3585
 cyclohexanediaminetetraacetate, 3317
 diacetylpyridinedioximate, 877
 diethyldithiocarbamate, 1573
 dimethylsulfoxide, 613
 dinuclear, diphenylphosphinothioate, 781
 ethanol, 3435
 heterometallic, 403,2483
 hexafluorophosphate, 3585
 hydroxide, hydroxo, 781
 iodide, iodo, 2483,3435
 macrocyclicpolyamine, -carboxylates, 599
 methyl, 781,2283
 nitrate, nitrate, 3317
 nitrobenzenethiolate, 2283
 phenyl, 403,781
 sulfanilamidopyrimidine, 613
 sulfide, 2483
 thiacycloalkynes, triphenylphosphine, 1529
 water, 2483
 Mesityl chromium(II), 2631,3879
 magnesium(II), 1855
 Mesitylammonium salts, chromium(III), 3879
 Mesitylene complexes iron(II), 433
 molybdenum(0), 3533
 Mesitylamides chromium(II), chromium(VI), lithium, 3879
 Mesitylimides chromium(II), 3879
 chromium(VI), 2631,3879
 lithium, 3879
 molybdenum(VI), 2631
 Mesomorphic complexes, metal(II) (alkoxyphenylethyl)piperidinedithiocarbamates, 315
 Metallaboranes nickel(II), 2323,3873
 thiobenzoate, triphenylphosphine, 3873
 Metallacyclophanes, molybdenum(V), 3695
 Methacrylates, niobium(V), 581

Methanide complexes

See Nitrosodicyanomethanide

Methanol complexes and solvates

barium, 4347
cadmium(II), 223,915
cobalt(II), 1201,2651
cobalt(III), 1201
copper(I), 4033,4273
copper(II), 3345,3399
indium(III), 2183,2291
iron(III), 1567
lanthanide(III), 3345
magnesium(II), 967
manganese(III), 2553
molybdenum(VI), 1323,3977
nickel(II), 1201,2819
nickel(III), 3505
silver(I), 453
titanium(IV), 4347
vanadium(II), vanadium(IV), 1517
vanadium(V), 643
zinc(II), 2689

See also Pyridinemethanol

Methoxide

barium, 4347
boron, 2325
cobalt(II), 2651
cobalt(III), 2109
germanium(IV), 2843
magnesium(II), 967
osmium(VI), 1323
sodium, 369,3505
titanium(IV), 4347
vanadium(IV), 1517
vanadium(V), 643
See also Tetrahydrofurfurylmethoxide
Methoxyethoxides, lanthanide(III), 1223
Methoxy(methoxymethylpyrazolyl)methyl-
pyrimidine complexes, copper(II), 939

Methoxyphenoxides

silicon, vanadium(V), 4055

Methoxyphenyl compounds

magnesium(II), 4353
telluride, 33,2509,4337

Methoxyphenylthiosemicarbazides

ruthenium(II), 4313

Methoxypropoxides, magnesium(II), 587

Methoxytrimethylheptanedionates

barium, 2527

Methyl compounds

aluminium, 1337,3429,4385,4389
antimony(V), 2643
arsenic(V), 2761
copper(I), 2979
lead(IV), 1585
lithium, 541,1177,1517,2979
magnesium, 541,1255
mercury, 781,2283
nickel(II), 3641
platinum(II), 1555,2455
platinum(IV), 3003

silicon, 1081,1513,1517,1831,2737,2941,
4055 See also Bis-, Tris-(trimethylsilyl),
Trimethylsilyl

sodium, 2365

tellurium(II), 33

thallium(III), 3609

tin(IV), 573,881,1095,1585,2213,3671,4129

titanium(IV), 25

zinc(II), 3593

(Methylacetato)benzoylcyclopentadienyl
complexes, molybdenum, molybdenum(0),
tungsten, tungsten(0), 3273

Methylamine complexes

platinum(II), platinum(IV), 2421

Methylaminoethanoldithiocarbamates

antimony-, arsenic-, bismuth-(III), 1212

Methylamino(methyl)pyridinium salts

molybdenum(VI), 95

Methylbenzoates, ruthenium(II), sodium, 1343

Methylbutadienylthiolates, platinum(II), 3185

Methylcarbonylcyclopentadienyl complexes

molybdenum(I), 481

Methylcarboxypropyl complex, tin(IV), 4283

Methylcyclopentadienyl

tantalum(IV), tantalum(V), 721

Methyl(cyclopentadienylcarboxylate)

complexes

chromium(0), 403

molybdenum, 2249

molybdenum(0), 403

molybdenum(I), 481,2249

molybdenum(II), 2249

tungsten(0), 403

tungsten(I), 481

Methyldihydrodithiindithiolates

nickel(III), nickel(IV), 1465

Methyldiphenylphosphine complexes

molybdenum(II), 1831

Methyldithiocarbamates, See Ethylsarcosinate-

dithioate, Methyleneoldithiocarbamate

Methyldithiocarbazates

nickel(II), platinum(II), 275

See also Methyl(phenoxymethylene)-
dithiocarbazate

Methylenebis(butylmethylphenoxide)s

lithium, tantalum(V), titanium(IV),

zirconium(IV), 2941

Methylenebisphenoxides

molybdenum(V), 3695

Methylethanoldithiocarbamate, nickel(II), 1971

Methylidyne complexes

See Carboxymethylidyne

Methylidynecarboxylate, cadmium(II), 1803

Methylimidazole complexes

cobalt(II), 463,3941

copper(II), 383,463,2465

nickel(II), 463

ruthenium(II), 143,1793

Methylimidazolinethionate complexes

tin(IV), 795

Methylisonicotinates, manganese(II), 2877

Methylmethacrylate complex, aluminium, 4389

- Methylnicotinate complexes**
 manganese(II), 2877
- Methylnitroaniline complex, cadmium(II), 3929**
- Methylphenoxides**
 aluminium, lanthanide(III), potassium, 3429
- Methyl(phenoxymethylene)dithiocarbazates**
 vanadium(IV), 1863
- Methylphenoxythiolate, niobium(V), 1447**
- Methylphenylselenoether, 1255**
- Methylpropylaminopyrrolidine complexes**
 platinum(II), 4297
- Methylpropylbenzene complexes**
 ruthenium(II), 1811, 3129
- (Methylpyrazolyl)formylbenzylidithiocarbazate**
 cobalt(III), 3735
- Methylpyridine complexes**
 aluminium, 1337
 copper(II), 383, 2465
 molybdenum(III), 839
 zinc(II), 1637
See also Aminomethylpyridine
- Methylpyridylbenzimidazole**
 lanthanide(III), yttrium(III), 1417
- Methylpyridylbenzothiazoline complexes**
 ruthenium(II), 143
- (Methylpyridyl)pyridylmethane complexes**
 copper(I), copper(II), 2299
See also Bis(methylpyridyl)methane
- Methylpyrimidine complexes, *See* Bis(dimethylnitrosopyrimidinedionyl)propylenediamine, Methoxy(methoxymethylpyrazolyl)methylpyrimidine**
- Methylquinoline complexes**
See Quinolinylmethyl
- Methylsulfonates, *See* Triflates**
- Methylthioacetyl, platinum(II), 2455**
- Methylthiolate, iron(III), 999**
- (Methylthiophenylazo)hydroxynaphthalene-sulfonates, copper(II), 3033**
- (Methylthiophenylazo)hydroxyquinoline-sulfonates, copper(II), 3033**
- Methylthiosemicarbazide complexes**
 nickel(II), 695
- Micelles, 1157**
- Molecular mechanics in complexes**
 rhodium(III) chloride phenyl pyrazine triphenylstibine, 4045
 silver(I) thiacycloalkynes, 1529
 technetium(V) iodide oxo trimethylenediamine water, 3311
 zinc(II) dioxypyridyldihydrodibenzocycloheptene, 1693
- Molecular orbitals in complexes, compounds**
 aluminium halide water, 4081
 cobalt(III) amines, phosphines, arsines, 2771
 copper(II) Schiff bases, 903
 dinitrogen binding by iron-molybdenum cofactor of nitrogenase, 653
 iron(III) cyclopentadienyl thiol cleavage, 999
 nickel(II) halo methylthiosemicarbazide, 695
 platinum(II) bismuth(III) chloride sulfide triphenylphosphine fluorophosphate, 2381
- thiophenes and transition metals review, 3219
See also Ab initio, Fenske-Hall, Hartree-Fock, Hückel, Bond valence
- Molecular weight measurements**
 metal(II) (methylpyrazolyl)borates, 671
 zirconium(IV) diphenyltriazene, 4017
See also Osmometry
- Molybdenum compounds and complexes**
 acetate, 1407
 acetyl-, acyl-cyclopentadienyl, 2387
 benzenebis(carbonylcyclopentadienyl), 3067
 benzoylcyclopentadienyl, 3273
 benzylcyclopentadienyl alcohol, 3273
 carbonyl, 707, 1549, 2249, 2387, 3067, 3273
 clusters, 707, 1407, 1549, 2249, 2387, 3067, 3273
 cyclopentadienyl, 707, 1549, 2249
 cyclopentadienylethanol, 2387
 ethyl(cyclopentadienylcarboxylate), 2249
 formylcyclopentadienyl, 2387
 heterometallic, 707, 1407, 1549, 2249, 2387, 3067
 heterometallic sulfide on alumina, 3235
 hydride, hydrido, 1549
 (methylacetato)benzoylcyclopentadienyl, 3273
 methyl(cyclopentadienylcarboxylate), 2249
 nitrogenase cofactor, 653
 oxide, oxo, 1407
 polynuclear, 2249
 selenide, selenido, 707
 sulfide, 2249, 2387, 3067, 3273
 telluride, telurido, 1549
 water, 1407, 2249
- Molybdenum(0) compounds and complexes**
 acetyl-, acyl-cyclopentadienyl, 2387
 benzenebis(carbonylcyclopentadienyl), 3067
 benzoylcyclopentadienyl, 3273
 bipyridine, 1095
 bis(diphenylphosphino)methane, 1095
 carbonyl, 229, 403, 409, 1095, 1101, 1365, 1391, 1407, 1433, 1937, 1945, 2279, 2387, 3067, 3273, 3533, 4363
 cyclopentadienylcarboxylic acid, 403
 dimethylglyoxime, 229
 dimethylphenanthroline, 1095
 ethyl(cyclopentadienylcarboxylate), 403
 ethyltrioxaphospha-bicyclooctane, 3533
 formylcyclopentadienyl, 2387
 heterometallic, 403, 1945, 2279, 2387, 3067, 3273, 4363
 isonicotinate, 2279
 mesitylene, 3533
 metal hydrodesulfurization review, 3165
 (methylacetato)benzoylcyclopentadienyl, 3273
 methyl(cyclopentadienylcarboxylate), 403
 nicotinate, 2279
 norbornadiene, 1101
 pentabenzylcyclopentadienyl, 403
 pentamethylcyclopentadienyl, 4363
 phenanthroline, 1095

phenylphosphine, 1945
 pyridine-dicarboxylate, -sulfonate, 2279
 tetrabutylphosphinedisulfide, 1101
 tetraethylphosphinedisulfide, 1101
 tetrahydrofuran, 409
 tetramethylphosphinedisulfide, 1101
 tetrapropylphosphinedisulfide, 1101
 toluene, 409
 triazaphosphaadamantane, 3533
 triphenylphosphine, 1937
 tris(dimethylpyrazolyl)borate, 1391
Molybdenum(I) compounds and complexes
 bis(phenoxy)-carbonyl, -thioether, 4353
 carbonyl, 481,707,1549,2249
 chloride, chloro, 4353
 cluster, 481
 cyclopentadienyl, 707,1549,2249
 dinitrophenylhydrazone, 481
 dinuclear, 481,707,1549,2249,4353
 ethyl(cyclopentadienylcarboxylate), 481, 2249
 heterometallic, 481,4353
 hydroxyethylcyclopentadienyl, 481
 methylcarbonylcyclopentadienyl, 481
 methyl(cyclopentadienylcarboxylate), 481, 2249
 nitrosyl, 4353
 sulfide, 481
 toluene, tris(dimethylpyrazolyl)borate, 4353
 water, 2249
Molybdenum(II) compounds and complexes
 acetate, 3399,3655
 acetonitrile, 1095,3655
 ammonium, 473
 aryl, 409
 benzenebis(ethenylphenoxide), 4353
 benzene-, biphenyl-bis(phenoxide), 4353
 bipyridine, 1095
 bis(dimethylphospholano)benzene, 473
 bis(diphenylphosphino)ethane, 1095
 bis(diphenylphosphino)methane, 1095,4137
 bis(diphenylphosphino)propane, 1095
 bis(phenoxy)-carbonyl, -thioether, 4353
 butenebis(phenoxide), 4353
 calixareneresorcinolate, 2329
 carbonyl, 409,1095,1391,2249,4363
 chloride, chloro, 409,473,1095,1391,1439, 1831,4137,4353
 dibenzoyltartrate, 3655
 dichloromethane, 473,2329
 dimethylphenanthroline, 1095
 dinuclear, 473,1439,1831,2249,3399,3655, 4353
 diphenylacetylene, 409
 diphenylformamidinate, 1831
 ditolylformamidinate, 1831
 ethenebis(phenoxide), 4353
 ethyl(cyclopentadienylcarboxylate), 2249
 heterometallic, 1095,1439
 iodide, iodo, 1391,2329
 methyl(cyclopentadienylcarboxylate), 2249
 methyltriphenylphosphine, 1831
 naphthadiolates, 4353
 nitrosyl, 1439,2329,4353
 norbornenecarboxylates, 3399
 oxide, oxo, 1439
 pentamethylcyclopentadienyl, 4363
 phenanthroline, 1095
 phenylpropyne, 409
 phenylthiolate, 2249
 polynuclear, 2329
 Schiff base, 409,1439
 tetrafluoroborate, 3655
 tris(dimethylpyrazolyl)borate, 1391,1439, 2329,4353
 tris(pyrazolyl)borate, 2329
 vinyl, 409
 water, 3655
 xylylenyls, 4363
Molybdenum(II,III) complex, chloro, dinuclear, diphenyl-, ditolyl-formamidinate, 1831
Molybdenum(II,VI) complex, butenediyl, butoxide, carbonyl, dinuclear, 839
Molybdenum(III) compounds and complexes
 acetylene, 839
 bis[tris(trifluoromethyl)phenyl]boroxide, 2637
 butoxide, 839
 cyclopentadienyl, 3089
 dimethylamide, 2637
 dinuclear, 839,2637,3089
 methylpyridine, pyridine, 839
 sulfide, thiolates, 3089
Molybdenum(IV) compounds and complexes
 carbonyl, 229
 cluster, 1365
 cyanide, 1259,3857
 cyclopentadienyl, 3089
 diethylthiocarbamate, 2163
 dimethylglyoxime, 229
 dinuclear, 229,3089
 heterometallic, 1259,1365,3857
 oxide, oxo, 229,1365,2163
 propionate, 1365
 sulfide, 3089
 water, 3857
Molybdenum(V) compounds and complexes
 chloride, chloro, 3695
 cluster, 2987
 cyanide, 3857
 dichloromethane, 2987
 diethylthiocarbamate, 165
 diisopropylphenylimido, 165
 dinuclear, 165,447,2987,3695
 ethanedithiolate, heterometallic, 2987
 iodide, iodo, 1391
 metallacyclophanes, methylenebisphenoxide, 3695
 naphthadiolate, 3695
 oxide, oxo, 447,1391,3695
 phenyldithiolate, polynuclear, 3695
 resorcinolate, 3695
 sulfide, 165,447,2987

tetraethylammonium, 2987
 tetraphenylphosphonium, 447
 thiolatobenzoate, thiolatopropionate, 447
 toluene, 1391
 tris(dimethylpyrazolyl)borate, 1391,3695
 water, 447
Molybdenum(VI) compounds and complexes
 acetylacetonate, 1323,2169,3977
 ammonium, 629,801,2483
 binaphthol, binaphtholate, 1323
 butylammonium, 2589
 chloride, chloro, 2169,2631
 citrate, 75
 cluster, 945,1433,1543
 dichloromethane, 1259,1543
 diethyldithiocarbamate, 165,2163
 diisopropylphenylimide, 165,2631
 dimethoxyethane, 2631
 dimethylamino(methyl)pyridinium, 95
 dimethylformamide, 95
 dimethylglyoxime, 229
 dinuclear, 75,165,229,1323
 ethanol, 2169
 heterometallic, 75,95,243,447,629,801,945,
 1365,1407,1433,1543,2483,2589,2761,
 3499,3865
 malate, 243
 mesitylimide, 2631
 methanol, 1323,3977
 methylamino(methyl)pyridinium, 95
 oxide, oxo, 75,95,229,243,447,629,1259,
 1323,1365,1407,1581,2163,2169,2589,
 2761,3865,3977
 polynuclear, 95,243,1259,2589
 Schiff base, 2169,3977
 selenide, 1433
 sulfide, 165,801,945,1543,2483,3499
 tetrabutylammonium, 95,1323,3865
 tetramethylammonium, 1323
 tetraphenylphosphonium, 1433
 triphenylphosphine, 945
 tri(propyl)phenylthiolate, 2631
 water, 75,1365,1407,2589,3865
Monosaccharide complexes
See Galactose, Glucose, Ribose
Montmorillonites
 aluminium pillared, lanthanide(III), 2785
See also Bentonite
Mössbauer spectra of complexes
 iron(II) diphenylphosphinocyclopentadienyl
 nickel(II), palladium(II), platinum(II)
 chlorides decomposition, 171
 iron(II) vanadium(V) diethyldithiocarbamate
 sulfide tetraethylammonium, 4121
 iron(II), iron(III) aminobenzoate, nitrate,
 3353
 iron(II), iron(III) perchlorate
 pyridylbenzimidazole water, 47
 iron(III) barium sodium malonates, 3953
Mutagenicity
 rhodium(III) bi-, pyridyl-quinoline, 1483

N

Naphthadiolates
 molybdenum(II), 4353
 molybdenum(V), 3695
Naphthalenesulfonates
See Hydroxynaphthalenesulfonates
Naphthol complexes, See Binaphthol
Naphtholates
See Bi-, Phenylazo-naphtholate
Naphthoquinone complexes, See Diamino-
naphthoquinone, Amino-, Hydroxy-
(methylmercaptan)naphthoquinone
Natural bond order analysis
 di(chloromethyl)oxatellurane chloride, 2441
Neodymium compounds and complexes
 acetate, 1629,2971
 aminocyclohexanecarboxylic acid, 507
 azacyclononanone, 3519
 bis(phenylsulfinyl)butane, 1787
 bis(trimethylsilyl)cyclooctatetraenyl, 2067
 butanebis(dimethylammonioacetate), 749
 calixarencarboxylate, 1655
 camphorsulfonate, 427,535
 chloride, chloro, 427,1057,1643,1655,3385,
 3415,3429,4143
 crown ligands, 1149
 diethylether, 567
 dimethyl-ammonium, -dithiocarbamate, 1643
 dimethylformamide, 833
 dinuclear, 507,749,1629,3429,3723
 heterometallic, 1655,2067,3345,3429
 indenyl, 3723
 macrocyclicpolyamine, 3247,3991
 macrocyclicpolyazapolyether, 567
 methanol, 3345
 methylphenoxide, 3429
 methylpyridylbenzimidazole, 1417
 nitrate, nitrate, 567,833,1149,1417,1629,
 1787,3247,3345,3991
 oxide, oxo, 535,749,1417,3415
 perchlorate, 507,535,749,1643
 phenanthroline, 427,1629,4143,4153
 phenol, 535
 phthalocyaninate, 2971
 picrate, 3519
 propanebis(dimethylammonioacetate), 749
 pyridylbenzimidazole, 1417
 Schiff base, 535,567,3345
 sulfide, 833
 tetraethyleneglycol, 1149
 tetrahydrofuran, 3385,3429,3723
 tetrahydrofurfurylmethoxide, 3723
 (tetramethylbutyl)phenoxyacetate, 1655
 thiocyanate, 1417,4143,4153
 tris(pyrazolyl)borate, 1057
 water, 507,567,749,833,1629,1643,1787,
 3247,3385
Nickel compounds and complexes
 carbonate, heterometallic, 3013
 heterometallic sulfide on alumina, 3235
 hydrodesulfurization review, 3177

oxide, oxo, 3013

Nickel(0) compounds and complexes
 cyclooctadiene, 2711
 dimethylphenanthroline, 2711
 ethene, 2681
 metal, 1707,4197
 tributylphosphine, 2681

Nickel(I) complex, pyridinedithiolate, 1931

Nickel(II) compounds and complexes
 acetate, 179,253,327,423,1439,1895,2625,
 2727,2991,3549,3615,4097
 acetyl, 3641
 acetylacetonate, 1331
 (alkoxyphenylethyl)piperidinedithio-
 carbamate, 315
 aminoethylpiperidine, 3305
 aminoethylpropanediamine, 39
 amino(methylmercaptan)naphthoquinone,
 933
 ammonia, 4197
 azamacrocycles, 253,2229,2599,3713,3997
 benzotriazole, 423
 benzoylacetoinimates, 3713
 bipyridine, 2667,2827,2863
 bis(benzimidazolylmethyl)amine, 2819
 bis(benzimidazolylmethylene)benzene, 1315
 bis(benzimidazolylmethyl)methylamine,
 2819
 bis(butylphenyl)(pyridyl)methylthiolate,
 3641
 bis(diphenylphosphino)ethane, 1971,4353
 bis(diphenylphosphino)ethene, 2827
 bis(methylbenzimidazolylmethyl)amine,
 2819
 bis(pyridylmethyl)malamide, 3815
 bis(triphenylphosphino)iminium, 3505
 boranes, 2323,3873
 bromide, bromo, 695,1679,1925,2229,2573,
 3455
 (butylphenyl)terpyridine, 3615
 chloride, chloro, 113,133,171,275,315,423,
 671,933,1111,1315,1331,1439,1925,1931,
 1971,2229,2323,2573,2673,2681,2711,
 2777,2819,2827,2925,2991,3455,3505,
 3557,3577,3641,3873,3997,4197,4353
 chloroform, 2667
 cyanide, 2827
 cyanobenzotriazole, 423
 diacetylpyridinedioximate, 877
 diamionaphthoquinone, 933
 diazafluorenone, 2863
 dichloromethane, 1971,2323,2711,2827
 dicyanamide, 463
 diethyldithiocarbamate, 1573
 diethylenetriamine, 39
 dimethylamino-propanol, -propoxide, 4197
 dimethylbipyridine, 2863
 dimethylformamide, 2827
 dimethylphenanthroline, 2711
 dimethylpropylenediamine, 3997
 dimethylpyrazolate, 2659

dinuclear, 133,1201,1315,1331,1679,1931,
 2573,2711,3713,3815,4197
 diphenylformami-dinate, -dine, 133
 diphenylphosphinocyclopentadienyl, 171
 dipropylthiobenzenedithiolate, 1351
 dithiobenzodithiolethione, 1351
 dithiolethionedithiolate, 3505
 ditolylformamidine, 133
 ethanol, 2667
 ethyldithiocarbonate, 2315,2667
 ethylenediamine, 2223,3557,3997
 ethylenediaminetetraacetanilide, 4323
 furylpropenalsemicarbazone, 3455
 galactosebis(thiosemicarbazone), 3549
 glucosebis(thiosemicarbazone), 3549
 heterometallic, 171,1439,2681,2819,3013,
 3815,4197
 hexafluorophosphate, 3615
 hydroxide, 3713
 hydroxy(methylmercaptan)naphthoquinone,
 933
 imidazole, 463
 macrocyclic, 1201
 macrocyclicdiamidodiamine, 179,741
 macrocyclicpolyamines, 741,2223,2777,3557
 macrocyclicpolyaminepolyol, 2205
 mercaptoethylsulfonate, 2819
 methanol, 1201,2819
 methyl, 3641
 methyldithiocarbamate, 275
 methylethanoldithiocarbamate, 1971
 methylimidazole, 463
 methylthiosemicarbazide, 695
 nitrate, nitrate, 463,1679,1925,2229,2361,
 2749,2819,3013
 nitrophenanthroline, 2863
 nitrosodicyanomethanide, 463
 oxalate, 1331,3013
 oxide, oxo, 171,3013
 oxopyridinethiolate, 369
 perchlorate, 1201,1331,1971,2205,2223,
 2659,2777,2819,3557,3577,3713,3997,
 4323
 phenanthroline, 1331,2315,2827,2863
 phenylenediaminetetraacetate, 2925
 phenylenedimethylenebispyrazole, 1679
 phenylpiperidinedithiocarbamate, 315
 phosphite, 171
 phthalocyaninate, 113
 piperidinedithiocarbamate, 315
 polynuclear, 2659,2925
 propoxide, 4197
 propyldithiocarbonate, 2573
 propylenediamine, 3997
 propylethylenediamine, 2361
 pyrazolate, 2659,3815
 pyrazolylmethylpyridine, 3577
 pyridinedithiolate, 1931
 (pyridylethyl)toluenesulfonamide, 1707
 ribosebis(thiosemicarbazone), 3549
 Schiff bases, 1201,1331,1439,2659,2673,
 2749,2863,2991,4097,4191

sulfate, 741,1931
 tetrabutylammonium, 1351
 tetrafluoroborate, 2599,2827
 tetrakis(methylpyrazolyl)borate, 671
 tetraphenylarsonium, 275
 tetraphenylborate, 1971
 tetraphenyldiselenoimidodiphosphinate, 2727
 thiobenzoate, 3873
 thiocyanate, 39,1679,2229,3557,3997
 thiosemicarbazones, 1895,1925
 tributylphosphine, 2681
 trichlorocyclopentadienyl, 2681
 trifluoroacetate, 3305
 trimethylphosphine, 3641
 triphenylphosphine, 1971,2323,2573,3873
 tris(aminoethyl)amine, 1331
 tris(cyanoethyl)phosphine, 2573
 tris(diphenylphosphinomethyl)ethane, 2573
 tris(methylpyrazolyl)borate, 671
 water, 39,171,179,253,275,315,423,463,1111, 1201,1315,1331,1439,1925,1931,1971, 2205,2223,2315,2573,2625,2659,2673, 2727,2749,2777,2819,2827,3013,3305, 3455,3505,3557,3577,3615,3815,3997, 4323
 Nickel(III) compounds and complexes
 bis(triphenylphosphino)iminium, 3505
 dipropylthiobenzenedithiolate, 1351
 dithiaoxadithiolate, 1111
 dithiobenzodithiolethione, 1351
 dithiolethionedithiolate, iodo, 3505
 macrocyclicdiamidodiamine, 179,741
 macrocyclicpolyamine, 741
 methanol, 3505
 methyl-, phenyl-dihydrodithiindithiolate, tetrabutylammonium, 1465
 tetraphenylphosphonium, 1111
 Nickel(IV) complex
 methyl-, phenyl-dihydrodithiindithiolate, tetrabutylammonium, 1465
 Nicotinate
 molybdenum(0), sodium, tungsten(0), 2279
 See also Ethyl-, Methyl-nicotinate, Niflumate
 Niflumates, copper(II), 1461,2721
 Niobium(III) complex, chloro, tetramethyl-piperidyl nitrene, triethylammonium, 1081
 Niobium(IV) compounds and complexes
 dinuclear, heterometallic, iodo, selenido, 995
 Niobium(IV,V) compounds and complexes
 heterometallic, phosphate, 2957
 Niobium(V) compounds and complexes
 acetonitrile, 351
 butylamide, butylamine, butylimide, 1081
 butyl(phenylselenyl)amide, 1081
 butylthiolate, 3911
 chloride, chloro, 351,1081,3911
 dinuclear, 581,1081,3911
 ethoxide, 1447
 heterometallic, 1081,2957
 methacrylate, 581
 methylphenoxythiolate, 1447
 oxide, oxo, 581,2957,3911
 phosphate, 2957
 polynuclear, propoxide, 581
 selenido, sulfido, tetraethylammonium, 3911
 tetraphenylphosphonium, 3911
 triethylammonium, 1447
 Nitrate and nitrate complexes
 aluminium(III), 2785,3985
 barium(II), 1663,2871,3317
 bismuth(III), 1212
 cadmium(II), 1679,3317,3363,3435
 calcium, 1843,2047,3317
 cerium(IV), 3415
 chromium(III), 1119,2047
 cobalt(II), 463,1047,1679,2229,2925,3013
 cobalt(III), 1739,2155,3747
 copper(I), 207,377,4033
 copper(II), 355,463,531,607,805,825,889, 963,1595,1663,1679,1693,1701,1843, 2021,2229,2909,3013,3345,4033
 gallium(III), 3985
 gold(I), 125
 indium(III), 3985
 iron(III), 849,1497,1843,3353,3953
 lanthanide(III), 567,833,963,1123,1149, 1417,1629,1663,1787,1843,2155,2785, 3247,3345,3991,4233,4265
 lead(II), 567,1663,2435,3681
 mercury(II), 3317
 nickel(II), 463,1679,1925,2229,2361,2749, 2819,3013
 palladium(II), 1315
 platinum(II), 57,1315
 silver(I), 25,57,125,153,217,453,525,833,863, 921,1259,1315,1505,1605,1663,1957, 2145,2893,2987,3013,4163
 strontium, 3317
 thorium(IV), 1843
 uranium(VI), 1843,2233
 yttrium(III), 1417,3991
 zinc(II), 109,1297,2711,3013,3317,3435
 Nitrene complexes
 See Tetramethylpiperidyl nitrene
 Nitrides and nitrido complexes, barium, calcium(II), explosion hazard, hafnium, lithium, magnesium(II), strontium, titanium, tungsten, vanadium, zirconium, 3635
 See also Tetrasulfurtetranitride
 Nitrile complexes, *See* Aceto-, Benzo-nitrile
 Nitrilotriacetates
 chromium(III), 3371,4217
 cobalt(III), 2135,2851
 copper(II), 2135,3447
 iron(III), 849
 Nitrilotriacetic acid complexes
 chromium(III), 3371
 Nitrilotrimethylenephosphonates
 copper(II), 3447
 Nitrite and nitro complexes
 barium(II), 805,2447
 cobalt(III), 1739,3565,3757,3807
 copper(II), 805,2447,3815,4331

sodium, 2447,3493,3807,4331
 Nitroaniline complexes
 cadmium(II), 1263,3929
 See also Methylnitroaniline
 Nitrobenzenethiolates
 manganese(III), 2885
 mercury, 2283
 Nitrogenase iron-molybdenum cofactor, 653
 Nitrogen bromide, 2701
 Nitrophenanthroline complexes
 nickel(II), 2863
 vanadium(IV), 4379
 Nitrophenylbutoxy-, Nitrophenylethoxy-
 carbonylthiourea complexes, copper(I),
 2605
 Nitrophenylimidazophenanthroline complexes
 ruthenium(II), 103
 Nitroso complexes, *See* Bis(dimethylnitroso-
 pyrimidinedionyl)propylenediamine
 Nitrosobenzene complexes
 See Nitrosotetramethylbenzene
 Nitrosodicyanomethanide complexes
 cobalt(II), copper(II), nickel(II), 463
 potassium, sodium, 463
 Nitrosotetramethylbenzene complexes
 ruthenium(I), 3339
 Nitrosyl complexes
 molybdenum(I), 4353
 molybdenum(II), 1439,2329,4353
 ruthenium(II), 927
 tetrafluoroborate, 1177
 Nitroxide complexes, *See* Imidazolidineoxyl
 Noble gases, silicon fluorine book review 1267
 Nonlinear optical properties
 cadmium(II) bipyridine methylnitroaniline,
 nitroaniline perchlorate water, 3929
 cadmium(II) iodide Schiff base, 2857
 cadmium(II) phenanthroline perchlorate
 nitroaniline, 1263
 copper(II), nickel(II) Schiff base, 4097
 molybdenum, tungsten silver sulfide
 diethoxyphosphinodithioate
 triphenylphosphine, 945
 Norbornadiene complexes
 molybdenum(0), 1101
 ruthenium(II), 3847
 tungsten(II), 1599
 See also Butoxynorbornadiene
 Norbornenecarboxylates, copper(I), copper(II),
 molybdenum(II), rhodium(II),
 ruthenium(II,III), silver(I), 3399
 Normal pulse voltammetry, nickel(II) Schiff
 base pyrazolates tetranuclear, 2659
 Nuclear magnetic resonance (H-1) spectra
 acyl, 577,1241,2387
 alcohols, 481,869,1129,2087,2387,2581
 aldehyde, 869
 alkene, 67,765,2979
 alkenyl, 869
 alkoxides, 581,587,839,881,1129,1223,2113,
 2843,4209
 alkyl, 33,869,1963,3407,3593,3699,3729,
 4283,4363 *See also* methyl
 alkylammonium, 1081,1447,2563,2689,
 3911,4121
 alkylhalides, 3649
 alkyne, 839,1529
 amides, 345,635,815,855,1013,1081,1337,
 1663,1713,2013,2271,2325,2465,2637,
 2941,3593,3879,3893,4017,4209,4393
 amines, 67,433,525,613,983,1003,1013,1713,
 2087,2405,2413,2421,2581,2705,2889,
 3317,3407,3557,3585,3775,3807,4039,
 4087
 amine oxides, 3407
 arenes, 2005,3129
 arsines, 1307
 aryl, 1291,1343,2405,2563 *See also* phenyl
 aryloxo, 1605,2405,3047,4163
 aryloxides, 369,1447,2405,2941,3047,3429,
 4055,4209,4353,4389
 aryltelluroalkylethers, 2509,4337
 azamacrocycles, 253,453,975,1907,2599,
 3713,3997
 benzenes, 1811
 bipyridines, 393,815,1555,2705,3293,3847
 calixarenes, 1655,1885,4385
 carbaboranes, 2499,2517
 carboxylates, 25,75,423,447,573,581,681,
 1343,1621,1907,2421,3317,3729
 carboxylic acid, 507,1477
 chiral centre, 409
 crown ether, 3865
 cyclooctatetraenyls, 2067
 cyclopentadienyls, 25,61,335,403,433,481,
 707,721,869,999,1513,1549,1713,1775,
 1811,2005,2013,2067,2249,2271,2321,
 2369,2387,2537,2689,2889,3067,3129,
 3273,3327,4363
 dicyanamide, 3671
 dienes, 1599,1663,2147,3641,3847
 dienyls, 2029
 dihydrogen, 1993,2797
 diketonates, 1907,2257,2405,2581,3039
 diphosphinoalkanes, 1453,1775,2141,2353,
 2797,3893,4337
 dithiocarbamates, 165,315,1573,1643,2885,
 3795,4121
 dithiocarbazates, 3735
 dithiophosphates, 3899
 esters, 593,1013,2029,4283,4389
 ethers, 345,567,587,1885,2013,2147,2637,
 3865,3879
 fluxionality, 207,229,393,1129,1529,2067,
 2113,2941,3293,3699
 formamidinates, 541
 formamidines, 1837
 guanidines, 2029
 hydrazones, 481,1241,3681
 hydride, 593,1549,2113,2797,3099,3253,
 3775,3911,4137
 hydroxide, hydroxo, 2843
 imidazoles, 47,103,1169,1417,1793,4163

imidazolinethionate, 795
 imides, 165,1081,2631,3879
 imines, 433,573 *See also* Schiff bases
 indenyl, 2737,3699
 isocyanide, 2397
 isomerism, 2087,2113,2249,2673,2737,3625,
 3705,3795
 ketoiminates, 3713
 macrocycles, 393,567,1783,2205,2413,2673,
 3293,3557,3585
 methyl, 61,573,781,881,1081,1337,2283,
 2643,2737,3429,3479,3593,3609,3641,
 4385,4389
 nitrenes, 1081
 nitriles, 25,291,2141,2797,4257
 nucleotides, 1993,3415,4297
 oximates, 307,2413
 oximes, 229,2257,2413
 phenanthrolines, 393,733,2509,2711,3293,
 3847,4143,4337
 phenols, 369,535,3729
 phenyl, 573,781,795,949,2563,2637,2643,
 4039,4045
 phosphazenes, 1003
 phosphides, 2537,3253
 phosphinates, 2643
 phosphines, 207,291,307,341,577,721,765,
 983,999,1307,1343,1563,1663,1811,1855,
 1957,2029,2041,2087,2257,2369,2509,
 3185,3253,3479,3533,3641,4023,4039,
 4337
 phosphine oxides, 3407
 phosphine sulfides, 1963
 phosphinidines, 721
 phosphinothioates, 949
 phosphites, 1663,3533
 phosphonates, 355,1843
 phosphonium, 2013,3649,4393
 phthalocyaninates, 113,515
 porphyrinates, 681,1621,2809,2843,2885,
 3129,3779
 pyrazine, 4045
 pyrazoles, 1003,3003,3435,3585,4257
 pyrazolylborates, 109,207,671,1057,1297,
 1391,1439,2435,4087,4353
 pyridines, 33,47,525,577,839,1169,1337,
 1417,1637,1885,2059,2279,2369,2413,
 2465,3003,3615,3641,3681,4023,4039,
 4045,4257
 pyridine oxide, 369
 pyridinium, 2563
 pyrimidines, 613,2087,4039
 pyrroles, 3775
 quinolines, 1963
 Schiff bases, 143,409,453,567,1105,1291,
 1343,1439,1605,1755,2213,2321,2405,
 2659,2673,2765,2991,3977,4097,4179,
 4273
 semicarbazones, 3455
 sulfonamides, 613
 sulfoxides, 393
 thiazoles, 1013,1585,1873,4045
 thiazolines, 143
 thioamides, 2537
 thioates, 3327
 thioethers, 393,1291,1529,1811,3293,3705,
 3807
 thioimidodiphosphinates, 4061
 thiolates, 369,999,1447,1577,2087,2249,
 2283,2631,2885,3099,3185,3475,3641,
 3911,4283
 thiones, 4023,4283
 thiosemicarbazide, 1477
 thiosemicarbazones, 855,1895,3549,3625
 thioureas, 2271,2605
 triazenides, 4017
 triazoles, 423
 vinyls, 409,2705,3479
 water, 433,447,1783,2087
 Nuclear magnetic resonance (Li-7) spectra
 aluminium copper magnesium alloys, 2963
 amide, imido, 1081
 triethanolamine, 2087
 Nuclear magnetic resonance (B-11) spectra
 carbaboranes, 1819,2517
 carbaboranes deboronation by fluoride,
 2499,2517
 dibutyldiazabutadiene, 2325
 fluoroborates, 2499,2517
 fluorophenylcarbaboranes, 2499,2517
 oxide hydroxide polynuclear, 2325
 tetrachlorocatecholate, 2325
 Nuclear magnetic resonance (C-13) spectra
 acyl, 577,2387,3775
 alcohols, 869,2087,2581
 alkene, 765,2979
 alkenyl, 839,869
 alkoxides, 839,881,1223,2843,4209
 alkyls, 33,869,1963,3407,3593,3729,4005,
 4283 *See also* methyl
 alkylammonium, 2563,2689
 alkylidyne, 593
 alkyne, 839,1529
 amides, 635,855,1013,1663,2465,2941,3593,
 4017,4209
 amines, 613,1013,1783,2087,2393,2405,
 2581,2705,3407,3585,3775,4005,4087
 amine oxides, 3407
 arene, 2005
 aryls, 409,2405,2563 *See also* phenyl
 arylazo, 2405
 aryloxides, 369,573,2405,2941,4209,4389
 azamacrocycles, 253,975,1907,2599
 azines, 3671
 bipyridines, 393,2705,3293
 calixarenes, 1885
 carbaboranes, 1819,2499,2517
 carbonyl, 409,593,839,869,1599,1937,1963,
 2005,2681,2979,3273,3775
 carboxylate, 25,75,573,681,881,1621,1907,
 3729
 chiral centre, 409
 cyanide, 681, 3671

- cyclopentadienyls, 25,721,869,1513,2005,
2387,2537,2681,2689,3273
- dienes, 1599,1663,2147
- diketonates, 1907,2257,2405,2581
- dithiocarbamate, 165,1573
- dithiolethionedithiolate, 2563,2689
- esters, 593,1013,4283,4389
- ethers, 567,2147,4005
- fluxionality, 207,393,671,3293,3585
- hydrazones, 3681
- imidazoles, 1169,1315,1417
- imidazolinethionate, 795
- imido, 165
- imines, 573 *See also Schiff bases*
- ketone, 2341,2689
- macrocycles, 393,567,1783,2393,3293,3585
- methyl, 573,781,881,2643,3593,3609,4389
- nitriles, 25
- oximates, 307,2413
- oximes, 2257,2413
- phenanthrolines, 393,2711,3293
- phenols, 3729
- phenyl, 573,781,795,949,2643,4005,4039
- phosphates, 4233
- phosphazenes, 1003
- phosphides, 2537
- phosphinates, 2643
- phosphines, 125,207,307,577,721,765,1663,
1855,2257,2341,3185,3333,4023,4039
- phosphine oxides, 3407
- phosphinothioates, 949
- phosphites, 1663,3333
- phosphonates, 355
- porphyrinates, 681,1621,2843,3129
- pyrazoles, 1003,3435,3585
- pyrazolylborates, 207,671,1057,4087
- pyridines, 33,577,1169,1417,2465,3681,
3747,4023,4039
- pyridine oxide, 369
- pyrimidines, 613,4039
- pyrroles, 3775
- quinolines, 1963
- Schiff bases, 409,567,1105,2405,2659
- semicarbazones, 3455
- sulfonamides, 613
- thiazoles, 1013
- thioamides, 2537
- thiocyanate, 125,2393
- thioethers, 393,1529,1983,3293
- thioimidodiphosphinates, 4061
- thiolates, 369,2283,3185,4283
- thiones, 4023,4283
- thiosemicarbazide, 1477
- thiosemicarbazones, 855,1895,3549,3625
- thioureas, 2605
- triazenides, 4017
- vinyls, 409,2705
- Nuclear magnetic resonance (N-14) spectra
bromine azide and bromine reaction, 2701
- Nuclear magnetic resonance (N-15) spectra
thiocyanate, 125
- Nuclear magnetic resonance (F-19) spectra
fluoride ion reaction with carbaboranes,
2499,2517
- fluoroborates, 2499,2517
- fluorodiketonates, 2147
- fluorophenylcarbaboranes, 2499,2517
- hexafluoroacetylacetonate, 2147
- hexafluorophosphate, 1513
- titanium(III) fluoro cyclopentadienyl, 61
- tris(trifluoromethyl)phenyl, 2637
- Nuclear magnetic resonance (Na-23) spectra
triethanolamine, 2087
- Nuclear magnetic resonance (Al-27) spectra of
aluminium complexes
- amidoacetophenone methyl methylpyridine,
1337
- copper lithium magnesium alloys, 2963
- Nuclear magnetic resonance (Si-29) spectra
bis(trimethylsilyl)cyclooctatetraenyl, 2067
- bis(trimethylsilyl)cyclopentadienyl, 2067
- polyhedral alkyl siloxanes, 3357
- triphenylsiloxyn(IV), 4005
- Nuclear magnetic resonance (P-31) spectra
bis(dimethylphospholano)benzene, 473
- diethylaminomethylenephosphonic acid, 355
- (diphenylphosphinito)(diphenylphosphino)-
diphenylphosphazene, 1563
- diphosphines, 433,1307
- diphosphinoalkanes, 927,999,1453,1775,
1957,2141,2353,2509,2531,2789,2797,
2827,3861,3893,4033,4137,4337
- diphosphinoalkenes, 927,2827
- diphosphonates, 1843
- diselenoimidodiphosphinates, 2727
- dithiophosphates, 3899
- fluxionality, 207,1945,2789
- hexafluorophosphate, 999,1513,2369
- nucleotides, 1993,3415
- phosphandiyls, 2537
- phosphate, poly- and pyro-phosphates, 4187
- phosphazenes, 1003
- phosphides, 1945,2537,3253
- phosphinates, 2643
- phosphines, 125,207,291,307,341,377,577,
721,765,1095,1433,1529,1577,1663,1811,
1855,1945,2087,2257,2341,2369,2381,
2405,2509,2537,2681,3185,3253,3333,
3479,4023,4337
- phosphine oxides, 1855,2087,2621,3407
- phosphine selenides, 1855
- phosphine sulfides, 1855,1963
- phosphinidines, 721
- phosphiniminocyclotrithiazenes, 1089
- phosphinodithioates, 3609
- phosphinothioates, 781,949
- phosphites, 3333,3533,3861
- phosphonium, 2013,3649,4393
- phosphorus ylides, 2013
- tetraalkyldiphosphinedisulfides, 1101
- thioimidodiphosphinates, 4061
- triazaphosphaadamantane, 3533
- tris(diphenylphosphinomethyl)ethane, 3099

Nuclear magnetic resonance (V-51) spectra
 iron(II) vanadium(V) diethyldithiocarbamate
 sulfide tetraethylammonium, 4121

Nuclear magnetic resonance (Se-77) spectra
 iron molybdenum tungsten selenium clusters,
 707
 magnesium phenylselenolate
 tris(tolylpyrazolyl)borate, 1255

Nuclear magnetic resonance (Mo-95) spectra
 of complexes
 copper(I) molybdenum(VI) chloride selenide
 triphenylphosphine, 1433
 molybdenum(V) copper(I), silver(I) cyanide
 ethanedithiolate sulfide triphenylphosphine
 tetraethylammonium clusters, 2987
 molybdenum(VI) selenide
 tetraphenylphosphonium, 1433

Nuclear magnetic resonance (Rh-103) spectra,
 rhodium(III) halides bis(dimethylarsino)-,
 bis(dimethylphosphino)-benzenes, 1307

Nuclear magnetic resonance (Cd-113) spectra
 cadmium(II) bis(chlorodimethylpyrazolyl)-
 methane nitrate dinuclear, 3435
 cadmium(II) dihydroxy-benzoate, (-benzoic
 acid) (hydrogen chloride) water, 1399

Nuclear magnetic resonance (Sn-119) spectra
 of complexes
 tin(IV) (alkylaza)-, oxa-heptadiyl halide,
 triphenylsiloxide trans influence, 4005
 tin(IV) bromo chloro, iodo, thiocyanate
 methylcarboxypropyl, 4283
 tin(IV) butyl dihydroxybenzoate, 3729
 tin(IV) halide trioctylphosphineoxide, 2621
 tin(IV) hydroxide,
 methylimidazolinethionate phenyl, 795

Nuclear magnetic resonance (Te-125) spectra
 aryltelluroalkylethers, 2509,4337
 ethyl, 33
 iron molybdenum, tungsten carbonyl
 cyclopentadienyl telluride, 1549
 oxatellurazine alkoxides, 4209
 ruthenium carbonyl tellurido clusters
 tetraphenylphosphonium, 3061

Nuclear magnetic resonance (Pt-195) spectra
 of platinum complexes
 platinum(0) alkene triphenylphosphine, 765
 platinum(0) alkyne triphenyl-phosphine,
 -phosphite, 3333
 platinum(II) (diphenylphosphinito)(diphenyl-
 phosphino)diphenylphosphazene, 1563
 platinum(II) tetraphenyldiselenoimido-
 diphosphinate, 2727

Nuclear magnetic resonance (Hg-199) spectra
 mercury(II) diphenylphosphinothioate
 methyl, phenyl, 781

Nuclear magnetic resonance (Tl-205) spectra
 thallium(III) diethylphosphinodithioate
 methyl, phenyl, 3609

Nuclear magnetic resonance (Pb-207) spectra
 lead(II) dimethylacetate hexanuclear, 19

Nucleotide complexes
 See Adenosine-, Guanosine-monophosphate

O

Octaethylporphyrinates
 iridium(III), ruthenium(II), zinc(II), 3129

Octahedral structures for hexanuclear
 dithiolates, 3899

Octanoates, cobalt(II), 2651

Optical properties, See Nonlinear optical
 properties, Specific optical rotation

Oscillator strengths in absorption spectra
 lanthanide(III) phenanthroline thiocyanate
 water, 4153

Osmium compounds and complexes
 acetonitrile, 3463
 carbonyl, 3463,3775
 formylpyrrole, 3775
 hydride, hydrido, 3463,3775
 phosphide, 3463
 polynuclear, 3463,3775
 trimethylamine, 3775

Osmium(0)complexes, acetonitrile, carbonyl,
 phosphine, polynuclear, 3463

Osmium(II) compounds and complexes
 adenosine-, deoxyguanosine-monophosphate,
 dihydrogen, ethylenediamine, triflate, 1993

Osmium(III) complexes, bis(triphenylphos-
 phonium)ethane, chloro, dichloromethane,
 dinuclear, tetrabutylammonium, 3649

Osmium(VI) compounds and complexes
 binaphtholate, heterometallic, methoxide,
 oxo, water, 1323

Osmometry
 cadmium(II), mercury(II), zinc(II) bis(halo-
 pyrazolyl)methanes halide, nitrate,
 perchlorate, 3435
 di(ethylhexyl)methanediphosphonates, 1843
 lead(II) dimethylacetate hexanuclear, 19
 palladium(II) bis(pyridylethyl)tellurium
 chloro, 33
 platinum(II) bis(pyridylethyl)tellurium
 chloro, 33
 ruthenium(II) halide pyridylbenzo-
 thiazolate triphenylphosphine, 1793

Oxaheptadiyls, tin(IV), 4005

Oxalates
 chromium(III), 531
 cobalt(II), 2155,3013
 copper(II), 531,3013
 heterometallic, 531.3013
 indium(III), 2291
 lanthanide(III), 2155
 nickel(II), 1331,3013
 potassium, 531,2291
 silver(I), zinc(II), 3013

Oxatelluranes
 See Di(chloromethyl)oxatellurane

Oxatellurazines, See Bis(oxyaryl)amide

Oxazole complexes, See Benzoxazole

Oxidation
 ribonolactone by dichromate, 701
 See also Catalysis

Oxidative addition review, 1,1271

Oxides and oxo complexes

aluminium, 335,1937,2785,3985
antimony(III), 1212
arsenic(V), 2761
barium, 2105
beryllium, 441
bismuth(III), 1212
boron, 2325
cerium(IV), 1129,3415
chromium(III), 1371
chromium(V), 2897
chromium(VI), 521,701,1371,1581,2081,
2897,3835,3879
cobalt, 3013
cobalt(III), 1377,2109
copper, 3013
copper(I), 327,2193,3601
copper(II), 607,2105,2193,3323,3601
gallium(III), 3985
heterometallic, 2957,3013,3865,3985
indium(III), 3985
iron(II,III), 4279
iron(III), 1567,1873,2307,3779
lanthanide, 535,749,1223,1361,1417,2037,
3415,3421
lead(II), 19
manganese(II,III), 1377,1719
manganese(III), 1365,1371
manganese(III,IV), 1471,2199
manganese(IV), 3493
manganese(VII), 71,1371,1377,1471,3787
molybdenum, 1407
molybdenum(II), 1439
molybdenum(IV), 229,1365,2163
molybdenum(V), 447,1391,3695
molybdenum(VI), 75,95,229,243,447,629,
1259,1323,1365,1407,1581,2163,2169,
2589,2761,3865,3977
nickel, 3013
nickel(II), 171,3013
niobium(V), 581,2957,3911
osmium(VI), 1323
platinum(IV), 315,2737
rhenium(IV), 2263
rhenium(V), 2087
rhenium(VII), 2263
scandium(III), 3415
selenium(IV), 3921
silicon, 95,713,2737
silver, 3013
silver(I), 1663,2147,3013,3609
sulfur, 1247
technetium(V), technetium(VII), 3311
tellurium(IV), 4209
thallium(III), 363
thorium(IV), 989
tin(IV), 881,3729
titanium(IV), 777,2105,2957,4347
transition metals survey, 1031
tungsten, 3635
tungsten(VI), 713,1323,1581,2193,3865,
3977,3985

uranium(VI), 1843,2233,3921,4205
vanadium(III), 2613
vanadium(III,V), 1081
vanadium(IV), 643,789,933,1247,1517,1825,
1863,2917,2991,4179,4379
vanadium(V), 629,643,1081,1143,2837,4055,
4179
yttrium(III), 1223,1417,3415
zinc, 3013
zinc(II), 267,495,3985
zirconium(IV), 3489
See also Per-, Super-oxide, Silox-anes, -ides
Oxidoarylideneaminocarboxylate, tin(IV), 573
Oximate complexes, *See* Diacetylmon-, Di-,
Pyruvoylamide-oximate
Oxime complexes, *See* Bis(acetyloxime)-
pyridine, Acetophenone-,
Bis(hydroxyaryl)ethylenediaminobutane-,
Di-, Tetralone-oxime
Oxypyridinethiolates
nickel(II), palladium(II), sodium, 369
Oxyphenylthiolates, palladium(II), sodium, 369

P

Palladium compounds and complexes
bis(diphenylphosphino)methane, 2353,2789
bromide, bromo, 2353
carbonyl, chloro, 2353,2789
ethanol, 2353
polynuclear, 2353,2789
Palladium(0) compounds and complexes
bis(diphenylphosphino)methane, 2789
carbonyl, 2789
denitrogenation, deoxygenation,
desulfurization review, 3197
metal, 171
polynuclear, toluene, 2789
Palladium(II) compounds and complexes
acetate, 1291,1439,2405,2789
acetone, 1963
acetonitrile, 2509,2531,4305,4337
acetophenoneoximes, 2257
acetylacetonate, 2257,2405
acetylpyridine(alkyl)thiosemicarbazones,
3625
(alkoxyphenylethyl)piperidinedithio-
carbamate, 315
amines, 1291,2405
amino(methylmercaptan)naphthoquinone,
933
aryls, 1291,2405
(aryliminoethyl)cyclopentadienyl, 335
aryltelluroalkylethers, 2509,4337
azamacrocycles, 975
azetidinonate, 1663
benzonitrile, 1003,1111,1889,3641
benzoxazolyphenol, 1889
benzoylvalinate, 3743
benzylthiolate, 2531
binaphtholate, 1323
bipyridine, 1663,3743

bipyridinebisamide, 815
 bis(benzimidazolylmethylene)benzene, 1315
 bis(butylphenyl)(pyridyl)methylthiolate, 3641
 bis(diphenylphosphino)ethane, 801,2509, 2531,2827,4337
 bis(diphenylphosphino)ethene, 2827
 bis(diphenylphosphino)propane, 2531
 bis(methyl)phenylphosphinesulfide, 1963
 bromide, bromo, 1963,2353,3625
 carbonyl, 1963
 chloride, chloro, 33,171,315,335,369,801, 815,933,975,1003,1111,1291,1315,1323, 1563,1663,1889,1931,1963,2257,2405, 2509,2531,2727,2827,3505,3625,3641, 3743,4305,4337
 chloroform, 33,2827
 cyclooctadiene, 369,2353
 diamionaphthoquinone, 933
 (dimethylaminomethyl)phenyl, 2257
 dimethylformamide, 2827
 dinuclear, 335,369,1291,1315,1931,1963, 2257,2405,3641
 (diphenylphosphinito)(diphenylphosphino)- diphenylphosphazene, 1563
 (diphenylphosphinoamino)diphenyl- phosphineoxide, 1563
 diphenylphosphinocyclopentadienyl, 171
 diphenyltetrakis(dimethyl-, diphenyltetrakis(- pyrazolyl)cyclotriphosphazene, 1003
 ethanol, 1323
 ethylenediamine, 1315
 glutathione, 1157
 heterometallic, 33,171,335,335,801,815,1291, 1439,1663,3625,4305
 hydroxyphenylthiolate, 369
 iodide, iodo, 1963,2827
 isomaleonitriledithiolate, 4305
 nitrate, 1315
 oxopyridinethiolate, oxyphenylthiolate, 369
 perchlorate, 975,1291,1963,2509,4337
 phenanthroline, 1663,2509,3743,4337
 phenylazonaphtholate, 2405
 propanedithiolate, 2531
 pyridine, 33,4305
 pyridinedithiolate, 1931
 quinolinylmethyl, 1963
 Schiff bases, 1291,1439,2405
 sulfide, 801,4305
 tetraacetyethane, 2405
 tetraethylammonium, 369,4305
 tetrafluoroborate, 2827
 tetraloneoxime, 2257
 tetraphenylarsonium, 4305
 tetraphenyldiselenoimidodiphosphinate,2727
 thiocyanate, 975
 thioethers, 1291
 triphenylphosphine, 335,1323,2257,2405, 2509,4305,4337
 triphenylphosphinesulfide, 1963
 triphenylphosphite, 4305
 water, 1157,3743
 Palladium(III) compounds and complexes
 bis(triphenylphosphino)iminium, 3505
 dithiaoxadithiolate, 1111
 dithiolethionedithiolate, iodo, 3505
 tetraphenylphosphonium, 1111
 Palladium(IV) compounds and complexes
 chloro, heterometallic, 2353,2789
 Pentabenzylcyclopentadienyl complexes
 chromium(0), lithium, molybdenum(0), tungsten(0), 403
 Pentabromocyclopentadienyl complexes
 manganese(I), 2681
 Pentafluorophenylthiolates
 chromium(I), chromium(II), chromium(III), chromium(VI), sodium, 2631
 Pentamethylcyclopentadienyl complexes
 chromium(III), chromium(V), 3879
 iridium(III), 1811,2321,3129
 molybdenum(0), molybdenum(II), 4363
 rhodium(III), 1811,2321,3115
 ruthenium(II), ruthenium(III), 433
 sodium, 4363
 titanium(IV), 61
 tungsten(0), tungsten(II), 4363
 Pentamethyldiethylenetriamine complexes
 calcium, 2581
 copper(II), 805
 Pentane solvates, titanium(IV), 777
 Pentanedionates, *See* Acetylacetonate
 Pentanol complexes, lanthanide(III), 1223
 Pentenyl complexes, iron(II), 869
 Pentoxides
 lanthanide(III), 1223
 tungsten(III), tungsten(IV), 2113
 Pentyl compounds
 iron(II), 869
 zinc(II), 3593
See also Hydroxypentyl
 Peptide complexes
 chromium(III), 4171
See also Tripeptide
 Perchlorates and perchlorate complexes
 cadmium(II), 223,915,1263,1301,2059,3363, 3435,3585,3929
 calcium, 507
 cobalt(II), 1201,3577,3735,4323
 cobalt(III), 1201,1739,2135,2771,3395,3735
 copper(I), 67,2193,2299,4163
 copper(I,II), 2059
 copper(II), 119,187,259,281,383,489,599, 909,1201,1315,1357,1505,1747,1771, 2059,2073,2135,2205,2239,2465,2659, 2909,3765,3997,4221,4323,4331
 explosion hazard, 983,3435
 iron(II), iron(III), 47
 lanthanide(III), 507,535,749,1381,1643, 1907,4265
 lead(II), 567,2765
 lithium, 1793,2223,4313
 manganese(II), 689,897,1411,2903
 manganese(III), 2553,2903,3511
 manganese(III,IV), 2199

- manganese(IV), 3493
 nickel(II), 1201,1331,1971,2205,2223,2659,
 2777,2819,3557,3577,3713,3997,4323
 palladium(II), 975,1291,1963,2509,4337
 platinum(II), 2509,4337
 rhodium(I), 1169
 rhodium(III), 307,1169,2223
 ruthenium(II), 81,143,983,1605,1793,2889,
 4073,4313
 ruthenium(III), 1755
 silver(I), 153,453,983,1505,1605,1793,1963,
 2509,4073,4163,4337
 sodium, 143,187,259,1291,1971,2073,2553,
 3511
 yttrium(III), 1357
 zinc(II), 975,2073,2205,2223,3435,3585
- Peroxides and peroxy complexes**
 iron(III), 1497
 uranium(VI), 4205
 vanadium(V), 2837
See also Hydrogen peroxide
- Peroxodisulfates**
 ammonium, 921
 potassium, 741,3747
 sodium, 3039
- Persulfates, potassium, 2365**
- Phenanthroline complexes**
 cadmium(II), 1263
 chromium(III), 3371
 cobalt(III), 3395
 copper(I), 4033
 copper(II), 733,1595,1999,2447,3655
 lanthanide(III), 427,1629,4143,4153,4229
 manganese(II), 2547,2741,4247
 manganese(III,IV), 2199
 molybdenum(0), molybdenum(II), 1095
 nickel(II), 1331,2315,2827,2863
 palladium(II), 1663,2509,3743,4337
 platinum(II), 2509,4337
 ruthenium(II), 81,393,983,1793,3293,3847
 vanadium(III), 2917
 vanadium(IV), 1863,4379
 zinc, 2475
See also Dimethyl-, Diphenyl-, Imidazo-,
 Nitro-, Tetramethyl-phenanthroline
- Phenazine complexes**
See Dipyridophenazine
- Phenol complexes**
 lanthanide(III), 535
See also Catechol, Naphthol
- Phenoxides**
 cadmium(II), 1301
 copper(II), 489
 sodium, 915
See also Arylazo-, Benzenebis-,
 Benzenebis(ethenyl-, Biphenylbis-
 Butenebis-, Dibutylmethyl-, Diformyl-,
 Ethenebis-, Methoxy-, Methyl-,
 Methylenebis(butylmethyl-phenoxide,
 Bis(oxybenzamidato)benzene,
 Bis(phenoxy)-carbonyl, -thioether, Diolate,
 Naphtholate, Oxidoarylideneamino-
 carboxylate, Oxyphenylthiolate, Picrate,
 Quinolineolate
- Phenoxyacetates**
See (Tetramethylbutyl)phenoxyacetate
- Phenyl compounds and complexes**
 antimony(V), 2563,2643
 arsenic(III), 1663
 germanium(IV), 949
 lead(IV), 949
 lithium, 4005,4033
 mercury(II), 403,781
 rhodium(III), 3115,4045
 selenium(II), 1081,1255
 telluride, 2509,4337
 thallium(III), 3609
 tin(IV), 573,795,949,1095,2213,2563,4005,
 4113
See also Dimethylamino-,
 (Dimethylaminomethyl)-, Fluoro-,
 Methoxy-, Pyridylamino-, Trifluoromethyl-
 phenyl, Mesityl
- Phenylacetates, silver(I), sodium, 1957
 Phenylacetylde, copper(I), 327
 Phenylamide complexes, *See* (Diisopropyl-,
 Phenylaminebis(methyl-phenylamide),
 Diphenylformamidinemethanebis(phenyl-
 amido), Mesitylamide
- Phenylamine complexes, ruthenium(III), 1235
 Phenylaminebis(methylphenylamido)
 complexes, cobalt(II), 1177
 Phenylazohydroxyquinolinesulfonates
See (Chloro-, (Methylthio-
 phenylazo)hydroxyquinolinesulfonate
- Phenylazonaphtholates, palladium(II), 2405
 Phenylcyanide complexes, *See* Benzonitrile
- Phenylidihydrodithiindithiolates
 nickel(III), nickel(IV), 1465
 Phenylidithiolates, molybdenum(V), 3695
 Phenylenediaminetetraacetates
 cadmium(II), cobalt(II), copper(II),
 nickel(II), sodium, zinc(II), 2925
- Phenylenedimethylenebispyrazole complexes
 cadmium(II), cobalt(II), copper(II),
 manganese(II), nickel(II), zinc(II), 1679
- Phenylhydrazinium complexes
 ruthenium(III), 1235
- Phenylhydrazone complexes
 tellurium(II), 1241
See also Dinitrophenylhydrazone
- Phenylimidazophenanthroline complexes
 ruthenium(II), 103
See also Chloro-, Hydroxy-, Nitro-
 phenylimidazophenanthroline
- Phenylimides**
 tantalum(V), 1177
 tungsten(IV), tungsten(VI), 2113
See also Butyl-, Isopropyl-phenylimide,
 Mesityl-, Tollyl-imide
- Phenylphosphide complex, platinum(II), 1945
 Phenylphosphine complexes
 molybdenum(0), 1945
See also (Tripropylphenyl)phosphine

- Phenylpiperidinedithiocarbamates
nickel(II), 315
- Phenylpropenal complexes, platinum(0), 765
- Phenylpropyne complexes
molybdenum(II), 409
- Phenylpyrazole complexes, copper(II), 1535
- Phenylselenolates, magnesium(II), 1255
- Phenyltetrazolethiolates, tin(IV), 4129
- Phenylthiol complexes, *See* Aminophenylthiol
- Phenylthiolates
chromium(V), 3879
iron(I), 2249
manganese(III), 2885
molybdenum(II), 2249
sodium, 2885
See also Bromo-, Hydroxy-, Oxy-,
Pentafluoro-, Tri(propyl)-, Vinyl-
phenylthiolate, Methylphenoxy-,
Nitrobenzene-, Phenyl-di-thiolate
- Phenylthiosemicarbazides, *See* Bromophenyl-,
Chlorophenyl-, Methoxyphenyl-, Toly-
thiosemicarbazide
- Phosphaboranes, 2323
- Phosphandiyls, *See* Cyclohexylphosphandiyl
- Phosphate and poly- and pyro-phosphates
ammonium, 2957
chromium(III), 2047
cobalt(III), 4187
iron(II), iron(III), 171
heterometallic, 2589,2957
niobium(IV,V), niobium(V), 2957
sodium, 2589,4187
tin(II), titanium(III,IV), titanium(IV), 2957
See also Bis(nitrophenyl)-,
Dinitrophenyldiethyl-, Hexafluoro-,
Tributyl-phosphate, Apatite, Nucleotide
- Phosphazene complexes
See Tetrakis(pyrazolyl)cyclotriphosphazene
- Phosphide complexes, osmium, 3463
See also Cyclohexyl-, Dibutyl-, Diphenyl-,
Phenyl-phosphide
- Phosphinates
See Di-, Dimethyl-, Diphenyl-phosphinate
- Phosphine complexes
manganese(I), 3663
osmium(0), 3463
rhenium(I), 3663
See also Bis(methyl)phenyl-, Butylmesityl-,
Di-, Dibutyl-, Dimethyl-, Diphenyl-,
Diphenyltolyl-, Methyl-diphenyl-, Phenyl-,
Tri-, Tributyl-, Tricyclohexyl-, Triethyl-,
Trimethyl-, Triphenyl-, Tripropyl-,
Tris(anthracenyl)-, Tris(cyanoethyl)-,
Tritolyl-phosphine,
Triazaphosphaadamantane
- Phosphine oxide complexes, *See* Butylmesityl-,
Trimethyl-, Trioctyl-, Triphenyl-phosphine
oxide
- Phosphine selenides
See Butylmesitylphosphineselenide
- Phosphine sulfides, *See* Bis(methyl)phenyl-,
Butylmesityl-, Triphenyl-phosphinesulfide,
Diphosphinedisulfide
- Phosphinidine complexes
See (Tripropylphenyl)phosphinidine
- Phosphiniminocyclotrithiazenes, 1089
- Phosphinites, *See* Diphenyl-phosphinito
- Phosphinodithioates
See Diethoxy-, Diethyl-phosphinodithioate
- Phosphinothioates, *See* Diethyl-, Dimethyl-,
Diphenyl-phosphinothioate
- Phosphinodithioformates
See Cyclohexylphosphinodithioformate
- Phosphites, iron(III), nickel(II), 171
See also Hypo-, Triphenyl-phosphite,
Ethyltrioxaphosphabicyclooctane
- Phosphonates, *See* Diethylaminomethylene-,
Di-, Ethylenediaminetetra(methylene-),
Iminodimethylene-, Nitrilotrimethylene-,
Isopropylmethylfluoro-phosphonate
- Phosphonium salts, *See* Bis(methyl)diphenyl-,
Ethyltriphenyl-, Tetraphenyl-phosphonium,
Bis(tricyclohexyl-, Bis(triphenyl-
phosphonium)ethane
- (Phosphonomethyl)glycinates
copper(II), 3447
See also Bis(phosphonomethyl)glycinate
- (Phosphonomethyl)iminodiacetates
copper(II), 3447
- Phosphoranes, *See* Ylide
- Phosphorodithioates, *See* Dithiophosphate
- Phosphorus chloride, 1247
- Phthalocyaninates
copper(II), 1877,2335
lanthanide(III), 515,2971
lithium(III), 515
nickel(II), 113
zinc(II), 113,1877
See also Tetrasulfophthalocyaninate
- Physiological studies
chromium(III) oligopeptide phosphatase
activation, 4171
cobalt(III) dipyrrophenazine phen-
anthroline, interaction with DNA, 3395
ruthenium(II) imidazophenanthroline
bipyridine, interaction with DNA, 103
See also Anti-fungal, -microbial, -tumour,
Mutagenicity
- Picolinamide complexes, *See* Picolyl-,
(Pyridylethyl)-, Toly-picolinamide
- Picolinates
cadmium(II), 235
cobalt(III), copper(II), 2135
ruthenium(II), 1605
silver(I), silver(II), 921
vanadium(III), vanadium(IV), 2917
- Picoline complexes, *See* Methylpyridine
- Picolinic acid complexes, cobalt(III), 2135
- Picolylpicolinamide complex, copper(II), 383
- Picrates
calcium, 2335
lanthanide(III), 1491,3519
magnesium, potassium, sodium, strontium,
2335

Piperidine complexes
 tungsten(0), 2279
 See also Aminoethylpiperidine
 Piperidinedithiocarbamates
 nickel(II), 315
 See also (Alkoxyphenylethyl)-, Phenyl-
 piperidinedithiocarbamate
 Piperidine-formamido-, (-thioureacarbonyl)-
 cyclopentadienyl complexes, iron(II), 2271
 Piperidinium salts
 fumarate, 689
 isophthalate, 1411,4379
 Pivaloyltrifluoroacetate, copper(II), 1999
 Platinum compounds and complexes
 benzene, 2353
 bis(diphenylphosphino)methane, 2353,3861
 carbonyl, 2353,3861
 chloride, chloro, 2353
 cluster, heterometallic, 3861
 hexafluorophosphate, 3861
 polynuclear, 2353,3861
 Platinum(0) compounds and complexes
 alkenes, benzylideneacetone, 765
 bis(diphenylphosphino)methane, 2353
 carbonyl, 2353
 dichloroacetylene, 3333
 dinuclear, 2353
 ethene, 765
 metal, 171,3795
 phenylpropenal, 765
 stilbene, 2455
 styrene, tricyclohexylphosphine, 765
 triethylphosphine, 3185
 triphenylphosphine, 765,2455,3333
 triphenylphosphite, 3333
 Platinum(II) compounds and complexes
 acetonitrile, 3795
 acetyl, acetylthiolate, 2455
 adenosinemonophosphate, 4297
 ammonia, 2421,3705
 aryltelluroalkylethers, 2509,4337
 azamacrocyclic, 3539
 azetidionate, 1663
 benzonitrile, 1003
 benzoylvalinate, 3743
 binaphtholate, 1323
 biphenylthiolate, 3185
 bipyridine, 1555,3743
 bipyridinebisamide, 815
 bis(benzimidazolylmethylene)benzene, 1315
 bis(butylphenyl)(pyridyl)methylthiolate,
 3641
 bis(diphenylphosphino)ethane, 2509,4337
 bis(diphenylphosphino)methane, 1663,2353
 bromide, bromo, 2455,3795
 butylisocyanide, 1663
 cantharidinate, 57
 chloride, chloro, 33,57,171,275,815,1003,
 1315,1323,1555,1563,1663,1931,1945,
 2353,2455,2509,2727,2809,3333,3505,
 3539,3641,3743,3795,4297,4337
 chloroacetyl, 2455
 chloroacetyl, 3333
 cyclooctadiene, 1663,2455,3641
 cyclopropylamine, 3705
 diaminocyclohexane, 3705
 diaminopropane, 57
 dibutylbipyridine, 1555
 dichloromethane, 1663,2381
 diethylaminopyrrolidine, 4297
 dimethylaminopyrrolidine, 4297
 dimethylbipyridine, 1555
 dimethylsulfide, 1555
 dimethylsulfoxide, 815,3795
 dinuclear, 57,377,1315,1555,1931,2381
 (diphenylphosphinito)(diphenylphosphino)-
 diphenylphosphazene, 1563
 (diphenylphosphinoamino)diphenyl-
 phosphineoxide, 1563
 diphenylphosphinocyclopentadienyl, 171
 diphenyltetrakis(dimethyl-, diphenyltetrakis(-
 pyrazolyl)cyclotriphosphazene, 1003
 dithian-, dithiepane-ylidenemalonate, 3705
 ethanol, 1323
 ethylenediamine, 1315,3705
 ethylmethylaminopyrrolidines, 4297
 ethylsarcosinatedithioate, 3795
 ethylsarcosinate(methyl)dithioate, 3795
 ethylthioacetyl, 2455
 guanosinemonophosphate, 4297
 heterometallic, 33,57,171,275,377,815,1003,
 1663,1945,2353,2381,2455,2509,3505,
 3539,4337
 hexafluorophosphate, 2353,2381
 iodide, iodo, 57,2421,2455,3705
 methyl, 1555,2455
 methylamine, 2421
 methylbutadienylthiolates, 3185
 methylthiocarbamate, 275
 methylpropylaminopyrrolidine, 4297
 methylthioacetyl, 2455
 nitrate, nitrate, 57,1315
 perchlorate, 2509,4337
 phenanthroline, 2509,4337
 phenylphosphide, 1945
 propylidenemalonate, 2421
 pyridine, 33,2455
 pyridinedithiolate, 1931
 sulfate, 3705
 sulfide, 377,2381
 tetra(chlorophenyl)porphyrinate, 2809
 tetra(methoxyphenyl)porphyrinate, 2809
 tetraphenylarsonium, 275
 tetraphenyldiselenoimidodiphosphinate, 2727
 tetraphenyl-, tetratolyl-porphyrinate, 2809
 triethylphosphine, 1945,3185
 triphenylphosphine, 377,1323,1663,2381,
 2455,2509,3333,4337
 triphenylphosphite, 1663,3333
 tris(cyanoethyl)phosphine, 1663
 water, 3705,3743
 xylylisocyanide, 1663
 Platinum(III) compounds and complexes
 bis(butylphenyl)(pyridyl)methylthiolate,3641

bis(triphenylphosphino)iminium, 3505
 dithiolethionediithiolate, 3505
Platinum(IV) compounds and complexes
 acetate, ammonia, 2421
 bis(pyrazolylmethyl)pyridine, 3003
 butyrate, 2421
 chloride, chloro, 1315,1885,2353,2809
 heterometallic, 1885,2353
 hexafluorophosphate, 3003
 hydroxide, hydroxo, 2421
 iodo, methyl, 3003
 methylamine, 2421
 oxide, oxo, 315,2737
 polynuclear, 3003
 propionate, propylidenemalonate, 2421
 pyridylcalixarene, 1885
 tetra(chlorophenyl)-, tetra(methoxyphenyl)-,
 tetraphenyl-, tetratolyl-porphyrinate, 2809
 trifluoroacetate, 2421
Podates, potassium, 1513
Polarography
 copper(II), nickel(II), palladium(II), oxo-
 vanadium(IV) naphthoquinones, 933
 gallium-, indium-(III) [(hydroxychlorophen-
 yl)azo]hydroxyquinolinesulfonate, 363
See also Differential pulse polarography
Polyamine complexes
See Macrocyclicpolyamine
Polyaminopropoxides, iron(III), 1497
Polyether complexes, *See* Crown ligands,
 Macrocyclicpolyazapolyether,
 Tetraphenyltrioxaundecanediamide
Polypyridines complexes
 cadmium(II), copper(I,II), 2059
See also Bi-, Ter-pyridine
Polystyrene compounds and complexes
 germanium, lithium, 1767
Polystyryl-ethylene, -methylene compounds
 germanium, 1767
Polysulfides
 caesium, sodium, uranium(VI), 3921
Polythionates, manganese(II), potassium, 2199
Porphyrinate complexes
See Octaethyl-, Tetraphenyl-porphyrinate
Potassium compounds and complexes
 azide, 825
 bis(oxybenzamidato)benzene, 4105
 bis(pyrazolyl)borate, 207
 bis(trimethylsilyl)cyclopentadienyl, 2067
 butoxide, 1315,2321,3099
 calixarene-carboxylate, 1655
 carbonate, 3357
 chloride, 1513,1663,2087
 citrate, 75
 cyanide, 1241,1259,2199
 dicyanamide, 463
 di(methoxy)phenylpyrazolate, 4257
 dimethylformamide, 4105
 dioxane, diphenylphosphide, 721
 dithianylidenemalonate, 3705
 dithiaoxadithiolate, 1111
 dithiopenylidenemalonate, 3705
 galactarate, 2055
 heterometallic, 33,57,71,75,275,321,531,701,
 815,825,909,1023,1111,1119,1193,1235,
 1259,1323,1361,1371,1471,1513,1581,
 1585,1663,1723,1885,2145,2307,2353,
 2397,2509,2789,2837,2851,2951,3429,
 3505,3539,3787,3851,3857,3985,4105,
 4205,4337
 hexafluorophosphate, 1371,1513,1567
 hydride, 3429
 hydroxide, 4105,4205
 iodide, 57,2145,2483
 isomaleonitriledithiolate, 1637
 macrocyclicdiamidodiether, 2335
 metal, 1177
 methylphenoxide, 3429
 nitrosodicyanomethanide, 463
 oxalate, 531,2291
 peroxodisulfate, 741,3747
 persulfate, 2365
 picrate, 2335
 podates, 1513
 polynuclear, 3429
 polythionate, 2199
 Schiff base, 1119
 tellurocyanate, 1241
 tetrahydroborate, 671,1297,2435
 tetrahydrofuran, 3429
 tetrakis(methylpyrazolyl)borate, 671
 tetrakis(pyrazolyl)borate, 207
 (tetramethylbutyl)phenoxyacetate, 1655
 tetraphenyldiselenoimidodiphosphinate, 2727
 thiocyanate, 125,223,321,1119,1417,1713,
 1771,2223,2271,2393,2563,3511,3557,
 3997,4143
 triethanolamine, 2087
 triethylenetetraaminehexaacetate, 1361,2037
 tris(chlorodimethylpyrazolyl)borate, 207
 tris(dimethylpyrazolyl)borate, 207,1297,
 1391
 tris(methoxyphenylpyrazolyl)borate, 2435
 tris(methylphenylpyrazolyl)borate, 109
 tris(methylpyrazolyl)borate, 207,671
 tris(phenylpyrazolyl)borate, 1535
 tris(pyrazolyl)borate, 207,1057,4087
 tris(pyridylpyrazolyl)borate, 1567,2435
 tris(trimethylsilyl)cyclooctatetraenyl, 2067
 water, 1119,1361,2055
Potentiometric titrations of complexes
 cadmium(II), zinc(II) chloride
 thiazolinyldiazine water, 297
 cadmium(II) phenylenediaminetetraacetate
 polynuclear, 2925
 cadmium(II), calcium(II), cobalt(II), iron(III),
 magnesium(II), nickel(II), zinc(II) Schiff
 base, 4191
 chromium(VI) oxo acidification, 3835
 cobalt(II) phenylenediaminetetraacetate
 polynuclear, 2925
 cobalt(III) chloro thiazolinyldiazine water,
 1137

- copper(II), lead(II), nickel(II)
 diethylaminomethylene-phosphonate, 355
 copper(II) iminodiacetate, nitrilotriacetate,
 and their phosphonate derivatives 3447
 copper(II) macrocyclicpolyaminepolyol,
 2205
 copper(II), nickel(II) phenylenediamine-
 tetraacetate polynuclear, 2925
 lanthanum(III) azamacrocyclic nitrate, 4233
 molybdenum(VI) malate oxo, 243
 molybdodimethylarsinate, 2761
 pyridylcalixarene protonation, 1885
 vanadium(III) histidine, 2613
 zinc(II) phenolic cyclams, 3285
 zinc(II) phenylenediaminetetraacetate
 polynuclear, 2925
- Praseodymium compounds and complexes
 acetonitrile, 1149
 aminocyclohexanecarboxylic acid, 507
 bis(trimethylsilyl)amide, 1223
 bis(trimethylsilyl)cyclooctatetraenyl, 2067
 bis(trimethylsilyl)cyclopentadienyl, 2067
 butanol, 1223
 calixarene-carboxylate, 1655
 camphorsulfonate, 427,535
 chloride, chloro, 427,1057,1643,1655,2067,
 3385,3415,4143
 crown ligands, 1149
 diethylether, 567
 dimethylaminoethoxide, 1223
 dimethyl-ammonium, -dithiocarbamate, 1643
 dimethylformamide, 833
 dinuclear, 507,1223,2697,3723
 heterometallic, 1223,1655,1663
 indenyl, 3723
 macrocyclicpolyamine, 3991
 macrocyclicpolyaminecarboxylate, 2697
 macrocyclicpolyaminecarboxylic acid, 2697
 macrocyclicpolyazapolyether, 567
 metal, methoxyethoxide, 1223
 methylpyridylbenzimidazole, 1417
 nitrate, nitro, 567,833,1149,1417,1663,
 3991
 oxide, oxo, 535,1223,1417,3415
 pentanol, pentoxide, 1223
 perchlorate, 507,535
 phenanthroline, 427,4143,4153
 phenol, 535
 polynuclear, propoxide, 1223
 pyridylbenzimidazole, 1417
 Schiff base, 535,567
 sulfide, 833
 tetrahydrofuran, 3385,3723
 tetrahydrofurfurylmethoxide, 3723
 (tetramethylbutyl)phenoxyacetate, 1655
 tetramethylheptanedionate, 1223
 thiocyanate, 1417,4143,4153
 trimethyl-phosphineoxide, -siloxide, 1223
 tris(pyrazolyl)borate, 1057
 water, 567,833,2697,3385
- Propanebis(dimethylammonioacetate)
 complexes, lanthanide(III), 749
- Propanedithiolates, palladium(II), sodium, 2531
 Propanol complexes and solvates
 cerium(IV), 1129
 hafnium(IV), 663
 lithium, 4197
 zirconium(IV), 663
See also Aminopropanol
- Propene complexes, *See* Phenylpropenal
- Propionates
 manganese(III), 1365
 manganese(III,IV), 1471
 molybdenum(IV), 1365
 platinum(IV), 2421
 zinc(II), 113
See also (Isobutylphenyl)-, Thiolato-
 propionate
- Propionic acid complexes
 manganese(III,IV), 1471
- Propoxides
 aluminium, 663
 cerium(IV), 1129
 hafnium(IV), heterometallic, 663
 lanthanide(III), 1223
 nickel(II), 4197
 niobium(V), 581
 tellurium(IV), 4209
 titanium(IV), 777,1223
 tungsten-(III), -(IV), -(VI), 2113
 vanadium(V), 1143
 yttrium(III), 1223
 zirconium(IV), 663
See also Dimethylamino-, Methoxy-,
 Polyamino-propoxide
- Propyl compounds, *See* Methylcarboxypropyl
- Propylamide complexes, *See* Diisopropylamide
- Propyldithiocarbonates, nickel(II), 2573
- Propylenebis(actoylepyridineimine) complexes
 copper(II), 119
- Propylenediamine complexes
 copper(II), nickel(II), 3997
See also Bis(dimethylnitrosopyrimidine-
 dionyl)-, Dimethyl-propylenediamine
- Propylethylenediamine complexes
 nickel(II), 2361
- Propylidenemalonates
 barium, platinum(II), platinum(IV), 2421
- Propylthiolates, iron(III), 999
- Propyne complexes, *See* Phenylpropyne
- Proteins, *See* Transferrin
- Pteridine complexes
See Dimethylpteridinedione
- Purine complexes, *See* Guanine
- Pyrazinates
 copper(II), 825
- Pyrazine complexes
 cadmium(II), 417
 iron(II), 1023
 rhodium(III), 4045
 ruthenium(III), 1023
- Pyrazolates, copper(II), nickel(II), 2659,3815
See also Di(methoxy)phenyl-, Dimethyl-,
 Pyridyl-pyrazolate

- Pyrazole complexes, *See* Methyl-, Phenyl-, Phenylenedimethylenebis-, Pyridyl-pyrazole, Bispyrazolymethane, Methoxy(methoxymethylpyrazolyl)methyl-pyrimidine, Bis-, Tetrakis-(pyrazolyl)-compounds
- Pyrazolonates, *See* Antipyrine, Acylmethylphenylpyrazolonates
- Pyrazolylborates, *See* Bis-, Tetrakis-, Tris-pyrazolylborate
- Pyrazolylmethylpyridine complexes cobalt(II), nickel(II), 3577
See also Bis-, Dimethyl-(pyrazolylmethyl)pyridine
- Pyridine complexes chromium(III), 1371
cobalt(III), 1377,2413
copper(I), 4033
copper(II), 187,383,489,1013,1477,2341, 3323,3687
lithium, 2637,3671
manganese(II,III), 1377,1719
manganese(III), 1273,1371
molybdenum(III), 839
palladium(II), 33,4305
platinum(II), 33,2455
rhenium(III), 3649
rhodium(III), 4045
tungsten-(III), -(IV), -(VI), 2113
vanadium(II), 1517
See also below and Acetyl-, Arylazo-, Benzoyl-, Bi-, Bis(benzimidazolyl)-, Bis(diphenylphosphinomethyl)-, Bis(phenyliminoethyl)-, Cyano-, Di-, Diacetyl-, Dimethanol-, Dimethyl-, Ethylmethyl-, Methyl-, Poly-, Pyrazolylmethyl-pyridine, Bis(pyridyl)-ethylene, -ethyl)malamide, -propane, Bis(pyridylmethyl)-alaninate, -glycinate, -hydroxyglutaramide, -malamide, Dioxopyridyldihydrodibenzocycloheptene, Dipicolinoyltriazaoctane, Phenanthroline, Trispyridylmethylamine
- Pyridinebiscyclopentadienyl complexes sodium, titanium(III), 195
- Pyridinecarboxylates and ester complexes
See Isonicotinate, Nicotinate, Picolinate
- Pyridinecarboxylic acid complexes
See Picolinic acid
- Pyridinedicarboxylates molybdenum(0), sodium, tungsten(0), 2279
- Pyridinedicarboxylic acid complexes copper(I), 4033
- Pyridinedithiolates, nickel(I), nickel(II), palladium(II), platinum(II), 1931
- Pyridinediyl-diethylidenedioxamohydrazides copper(II), 4221
- Pyridine-imine complexes
See Propylenebis(actoylpyridineimine)
- Pyridinemethanol complexes, copper(II), 1461
- Pyridine oxide complexes
See Oxopyridinethiolates
- Pyridinesulfonates molybdenum(0), sodium, tungsten(0), 2279
- Pyridinethiol complexes, silver(I), 1543
- Pyridinethiolates cobalt(I,III), cobalt(II), 1425
indium(III), 2291
See also Bis(butylphenyl)(pyridyl)methyl-, Oxopyridine-, Pyridinedi-thiolate
- Pyridinethione complexes, copper(I), 4023
- Pyridinioacetate complexes lanthanide(III), 4265
- Pyridinium salts vanadium(V), 643
See also Amino-, Dimethyl-, Iminodi-pyridinium
- Pyridonate complexes, *See* Hydroxypyridonate
- Pyridylacetyl complexes, ruthenium(II), 577
- Pyridylaminophenyl complexes gold(III), 4039
See also Pyridyl(methyl)aminophenyl
- Pyridylaminotolyl complexes, gold(III), 4039
- Pyridylbenzimidazole complexes iron(II), iron(III), 47
lanthanide(III), yttrium(III), 1417
See also Methylpyridylbenzimidazole
- Pyridylbenzothiazolate complexes ruthenium(II), 143,1793
- Pyridylbenzothiazoline complexes ruthenium(II), 143
See also Methylpyridylbenzothiazoline
- Pyridylcalixarene complexes gold(III), platinum(IV), 1885
- Pyridyldihydrophenalenedionates copper(II), 1693
- Pyridyl(dimethoxyphenyl)pyrazoles complexes copper(I), copper(II), silver(I), 4257
- Pyridylethyl complexes and compounds tellurium(II), 33
- (Pyridylethyl)picolinamide complexes copper(II), 2465
- (Pyridylethyl)toluenesulfonamides copper(II), nickel(II), 1707
- Pyridyl(methyl)aminophenyl, gold(III), 4039
- Pyridylpyrazolate, iron(III), 1567
- Pyridylpyrazole complexes, iron(III), 1567
See also Pyridyl(dimethoxyphenyl)pyrazole
- Pyridylquinoline complexes rhodium(I,III), rhodium(III), 1483
- Pyrimidine complexes, *See* Methyl-, Sulfanilamido-pyrimidine, Purine, Uracil
- Pyrimidineaminotolyl complex, gold(III), 4039
- Pyrimidinethiolate/thionate
See Dimethylpyrimidinethiolate/thionate
- Pyronates, *See* Hydroxyethyl-, Hydroxymethyl-pyronate
- Pyrrole complexes denitrogenation by palladium review, 3197
sodium, titanium(III), 195
See also Cyanoethyl-, Formyl-pyrrole, Porphyrinate
- Pyrrolidine complexes, *See* Aminopyrrolidine
- Pyruvoylamideoximates, copper(II), 1723

Q

- Quinaldates, *See* Quinolinecarboxylate
- Quinizarine complexes, *See* Anthraquinone
- Quinoline complexes
 - See* Bi-, Pyridyl-, Tellura-quinoline
- Quinolinecarboxylates, manganese(II), manganese(II,III), manganese(III), 2903
- Quinolineolates
 - ruthenium(II), ruthenium(III), 81
 - vanadium(IV), vanadium(V), 4179
- Quinolinesulfonates
 - See* Hydroxyquinolinesulfonate
- Quinolinylmethyl complex, palladium(II), 1963
- Quinone complexes
 - See* Anthra-, Naphtho-quinone

R

- Raman spectra of complexes
 - alkynes, 1529
 - azide, 223
 - azo, 3033
 - bromide and bromo, 1161
 - carboxylate, 223
 - cyanate, cyanato, 2877
 - diketonates, 1323
 - fluoride, fluoro, 3421
 - hypophosphite, 495
 - iodine, 1983
 - oxide, oxo, 1323,3421,3835,3921,4205
 - peroxide, peroxy, 4205
 - phenoxides, 369
 - phosphines, 1957
 - pyridines, 223,2877,3323
 - pyridine oxides, 369
 - sulfides, 833,3921
 - thiocyanate, 223
 - thiolates, 369
- Rate constants *See* Kinetic studies
- Reaction volume of isomerization, ruthenium(I) carbonyl cyclopentadienyl dinuclear, 3339
- Reduction, organohalides by organo-germanium hydrides on polystyrene, 1767
 - See also* Catalysis
- Reflectance spectra of complexes
 - cadmium(II) bipyridine methylnitroaniline, nitroaniline perchlorate water, 3929
 - chromium(III) halide polyselenoethers, 4253
 - cobalt(III) chloro thiazolinyldiazine water, 1137
 - cobalt(III) ethylenediamine phosphates, 4187
 - copper(II) chloro methoxy(methoxymethylpyrazolyl)methylpyrimidine tetrafluoroborate, 939
 - copper(II) diazafluorenehydrazine, pyridine perchlorate tris(aminoethyl)amine, 187
 - copper(II) dimethylpteridinedione nitrate water, 607
 - copper(II) iron(II) cyano tris(aminoethyl)amine water, 909
 - copper(II) pyridine thiosalicylate dinuclear, 3323
 - copper(III) dithiaoxadithiolate tetraphenylphosphonium, 1111
 - molybdenum(VI) silicon oxo dimethylformamide dimethylamino(methyl)pyridinium methylamino(methyl)pyridinium, 95
 - nickel(II) halide methylthiosemicarbazide, 695
 - nickel(II) propyldithiocarbonate organophosphines, 2573
 - rhenium(III), oxo-rhenium(V) dimethylpyrimidinethiolate halide oxo triphenylphosphine, 2087
 - uranium(VI) caesium oxo polysulfide, 3921
 - vanadium(IV) oxo hydroxy-pyronates, -pyridonates, 789
 - vanadium(IV) oxo Schiff base dinuclear, 643
 - vanadium(V) methanol methoxide oxo Schiff base, 643
 - vanadium(V) oxo propoxide Schiff base, 1143
 - vanadium(V) oxo pyridinium water polynuclear, 643
- Refraction coefficient
 - aluminium, gallium halide water, 4081
- Relaxation parameters
 - effect of metal-bearing liposomes on water proton spin-lattice rates, 2755
- Resorcinolates
 - molybdenum(V), 3695
 - See also* Calixareneresorcinolate
- Rhenium(0) compounds and complexes
 - carbonyl, dinuclear, heterometallic, 3489
- Rhenium(I) compounds and complexes
 - benzene, 3003
 - bis(butylphenyl)(pyridyl)methylthiolate, 3641
 - bis(dimethylpyrazolylmethyl)pyridine, 3003
 - bis(methyl)phenylphosphine, 3663
 - bis(pyrazolylmethyl)pyridine, 3003
 - bromide, bromo, 3003
 - carbonyl, chloro, 3003,3641
 - dimethylcyclopentadienyl, 3663
 - hexafluorophosphate, iodo, 3003
 - phosphine, 3663
 - tetrahydrofuran, 3003
- Rhenium(III) compounds and complexes
 - acetate, 3649
 - acetone, 2087
 - bis(tricyclohexylphosphonium)ethane, 3649
 - bis(triphenylphosphonium)ethane, 3649
 - bromide, bromo, 2093
 - chloride, chloro, 2087, 2263,3649
 - cluster, 1615
 - dichloroethane, 3649
 - dimethylpyrimidinethiolate, 2087
 - dinuclear, 3649
 - iodide, iodo, 1615
 - pyridine, 3649
 - telluride, tellurido, 1615
 - tetrabutylammonium, 3649

- thiourea, 2263
 triphenylphosphine, 2087
 water, 2263
Rhenium(IV) oxide, 2263
Rhenium(V) compounds and complexes
 bis(diphenylphosphino)ethane, 1979
 bromide, bromo, 2093
 chloride, chloro, 2087
 cluster, 1615
 dimethylpyrimidinethiolate, 2087
 dinitrogen, 1979
 ethoxide, 2087
 hydride, 1979
 iodo, oxo, 2087
 telluride, tellurido, 1615
 triphenylphosphine, 1979,2087
Rhenium(VII) compounds and complexes
 ammonium, oxo, 2263
Rhodium(I) compounds and complexes
 bis(benzimidazolyl)pyridine, 1169
 bis(butylphenyl)(pyridyl)methylthiolate, 3641
 bis(methylbenzimidazolyl)pyridine, 1169
 bromide, bromo, 1169
 butadienylthiolate, butylthiolate, 3099
 carbonyl, 869,1169,3099,3641
 chloride, chloro, 869,1169,3641
 cyclooctadiene, 3641
 dimethyl(acetylenedicarboxylate), 3099
 dinuclear, 1169,3099,3641,3641
 hexafluorophosphate, 3099
 hydride, 869
 perchlorate, 1169
 triphenylphosphine, 869
 tris(diphenylphosphinomethyl)ethane, 3099
 (vinylphenyl)thiolate, 3099
 water, 1169
Rhodium(I,III) complexes, carbonyl, chloro, pyridylquinoline, water, 1483
Rhodium(II) compounds and complexes
 carbonate, 3399,3655
 dibenzoyltartrate, 3655
 dinuclear, heterometallic, 3399,3655
 norbornenecarboxylates, 3399
 water, 3399,3655
Rhodium(III) compounds and complexes
 biquinoline, 1483
 bis(benzimidazolyl)pyridine, 1169
 bis(dimethylarsino)benzene, 1307
 bis(dimethylphosphino)benzene, 1307
 bis(methylbenzimidazolyl)pyridine, 1169
 bromide, bromo, 1169,1307,1483
 butylthiolate, 3099
 carbonyl, 1169
 chloride, chloro, 307,1169,1307,1483,1811, 2223,2321,4045
 chloroform, 307
 cyanoethylpyrrole, 4045
 diacetylmonoximate, 307
 dinuclear, 1811,2321
 diphenylphosphino(phenylthio)methane, 1811
 hydride, 3099,3115
 hydrodesulfurization review, 3115
 iodide, iodo, 1169,1307
 macrocyclicpolyamine, 2223
 pentamethylcyclopentadienyl, 1811,2321, 3115
 perchlorate, 307,1169,2223
 phenyl, 3115,4045
 pyrazine, pyridine, 4045
 pyridylquinoline, 1483
 Schiff base, 2321
 tetrafluoroborate, 1307,1811
 thiazole, 4045
 thiolates, trimethylphosphine, 3115
 triphenylphosphine, 307
 triphenylstibine, 4045
 tris(diphenylphosphinomethyl)ethane, 3099
 (vinylphenyl)thiolate, 3099
 water, 307,1169,1307,1483,2223
Ribosebis(thiosemicarbazone) complexes
 copper(II), nickel(II), 3549
Rotating disk electrode voltammetry
 cobalt(III) amines, phosphines, arsines, 2771
Rubidium compounds and complexes
 chloride, 1513,2087
 heterometallic, telluride, 3055
 triethanolamine, 2087
Ruthenium compounds and complexes
 carbonyl, 593,2387,3061,3067,3253
 chloride, chloro, 3253
 cluster, 2387,3061,3067
 dibutylphosphide, dibutylphosphine, 3253
 ethylcarboxypropylidyne, 593
 heterometallic, 2387,3067
 hydride, polynuclear, 593,3253
 sulfide, 2387,3067
 tellurido, tetraphenylphosphonium, 3061
Ruthenium(0) compounds and complexes
 bis(dicyclohexyl-, bis(dimethyl-, bis(diphenyl-phosphino)methane, 1453
 carbonyl, 577,593,1453,2387,3061,3067, 3253
 dinuclear, 1453
 polynuclear, 577,593,1453,2387,3061,3253
Ruthenium(I) complex, carbonyl, cyclopentadienyl, dinuclear, nitrosotetramethylbenzene, 3339
Ruthenium(II) compounds and complexes
 acetonitrile, 291,433,1921
 acetylacetonate, 3039
 adenosinemonophosphate, 1993
 aryls, 1343
 arylazophenoxides, 81,3047
 bipyridine, 81,103,143,393,983,1755,1793, 1921,2705,3039,3047,3293,3847,4073, 4313
 bis(anilinovinyl)bipyridine, 2705
 bis(butylphenyl)(pyridyl)methylthiolate, 3641
 bis[(diphenylphosphino)benzylidene]-ethylenediamine, 433

bis(diphenylphosphino)-ethane, -ethene,
 -methane, 927
 bis(diphenylphosphinomethyl)pyridine, 291
 bis(diphenylphosphino)propane, 927
 bisterpyridylbenzene, 2369
 bromide, bromo, 143,1793,1921
 bromophenylthiosemicarbazide, 4313
 (butylphenyl)terpyridine, 3615
 carbonyl, 577,1343,3641
 chloride, chloro, 81,103,143,291,393,577,
 927,983,1343,1605,1793,1811,1921,1993,
 2369,2705,3039,3129,3293,3641,3847,
 4073,4313
 chlorobenzoate, 1343
 chlorophenylimidazophenanthroline, 103
 chlorophenylthiosemicarbazide, 4313
 cyanide, cyano, 3851
 cyclopentadienyl, 2369,2889
 (cyclopentadienylmethyl)-triazacyclononane,
 -trimethylammonium, 2889
 deoxyguanosinemonophosphate, 1993
 dibenzoylmethanate, 3039
 dichloromethane, 1605,1793
 diethyldithiocarbamate, 983
 diethylether, 577
 dimethylphenanthrolines, 3847
 dimethylsulfoxide, 393,1993,3293
 dinuclear, 143,433,577,2369
 diphenylbipyridine, 393
 diphenylphenanthroline, 393,3293
 diphenylphosphino(phenylthio)methane,
 1811
 dipropyldithiocarbamate, 983
 dithioates, 983
 guanosinemonophosphate, 1993
 heterometallic, 433,3129,3851
 hexafluoroacetylacetonate, 3039
 hexafluorophosphate, 1921,2369,2705,3039,
 3615,3847
 hydroxide, hydroxo, 1921
 hydroxyphenylimidazophenanthroline, 103
 imidazole, 1793
 imidazophenanthroline, 103
 methoxyphenylthiosemicarbazide, 4313
 methylbenzoate, 1343
 methylimidazole, 143,1793
 methylpropylbenzene, 1811,3129
 methylpyridylbenzothiazoline, 143
 nitrophenylimidazophenanthroline, 103
 nitrosyl, 927
 norbornadiene, 3847
 octaethylporphyrinate, 3129
 pentamethylcyclopentadienyl, 433
 perchlorate, 81,143,983,1605,1793,2889,
 4073,4313
 phenanthroline, 81,393,983,1793,3293,3847
 phenylimidazophenanthroline, 103
 picolinate, 1605
 polynuclear, 2889
 pyridylacetyl, 577
 pyridylbenzothiazolate, 143,1793
 pyridylbenzothiazoline, 143
 quinolineolate, 81
 Schiff bases, 81,143,1343,1605,1755,4073
 terpyridine, 1921,3615
 terpyridylbenzene, 2369
 tetrafluoroborate, 1811
 tetramethylphenanthroline, 3847
 thiamacrocycle, 3293
 tolylazopyridine, tolylpicolinamide, 1605
 tolylthiosemicarbazide, 4313
 triflate, 3129
 trifluoroacetylacetonate, 3039
 triphenylphosphine, 81,291,577,983,1343,
 1793,2369,3847
 trithiacyclononane, 393
 tropolonate, 3039
 water, 103,143,393,433,983,1605,1793,1993,
 2369,2705,3039,3293,4073,4313
 Ruthenium(II,III) compounds and complexes
 acetate, 3399,3655
 benzonitrile, benzyl alcohol, bromo, 2429
 chloride, chloro, 3399,3655
 cyanide, cyano, heterometallic, 3851
 dibenzoyltartrate, 3655
 dinuclear, 2429,3399,3655,3851
 ethylenediaminetetraacetate, 3851
 heterometallic, 3851
 norbornenecarboxylates, 3399
 trifluoroacetate, 3399
 water, 3399,3655,3851
 Ruthenium(III) compounds and complexes
 arylazophenoxides, 81,3047
 bipyridine, 1023,1755,3039,3047
 bis(pyridyl)-ethylene, -propane, 1023
 bromide, bromo, 143,2429
 (butylphenyl)terpyridine, 3615
 chloride, chloro, 81,143,433,927,1023,1235,
 1605,1755,1793,2705,2951,3039,3047,
 3615,3851
 dimethylbipyridine, 1023
 ethylenediaminetetraacetate, 1023,1235,3851
 heterometallic, 1023,1235,2951,3851
 hexafluorophosphate, 3039
 iodate, 3039
 iodide, iodo, 3047
 pentamethylcyclopentadienyl, 433
 perchlorate, 1755
 phenylamine, phenylhydrazinium, 1235
 pyrazine, 1023
 quinolineolate, 81
 Schiff base, 81,1755,2951
 triphenylphosphine, 81,2951
 water, 81,143,1023,1235,1605,1755,2429,
 2951,3039,3047,3615,3851
 Ruthenocene *See* Ruthenium(II),
 cyclopentadienyl
 Rutherford backscattering spectrometry
 chromium(0), molybdenum(0), tungsten(0)
 carbonyls on alumina, 1937
 iron(II) diphenylphosphinocyclopentadienyl
 nickel(II), palladium(II), platinum(II)
 chlorides decomposition, 171

S

Salicylates

manganese(III), 1273

uranium(VI), 4205

See also Thiosalicylate

Salicyloylhydrazones, *See* Phenyltriazolyl-carbaldehydesalicyloylhydrazone

Salting-in, uncharged metal complexes of natural aminoacids, 2145

Samarium(III) compounds and complexes

bis(methyl)diphenylphosphonium, 2013

bis(trimethylsilyl)cyclooctatetraenyl, 2067

bis(trimethylsilyl)cyclopentadienyl, 2067

butylcyclopentadienyl, 2013

calixarencarboxylate, 1655

camphorsulfonate, 427,535

chloride, chloro, 427,1057,1643,1655,2013, 2067,3415,4143

diethylether, 567

dimethyl-ammonium, dithiocarbamate, 1643

heterometallic, 1655,2013,2067

macrocyclicpolyamine, 3991

macrocyclicpolyazapolyether, 567

methylpyridylbenzimidazole, 1417

nitrate, nitrato, 567,1417,3991

oxide, oxo, 535,1417,3415

perchlorate, 535

phenanthroline, 427,4143

phenol, 535

pyridylbenzimidazole, 1417

Schiff base, 535,567

(tetramethylbutyl)phenoxyacetate, 1655

thiocyanate, 1417,4143

tris(pyrazolyl)borate, 1057

water, 567

Sarin, *See* Isopropylmethylfluorophosphonate

Scandium(III) compounds and complexes

chloride, 1057,3415,3485

oxide, 3415

tetrahydrofuran, 3485

tris(pyrazolyl)borate, 1057

water, 3485

Scanning electron microscopy

barium copper(II) titanium(IV) oxide, 2105

silver(I) cobalt(II), copper(II), nickel(II),

zinc(II) oxalates, 3013

zinc(II) hypophosphite water, 495

Schiff base complexes

cadmium(II), 223,915,1301,2857,4191

calcium(II), 4191

chromium(III), 1119

cobalt(II), 1201,4191

cobalt(III), 1201

copper(I), 4273

copper(II), 489,903,1201,1771,2659,2673, 2909,2991,3345,4097,4371

iridium(III), 2321

iron(III), 2553,4191

lanthanide(III), 321,535,567,3345

lead(II), 567,2765

lithium, 1517

magnesium(II), 4191

manganese(III), 2553,3787

molybdenum(II), 409,1439

molybdenum(VI), 2169,3977

nickel(II), 1201,1331,1439,2659,2673,2749, 2863,2991,4097,4191

palladium(II), 1291,1439,2405

potassium, 1119

rhodium(III), 2321

ruthenium(II), 81,143,1343,1605,1755,4073

ruthenium(III), 81,1755,2951

silver(I), 453,2375

silver(II), 2375

sodium, 535,1105,1517,4273

tin(IV), 2213

tungsten(VI), 3977

vanadium(III), 1517

vanadium(IV), 643,1247,1517,1825,2991, 4179

vanadium(V), 643,1143,4179

zinc(II), 4191

zirconium(IV), 1105

See also Bis(phenyliminoethyl)-pyridine,

Pyridine-imine, Thiazolate,

Selenide and selenido complexes

cluster, 1433,1543

copper(I), 1433

heterometallic, 1543

iron, iron(0), 707,1689

molybdenum, 707

molybdenum(VI), 1433

niobium(IV), 995

niobium(V), 3911

silver(I), 1543

sodium, 1433

transition metals survey, 1031

tungsten, 707,1689

tungsten(VI), 1543

See also Phosphine selenides

Selenium(0), elemental, 1433,1855,3911

Selenium(II) compounds and complexes

bromo, heterometallic, 1081

phenyl, 1081,1255

See also Butyl(phenylselenyl)amide,

Diselane, Diselano, Selenoether, Selenolate,

Selenium(IV) oxide, 3921

Selenoether complexes, *See* Methylphenyl-

selenoether, Tetraselenacyclohexadecane,

Tris(methylselenomethyl)ethane, Triselenacyclohexane, -undecane

Selenolates, *See* Phenylselenolate

Semicarbazone complexes

See Furylpropenal-, Thio-semicarbazone

Semiquinone complexes, manganese(II),

manganese(II,III), manganese(III), 2903

Silicon compounds and complexes

alkoxides, 1513

chloride, chloro, 1081,1831,2941,4055

fluorine hydrogen, noble gases book review 1267

heterometallic, 95,713,1513

hydroxide, hydroxo, 1223,4005

indenyl, 2737
 iodide, iodo, 1517
 methoxyphenoxide, 4055
 methyl, 1081,1513,1517,1831,2737,2941,
 4055 *See also* Bis-, Tris-(trimethylsilyl),
 Trimethylsilyl
 oxide, oxo, 95,713,2737
 tetrahydroindenyl, 2737
 tetramethylcyclopentadienyl, 1513
See also Dimethylsilabutenyldiphenyl-
 phosphine
Siloxanes
 alkyl, polyhedral, 3357
Siloxides, *See* Trimethyl-, Triphenyl-siloxide
Silver compounds and complexes
 carbonate, heterometallic, oxo, 3013
Silver(I) compounds and complexes
 acetate, 327,2375,3695
 acetonitrile, 453,3899,4257
 acetylde, 327
 (aminomethyl)pyridine, 921
 ammonia, 863
 arylazoimidazoles, 4163
 azacryptates, 453
 azamacrocyclic, 2375
 biimidazole, 2893
 bis(diphenylphosphino)methane, 1957
 bis(methylbipyridine-ethyl)benzene, 1505
 bis(methylphenylphosphine), 1529
 butoxynorbornadiene, 2147
 carbonate, 983
 chloride, chloro, 2681
 (chlorobenzoyl)benzoate, 863
 cluster, 945,1543,2987
 cyanoacetate, 25
 diazoniobicyclooctanedipropionate, 153
 dichloromethane, 1543,2711,2987
 diethoxyphosphinodithioate, 945
 dimethylaminopyridinioacetate, 153
 dimethylformamide, 217
 dimethylphenanthroline, 2711
 dinuclear, 153,453,1529,1957,2147
 diphenylformamidine, 1837
 dipropyldithiophosphate, 3899
 fluoride, fluoro, 61
 heptafluorodimethyloctanedionate, 2147
 heterometallic, 217,833,945,1259,1529,1543,
 1663,2145,2681,2987,3013
 hexafluoroacetylacetonate, 2147
 hexafluoroarsenate, 4239
 hexafluorophosphate, 2375,3847,3899
 methanol, 453
 nitrate, nitrato, 25,57,125,153,217,453,
 525,833,863,921,1259,1315,1505,1605,
 1663,1957,2145,2893,2987,3013,4163
 norbornenecarboxylates, 3399
 oxalate, 3013
 oxide, oxo, 1663,2147,3013,3609
 perchlorate, 153,453,983,1505,1605,1793,
 1963,2509,4073,4163,4337
 phenylacetate, 1957
 picolinate, 921
 polynuclear, 453,3899
 pyridinethiol, 1543
 pyridyl(dimethoxyphenyl)pyrazoles, 4257
 Schiff base, 453,2375
 selenide, selenido, 1543
 sulfate, 2421
 sulfide, 217,833,945,1543,2987
 terpyridylbenzene, 2375
 tetrachlorocyclopentadienyl, 2681
 tetrafluoroborate, 1529,2029,2711,2827,4257
 thiacycloalkynes, 1529
 tolylazopyridine, 1605
 triflate, 1529,1837,3129,3641
 trifluoroacetate, 3399
 trifluoroacetylacetonate, 2147
 trifluorophenylbutanedionate, 2147
 trifluorothiopyridylbutanedionate, 2147
 triphenylphosphine, 945,1259,1529,1543,
 2681,2987
 tris(hydroxymethyl)methylammonium, 217
 tris(methylpyridylmethyl)amine, 525
 water, 153,217,453,921,1957,2375
Silver(II) compounds and complexes
 acetonitrile, azamacrocyclic, 2375
 picolinate, 921
 Schiff base, terpyridylbenzene, 2375
 tetrafluoroborate, 2375
Smectites, *See* Montmorillonite
Sodium compounds and complexes
 acetate, 327,1771,3357
 acetylacetonate, 1907
 acetyl-, acyl-cyclopentadienyl, 2387
 (alkoxyphenylethyl)piperidinedithio-
 carbamate, 315
 amalgam, 869,2941
 ascorbate, 2081
 azacrown, 3865
 azacryptate, 321
 azide, 1535,2193,2239,2701,3747
 bentonite, 1403
 benzenebis(carbonylcyclopentadienyl), 3067
 benzoate, 1621
 benzoylcyclopentadienyl, 3273
 benzylthiolate, 2531
 bis(nitrophenyl)phosphate, 733
 bromide, 2145,4283
 butylthiolate, 3911
 butyrate, 881
 calixarene-carboxylate, 1655
 camphorsulfonate, 427
 cantharidinate, 57
 chloride, 1513,1663,2087
 chlorobenzoate, 1343
 cyanate, cyanato, 2877,3357
 cyanide, 681,1747
 cyanoacetate, 25
 cyclopentadienyl, 195,3067
 dibenzoylmethanate, 1907
 dicyanamide, 3671
 diethyldithiocarbamate, 983,2183,2885,3967,
 4121
 diethylether, 3865

di(ethylhexyl)methanediphosphonate, 1843
 diethylphosphinodithioate, 3609
 diethylphosphinothioate, 949
 diformylphenoxides, 223,1301
 dimethylaminoethylcyclopentadienyl, 195
 dimethylaminopropoxide, 4197
 dimethylphosphinate, 2643
 dimethylphosphinothioate, 949
 dinuclear, 4061
 diphenylamide, 2013
 diphenylphosphinate, 2643
 dipropylidithiocarbamate, 983
 dithioleonedithiolate, 2689
 dithiolethionidithiolate, 3505
 dithionite, 447,3311
 dodecylsulfate, 1157
 ethoxide, 2689
 ethylhydroxybutyrate, 2897
 formylcyclopentadienyl, 2387
 heterometallic, 57,75,125,243,447,521,869,
 1023,1169,1291,1323,1365,1407,1425,
 1581,1655,1663,2081,2279,2365,2387,
 2589,2761,2819,2897,2925,3273,3279,
 3399,3655,3807,3865,3921,3953,3985,
 4039,4363
 hexafluorophosphate, 2353,4087
 hydride, 1517,2797,4061
 hydroxide, 3357
 hypochlorite, 2365
 iodate, 3039
 iodide, 1169,3311,4283
 isomaleonitriledithiolate, 4305
 isonicotinate, 71,2279
 macrocyclicdiamidodiether, 2335
 malate, 243
 maleonitriledithiolate, 2291
 malonate, 3953
 mercaptoethylsulfonate, 2819
 metal, 1433,1517,1731,1907,2681,2689,
 3947,4005,4197
 methoxide, 369,3505
 methyl, 2365
 methylbenzoate, 1343
 nicotinate, 2279
 nitrite, 2447,3493,3807,4331
 nitrosodicyanomethanide, 463
 oxopyridinethiolate, oxyphenylthiolate, 369
 pentafluorophenylthiolate, 2631
 pentamethylcyclopentadienyl, 4363
 perchlorate, 143,187,259,1291,1971,2073,
 2553,3511
 peroxodisulfate, 3039
 phenoxide, 915
 phenylacetate, 1957
 phenylenediaminetetraacetate, 2925
 phenylthiolate, 2885
 phosphates, 2589,4187
 picrate, 2335
 polysulfide, 3921
 propanedithiolate, 2531
 pyridinebiscyclopentadienyl, 195
 pyridine-dicarboxylate, -sulfonate, 2279
 pyrrole, 195
 Schiff base, 535,1105,1517,4273
 selenide, 1433
 sulfide, 447,3921
 sulfite, 3357
 telluride, 33,2509,3061,4337
 tetrafluoroborate, 939
 tetrahydroborate, 33,481,567,2175,2353,
 2387,2405,2509,2789,3273,4337
 tetrahydrofuran, 4061
 (tetramethylbutyl)phenoxyacetate, 1655
 tetraphenylthioimidodiphosphinate, 4061
 thiocyanate, 889,1535,1679,2393,3807,4283
 thiolate, 4121
 thiosalicylate, 3323
 thiosulfate, 2199
 triethanolamine, 2087
 triethylborate, 133,4137
 triphenylsiloxide, 4005
 tri(propyl)phenylthiolate, 2631
 water, 447,949,2925,3609,4121,4187
 Solid state reactions
 metathesis of metal nitrides, 3635
 Solubility studies
 aluminium hafnium(IV) alkoxides, 663
 aluminium zirconium(IV) propoxide, 663
 Solvent effects on electronic spectra
 lanthanide(III) phenanthroline thiocyanate
 water, 4153
 ruthenium(II) bipyridine Schiff bases, 4073
 Solvent extraction
 alkali metal by metallocene podates, 1513
 alkali metal, alkaline earth picrates by
 macrocyclicdiamidodiesters, 2335
 chromium(VI) by calixareneammonium,
 1581
 cobalt(II), copper(II), nickel(II) by
 ethylenediaminetetraacetanilide, 4323
 lanthanide(III) by calixarene-carboxylates in
 presence of alkali metals, 1655
 Specific optical rotation in complexes
 lanthanide(III), sodium Schiff base, 535
 manganese(III) bis(dichlorosalicylidene)-
 cyclohexanedisulfonamide sodium,
 tetraphenylphosphonium, 2365
 Square wave voltammetry
 molybdenum(II) bis(phenoxide)s chloro
 nitrosyl tris(dimethylpyrazolyl)borate
 dinuclear, 4353
 nickel(II) Schiff base pyrazolates
 tetranuclear, 2659
 Stability constants of complexes
 cadmium(II), calcium(II), cobalt(II), iron(III),
 magnesium(II), nickel(II), zinc(II) Schiff
 base, 4191
 copper(II), macrocyclicpolyamine, 2073
 copper(II) (methylthiophenylazo)hydroxy-
 quinoline-, -naphthalene-, -sulfonate, 3033
 gallium(III), indium(III), thallium(III)
 [(hydroxychlorophenyl)azo]-
 hydroxyquinolinesulfonate, 363

- lead(II) diethylaminomethylene-phosphonate, 355
 metals in aqueous solution book review, 993
 nickel(II) bipyridine, phenanthroline Schiff base, 2863
 platinum(II) methylbutadienylthiolates triethylphosphine, 3185
 vanadium(III) histidine, 2613
 zinc(II) macrocyclicpolyamine, 2073
 Stibine complexes, *See* Triphenylstibine
 Stilbene, platinum(0), 2455
 Strontium compounds and complexes
 chloride, chloro, 2087
 cyclohexanediaminetetraacetate, 3317
 ethanol, ethoxide, 2581
 macrocyclicdiamidodiether, 2335
 nitrate, nitrate, 3317
 nitride, 3635
 picrate, 2335
 tetramethylheptanedion-ate, -e, 2581
 triethanolamine, water, 2087
 Styrene complexes, platinum(0), 765
 See also Polystyrene
 Succinates, *See* Butanedioate
 Sulfadiazine complexes
 See Sulfanilamidopyrimidine
 Sulfanilamidopyrimidine complexes
 mercury(II), 613
 Sulfates
 beryllium, 1663
 cerium(IV), 3415
 cobalt(II), 1047
 copper(II), 741,805,2447,3323,3601
 iron(II), 1567,3615
 iron(III), 1567,3953
 manganese(II), 71
 nickel(II), 741,1931
 platinum(II), 3705
 silver(I), 2421
 vanadium(IV), 789,933,1143,1247,1517, 1825,4179,4379
 zinc(II), 495,2689
 zirconium(IV), 3489
 See also Alkyl-, Bi-, Per-, Peroxodi-, Thio-sulfate, Polythionate
 Sulfides
 cadmium(II), 2483
 caesium, 3921
 cluster, 481,945,1425,1543,2387,2731,3067, 3273
 cobalt, 2387,3067,3273
 cobalt(I,III), 1425
 copper, 2731
 copper(I), 377,2731,2987,3499
 heterometallic, 217,481,801,833,945,1543, 3067,3499
 hydrodesulfurization review, 3177
 iron, 2249,3273
 iron(II), 481,4121
 lanthanide(III), 833
 mercury(II), 2483
 molybdenum, 2249,2387,3067,3273
 molybdenum(I), 481
 molybdenum(III), molybdenum(IV), 3089
 molybdenum(V), 165,447,2987
 molybdenum(VI), 165,801,945,1543,2483, 3499
 niobium(V), 3911
 palladium(II), 801,4305
 platinum(II), 377,2381
 ruthenium, 2387,3067
 silver(I), 217,833,945,1543,2987
 sodium, 447,3921
 transition metals survey, 1031
 tungsten, 3067,3273
 tungsten(I), 481
 tungsten(VI), 217,801,833,945,2483,3499, 4305
 vanadium(V), 4121
 zinc(II), 2483
 See also Phosphine sulfides, Hydro-, Poly-sulfide, Thioether
 Sulfites, sodium, 3357
 Sulfonamides, *See* Sulfanilamidopyrimidine, Cyclohexanedi-, Toluene-sulfonamide
 Sulfonates, *See* Camphor-, Ethyl-, Naphthalene-, Pyridine-, Quinoline-sulfonate, Triflate
 Sulfoxide complexes, *See* Dimethylsulfoxide, Bis(phenylsulfinyl)butane
 Sulfur compounds and complexes
 chloro, 1247
 elemental, 1855,3921
 oxide, oxo, 1247
 See also Tetrasulfurtetranitride, Thia, Thio
 Superoxides
 cobalt(II), cobalt(III), 1047
 manganese(II), manganese(III), 3511

T

- Tantalum(II) complexes, diborane, dinuclear, ditolylformamidinate, 1177
 Tantalum(III) compounds and complexes
 bis(dimethylphosphino)methane, 1177
 chloride, chloro, 1081,1177
 dimethylsulfide, dinuclear, 1177
 ditolylformamidinate, 1177
 tetramethylpiperidyl nitrene, 1081
 tolylimido, tolylisocyanide, 1177
 triethylammonium, 1081
 Tantalum(IV) complexes, chloro, dinuclear, methylcyclopentadienyl, toluene, (tripropylphenyl)phosphinidine, 721
 Tantalum(V) compounds and complexes
 acetonitrile, 351
 butylamide, butylamine, butylimide, 1081
 butyl(phenylselenyl)amide, 1081
 chloride, chloro, 351,721,1081,1177,2941
 diboranylditolylformamidinate, 1177
 diethylether, 1177
 dimethylamide, 2941
 dinuclear, 721,1081,1177
 diphenylformamid-inate, -ine, -inemethanebis(phenylamido), 1177

- diphenylphosphide, 721
ditolylformamidinate, 1177
heterometallic, 1081
methylcyclopentadienyl, 721
methylenebis(butylmethylphenoxide), 2941
phenylimido, 1177
toluene, 721
tolylimido, 1177
(tripropylphenyl)phosphine, 721
Tartrates, *See* Dibenzoyltartrate
Technetium(V) complexes, iodo, oxo,
trimethylenediamine, water, 3311
Technetium(VII) compounds and complexes
ammonium, oxo, 3311
Tellura-diazolines, -quinolines, 1241
Telluride and tellurido complexes
alkyl, 2509
iron, iron(0), 1549
methoxyphenyl, 33,2509,4337
molybdenum, 1549
phenyl, 2509,4337
rhenium(III), rhenium(V), 1615
rubidium, 3055
ruthenium, 3061
sodium, 33,,2509,3061,4337
tin(IV), 1193
transition metals survey, 1031
tungsten, 1549
zinc(II), 1193
Tellurium compounds and complexes
alloys, 1193
See also Aryltelluroalkylethers
Tellurium(0), elemental, 33,995,1241,3055
Tellurium(II) compounds and complexes
alloys, 3055
heterometallic, 33,995,3055
iodide, iodo, 995,1615
methyl, 33
phenylhydrazone, 1241
pyridylethyl, 33
See also Tellura-diazoline, -quinoline,
Telluride, Tellurocyanate
Tellurium(IV) compounds and complexes
bis(oxyaryl)amides, 4209
chloro, 2441
ethoxide, hydroxide, oxo, propoxide, 4209
See also Oxatellurane
Tellurocyanates, potassium, 1241
Terbium compounds and complexes
acylmethylphenylpyrazolonates, 1381
bis(trimethylsilyl)cyclooctatetraenyl, 2067
bis(trimethylsilyl)cyclopentadienyl, 2067
camphorsulfonate, 427,535
chloride, chloro, 427,1057,1643,2067,3415,
3635
dimethyl-ammonium, -dithiocarbamate, 1643
ethanol, 1381
hydroxide, hydroxo, 4265
macrocyclicpolyamine, 3991
nitrate, 3991,4265
oxide, oxo, 535,3415
perchlorate, 535,1381,4265
phenanthroline, 427
phenol, 535
polynuclear, pyridinioacetate, 4265
Schiff base, 535
tris(pyrazolyl)borate, 1057
water, 1381,4265
Terephthalates, *See* Thioterephthalate
Terpyridine complexes
cobalt(II), iron(II), 3615
ruthenium(II), 1921,3615
See also (Butylphenyl)terpyridine
Terpyridylbenzene complexes
ruthenium(II), 2369
silver(I), silver(II), 2375
See also Bisterpyridylbenzene
Tetraacetylene complex, palladium(II), 2405
Tetrabromocyclopentadienyl complexes
gold(I), manganese(I), 2681
Tetrabutylammonium
binaphtholate, 1323
bromide, 1921,3865
carbaboranes, 1819,2499,2517
chloride, 1323,2183
cyanide, 3779
fluoride, 2499,2517
heteropolyoxometallates, 713
indium(III), 2183
manganese(VII), 1371,1377
molybdenum(VI), 95,1323,3865
nickel(II), 1351
nickel(III), nickel(IV), 1465
osmium(III), rhenium(III), 3649
tetrafluoroborate, 2499,3827
tungsten(VI), 713,1323,3865
Tetrabutylidiphosphinedisulfide complexes
molybdenum(0), tungsten(0), 1101
Tetrachlorocatecholate, boron, 2325
Tetrachlorocyclopentadienyl complexes
gold(I), manganese(I), silver(I), 2681
Tetrachlorocyclopentadienylthiolates
gold(I), lithium, manganese(I), 2681
Tetra(chlorophenyl)porphyrinates
platinum(II), platinum(IV), 2809
Tetraethylammonium salts
antimony(V), 2563
bromide, 2689
chloride, 3911,4121
cobalt(II), 1425
iron(II), 4121
molybdenum(V), 2987
niobium(V), 3911
palladium(II), 369,4305
tin(IV), 4283
tungsten(VI), 4305
vanadium(V), 4121
zinc(II), 1111,2563,2689,4283
Tetraethyldiphosphinedisulfide complexes
molybdenum(0), tungsten(0), 1101
Tetraethyleneglycol complexes
lanthanide(III), 1149
Tetraethyleneglycoldimethylether complexes
cadmium(II), 1803

- Tetrafluoroborates**
 cadmium, 3435
 cobalt(II), cobalt(III), 3735
 copper(I), 2193,2397,4257
 copper(II), 383,939,1535,2447,2465,3687,4257
 ditolylformamidinium, 541
 hydrogen, 2797
 iridium(III), 1811,2029
 iron(II), 433,2797,3827
 molybdenum(II), 3655
 nickel(II), 2599,2827
 nitrosyl, 1177
 palladium(II), 2827
 rhodium(III), 1307,1811
 ruthenium(II), 1811
 silver(I), 1529,2029,2711,2827,4257
 silver(II), 2375
 sodium, 939
 tetrabutylammonium, 2499,3827
 thallium(I), 1811
 zinc, 2711,3435
- Tetrahydroborates**
 lithium, 1177,2353,2797,3469
 potassium, 671,1297,2435
 sodium, 33,481,567,2175,2353,2387,2405,2509,2789,3273,4337
- Tetrahydrofuran complexes and solvates**
 chromium(II), 2631,3879
 chromium(III), 4253
 iron(II), 2797
 lanthanide(III), 623,3385,3429,3723
 lithium, 345,2013,2067,2637,3879
 magnesium, 541
 manganese(II), 133
 molybdenum(0), 409
 potassium, 3429
 rhenium(I), 3003
 scandium(III), 3485
 sodium, 4061
 titanium(III), 195
 titanium(IV), 635
 tungsten(III), 3893
 vanadium(II), 1517
 zirconium(IV), 635
- Tetrahydrofurfurylmethoxides**
 lanthanide(III), 3723
- Tetrahydroindene complex, iron(I), 2737**
- Tetrahydroindenyl compounds, silicon, 2737**
- Tetrakis(benzylidene)ethene complexes**
 iron(0), 2979
- Tetrakis(methylpyrazolyl)borates,**
 cadmium(II), cobalt(II), copper(II),
 iron(II), manganese(-II), nickel(II),
 potassium, zinc, 671
- Tetrakis(pyrazolyl)borates**
 copper(I), potassium, 207
See also Tetrakis(methylpyrazolyl)borate
- Tetrakis(pyrazolyl)cyclotriphosphazene, *See***
 Diphenyltetrakis(pyrazolyl)-,
 Diphenyltetrakis(dimethylpyrazolyl)-
 cyclotriphosphazene
- Tetrakis(pyrazolylmethyl)tetraazacyclodecane complexes, cadmium(II), 3585**
- Tetraloneoxime, palladium(II), 2257**
- Tetra(methoxyphenyl)porphyrinates**
 platinum(II), platinum(IV), 2809
 thallium(III), 681,1621
 tin(IV), 1621
- Tetramethylammonium salts**
 binaphtholate, chloride, 1323
 copper(II), 4105
 heteropolyoxometallates, 629
 molybdenum(VI), 1323
See also Tris(hydroxymethyl)methylammonium
- Tetramethylbenzene complexes**
See Nitrosotetramethylbenzene
- (Tetramethylbutyl)phenoxyacetates**
 lanthanide(III), lithium, potassium, sodium,
 yttrium(III), 1655
- Tetra(methylcarboxylato)butadiendiyl complexes, iridium(III), 2029**
- Tetramethylcyclopentadienyl complexes**
 iron(II), silicon(IV), 1513
See also Tetramethyl(trimethyleneoligoethyleneglycoether)cyclopentadienyl
- Tetramethyldiphosphinedisulfide complexes**
 molybdenum(0), tungsten(0), 1101
- Tetramethylethylenediamine complexes**
 cobalt(III), 2771
 copper(I), 67
- Tetramethylheptanedionates**
 copper(II), 1595,1999
 lanthanide(III), 1223
 strontium, 2581
 titanium(IV), 777
- Tetramethylheptanedione complexes**
 strontium, 2581
- Tetramethylphenanthroline complexes**
 ruthenium(II), 3847
- Tetramethylpiperidyl nitrene complexes**
 niobium(III), tantalum(III), vanadium(III,V),
 1081
- Tetramethyl(trimethyleneoligoethyleneglycoether)cyclopentadienyl complexes**
 cobalt(II), cobalt(III), iron(II), iron(III),
 lithium, 1513
- Tetraphenylarsonium salts**
 chloride, 4305
 nickel(II), 275
 palladium(II), 4305
 platinum(II), 275
- Tetraphenylborates**
 cadmium(II), 3585
 nickel(II), 1971
- Tetraphenyldiselenoimidodiphosphinates**
 nickel(II), palladium(II), platinum(II),
 potassium, 2727
- Tetraphenylphosphonium salts**
 bromide, 1111,1433,3061,3911
 chloride, 447,2183,2365,2483
 copper(III), gold(III), 1111
 heterometallic, 2483

- indium(III), 2183
 manganese(III), 2365
 molybdenum(V), 447
 molybdenum(VI), 1433
 nickel(III), 1111
 niobium(V), 3911
 palladium(III), 1111
 ruthenium, 3061
 tin(IV), zinc(II), 4283
Tetraphenylporphyrinates
 germanium(IV), 2843
 manganese(III), 2885
 platinum(II), 2809
 platinum(IV), 2809
 See also Tetra(chlorophenyl)-,
 Tetra(methoxyphenyl)-, Tetratolyl-
 porphyrinate
Tetraphenylthioimidodiphosphinates
 sodium, 4061
Tetraphenyltrioxaundecanediame complexes
 erbium(III), 1491
Tetrapropylammonium salts
 heterometallic, 3055
Tetrapropylidiphosphinedisulfide complexes
 molybdenum(0), tungsten(0), 1101
Tetraselenacyclohexadecane complexes
 chromium(III), 4253
Tetrasulfophthalocyaninates
 cobalt(I), cobalt(II), cobalt(III), 3279
Tetrasulfur tetraniitride, 1089
Tetratolylporphyrinates
 platinum(II), platinum(IV), 2809
 See also
 Bis(tritolylporphyrinatophenoxy)ethane
Tetrazine complexes, *See* Dihydratotetrazine,
 Pteridine
Tetrazole complexes
 See Phenyltetrazolethiolate
Thallium(I) compounds and complexes
 acetate, bis(butylmethyl-, bis(butylpropyl-
 bis(dibutyl-pyrazolyl)borate, 3469
 formate, 2435
 hexafluorophosphate, 3585
 tetrafluoroborate, 1811
 tris(methoxyphenylpyrazolyl)borate, 2435
Thallium(III) compounds and complexes
 acetate, 681
 benzoate, 1621
 bromide, 3609
 chloride, chloro, 681,1621
 chloroform, 1621
 cyano, dichloromethane, 681
 diethylphosphinodithioate, 3609
 hydroxide, hydroxo, 363,3609
 [(hydroxychlorophenyl)azo]hydroxy-
 quinolinesulfonate, 363
 iodide, methyl, 3609
 oxide, oxo, 363
 phenyl, 3609
 tetra(methoxyphenyl)porphyrinate, 681,1621
Thenoyltrifluoroacetates
 lanthanide(III), yttrium(III), 1907
Theophylline complexes, copper(II), 3601
Thermal analysis of complexes
 barium dihydrotetrazinedicarboxylate water,
 2871
 beryllium ammonium iodate water, 441
 cadmium(II), cobalt(II), copper(II), nickel(II)
 aroylhydrazones, 2625
 cadmium(II) phenanthroline perchlorate
 nitroaniline, 1263
 calcium chromium(III) hydroxo apatite,
 2047
 calcium dibenzoylmethan-ate, -e,
 pentamethyldiethylenetriamine, 2581
 cerium(IV) propanol propoxide dinuclear,
 1129
 cobalt(III) azide dimethylpyridines, 3747
 cobalt(III) chloro thiazolinyldiazine water,
 1137
 cobalt(III) ethylenediamine phosphates, 4187
 copper(I) bis(diphenylphosphino)methane
 bipyridine, phenanthroline, pyridine,
 pyridinedicarboxylic acid nitrate dinuclear,
 4033
 copper(I) carboxybenzoylthiosemicarbazide
 chloride water dinuclear, 1477
 copper(I) chloride, tetrafluoroborate
 tungsten(0) bipyridine carbonyl, 2193
 copper(II) aminoethanol theophylline water,
 3601
 copper(II) chloride, perchlorate Schiff bases
 water dinuclear, 489
 copper(II) dimethylpteridinedione nitrate
 water, 607
 copper(II) glycinate thiocyanate water, 889
 copper(II) purines chloride, nitrate water,
 1701
 copper(II) pyridine thiosalicylate dinuclear,
 3323
 copper(II) Schiff bases, 2991
 denitrogenation, deoxygenation,
 desulfurization by palladium review, 3197
 iron(II) diphenylphosphinocyclopentadienyl
 nickel(II), palladium(II), platinum(II)
 chlorides, 171
 iron(II) perchlorate pyridylbenzimidazole
 water, 47
 lanthanide(III) acylmethylphenyl-
 pyrazolonates water, 1381
 lanthanide(III) hexaazacyclooctadecane
 nitrate, 3247
 lanthanide(III) oxyfluoride, 3421
 lanthanide(III) phenanthroline thiocyanate,
 4143
 lanthanide(III) pyridylbenzimidazoles
 thiocyanate, 1417
 lanthanide(III) Schiff base, 535
 lithium cyanide, dicyanamide, 3671
 magnesium methoxide methanol, 967
 magnesium methoxypropoxide tetranuclear,
 587
 manganese(II) acetyl-, benzoyl-pyridine,
 ethyl-, methyl-nicotinate cyanate, 2877

- mercury(II) sulfanilamidopyrimidine dimethylsulfoxide, 613
- metal(II) (alkoxyphenylethyl)piperidine-dithiocarbamates, 315
- metathesis of metal nitrides, 3635
- molybdenum(VI) oxo phosphorus butylammonium polynuclear water, 2589
- molybdenum(VI) oxo Schiff base methanol, 3977
- nickel(II) acetylacetonate oxalate phenanthroline dinuclear water, 1331
- nickel(II) aminoethylpiperidine trifluoroacetate, 3305
- nickel(II) aminoethylpropanediamine thiocyanate, 39
- nickel(II) azamacrocycles benzoylacetoinimates perchlorate, 3713
- nickel(II) azamacrocycles perchlorate water, 3997
- nickel(II) bipyridine ethyldithiocarbonate chloroform ethanol polymer, 2667
- nickel(II) diethylenetriamine thiocyanate water, 39
- nickel(II) ethyldithiocarbonate phenanthroline water, 2315
- nickel(II) oxalate Schiff base dinuclear, 1331
- nickel(II) propyldithiocarbonate tris(diphenylphosphinomethyl)ethane water 2573
- platinum(II) bromide, chloride ethylsarcosinate(methyl)dithioate, 3795
- platinum(II) tetraphenyldiselenoimido-diphosphinate, 2727
- praseodymium dimethylaminoethoxide tetramethylheptanedionate, 1223
- rhenium(III) chloride thiourea water, 2263
- ruthenium(II) bipyridine diketonates, 3039
- ruthenium(III) bipyridine chloro, 3039
- silver(I) ammonia (chlorobenzoyl)benzoate, 863
- silver(I) cobalt(II), copper(II), nickel(II), zinc(II) oxalates, 3013
- sodium dicyanamide, 3671
- strontium tetramethylheptanedionate, -e, 2581
- uranium(VI) amino acids ammonium oxo peroxy water, 4205
- vanadium(III) picolinate water, 2917
- vanadium(IV) oxo Schiff base dinuclear, 643
- vanadium(V) chloro oxo methoxyphenoxide, 4055
- vanadium(V) macrocyclicdiaminediammonium oxide peroxide water dinuclear, 2837
- vanadium(V) methanol methoxide oxo Schiff base, 643
- zinc(II) bipyridines, phenanthroline trichloroacetate water, 2475
- zirconium chloride and lithium nitride, 3635
- Thermochromism**
- nickel(II) aminoethylpiperidine trifluoroacetate, 3305
- ruthenium(II,III) potassium cyanide ethylenediaminetetraacetate, 3851
- Thiacycloalkyne complexes copper(I), mercury(II), silver(I), 1529
- Thiamacrocylic complexes ruthenium(II), 3293
See also Trithiacyclononane
- Thiazenes, *See* Phosphiniminocyclotrithiazene
- Thiazole complexes heterometallic, 1585 iron(II), 1873,4279 iron(II,III), 4279 iron(III), 1873,4279 rhodium(III), 4045
See also Benzothiazole
- Thiazolate complexes, *See* Benzothiazolate
- Thiazolinyldiazine complexes cadmium(II), 297 cobalt(III), 1137 zinc, 297
- Thio complexes, *See* Sulfide
- Thioamides, *See* Benzothiazolatethione, Diphenylphosphinothioamide (Butylphenyl)-, Cyclohexylphosphino-, (Isopropylphenyl)-, Tollyl-(phenyl)thioamide,
- Thioates, *See* Di-, Phosphino-thioate
- Thiobenzoates, metallaborane, nickel(II), 3873
- Thiocarbamates, *See* Dithiocarbamate
- Thiocarbonates, *See* Dithiocarbonate
- Thiocyanates ammonium, 267,2229 cadmium(II), 235,1679 carbon-13 and nitrogen-15 labelled, 125 chromium(III), 1119,2223 cobalt(II), 1679,2229 cobalt(III), 3807 copper(I), 889 copper(I,II), 161 copper(II), 889,1771,2229,3997 gold(I), 125 lanthanide(III), 321,1417,4143,4153 manganese(II), manganese(III), 3511 nickel(II), 39,1679,2229,3557,3997 nitrogen versus sulfur bonding, 125 palladium(II), 975 potassium, 125,223,321,1119,1417,1713, 1771,2223,2271,2393,2563,3511,3557, 3997,4143 sodium, 889,1535,1679,2393,3807,4283 tin(IV), 4283 yttrium(III), 1417 zinc(II), 267,975,2393
- Thioester complexes
See Ethylsarcosinate(methyl)dithioate
- Thioether complexes palladium(II), 1291
See also Bis(aminoethyl)dithiocyclohexane, Dimethyl-, Diphenyl-sulfide, Diphenylphosphino(phenylthio)methane, Dithian-, Dithiepane-ylidenemalonates, Thiamacrocylic, Trithiacyclohexane
- Thioimidodiphosphinates
See Tetraphenylthioimidodiphosphinate

- Thiol complexes**
 carbaborane, 1819
 hydrodesulfurization of thiols by metal surfaces review, 3165
See also Glutathione, Phenyl-, Pyridine-thiol
- Thiolates**
 copper(I), 4273
 molybdenum(III), 3089
 rhodium(III), 3115
 sodium, 4121
See also below and Acetonyl-, Benzyl-, Biphenyl-, Butadienyl-, Butyl-, Cyclopentadienyl-, Di-, Ethyl-, Methyl-, Phenyl-, Phenyltetrazole-, Propyl-, Pyridine-, Pyrimidine-, Tollyl-thiolate, Thiazolinate
- Thiolatobenzoate complexes**
 molybdenum(V), 447
- Thiolatopropionate complexes**
 molybdenum(V), 447
- Thione complexes and thionates**
See Benzthiazolate-, Pyridine-thione, Methylimidazolinethionate, Diphosphinedisulfide, Dithiolethione, Pyridinethiol, Thiosemicarbazone
- Thiophene complexes**
 desulfurization by palladium review, 3197
 hydrodesulfurization review, 3213
 transition metals bonding review, 3219
- Thiophosphinates** *See* Phosphinothioate
- Thiosalicylates, copper(II), sodium, 3323**
- Thiosemicarbazides, *See* Carboxybenzoyl-, Methyl-, Phenyl-thiosemicarbazide**
- Thiosemicarbazone complexes**
 copper(II), 1895
 nickel(II), 1895,1925
See also Acetylpyridine(alkyl)-, Carboxylatobenzoyl-, Galactosebis-, Glucosebis-, Hydroxybenzyl-, Isatin-, Ribosebis-thiosemicarbazone
- Thiosulfates, sodium, 2199**
- Thioterephthalates, *See below***
- Thioterephthaloyl-amides, -anhydrides, -chloride, -esters, -thioesters complexes**
 iron(II), 3327
- Thiourea complexes, rhenium(III), 2263**
See also Butoxycarbonyl-, Ethoxycarbonyl-thiourea
- (Thioureacarbonyl)cyclopentadienyl complexes**
 iron(II), 1713
See also (Dimethyl-, Piperidine-thioureacarbonyl)cyclopentadienyl
- Thorium(III) complexes, water, 989**
- Thorium(IV) compounds and complexes**
 azide, chloride, 989
 di(ethylhexyl)methanediphosphonate, 1843
 hydroxide, hydroxo, 989
 nitrate, nitrate, 1843
 oxo, 989
 water, 989,1843
- Thulium compounds and complexes**
 chloride, chloro, 1057,3415
 macrocyclicpolyamine, nitrate, 3991
 oxide, 3415
 tris(pyrazolyl)borate, 1057
- Tin, alloys, 1193**
- Tin(0), metal, 2957**
- Tin(II) compounds and complexes**
 bromide, bromo, 2621
 chloride, chloro, 1599,1621,2263,2621
 heterometallic, 1599,2957
 phosphate, 2957
 water, 1621,2263,2621
- Tin(IV) compounds and complexes**
 (alkylaza)heptadiyl, 4005
 benzoate, 1621
 bromide, bromo, 2621,4005,4283
 butyl, 2213,3699,3729
 butyrate, carbohydrate, 881
 chloride, chloro, 573,881,949,1095,1585, 2213,2621,3671,3699,4005,4283
 dicyanamide, 3671
 diethylether, 1095
 diethylphosphinothioate, 949
 dihydroxybenzoate, 3729
 dimethylphosphinothioate, 949
 dimethylpyridinium, 4283
 dinuclear, 573,949
 diphenylphosphinothioate, 949,4113
 dithioleonedithiolate, 4283
 ethoxide, 881
 heterometallic, 1095,1193,1585
 hydroxide, hydroxo, 795,881,949
 indenyl, 3699
 iodide, iodo, 881,4283
 methyl, 573,881,1095,1585,2213,3671,4129
 methylcarboxypropyl, 4283
 methylimidazolinethionate, 795
 oxaheptadiyl, 4005
 oxide, oxo, 881,3729
 oxidoarylideneaminocarboxylate, 573
 phenyl, 573,795,949,1095,2213,2563,4005, 4113
 phenyltetrazolethiolate, 4129
 polynuclear, 881,2105
 Schiff bases, 2213
 telluride, tellurido, 1193
 tetraethylammonium, 4283
 tetra(methoxyphenyl)porphyrinate, 1621
 tetraphenylphosphonium, thiocyanate, 4283
 tolyl, 2563
 trioctylphosphineoxide, 2621
 triphenylsiloxide, 4005
- Titanium nitride, 3635**
- Titanium(III) compounds and complexes**
 chloride, chloro, 195,3635
 cyclopentadienyl, 61
 dimethylaminoethylcyclopentadienyl, 195
 fluoro, heterometallic, polynuclear, 61
 pyridinebiscyclopentadienyl, 195
 pyrrole, tetrahydrofuran, 195
 (trimethylsilyl)cyclopentadienyl, 61

- Titanium(III,IV) compounds and complexes
heterometallic, phosphate, 2957
- Titanium(IV) compounds and complexes
acetylacetonate, 777
chloride, chloro, 25,635,869,2941
cyanoacetate, 25
cyclopentadienyl, 25,61
dicyclohexylamide, 635
diethylamide, 4017
dimethylamide, 2941,4017
diphenyltriazenide, 4017
fluoride, fluoro, 61
heterometallic, 1223,2105,2957,4347
methanol, methoxide, 4347
methyl, 25
methylenebis(butylmethylphenoxide), 2941
oxide, oxo, 777,2105,2957,4347
pentamethylcyclopentadienyl, 61
pentane, 777
phosphate, 2957
polynuclear, 777,4347
propoxide, 777,1223
tetrahydrofuran, 635
tetramethylheptanedionate, 777
(trimethylsilyl)cyclopentadienyl, 61
- Toluene complexes and solvates
calcium, 2581
molybdenum(0), 409
molybdenum(I), 4353
molybdenum(V), 1391
palladium(0), 2789
tantalum(IV), 721
tantalum(V), 721
tungsten(III), tungsten(III,IV), 3893
vanadium(III), 1517
zirconium(IV), 2941
See also Cyclopentadienyl-, Fluorenyl-,
Fluoro-, Indenyl-toluene
- Toluenesulfonamides
See (Pyridylethyl)toluenesulfonamide
- Tolyl
antimony(V), tin(IV), 2563
See also Pyridyl-, Pyrimidine-aminotolyl
- Tolylazopyridine complexes
ruthenium(II), silver(I), 1605
- Tolylimides
chromium(V), 3879
tantalum(III), tantalum(V), 1177
- Tolylisocyanide complexes, tantalum(III),
1177
- (Tolyl)(phenyl)thioamides, lithium, 3879
Tolylpicolinamide, ruthenium(II), 1605
Tolylthiolates, *See* Methylphenoxythiolate
Tolylthiosemicarbazides, ruthenium(II), 4313
- Transferrins
cobalt(III) labelled, iron(III) removal, 1069
- Trans influence, germanium(IV) (butylaza)-
heptadiyl chloride; tin(IV) (alkylaza)-, oxa-
heptadiyl halide, triphenylsiloxide, 4005
- Transition metal coordination chemistry book
review, 4189
- Transmission electron microscopy, calcium
chromium(III) hydroxo apatite, 2047
- Triamine complexes *See* Aminoethylpropane-
diamine, Diethylenetriamine
- Triazaphosphaadamantane complexes
copper, 2731
molybdenum(0), 3533
- Triazenide complexes, *See* Diphenyltriazenide
- Triazole complexes and Triazolates
See Benzo-triazolate, -triazole
- Tribromocyclopentadienyl complexes
gold(I), manganese(I), 2681
- Tributylphosphate complexes
uranium(VI), 2233
- Tributylphosphine complexes
cobalt(II), 1731
copper(I), 327
gold(I), nickel(0), nickel(II), 2681
tungsten(II), 4137
- Trichloroacetates, zinc, 2475
- Trichlorocyclopentadienyl complexes, gold(I),
lithium, manganese(I), nickel(II), 2681
- Trichlorocyclopentadienyl-dithiolates,
-thiolates, gold(I), lithium, manganese(I),
2681
- Tricyanomelamines, lithium, 3671
- Tricyclohexylphosphine complexes
copper(I), 207
platinum(0), 765
- Triene complexes, *See* Cycloheptatriene
- Triethanolamine complexes
barium, caesium, , 2087
cobalt(II), cobalt(III), 1047
lithium, magnesium, potassium, rubidium,
sodium, strontium, 2087
- Triethylammonium salts
iron(0), 3475
niobium(III), 1081
niobium(V), 1447
tantalum(III), 1081
- Triethylborates, sodium, 133,4137
- Triethylenetetraaminehexaacetates
lanthanide(III), potassium, 1361,2037
- Triethylphosphine complexes
gold(I), 125
platinum(0), 3185
platinum(II), 1945,3185
- Triflates
copper(II), 3641
iridium(III), 3129
iron(II), iron(III), 2223
osmium(II), 1993
ruthenium(II), 3129
silver(I), 1529,1837,3129,3641
zinc, 3129,3435
- Trifluoroacetates
nickel(II), 3305
platinum(IV), 2421
ruthenium(II,III), silver(I), 3399
zinc, 3435
- Trifluoroacetylacetonates
cobalt(II), 2651

- ruthenium(II), 3039
 silver(I), 2147
 (Trifluoromethyl)phenyls
 See Tris(trifluoromethyl)phenyl
 Trifluoromethylsulfonates, *See* Triflates
 Trifluorophenylbutanedionate, silver(I), 2147
 Trifluorothienylbutanedionate, silver(I), 2147
 Trimethylamine complexes
 copper(I), 1487
 osmium, 3775
 Trimethylammonioacetate, cadmium(II), 3363
 Trimethylammonium iodide, 1487
 Trimethylenediamine complexes
 technetium(V), 3311
 Trimethylheptanedionates
 See Methoxytrimethylheptanedionates
 Trimethylphosphine complexes
 gold(I), 125
 nickel(II), 3641
 rhodium(III), 3115
 Trimethylphosphineoxide complexes
 lanthanide(III), 1223
 Trimethylsiloxides
 lanthanide(III), 1223
 vanadium(III,V), 1081
 Trimethylsilylamides
 See Bis(trimethylsilyl)amide
 (Trimethylsilyl)cyclopentadienyl complexes
 titanium(III), titanium(IV), 61
 See also Bis(trimethylsilyl)cyclopentadienyl
 Trioctylphosphineoxide complex, tin(IV), 2621
 Trioxaundecanedioates, manganese(II), 4247
 Tripeptide complexes, *See* Glutathione
 Triphenylphosphine complexes
 chromium(0), 1937
 copper, 2731
 copper(I), 327,377,1433,1529,2987,3399,
 3499
 copper(I,II), 2341
 gold(I), 125,1577,2681
 iridium(III), 2029
 mercury(II), 1529
 metallaborane, 3873
 molybdenum(0), 1937
 molybdenum(VI), 945
 nickel(II), 1971,2323,2573,3873
 palladium(II), 335,1323,2257,2405,2509,
 4305,4337
 platinum(0), 765,2455,3333
 platinum(II), 377,1323,1663,2381,2455,
 2509,3333,4337
 rhenium(III), 2087
 rhenium(V), 1979,2087
 rhodium(I), 869
 rhodium(III), 307
 ruthenium(II), 81,291,577,983,1343,1793,
 2369,3847
 ruthenium(III), 81,2951
 silver(I), 945,1259,1529,1543,2681,2987
 tungsten(0), 1937
 tungsten(VI), 945
 Triphenylphosphine oxide complexes
 gallium(III), 3407
 Triphenylphosphinesulfide complexes
 palladium(II), 1963
 Triphenylphosphite complexes
 iridium, 3861
 palladium(II), 4305
 platinum(0), 3333
 platinum(II), 1663,3333
 Triphenylphosphoniobutyrate complexes
 cadmium(II), 199
 Triphenylsiloxides
 chromium(VI), 3879
 sodium, tin(IV), 4005
 Triphenylstibine, rhodium(III), 4045
 Triphosphine complexes, *See* Tris(dimethyl-,
 Tris(diphenyl-phosphinomethyl)ethane
 (Tripropylphenyl)phosphine complexes
 tantalum(V), 721
 (Tripropylphenyl)phosphinidine complexes
 tantalum(IV), 721
 Tri(propyl)phenylthiolates
 molybdenum(VI), sodium, 2631
 Tripropylphosphine complexes, gold(I), 125
 Tris(aminoethyl)amine complexes
 copper(II), 187,909
 nickel(II), 1331
 Tris(anthracenyl)phosphine, aryl embraces,
 3545
 Tris(chlorodimethylpyrazolyl)borates
 copper(I), potassium, 207
 Tris(cyanoethyl)phosphine complexes
 gold(I), 125
 nickel(II), 2573
 platinum(II), 1663
 Tris(dimethylphosphinomethyl)ethane
 complexes, manganese(I), 3663
 Tris(dimethylpyrazolyl)borates
 copper(I), 207
 molybdenum(0), 1391
 molybdenum(I), 4353
 molybdenum(II), 1391,1439,2329,4353
 molybdenum(V), 1391,3695
 potassium, 207,1297,1391
 zinc(II), 1297
 Tris(diphenylphosphinomethyl)ethane
 complexes
 nickel(II), 2573
 rhodium(I), rhodium(III), 3099
 Triselenacyclohexane complexes, iodine, 1983
 Trisenaundecane complexes
 chromium(III), 4253
 Tris(hydroxymethyl)methylammonium salts
 heterometallic, silver(I), tungsten(VI), 217
 Tris(methoxyphenylpyrazolyl)borates
 potassium, thallium(I), 2435
 Tris(methylphenylpyrazolyl)borates
 potassium, zinc(II), 109
 Tris(methylpyrazolyl)borates
 cadmium(II), cobalt(II), 671
 copper(I), 207

- copper(II), iron(II), manganese(II), nickel(II), 671
 potassium, 207,671
 zinc, 671
- Tris(methylpyridylmethyl)amine complexes
 silver(I), 525
- Tris(methylselenomethyl)ethane complexes
 chromium(III), 4253
- Tris(phenylpyrazolyl)borates
 copper(II), potassium, 1535
See also Tris(methoxyphenylpyrazolyl)-
 borate
- Tris(pyrazolyl)borates
 cobalt(III), 4087
 copper(I), 207
 lanthanide(III), 1057
 molybdenum(II), 2329
 potassium, 207,1057,4087
 scandium(III), yttrium(III), 1057
See also Tris(chlorodimethyl-, Tris(dimethyl-
 Tris(methyl-, Tris(methylphenyl-,
 Tris(phenyl-, Tris(pyridyl-, Tris(tolyl-
 pyrazolyl)borate
- Tris(pyridylmethyl)amine complexes
See Tris(methylpyridylmethyl)amine
- Tris(pyridylpyrazolyl)borates
 iron(II), 1567
 lead(II), 2435
 potassium, 1567,2435
- Tris(tolylpyrazolyl)borates
 magnesium(II), 1255
- Tris(trifluoromethyl)phenyls
 boron, lithium, 2637
- Tris(trimethylsilyl)cyclooctatetraenyl
 complexes, potassium, 2067
- Trithiacyclohexane complexes, iodine, 1983
- Trithiacyclononane complexes
 ruthenium(II), 393
- Tritolylphosphines complexes
 copper(I), 4023
 gold(III), 4039
- Tropolonates, ruthenium(II), 3039
- Tungsten compounds and complexes
 benzenebis(carbonylcyclopentadienyl), 3067
 benzoylcyclopentadienyl, 3273
 carbonyl, clusters, 707,1549,1689,3067,3273
 cyclopentadienyl, 707,1549,1689
 heterometallic, 707,1549,1689,3067
 hydride, hydrido, 707,1549,1689
 (methylacetato)benzoylcyclopentadienyl,
 3273
 nitride, oxide, 3635
 selenide, selenido, 707,1689
 sulfide, 3067,3273
 telluride, telurido, 1549
- Tungsten(0) compounds and complexes
 acetonitrile, 2141
 benzenebis(carbonylcyclopentadienyl), 3067
 benzoylcyclopentadienyl, 3273
 bipyridine, 2193
 bis(diphenylphosphino)benzene, 2141
 carbonyl, 403,1101,1937,2141,2193,2279,
 3067,3273,4137,4363
 cyclopentadienylcarboxylic acid, 403
 ethyl(cyclopentadienylcarboxylate), 403
 fullerene, 2141
 heterometallic, 403,2193,2279,3067,3273,
 4363
 isonicotinate, 2279
 metal, 3635
 (methylacetato)benzoylcyclopentadienyl,
 3273
 methyl(cyclopentadienylcarboxylate), 403
 nicotinate, 2279
 pentabenzoylcyclopentadienyl, 403
 pentamethylcyclopentadienyl, 4363
 piperidine, 2279
 pyridine-dicarboxylate, -sulfonate, 2279
 tetrabutyl-, tetraethyl-, tetramethyl-,
 tetrapropyl-diphosphinedisulfide, 1101
 triphenylphosphine, 1937
- Tungsten(I) compounds and complexes
 carbonyl, 481,707,1549,1689
 cluster, 481
 cyclopentadienyl, 707,1549,1689
 dinuclear, 481,707,1549
 ethyl-, methyl-(cyclopentadienyl-
 carboxylate), heterometallic, sulfide, 481
- Tungsten(II) compounds and complexes
 acetonitrile, 1599
 carbonyl, 1599,4363
 chloro, dinuclear, 1599,4137
 heterometallic, norbornadiene, 1599
 pentamethylcyclopentadienyl, 4363
 tributylphosphine, 4137
 xylylenyls, 4363
- Tungsten((II,VI) complexes, butenediyl,
 butoxide, carbonyl, dinuclear, 839
- Tungsten(III) compounds and complexes
 bis(diphenylphosphino)methane, 4137
 bis(diphenylphosphino)propane, 3893
 butoxide, 839
 chloride, chloro, 3893,4137
 dibutylamide, dibutylamine, 3893
 dinuclear, 839,2113,3893,4137
 hydride, hydrido, 4137
 pentoxides, polynuclear, propoxide, 2113
 pyridine, 2113
 tetrahydrofuran, toluene, 3893
- Tungsten(III,IV) complexes, bis(diphenyl-
 phosphino)propane, chloro, dibutyl-,
 diethyl-amide, dinuclear, toluene, 3893
- Tungsten(IV) compounds and complexes
 chloride, chloro, 3635,4137
 dinuclear, hydride, pentoxides, phenylimide,
 polynuclear, propoxide, pyridine, 2113
- Tungsten(VI) compounds and complexes
 acetylacetonate, 3977
 ammonium, 217,801,833,2483
 binaphtholate, 1323
 chloride, chloro, 4137
 cluster, 945,1543
 dichloromethane, 1543

dimethylamino(methyl)pyridylammonium, 713
dimethylformamide, 217,713
dimethylhydrazido, dinuclear, 2113
heterometallic, 217,713,801,833,945,1323, 1543,2483,3499,3865,3985,4305
oxide, oxo, 713,1323,1581,2193,3865,3977, 3985
phenylimide, 2113
polynuclear, 713
propoxide, pyridine, 2113
Schiff base, 3977
selenide, selenido, 1543
sulfide, 217,801,833,945,2483,3499,4305
tetrabutylammonium, 713,1323,3865
tetraethylammonium, 4305
triphenylphosphine, 945
tris(hydroxymethyl)methylammonium, 217
water, 217,1323,3865,3985
Tyrosine complexes, *See* Transferrin

U

Undecanedioates, *See* Trioxaundecanedioate
Uracil complexes, *See* Fluorouracilate
Uranium(0), metal, 3921
Uranium(VI) compounds and complexes
acetate, ammonium, aspartate, 4205
di(ethylhexyl)methanediphosphonate, 1843
dinuclear, glutamate, 4205
heterometallic, 3921,4205
histidinate, imidazolate, 4205
nitrate, nitrato, 1843,2233
oxo, 1843,2233,3921,4205
peroxide, peroxy, 4205
polysulfide, 3921
salicylate, 4205
tributylphosphates, 2233
water, 1843,2233,4205
Urea complexes, manganese(III), 2903
See also Dimethyl-, Thio-urea

V

Valine complexes, *See* Benzoylvalinate
Vanadium nitrides, 3635
Vanadium(II) complexes, bromide, chloride, methanol, pyridine, tetrahydrofuran, 1517
Vanadium(III) compounds and complexes
acetonitrile, 1517
bipyridine, 2917
bromide, bromo, 1517
chloride, chloro, 1517,2613,2917,3635
dinuclear, 1517,2613
heterometallic, 1517
histidine, oxo, 2613
phenanthroline, picolinate, 2917
Schiff base, toluene, 1517
water, 1517,2917

Vanadium(III,V) compounds and complexes
dinuclear, oxo, tetramethylpiperidyl nitrene, trimethylsiloxide, 1081
Vanadium(IV) compounds and complexes
acetate, 1863,2991
acetylacetonate, 643,1517
amino(methylmercaptan)naphthoquinone, 933
antipyrines, 1247
bipyridine, 1863,4379
bromide, bromo, 1517
carboxylate, 643
chloride, chloro, 1247,1517
diaminonaphthoquinone, 933
dimethylbipyridine, 4379
dinuclear, 643,1517,1825,1863,4379
hydroxyethylpyronate, 789
hydroxy(methylmercaptan)naphthoquinone, 933
hydroxy-methylpyronate, -pyridonate, 789
iodide, iodo, 1517
isophthalate, 4379
methanol, methoxide, 1517
methyl(phenoxymethylene)dithiocarbazates, 1863
nitrophenanthroline, 4379
oxide, oxo, 643,789,933,1247,1517,1825, 1863,2917,2991,4179,4379
phenanthroline, 1863,4379
picolinate, 2917
quinolineolate, 4179
Schiff bases, 643,1247,1517,1825,2991,4179
sulfate, 789,933,1143,1247,1517,1825,4179, 4379
water, 789,1143,1247,1517,4179
Vanadium(V) compounds and complexes
ammonium, 629,1081,2837,4121
carboxylate, 643
chloride, chloro, 1081,4055
cluster, 4121
cyanoaniline, cyanopyridine, 4055
diethyldithiocarbamate, 4121
dinuclear, 2837
heterometallic, 629,2837,4121
macrocyclicdiaminediammonium, 2837
methanol, methoxide, 643
methoxyphenoxide, 4055
oxide, oxo, 629,643,1081,1143,2837,4055, 4179
peroxide, peroxy, 2837
polynuclear, 643
propoxide, 1143
pyridinium, 643
quinolineolate, 4179
Schiff bases, 643,1143,4179
sulfide, tetraethylammonium, 4121
water, 643,2837
Vapour pressure measurements
zinc(II) alkyls alkylamides, 3593
Vinyl compounds and complexes
molybdenum(II), 409
See also Divinylketene, Dimethylsilabutenyl-

diphenylphosphine
 Vinylbipyridine complexes
See Bis(anilinovinylbipyridine)
 Vinylketone complexes, iron(0), 2979
 Vinylphenethyl compounds, germanium, 1767
 (Vinylphenyl)thiolates
 rhodium(I), rhodium(III), 3099
 Voltammetry, *See* Cyclic-, Normal pulse-,
 Rotating disk electrode-, Square wave-
 voltammetry

W

Water complexes and hydrates
 aluminium, 2491,3985,4081
 antimony(V), 2563
 barium, 2087,2421,2527,2871
 beryllium, 441
 cadmium(II), 199,223,297,915,1301,1399,
 1803,2059,2413,2483,2625,3363,3435,
 3455,3585,3929
 calcium, 507,1843,2047,2087
 chromium(III), 1119,1371,2047,2223,2491,
 2897,3371,4217
 chromium(V), 2897
 cobalt(II), 423,463,1047,1201,1315,1731,
 2109,2155,2413,2625,2651,2925,3013,
 3279,3455,3577,3615,3757,3941,4323
 cobalt(III), 1047,1137,1201,1739,2109,2155,
 2851,3747,3757,3807,4087
 copper(I), 1477
 copper(II), 119,187,259,281,383,423,463,
 489,531,607,733,805,825,889,909,963,
 1013,1201,1279,1315,1357,1477,1505,
 1535,1595,1651,1701,1723,1747,1771,
 1843,1999,2059,2073,2135,2175,2205,
 2239,2341,2447,2465,2605,2625,2659,
 2673,2909,3013,3033,3345,3379,3399,
 3455,3525,3601,3641,3655,3765,3815,
 3997,4033,4105,4163,4221,4257,4323,
 4331,4371
 gallium, 4081
 gold(III), 4039
 heterometallic, 217,3013,3815
 heteropolyoxometallates, 629
 indium(III), 2183,2291
 iridium(I), 1169
 iron(II), 47,909,1023,1567,2307,2797,3615
 iron(III), 47,849,1567,1843,2223,2307,2491,
 3953
 lanthanide(III), 321,507,515,567,623,749,
 833,963,1361,1381,1491,1629,1643,1787,
 1907, 2037,2155,2697,3247,3385,4143,
 4153,4229,4265
 lead(II), 19,355,567,2765,3681
 magnesium, 2087,2145
 manganese(II), 71,423,689,897,1403,1411,
 1471,1679,2365,2547,2741,2877,2903,
 3267,3511,4247
 manganese(II,III), 1719
 manganese(III), 71,1273,1365,2223,3511,
 3787

manganese(III,IV), 1471,2199
 manganese(IV), 3493
 mercury(II), 2483
 metal complexes book review, 993
 molybdenum, 1407,2249
 molybdenum(I), 2249
 molybdenum(II), 3655
 molybdenum(IV), 3857
 molybdenum(V), 447
 molybdenum(VI), 75,1365,1407,2589,3865
 nickel(II), 39,171,179,253,275,315,423,463,
 1111,1201,1315,1331,1439,1925,1931,
 1971,2205,2223,2315,2573,2625,2659,
 2673,2727,2749,2777,2819,2827,3013,
 3305,3455,3505,3557,3577,3615,3815,
 3997,4323
 osmium(VI), 1323
 palladium(II), 1157,3743
 platinum(II), 3705,3743
 potassium, 1119,1361,2055
 rhenium(III), 2263
 rhodium(I), 1169
 rhodium(I,III), 1483
 rhodium(II), 3399,3655
 rhodium(III), 307,1169,1307,1483,2223
 ruthenium(II), 103,143,393,433,983,1605,
 1793,1993,2369,2705,3039,3293,4073,
 4313
 ruthenium(II,III), 3399,3655,3851
 ruthenium(III), 81,143,1023,1235,1605,1755,
 2429,2951,3039,3047,3615,3851
 scandium(III), 3485
 silver(I), 153,217,453,921,1957,2375
 sodium, 447,949,2925,3609,4121,4187
 strontium, 2087
 technetium(V), 3311
 thorium(III), 989
 thorium(IV), 989,1843
 tin(II), 1621,2263,2621
 tungsten(VI), 217,1323,3865,3985
 uranium(VI), 1843,2233,4205
 vanadium(III), 1517,2917
 vanadium(IV), 789,1143,1247,1517,4179
 vanadium(V), 643,2837
 yttrium(III), 1357,1907
 zinc, 495,1297,1783,2073,2205,2223,2393,
 2475,2483,2689,2711,3013,3435,3475,
 3585,3947,3985
 zirconium(IV), 3489
 Wilkinson, Geoffrey, 3877

X

X-ray absorption spectra
See Extended X-ray absorption
 X-ray absorption near-edge spectra
 nickel(II),(III) dipropylthiobenzenedithiolate,
 dithiobenzodithiolethione, 1351
 uranium(VI) oxo nitrate tributylphosphates,
 2233
 Xanthates, *See* Dithiocarbonates
 Xanthine complexes, *See* Theophylline

- X-ray crystal structures of complexes
- aluminium acetonitrile calixarene methyl dinuclear, 4385
 - aluminium amidoacetophenone methyl, 1337
 - aluminium dibutylmethylphenoxide methyl methylmethacrylate, 4389
 - aluminium hafnium(IV) propoxide, 663
 - antimony(III) iminodiethanoldithiocarbamate, 1212
 - antimony(V) diphenylphosphinate hydroxo methyl, 2643
 - antimony(V) dithiolethionedithiolate phenyl, tolyl tetraethylammonium, 2563
 - arsenic(II) tellurium(II) rubidium ethylenediamine, 3055
 - arsenic(III) iminodiethanoldithiocarbamate, 1212
 - barium copper(II) titanium(IV) oxide, 2105
 - barium dihydrotetrazinedicarboxylate water, 2871
 - barium methoxytrimethylheptanedionate water dinuclear, 2527
 - barium titanium(IV) methanol methoxide oxo, 4347
 - bismuth(III) iminodiethanoldithiocarbamate dinuclear, 1212
 - boron oxide dibutyl diazabutadiene polynuclear, 2325
 - boron oxide hydroxide dimethylammonium chloride polynuclear, 2325
 - cadmium(II) azacryptates perchlorate dinuclear, 223, 1301
 - cadmium(II) bipyridine methylnitroaniline, nitroaniline perchlorate water, 3929
 - cadmium(II) bromide, chloride, iodide triphenylphosphoniobutyrate water, 199
 - cadmium(II) bromide, chloride, iodide pyrazine, 417
 - cadmium(II) chloride, nitrate perchlorate trimethylammonioacetate water, 3363
 - cadmium(II) chloride thiazolinyldiazine water, 297
 - cadmium(II) cobalt(I) carbonyl methylidynecarboxylate tetraethylene-glycoldimethylether polynuclear, 1803
 - cadmium(II) dihydroxybenzoate (dihydroxybenzoic acid) (hydrogen chloride) water, 1399
 - cadmium(II) dimethylquinquepyridine perchlorate, 2059
 - cadmium(II) iodide Schiff base, 2857
 - cadmium(II) macrocyclic Schiff base perchlorate dinuclear methanol, 915
 - cadmium(II) phenanthroline perchlorate nitroaniline, 1263
 - cadmium(II) phenylenedimethylenebis-pyrazole thiocyanate dinuclear, 1679
 - cadmium(II) picolinate azide, thiocyanate, 235
 - cadmium(II) tetrakis(pyrazolylmethyl)tetra-azacyclododecane tetraphenylborate, 3585
 - calcium aminocyclohexanecarboxylic acid perchlorate water polynuclear, 507
 - calcium dibenzoylmethanate pentamethyldiethylenetriamine, 2581
 - cerium(IV) oxo propoxide polynuclear, 1129
 - chromium(0) carbonyl cyclopentadienyl-, fluorenyl-, indenyl-toluene, 2005
 - chromium(II) diisopropyl dimethyl-imidazolylidene mesityl, 3879
 - chromium(II) (diisopropylphenyl)amide lithium tetrahydrofuran, 3879
 - chromium-(II), -(III) pentafluorophenyl-thiolate xylylisocyanide, 2631
 - chromium(III) bromo pentamethylcyclopentadienyl mesitylammonium, 3879
 - chromium(III,VI) manganese(III), benzoate chloro oxo pyridine, 1371
 - chromium(III) potassium Schiff base thiocyanate water, 1119
 - chromium(V) butyl-, isopropylphenyl-imido pentamethylcyclopentadienyl chloro, 3879
 - chromium(V) isopropylphenylimido pentamethylcyclopentadienyl phenylthiolate, 3879
 - chromium(VI) mesitylimido mesitylamido lithium diethylether, 3879
 - cobalt iron molybdenum, tungsten carbonyl (methylacetato)benzoylcyclopentadienyl sulfide, 3273
 - cobalt molybdenum ruthenium sulfur cluster carbonyl acylcyclopentadienyl, 2387
 - cobalt(I,III) carbonyl cluster pyridinethiolate sulfide, 1425
 - cobalt(II) adipate methylimidazole water dinuclear, 3941
 - cobalt(II) benzothiazolatethione bis(diphenylphosphino)ethane, tributylphosphine acetonitrile, 1731
 - cobalt(II) chloride diphenylbenzamidine, 133
 - cobalt(II) chloro iminodipyridinium, 2851
 - cobalt(II) chloride phenylaminebis-(methylphenylamido), 1177
 - cobalt(II) chloride pyrazolylmethylpyridine water, 3577
 - cobalt(II) ethylenediaminetetraacetanilide perchlorate water, 4323
 - cobalt(II) nitrate phenylenedimethylenebispyrazole, 1679
 - cobalt(II) sodium phenylenediaminetetra-acetate polynuclear water, 2925
 - cobalt(III) acetate chloro hydroxo methoxide oxo water polynuclear, 2109
 - cobalt(III) (amino acid salts), aminoethyl-propanediamine nitrito water, 3757
 - cobalt(III) ammine nitro bond lengths, 3565
 - cobalt(III) azide dimethylpyridines, 3747
 - cobalt(III) bis(aminoethyl)dithiocyclohexane chloride ethanol, 3807
 - cobalt(III) bis(aminopropyl)glycinate halo, perchlorate, nitrate, nitrito water, 1739
 - cobalt(III) caesium hydroxo nitrilotriacetate water dinuclear, 2851

cobalt(III) chloride diethylenetriamine tris-
 (pyrazolyl)borate hexafluorophosphate, 4087
 cobalt(III) chloride (methylpyrazolyl)-
 formylbenzylthiocarbamate, 3735
 cobalt(III) chloro thiazolinyldiazine water, 1137
 cobalt(III) macrocyclicpolyamine tris(pyrazolyl)borate hexafluorophosphate, 4087
 cobalt(III) manganese(II,III) benzoate oxo pyridine, 1377
 cobalt(III) tris(pyrazolyl)borate hexafluorophosphate, 4087
 copper(I) acetonitrile Schiff base methanol hexafluorophosphate tetranuclear, 4273
 copper(I) alkylisocyanides tetrafluoroborate, 2397
 copper(I) bis(diphenylphosphino)methane nitrate pyridine methanol dinuclear, 4033
 copper(I) bromide dimethylsilabutanyl-diphenylphosphine dinuclear, 3479
 copper(I) chloride dibutylphosphine tetranuclear, 3253
 copper(I) chloride nitrophenylbutoxy-, nitrophenylethoxy-carbonylthiourea, 2605
 copper(I) ethene perchlorate tetramethylethylenediamine, 67
 copper(I) hydroxybenzylthiosemicarbazones bromide, iodide acetonitrile, 3499
 copper(I) iodide pyridinethione tritolylphosphine dinuclear, 4023
 copper(I) iodide trimethylamine tetramer, 1487
 copper(I) molybdenum(VI) chloride selenide triphenylphosphine, 1433
 copper(I) platinum(II) sulfide triphenylphosphine hexafluorophosphate, 377
 copper(I) pyridyl(dimethoxyphenyl)pyrazole tetrafluoroborate, 4257
 copper(I) tris(pyrazolyl)borates tricyclohexylphosphine, 207
 copper(I,II) cyanide diethylenetriamine, 1747
 copper(I,II) cyanide dimethylformamide thiocyanate polynuclear, 161
 copper(I,II) dimethyldiphenylquinquepyridine perchlorate acetonitrile dinuclear, 2059
 copper(I,II) levulinate triphenylphosphine tetranuclear, 2341
 copper(II) acetate hydroxo triazacyclododecane dinuclear perchlorate, 259
 copper(II) aminoethanol theophylline water, 3601
 copper(II) (aminomethyl)pyridine chloride water, 1651
 copper(II) azide dimethylpyridine formamide dimer, polymer, 2239
 copper(II) bipyridine bis(dimethylnitrosopyrimidinedionyl)propylenediamine dinuclear perchlorate ethanol, water, 281
 copper(II) bipyridine oxalate nitrate water polynuclear, 531
 copper(II) bis(methylbipyridineethyl)-benzene perchlorate acetonitrile, 1505
 copper(II) bis(pyridylmethyl)-alaninate, -alanineamide, -glycinate, -glycineamide chloride, hexafluorophosphate, perchlorate water, 3765
 copper(II) bis(pyridylmethyl)malamide pyrazolate water dinuclear, 3815
 copper(II) carboxylatobenzoylthiosemicarbazone imidazole pyridine water trinuclear, 1477
 copper(II) (carboxylatooxopropylidene)-tetramethylimidazolidineoxyl water, 1279
 copper(II) chloro creatinine, 3379
 copper(II) chloro diaminopropane diammoniumpropane malonate, 3261
 copper(II) chloro methoxy(methoxymethylpyrazolyl)methylpyrimidine tetrafluoroborate, 939
 copper(II) chloro phenylpyrazole tris(phenylpyrazolyl)borate dichloromethane, 1535
 copper(II) cyanoguanidine nitrate, 805
 copper(II) diazafluorenehydrazine perchlorate tris(aminoethyl)amine, 187
 copper(II) dibenzoyltartrate phenanthroline water, 3655
 copper(II) diethylenetriamine hydroxide perchlorate dinuclear, 1747
 copper(II) dimesitylboroxide lithium acetonitrile pyridine, 2637
 copper(II) dimethanolpyridine niflumate, 2721
 copper(II) dimethylpteridinedione nitrate water, 607
 copper(II) dimethylpyrazolylmethylpyridine nitrite perchlorate, 4331
 copper(II) ethyl(benzothiazolyl)aminoformate dinuclear, pyridine, 1013
 copper(II) ethylenediamine ethylenediaminedicarboxylate, glycinecarboxylate water, 1723
 copper(II) ethylenediamine pyridine tetrafluoroborate, 3687
 copper(II) ethylenediaminetetraacetanilide perchlorate water, 4323
 copper(II) gadolinium(III) diglycolate water polynuclear, 963
 copper(II) glycinate thiocyanate water, 889
 copper(II) (hydroxyethoxy)methylguanidine nitrate water, 1701
 copper(II) iron(II) cyano tris(aminoethyl)amine water, 909
 copper(II) lead(II) dimethylaminoethoxide dimethylsulfoxide iodo, 263
 copper(II) levulinate bipyridine, pyridine, water, 2341
 copper(II) macrocyclicdiamidodiamine water, 3525
 copper(II) methylimidazole nitrosodicyanomethanide, 463

copper(II) methyl-imidazole, -pyridine perchlorate picolylpicolinamide water, 383
 copper(II) methyl-imidazole, -pyridine perchlorate (pyridylethyl)picolinamide water, 2465
 copper(II) methyl(nitrobenzal)methylene-dithiocarbamate, 4097
 copper(II) niflumate pyridinemethanol, 1461
 copper(II) nitrite bipyridine, phenanthroline bisulfate, tetrafluoroborate water, 2447
 copper(II) norbornenecarboxylate methanol dinuclear, 3399
 copper(II) perchlorate propylenebis-(actoylpyridineimine) water, 119
 copper(II) phenanthroline pivaloyltrifluoroacetate, 1999
 copper(II) phenanthroline tetramethylheptanedionate, 1595
 copper(II) potassium azide pyrazinate, 825
 copper(II) potassium bis(oxybenzamidato)-benzene dimethylformamide, 4105
 copper(II) pyridinediyl-diethylidene-dioxamohydrazide water, 4221
 copper(II) (pyridylethyl)toluenesulfonamide, 1707
 copper(II) Schiff bases, 903,2991,4371
 copper(II) yttrium(III) alanine perchlorate water, 1357
 copper(III) dithiaoxadithiolate tetraphenylphosphonium, 1111
 di(chloromethyl)oxatellurane chloride, 2441
 ditolylformamidinium tetrafluoroborate, 541
 dysprosium(III) chloro tetrahydrofuran, 623
 erbium(III) aminocyclohexanecarboxylic acid perchlorate water dinuclear, 507
 erbium(III) butane-, propane-bis(dimethyl-ammonioacetate) perchlorate water dinuclear, 749
 erbium(III) diphenylamide lithium tetrahydrofuran, 2013
 erbium(III) picrate tetraphenyltrioxo-undecanediamide water acetonitrile, 1491
 ethyltriphenylphosphonium diphenylamide, 4393
 europium(III) acetate azamacrocyclic dibenzoylmethanate water, 1907
 europium(III) azacyclononanone picrate, 3519
 europium(III) bis(phenylsulfinyl)butane nitrate polynuclear, 1123
 gadolinium(III) azacryptate dimethylformamide (potassium thiocyanate) acetonitrile water, 321
 gadolinium(III) chloride tetrahydrofuran, 3385
 gadolinium(III) oxalate water, 2155
 gallium(III) butyl (dimethylamino-oxide)-, dimethylamino-phenyl hydroxo dinuclear, 3407
 gallium(III) butyl dimethylaminophenyl triphenylphosphineoxide, 3407
 germanium(IV) (butylaza)heptadiyl chloro, 4005
 germanium(IV) chloride, hydroxide, methoxide tetraphenylporphyrinate, 2843
 germanium(IV) diphenylphosphinothioate phenyl, 949
 gold(I) diethyldithiopiperazinedione triphenylphosphine dinuclear, 1577
 gold(III) chloro pyridylaminophenyl, 4039
 indium(III) bis(acetyloxime)pyridine chloride methanol, water, 2183
 indium(III) bis(acetyloxime)pyridine chloride oxalate water, 2291
 indium(III) bis(acetyloxime)pyridine chloro maleonitriledithiolate methanol, 2291
 indium(III) bis(phenyliminoethyl)pyridine chloro acetonitrile, tetraethylammonium, 2183
 indium(III) butyl chloride, 1763
 indium(III) pyridinethiolate, 2291
 iodine triseleno-, trithia-cyclohexane, 1983
 iridium platinum cluster carbonyl triphenylphosphite bis(diphenylphosphino)methane hexafluorophosphate, 3861
 iridium(I) chloride dibutylphosphine, 341
 iridium(III) creatinine tetra(methyl-carboxylato)butadiendiyl triphenylphosphine chloro, tetrafluoroborate, 2029
 iridium(III) chloro diphenylphosphino-(phenylthio)methane pentamethylcyclopentadienyl tetrafluoroborate acetone, 1811
 iridium(III) chloro pentamethylcyclopentadienyl Schiff base, 2321
 iron butylthiolate carbonyl hydrosulfide trinuclear, 3475
 iron molybdenum carbonyl cyclopentadienyl telluride, 1549
 iron molybdenum tungsten selenium carbonyl cyclopentadienyl, 707
 iron tungsten selenium carbonyl cyclopentadienyl, 707,1689
 iron(0) carbonyl tetrakis(benzylidene)ethene, 2979
 iron(I) bis(indenyl)dimethylsilane carbonyl dinuclear, 2737
 iron(II) bis[(diphenylphosphino)-benzylidene]ethylenediamine cyclopentadienyl tetrafluoroborate dichloromethane, 433
 iron(II) bis(diphenylphosphino)methane dithioformate tetrafluoroborate, 2797
 iron(II) bis(diphenylphosphino)methane hydride, 2797
 iron(II) carbonyl sulfide molybdenum(I) methyl(cyclopentadienylcarboxylate), 481
 iron(II) (chlorophenylthiourea-carbonyl)-cyclopentadienyl, 1713
 iron(II) dimethylformamidocyclopentadienyl (dimethylthiourea-carbonyl)cyclopentadienyl, 2271
 iron(II) vanadium(V) diethyldithiocarbamate sulfide tetraethylammonium, 4121

iron(II,III) bis(diphenylphosphino)methane carbonyl chloro dinuclear, 2797
 iron(II,III) chloride oxide thiazole polynuclear, 4279
 iron(III) barium sodium malonate water, 3953
 iron(III) chloro oxo thiazole dinuclear, 1873
 iron(III) oxo pyridylpyrazolate pyridylpyrazole hexafluorophosphate acetonitrile tetranuclear, 1567
 iron(III) oxo pyridylpyrazole sulfate methanol water dinuclear, 1567
 iron(III) potassium iminodiacetate oxo water dinuclear, 2307
 iron(III) Schiff base acetylacetonate ethanol, 2553
 lanthanum(III) macrocyclicpolyamine nitrate, 3991
 lanthanum(III) potassium triethylenetetraaminehexaacetate water, 1361
 lead(II) diacetylpyridinedihydrazone nitrate water, 3681
 lead(II) dimethylacetate water hexanuclear, 19
 lead(II) Schiff bases, 2765
 lead(II) tris(pyridylpyrazolyl)borate nitrate diethylether, 2435
 lithium bis[tris(trifluoromethyl)phenyl]boroxide tetrahydrofuran dinuclear, 2637
 lithium cyanide pyridine, 3671
 lithium dicyanamide acetonitrile, 3671
 lithium ditolylformamidinate diethylether dinuclear, 541
 magnesium chloro diphenylformamidinate tetrahydrofuran dinuclear, 541
 magnesium methoxide methanol, 967
 magnesium methoxypropoxide tetranuclear, 587
 magnesium phenylselenolate tris(tolylpyrazolyl)borate, 1255
 manganese(I) carbonyl chloro bis(diethylphosphino)ethane, 2041
 manganese(II) acetylpyridine cyanate water, 2877
 manganese(II) bipyridine dimethylamino-pyridinioacetate perchlorate dinuclear, 897
 manganese(II) bipyridine fumarate water polymer, 689
 manganese(II) bipyridine isophthalate perchlorate water dinuclear, 1411
 manganese(II) bis(hydroxyethyl)glycinate chloride water dinuclear, 3267
 manganese(II) butanedioate bipyridine, phenanthroline water dinuclear, 2547
 manganese(II) chloride diphenylformamidinate dinuclear, 133
 manganese(II) heptanedioate, hexanedioate phenanthroline water dinuclear, 2741
 manganese(II) trioxaundecanedioate phenanthroline water ethanol, 4247
 manganese(II,III) benzoate oxo pyridine polynuclear acetonitrile, 1719
 manganese(III) acetylacetonate isonicotinate water, 71
 manganese(III) molybdenum(IV) sodium oxo propionate, 1365
 manganese(III) pyridine salicylate water imidazolium dinuclear, 1273
 manganese(III) Schiff bases acetate, chloride, perchlorate methanol dinuclear, 2553
 manganese(III) Schiff bases mono-, polynuclear acetonitrile, 3787
 manganese(III,IV) acetate oxo propionate propionic acid water polynuclear, 1471
 mercury(II) diphenylphosphinothioate methyl dimeric, 781
 mercury(II) methyl nitrobenzenethiolate, 2283
 mercury(II) sulfanilamidopyrimidine dimethylsulfoxide, 613
 molybdenum carbonyl methyl(cyclopentadienylcarboxylate) sulfide water tetranuclear, 2249
 molybdenum iron carbonyl cyclopentadienyl sulfide, 2249
 molybdenum sodium acetate oxo water, 1407
 molybdenum(0) carbonyl ethyltrioxaphosphabicyclooctane, triazaphosphaadamantane, 3533
 molybdenum(II) bis(dimethylphospholano)-benzene chloro dichloromethane dinuclear, 473
 molybdenum(II) calixareneresorcinolate nitrosyl tris(pyrazolyl)borate tetranuclear dichloromethane, 2329
 molybdenum(II) carbonyl pentamethylcyclopentadienyl xylylenyl, 4363
 molybdenum(II,III) chloride diphenyl-, ditolyl-formamidinate dinuclear, 1831
 molybdenum(II,VI) butenediyl butoxide carbonyl dinuclear, 839
 molybdenum(III) acetylene butoxide methylpyridine dinuclear, 839
 molybdenum(V) iodo oxo tris-(dimethylpyrazolyl)borate toluene, 1391
 molybdenum(V) diethyldithiocarbamate diisopropylphenylimido disulfido dinuclear, 165
 molybdenum(VI) acetylacetonate binaphtholate oxo tetrabutylammonium, 1323
 molybdenum(VI) binaphthol oxo tetrabutylammonium dinuclear, 1323
 molybdenum(VI) oxo phosphorus butylammonium polynuclear water, 2589
 molybdenum(VI) potassium sodium citrate oxo water dimer, 75
 molybdenum(VI) oxo Schiff base methanol, 3977
 molybdenum(VI) silicon oxo dimethylformamide dimethylamino(methyl)pyridinium methylamino(methyl)pyridinium, 95
 molybdenum(VI) silver(I) sulfide pyridine-thiol triphenylphosphine dichloromethane, 1543

neodymium(III) acetate nitrate phenanthroline dinuclear, 1629
 neodymium(III) aluminium methyl methylphenoxide polynuclear, 3429
 neodymium(III) aminocyclohexanecarboxylic acid perchlorate water dinuclear, 507
 neodymium(III) bis(phenylsulfinyl)butane nitrate, 1787
 neodymium(III) butane-, propane-bis(dimethylammonioacetate) perchlorate water dinuclear, 749
 neodymium(III) chloride tetrahydrofuran water, 3385
 neodymium(III) dimethylammonium dimethyldithiocarbamate, 1643
 neodymium(III) hexaazacyclooctadecane nitrate, 3247
 neodymium(III) indenyl tetrahydrofurfurylmethoxide, 3723
 neodymium(III) potassium methylphenoxide tetrahydrofuran polynuclear, 3429
 neodymium(III) nitrate tetraethyleneglycol, 1149
 neodymium(III) tris(pyrazolyl)borate, 1057
 nickelaborane chloro triphenylphosphine dichloromethane, 2323
 nickelaborane thiobenzoate triphenylphosphine, 3873
 nickel(II) aminoethylpiperidine trifluoroacetate, 3305
 nickel(II) aminoethylpropanediamine thiocyanate, 39
 nickel(II) azamacrocyclic benzoylacetoinimate perchlorate, 3713
 nickel(II) azamacrocyclic tetrafluoroborate, 2599
 nickel(II) bipyridine ethyldithiocarbonate chloroform ethanol polymer, 2667
 nickel(II) bis(benzimidazolylmethyl)amine perchlorate methanol water, 2819
 nickel(II) bis(diphenylphosphino)ethane methylethanoldithiocarbamate tetraphenylborate dichloromethane, 1971
 nickel(II) bis(diphenylphosphino)ethene chloride dichloromethane, 2827
 nickel(II) bromide methylthiosemicarbazide, 695
 nickel(II) butanedionebis(methylphenylthiosemicarbazone), 1895
 nickel(II) chloride dimethylaminopropanol, 4197
 nickel(II) chloride dimethylphenanthroline dichloromethane dinuclear, 2711
 nickel(II) chloride diphenylformamidinate dinuclear, 133
 nickel(II) chloride ditolylformamide, 133
 nickel(II) diethylenetriamine thiocyanate water, 39
 nickel(II) ethyldithiocarbonate phenanthroline water, 2315
 nickel(II) ethylpentaazacyclotetradecane perchlorate, 2777
 nickel(II) hydroxyiminobutanone(phenylthiosemicarbazone) nitrate water, 1925
 nickel(II) lithium chloride dimethylaminopropoxide propanol dimer, 4197
 nickel(II) macrocyclicdiamidodiamine water, 179
 nickel(II) macrocyclicpolyamine perchlorate, 3557
 nickel(II) methylethanoldithiocarbamate triphenylphosphine perchlorate, 1971
 nickel(II) nitrate propylethylenediamine, 2361
 nickel(II) oxalate perchlorate tris(aminoethyl)amine, 1331
 nickel(II) phenanthroline Schiff base, 2863
 nickel(II) propyldithiocarbonate triphenylphosphine, 2573
 nickel(II) (pyridylethyl)toluenesulfonamide, 1707
 nickel(II) Schiff base, 2749
 nickel(II) tetraphenyldiselenoimidodiphosphinate, 2727
 nickel(III) bis(triphenylphosphino)iminium dithiolethionedithiolate methanol, 3505
 nickel(IV) methyldihydrodithiindithiolate, 1465
 niobium(IV) selenido tellurium(II) iodo dinuclear, 995
 niobium(V) acetonitrile chloride, 351
 niobium(V) butylthiolate selenido tetraethylammonium, 3911
 niobium(V) lithium butylamide butylimide dinuclear, 1081
 niobium(V) methacrylate propoxide oxo tetranuclear, 581
 niobium(V) methylphenoxythiolate triethylammonium, 1447
 niobium(V) oxo selenido tetraethylammonium, tetraphenylphosphonium, 3911
 osmium acetonitrile carbonyl hydride phosphide polynuclear, 3463
 osmium carbonyl formylpyrrole hydride trimethylamine polynuclear, 3775
 osmium(III) bis(triphenylphosphonium)ethane chloro dinuclear, 3649
 palladium bis(diphenylphosphino)methane carbonyl chloride trinuclear ethanol, 2353
 palladium(0) bis(diphenylphosphino)methane carbonyl hexanuclear toluene, 2353
 palladium(II) aceto-xyloneoxime chloride triphenylphosphine, 2257
 palladium(II) benzoxazolylphenol chloro, 1889
 palladium(II) benzoylvalinate bipyridine, 3743
 palladium(II) benzylthiolate bis(diphenylphosphino)propane, 2531
 palladium(II) bipyridinebisamide chloride, 815
 palladium(II) bis(diphenylphosphino)ethane iodide chloroform, 2827

palladium(II) bis(diphenylphosphino)ethene tetrafluoroborate dimethylformamide, 2827
 palladium(II) carbonyl quinolinylmethyl triphenylphosphinesulfide perchlorate, 1963
 palladium(II) chloro (tolyltelluroethyl)pyridine chloroform, 33
 palladium(II) hydroxyphenylthiolate oxyphenylthiolate tetraethylammonium dinuclear, 369
 palladium(II) isomaleonitriledithiolate triphenylphosphine, 4305
 palladium(II) tungsten(VI) isomaleonitriledithiolate sulfide tetraethylammonium, 4305
 palladium(II) oxopyridinethiolate, 369
 palladium(II) tetraphenyldiselenoimido-diphosphinate, 2727
 palladium(II) tungsten(VI) sulfide bis(diphenylphosphino)ethane, 801
 [(phenyl)(dicyclohexylamino)(dibutyl-, diethyl-amino)phosphin]iminocyclo-trithiazenes, 1089
 platinum bis(diphenylphosphino)methane carbonyl chloride trinuclear benzene, 2353
 platinum(0) benzylideneacetone, phenylpropenal triphenylphosphine, 765
 platinum(II) ammonia dithiepaneylidene malonate water, 3705
 platinum(II) ammonia propylidenemalonate, 2421
 platinum(II) azetidionate triphenylphosphine dichloromethane, 1663
 platinum(II) bipyridinebisamide chloride dimethylsulfoxide, 815
 platinum(II) bismuth(III) chloride sulfide triphenylphosphine hexafluorophosphate dichloromethane, 2381
 platinum(II) chloro chloroacetyl triphenylphosphine, 2455
 platinum(II) chloro dibutylbipyridine, 1555
 platinum(II) chloro (diphenylphosphinito)-(diphenylphosphino)diphenylphosphazene, 1563
 platinum(II) chloro ethylmethylaminopyrrolidines, 4297
 platinum(II) chloro triethylphosphine phenylphosphide molybdenum(0) carbonyl, 1945
 platinum(II) methyl bipyridine, dibutylbipyridine, dimethylbipyridine, 1555
 platinum(II) biphenyl-, methylbutadienylthiolate triethylphosphine, 3185
 platinum(II) sodium cantharidinate diaminopropane dinuclear, 57
 platinum(II) tetraphenyldiselenoimido-diphosphinate, 2727
 platinum(IV) acetate ammonia propylidenemalonate, 2421
 potassium hydrogen galactarate water, 2055
 praseodymium chloro tetrahydrofuran, 3385
 praseodymium macrocyclicpolyamine-carboxylate, -carboxylic acid water dinuclear, 2697
 praseodymium methoxyethoxide oxo trimethylphosphineoxide polynuclear, 1223
 praseodymium nitrate (crown ligand) acetonitrile, 1149
 praseodymium tris(pyrazolyl)borate, 1057
 rhenium(I) bis(dimethylpyrazolylmethyl)pyridine carbonyl iodo, 3003
 rhenium(III) bis(triphenylphosphonium)ethane chloro dinuclear, 3649
 rhenium(III) chloride thiourea water, 2263
 rhenium(III) iodide telluride cluster, 1615
 rhodium(I) bis(butylphenyl)(pyridyl)methylthiolate cyclooctadiene, 3641
 rhodium(III) bis(dimethylarsino)benzene iodo tetrafluoroborate, 1307
 rhodium(III) bis(dimethylphosphino)benzene chloro, 1307
 rhodium(III) chloride phenyl pyrazine triphenylstibine, 4045
 rhodium(III) chloride phenyl pyridine thiazole, 4045
 rhodium(III) diacetylmonoximate triphenylphosphine perchlorate chloroform, 307
 rhodium(III) pentamethylcyclopentadienyl trimethylphosphine thiophenes insertion products review, 3115
 ruthenium carbonyl chloro, hydride dibutylphosphide, -phosphine trinuclear, 3253
 ruthenium cobalt carbonyl sulfide tungsten benzenebis(carbonylcyclopentadienyl), 3067
 ruthenium carbonyl ethylcarboxypropylidyne hydrido pentanuclear, 593
 ruthenium carbonyl tellurido clusters tetraphenylphosphonium, 3061
 ruthenium(0) bis(diphenylphosphino)methane carbonyl dinuclear, 1453
 ruthenium(0) bis(dicyclohexylphosphino)methane carbonyl, 1453
 ruthenium(II) bipyridine, phenanthroline chloride trithiacyclononane water, 393
 ruthenium(II) bipyridine, phenanthrolines chloro tetrathiacyclododecane water, 3293
 ruthenium(II) bis[(diphenylphosphino)benzylidene]ethylenediamine pentamethylcyclopentadienyl zinc chloro acetonitrile water, 433
 ruthenium(II) bis(diphenylphosphino)methylpyridine triphenylphosphine chloride, 291
 ruthenium(II) bis(diphenylphosphino)propane chloro nitrosyl, 927
 ruthenium(II) carbonyl chloro pyridylacetyl triphenylphosphine diethylether, 577
 ruthenium(II) chloro cyclopentadienyl terpyridylbenzene triphenylphosphine water, 2369
 ruthenium(II) cyclopentadienyl (cyclopentadienylmethyl)triazacyclononane perchlorate trinuclear, 2889
 ruthenium(II) picolinate Schiff base perchlorate dichloromethane, 1605

ruthenium(II,III) benzonitrile bromo
 dinuclear benzyl alcohol, 2429
 ruthenium(III) chloride Schiff base
 triphenylphosphine, 2951
 samarium(III) bis(methyl)diphenyl-
 phosphonium butylcyclopentadienyl
 chloride tetrahydrofuran, 2013
 scandium(III) chloride tetrahydrofuran water,
 3485
 silver(I) (aminomethyl)pyridine nitrate, 921
 silver(I) ammonia (chlorobenzoyl)benzoate,
 863
 silver(I) azacryptate acetonitrile methanol
 perchlorate water polynuclear, 453
 silver(I) biimidazole nitrate, 2893
 silver(I) bis(diphenylphosphino)methane
 nitrate, phenylacetate dinuclear water, 1957
 silver(I) bis(methylbipyridine-ethyl)benzene
 perchlorate, 1505
 silver(I) butoxynorbomadiene hexafluoro-
 acetylacetonate and dinuclear, 2147
 silver(I) cyanoacetate, 25
 silver(I) diazoniobicyclooctanedipropionate
 perchlorate water, 153
 silver(I) dimethylaminopyridinioacetate
 nitrate water, 153
 silver(I) dimethylphenanthroline
 tetrafluoroborate dichloromethane, 2711
 silver(I) diphenylformamidine triflate, 1837
 silver(I) dipropylidithiophosphate
 hexanuclear, 3899
 silver(I) molybdenum(VI) oxo triphenyl-
 phosphine dichloromethane polynuclear,
 1259
 silver(I) tris(methylpyridylmethyl)amine
 silver(I), 525
 silver(I) tungsten(VI) sulfide
 tris(hydroxymethyl)methylammonium
 dimethylformamide, water polymers, 217
 sodium tetraphenylthioimidodiphosphinate
 tetrahydrofuran dinuclear, 4061
 sodium tolylazacrown diethylether
 octamolybdotungstate, 3865
 strontium chloride triethanolamine, 2087
 tantalum(III) bis(dimethylphosphino)-
 methane chloro ditolylformamidinate
 tolylisocyanide tolylimido dinuclear, 1177
 tantalum(III) chloro tetramethylpiperidyl-
 nitrene triethylammonium, 1081
 tantalum(IV) chloro methylcyclopentadienyl
 (tripropylphenyl)phosphinidine toluene
 dinuclear, 721
 tantalum(V) chloro diphenylformamidinate
 diphenylformamidine phenylimido, 1177
 tantalum(V) diphenylformamidinate
 diphenylformamidinemethanebis(phenyl-
 amido) diethylether, 1177
 tantalum(V) chloro methylcyclopentadienyl
 (tripropylphenyl)phosphine, 721
 tantalum(V) diboranyl ditolylformamidinate
 ditolylformamidinate tolylimido dinuclear
 diethylether, 1177
 tantalum(V) dimethylamide methylene-
 bis(butylmethylphenoxide), 2941
 tantalum(V) methylcyclopentadienyl
 diphenylphosphide toluene dinuclear, 721
 technetium(V) iodide oxo
 trimethylenediamine water, 3311
 terbium(III) hydroxide nitrate pyridinio-
 acetate perchlorate water polynuclear, 4265
 terbium(III) phenylmethylpropionyl-
 pyrazolonate water ethanol, 1381
 thallium(I) bis(butylmethyl-,bis(butylpropyl-),
 bis(dibutyl-pyrazolyl)borates, 3469
 thallium(I)
 tris(methoxyphenylpyrazolyl)borate, 2435
 thallium(III) acetate dichloromethane
 tetra(methoxyphenyl)porphyrinate, 681
 thallium(III) benzoate tetra(methoxyphenyl)-
 porphyrinate chloroform, 1621
 thallium(III) diethylphosphinodithioate
 methyl, phenyl, 3609
 tin(IV) (alkylaza)-, oxa-heptadiyl halide,
 triphenylsiloxide, 4005
 tin(IV) bis(hydroxynaphthaldehyde)-
 phenylenediiminate phenyl, 2213
 tin(IV) bromo chloro, iodo, thiocyanate
 methylcarboxypropyl, 4283
 tin(IV) butyl dihydroxybenzoate, 3729
 tin(IV) butyrate methyl oxo tetranuclear, 881
 tin(IV) chloro oxidoarylideneamino-
 carboxylate phenyl dinuclear, 573
 tin(IV) diphenylphosphinothioate hydroxo
 phenyl dimeric, 949
 tin(IV) diphenylphosphinothioate phenyl,
 4113
 tin(IV) dithioleonedithiolate methylcarboxy-
 propyl tetraethylammonium, 4283
 tin(IV) ethoxide iodo methyl oxo
 tetranuclear, 881
 tin(IV) methylimidazolinethionate phenyl,
 795
 tin(IV) methyl phenyltetrazoletiolate, 4129
 titanium(III) chloride
 dimethylaminoethylcyclopentadienyl, 195
 titanium(III) fluoro tetranuclear
 (trimethylsilyl)cyclopentadienyl, 61
 titanium(III) gallium(III) fluoro
 cyclopentadienyl, 61
 titanium(IV) chloro dicyclohexylamide, 635
 titanium(IV) cyanoacetate cyclopentadienyl,
 25
 titanium(IV) diethyl-, dimethyl-amide
 diphenyltriazene, 4017
 titanium(IV) methylenebis(butylmethyl-
 phenoxide), 2941
 titanium(IV) oxo tetramethylheptanedionate
 pentane tetrameric, 777
 transition metals terminal oxides, sulfides,
 selenides, tellurides survey, 1031
 tungsten(0) mercury(II) carbonyl
 pentabenzylcyclopentadienyl, 403
 tungsten(II) carbonyl pentamethyl-
 cyclopentadienyl xylylenyl, 4363

tungsten(II) tin(II) carbonyl chloro
norbornadiene, 1599
tungsten(II,VI) butenediyl butoxide carbonyl
dinuclear, 839
tungsten(III) bis(diphenylphosphino)-
methane chloride hydride dinuclear, 4137
tungsten(III) bis(diphenylphosphino)-
propane chloride dibutylamide dinuclear
toluene, 3893
tungsten(III,IV) bis(diphenylphosphino)-
propane chloride dibutyl-, diethyl amide
dinuclear toluene, 3893
tungsten(IV) hydride phenylimide propoxide
pyridine trinuclear, 2113
tungsten(VI) aluminium potassium zinc oxo
water polynuclear, 3985
tungsten(VI) cadmium(II) iodo sulfido
tetraphenylphosphonium, 2483
tungsten(VI) dimethylhydrazido propoxide
pyridine, 2113
tungsten(VI) phenylimide propoxide
dinuclear, 2113
tungsten(VI) phenylimide propoxide
pyridine, 2113
tungsten(VI) silver sulfide neodymium
dimethylformamide polynuclear, 833
tungsten(VI) silicon oxo dimethylformamide
dimethylamino(methyl)pyridylammonium,
713
tungsten(VI) silver(I) selenido pyridinethiol
triphenylphosphine dichloromethane, 1543
uranium(VI) caesium, sodium oxo
polysulfide, 3921
vanadium(III) picolinate water, 2917
vanadium(III) Schiff base toluene, 1517
vanadium(III,V) oxo tetramethylpiperidyl-
nitrene trimethylsiloxide dinuclear, 1081
vanadium(IV) oxo bipyridine methyl(nitro-
phenoxymethylene)dithiocarbazate, 1863
vanadium(IV) oxo Schiff base, 1517
vanadium(V) macrocyclicdiaminediammon-
ium oxide peroxide water dinuclear, 2837
vanadium(V) methanol methoxide oxo
Schiff base, 643
vanadium(V) oxo propoxide Schiff base,
1143
vanadium(V) oxo pyridinium water
polynuclear, 643
vanadium(V) oxo quinolineolate Schiff
bases, 4179
ytterbium(III) diphenylamide lithium
tetrahydrofuran, 345
ytterbium(III) potassium triethylenetetra-
aminehexaacetate water, 1361
yttrium(III) praseodymium oxo propoxide
polynuclear, 1223
zinc(II) acetate acetylpyridine(ethyl)thio-
semicarbazone dinuclear, 3947
zinc(II) bipyridines trichloroacetate water,
2475
zinc(II) chloro macrocyclicpolyamine, 1783
zinc(II) chloride macrocyclicpolyamine
perchlorate, 2073
zinc(II) chloride thiazolinyldiazine, 297
zinc(II) diazabicyclooctane thiocyanate
ammonia, dimethylsulfoxide, 267
zinc(II) dimethylphenanthroline nitrate,
tetrafluoroborate ethanol water, 2711
zinc(II) dithiolethionedithiolate
(ferrocenylmethyl)trimethyl-, tetraethyl-
ammonium methanol, 2689
zinc(II) ethylenediamine tin tellurides, 1193
zinc(II) hypophosphite water, 495
zinc(II) isomaleonitriledithiolate
methylpyridine, 1637
zinc(II) macrocyclicpolyamine thiocyanate,
2393
zinc(II) octaethylporphyrinate ruthenium(II)
methylpropylbenzene triflate, 3129
zinc(II) tris(dimethylpyrazolyl)borate, 1297
zinc(II) tris(methylphenylpyrazolyl)borate
nitrate, 109
zinc(II) tris(methylpyrazolyl)borate
chloroform, 671
zirconium(IV) diphenyltriazene, 4017
zirconium(IV) methylenebis(butylmethyl-
phenoxide) toluene, 2941
zirconium(IV) Schiff bases, 1105
X-ray crystal structures of ligands
butanedionebis(piperidylthiosemicarbazone),
1895
dicarbododecaboranedithiolethione, 1819
diethylaminomethylenephosphonic acid, 355
dihydrotetrazinedicarboxylic acid water,
2871
ditolylformamidine dimers, 541
isatinthiosemicarbazones, 855
macrocyclicpolyazapolyether methanol, 567
methyl(nitrobenzal)methylenedithio-
carbazate, 4097
tetraphenylthioimidodiphosphinic acid, 4061
tris(anthracenyl)phosphine, 3545
X-ray diffraction
aluminium zirconium(IV) propoxide, 663
aluminium pillared montmorillonite, 2785
barium dihydrotetrazinedicarboxylate water,
2871
beryllium ammonium iodate water, 441
cadmium(II) bipyridine methylnitroaniline,
nitroaniline perchlorate water, 3929
cadmium(II) furylpropenalsemicarbazone
halide, 3455
calcium chromium(III) hydroxo apatite,
2047
cobalt(II) furylpropenalsemicarbazone
halide, 3455
cobalt(II) heterometallic oxalate, 3013
copper(II) bipyridine
pivaloyltrifluoroacetate, 1999
copper(II) furylpropenalsemicarbazone
halide, 3455
copper(II) heterometallic oxalate, 3013

- copper(II) zinc(II) diethyldithiocarbamate, 1573
 hafnium nitride, 3635
 iron(II) diphenylphosphinocyclopentadienyl nickel(II), palladium(II), platinum(II) chlorides decomposition, 171
 lanthanum(III) oxyfluoride, 3421
 manganese(II), sodium bentonite, 1403
 molybdenum(VI) cadmium(II), mercury(II), zinc(II) iodo sulfido tetraphenylphosphonium, 2483
 nickel(II) aminoethylpiperidine trifluoroacetate, 3305
 nickel(II) furylpropenalsemicarbazone halide, 3455
 nickel(II) heterometallic oxalate, 3013
 nickel(II), zinc(II) diethyldithiocarbamate, 1573
 praseodymium dimethylaminoethoxide tetramethylheptanedionate, 1223
 silver(I) heterometallic oxalates, 3013
 tantalum(V) acetonitrile chloride, 351
 titanium nitride, tungsten nitride, 3635
 tungsten(VI) cadmium(II), mercury(II), zinc(II) iodo sulfido tetraphenylphosphonium, 2483
 vanadium nitrides, 3635
 vanadium(IV) oxo methylhydroxypyronate, 789
 zinc(II) heterometallic oxalate, 3013
 zinc(II) phenanthroline trichloroacetate water, 2475
 zirconium nitride, 3635
 zirconium(IV) chloro ethyltetramethylcyclopentadienyl cyclohexyl-phosphide, -phosphino(phenyl)thioamide, 2537
- X-ray photoelectron spectra of complexes
 cadmium(II) aroylhydrazones, 2625
 calcium chromium(III) hydroxo apatite, 2047
 cobalt(II) aroylhydrazones, 2625
 cobalt(III) manganese(II,III) benzoate oxo pyridine, 1377
 copper(II) aroylhydrazones, 2625
 germanium ethyl hydride polystyrene, 1767
 lanthanide(III) camphorsulfonate chloride phenanthroline, 427
 lanthanide(III) Schiff base, 535
 molybdenum(VI) silicon oxo dimethylformamide dimethylamino(methyl)pyridinium methylamino(methyl)pyridinium, 95
 nickel(II) aroylhydrazones, 2625
 nickel(II) bipyridine ethyldithiocarbonate chloroform ethanol polymer, 2667
 niobium(IV,V) titanium(III,IV) tin(II) phosphate, 2957
 sodium pyridinebiscyclopentadienyl, 195
 titanium-(III), -(IV) chloride aminocyclopentadienyls, 195
 tungsten metal, nitride, oxide, 3635
 tungsten(VI) cadmium(II) iodo sulfido tetraphenylphosphonium, 2483
 tungsten(VI) silicon oxo dimethylformamide dimethylamino(methyl)pyridylammonium, 713
 Xylylenyl compounds molybdenum(II), tungsten(II), 4363
 Xylylisocyanide complexes chromium-(I), -(II), -(III), 2631
 platinum(II), 1663
- ## Y
- Ylide complexes, *See* Diphenyldi-, Diphenylmethyl-methylenephosphorane
 Ytterbium(III) compounds and complexes acetate, 2755
 butylcyclopentadienyl, 2013
 chloride, chloro, 345,1057,2013,3415,3635, 4143
 diethylenetriaminedi(acetylphenylalanine-octadecylester)triacetate, 2755
 diethylenetriaminedi(acetyltyrosine-octadecylester)triacetate, 2755
 dimethyl-ammonium, -dithiocarbamate, 1643
 diphenylamide, 345,2013
 diphenylmethylmethylenephosphorane, 2013
 heterometallic, 1057,2013
 macrocyclicpolyamine, nitrate, 3991
 oxide, oxo, 2037,3415
 phenanthroline, thiocyanate, 4143
 triethylenetetraaminehexaacetate, 2037
 tris(pyrazolyl)borate, 1057
 water, 2037,4143
 Yttrium(III) compounds and complexes acetate, acetylacetonate, 1907
 alanine, 1357
 azamacrocycles, 1907
 calixarencarboxylate, 1655
 chloride, 1057,1655,1907,3415,3635
 dibenzoylmethanate, 1907
 heterometallic, 1223,1357,1655
 hydroxide, hydroxo, 1907
 macrocyclicpolyamine, 3991
 methylpyridylbenzimidazole, 1417
 nitrate, nitrate, 1417,3991
 oxide, oxo, 1223,1417,3415
 perchlorate, 1357
 polynuclear, propoxide, 1223
 pyridylbenzimidazole, 1417
 (tetramethylbutyl)phenoxyacetate, 1655
 thenoyltrifluoroacetate, 1907
 thiocyanate, 1417
 tris(pyrazolyl)borate, 1057
 water, 1357,1907
- ## Z
- Zinc carbonate, heterometallic, 3013
 hydrodesulfurization review, 3177
 metal, 61,433,1177
 oxide, oxo, 3013

Zinc(II) compounds and complexes
 acetate, 423,1663,3475,3947,3985
 acetylpyridine(ethyl)thiosemicarbazonate, 3947
 (alkoxyphenylethyl)piperidinedithio-
 carbamate, 315
 ammonia, 267
 azamacrocycles, 975
 benzotriazole, 423
 bipyridines, 2475
 bis(benzimidazolylmethylene)benzene, 1315
 bis(bromopyrazolyl)methane, 3435
 bis(butylphenyl)(pyridyl)methylthiolate, 3641
 bis(chlorodimethylpyrazolyl)methane, 3435
 bis(chloropyrazolyl)methane, 3435
 bis(pyrazolylmethyl)tetraazacyclododecane, 3585
 bis(trimethylsilyl)amide, 3593
 bromide, bromo, 1407,1679,3435
 butyl, 3593
 carbaboranes, 1819
 chloride, chloro, 297,315,423,433,671,975, 1193,1315,1637,1679,1783,1819,2073, 2223,2393,2483,2925,3435,3455,3641
 chloroform, 671
 cyanobenzotriazole, 423
 cyclohexanediaminetetraacetate, 3317
 (cyclopentadienylmethyl)trimethyl-
 ammonium, 2689
 diacetylpyridinedioximate, 877
 diazabicyclooctane, 267
 dibutylamide, 3593
 diethylamide, 3593
 diethyldithiocarbamate, 1573
 diisopropylamide, dimethylamide, 3593
 dimethylformamide, 267
 dimethylphenanthroline, 2711
 dimethylpyridinium, 2563,4283
 dimethylsulfoxide, 267
 dinuclear, 267,2223,2925,3435,3593,3947
 dioxypyridyldihydrodibenzocycloheptene, 1693
 dithioleonedithiolate, 2689,4283
 dithiolethionedithiolate, 1111,2563,2689
 ethanol, 2711
 ethyl, 3593
 ethylenediamine, 1193
 furylpropenalsemicarbazone, 3455
 heterometallic, 433,1193,1407,1573,1663, 2483,2689,3013,3129,3985
 hexafluorophosphate, 3585
 hypophosphite, 495
 iodide, 1679,2483,3435
 isomaleonitriledithiolate, 1637
 macrocyclicpolyamine, 599,1783,2073,2223, 2393,3285
 macrocyclicpolyaminocarboxylates, 599
 macrocyclicpolyaminepolyol, 2205
 methanol, 2689
 methyl, 3593
 methylpyridine, 1637
 nitrate, nitrate, 109,1297,2711,3013,3317, 3435
 octaethylporphyrinate, 3129
 oxalate, 3013
 oxide, oxo, 267,495,3985
 pentyl, 3593
 perchlorate, 975,2073,2205,2223,3435,3585
 phenanthroline, 2475
 phenylenediaminetetraacetate, 2925
 phenylenedimethylenebispyrazole, 1679
 phthalocyaninate, 113,1877
 polynuclear, 2925
 propionate, 113
 Schiff base, 4191
 sulfate, 495,2689
 sulfide, 2483
 telluride, telurido, 1193
 tetraethylammonium, 1111,2563,2689,4283
 tetrafluoroborate, 2711,3435
 tetrakis(methylpyrazolyl)borate, 671
 tetraphenylphosphonium, 4283
 thiazolinyldiazine, 297
 thiocyanate, 267,975,2393
 trichloroacetate, 2475
 triflate, 3129,3435
 trifluoroacetate, 3435
 tris(dimethylpyrazolyl)borate, 1297
 tris(methylphenylpyrazolyl)borate, 109
 tris(methylpyrazolyl)borate, 671
 water, 495,1297,1783,2073,2205,2223,2393, 2475,2483,2689,2711,3013,3435,3475, 3585,3947,3985
Zirconium nitride, 3635
Zirconium(0), metal, 663
Zirconium(IV) compounds and complexes
 carbonyl, 3489
 chloride, chloro, 635,1105,2537,2941,3635
 cyclohexylphosph-andiyls, -ide, -inodithioformate, -ino(phenyl)thioamide, 2537
 dicyclohexylamide, 635
 dimethylamide, 2941,4017
 dinuclear, 2941
 diphenyltriazene, 4017
 ethyltetramethylcyclopentadienyl, 2537
 heterometallic, 663,3489
 methylenebis(butylmethylphenoxide), 2941
 oxide, 3489
 propanol, propoxide, 663
 Schiff bases, 1105
 sulfate, 3489
 tetrahydrofuran, 635
 toluene, 2941
 water, 3489