

**CUMULATIVE
SUBJECT INDEX
VOLUMES 1 – 50**

- Absolute configuration and circular dichroism, 13, 309
- Absolute configurations of metal complexes determined by X-ray analysis, 13, 305
- Absorption spectra and structure of lanthanide coordination compounds in solution, 27, 223
- Acetylene and monoolefin complexes of nickel, palladium and platinum, 6, 27
- Acetylenes, hydrogenation of, 1, 510
- Acetylenes, polymerization of, 1, 515
- Acetylenic complexes of Rh, 1, 512
- Acid-catalyzed reactions of transition metal complexes, 11, 277
- Acridinium and quinolinium ion sensitization of $[\text{Co}(\text{NH}_3)_5\text{Br}]^{2+}$, 16, 171
- Acrylonitrile, the coordination chemistry of, 44, 149
- Actinide complexes with carboxylic acids, 26, 85
- Actinide complexes with chelating ligands containing sulfur and amidic nitrogen donor atoms, 28, 231
- Actinide halides, coordination chemistry of, 2, 145
- Actinide nitrate complexes, 36, 183
- Actinides, lanthanides, and d^0 transition metal ions, non-transition-metal ions. Metal-chloride complexes studied by ion-exchange and solvent-extraction methods. Part I, 2, 195
- Actinides, some aspects of the bioinorganic chemistry of the, 31, 221

Actinides, transition-metal elements and the hexavalent. Metal-chloride complexes studied by ion-exchange and solvent-extraction methods. Part II, 2, 257

Activation and fixation of N_2 , CO_2 , CO , H_2 and related molecules. Properties of the system: transition metal compound--magnesium, 26, 71

Activation of molecular nitrogen, 3, 429

Activation of saturated hydrocarbons by metal complexes in solution, 24, 97

Activation parameters and reaction mechanism in octahedral substitution, 14, 217

Activation volumes of the reactions of transition metal compounds in solution, 36, 89

Acylcobalt carbonyls under oxo conditions, behavior of, 16, 9

Advances in the knowledge of the electronic structure of coordination compounds from photoelectron spectroscopic techniques, 43, 355

Advances in the photochemistry and photophysics of chromium(III) polypyridyl complexes in fluid media, 39, 121

Alfred Werner's research on, geometrically isomeric coordination compounds, 15, 1

Alfred Werner's research on, optically active coordination compounds, 12, 105

Alfred Werner's research on, polynuclear coordination compounds, 9, 339

- Alfred Werner's research on, structural isomerism, 11, 161
- Algae, the cytochromes of higher plants and, 26, 47
- Alkali and alkaline earth metals, coordination compounds of, with covalent characteristics, 14, 1
- Alkoxide(trialkylsilyloxy) polymers, metal oxide, 2, 299
- Alkyl complexes, osmium, 44, 127
- N-Alkyltriethylenediaminium cation, metal complexes of, 1, 239
- Alkynyl (metal) compounds, coordination chemistry of, 47, 89
- Allenes, coordination chemistry of, 20, 81
- Allylic complexes of Rh, 1, 514
- Ambidentate ligands, 1, 205
- Amidic nitrogen donor atoms, actinide complexes with chelating ligands containing sulfur and, 28, 231
- l-Amidino-O-alkylureas, donor properties of, 2, 441
- Amidoximes, 13, 37
- Amine N-oxides, coordination chemistry of aromatic, 3, 375
- Amine N-oxides, metal complexes of aromatic, 11, 93
- Amine, amino acid and peptide chelates, 13, 244
- Amine-oximes, 13, 34
- Amines oxides, coordination complexes of the aromatic diimine N-oxides and diazine N-oxides, 20, 37
- Amines, thermodynamics and kinetics of the transition metal complexes of tripodal, 14, 29
- Aminopolycarboxylic acid chelates, 13, 242

Ammine complexes, vibrational spectra and force constants of pure, 19, 41

Analytical treatment of the electronic spectra of some low-symmetry transition metal complexes, 43, 63

Anionopentaamine complexes of cobalt(III) and chromium(III), stereochemistry and reaction rates of, 23, 223

Anomalous temperature variation of NQR frequencies and bonding in metal complexes, 17, 281

Antimony, phosphorus and arsenic complexes of the main group elements, 19, 173

Application of diffuse reflectance spectroscopy of the chemistry of transition metal coordination compounds, 14, 181

Application of ultrasound absorption to reaction kinetics, 11, 189

Application of X-ray photoelectron spectroscopy in inorganic chemistry, 13, 47

Aqueous coordination complexes of neptunium, 25, 133

Aqueous perchlorate solution aspects of the chemistry of cobalt(III) in, 5, 349

Aqueous solution, radiation chemistry of metal ions in, 22, 195

Aquocobalt(III) systems, a phenomenological model for redox reactions in solution; application to, 14, 269

Arsenic, phosphor and antimony complexes of the main group elements, 19, 173

Arsine donor ligand, organometallic intramolecular-coordination compounds containing an, 42, 245

Aspects of the chemistry of cobalt(III) in aqueous perchlorate solution, 5, 349

Associative substitution reactions of 18-electron transition metal organometallic complexes, 43, 7

Axial ligand binding to carbon donors and mono- and diatomic nitrogen and oxygen donors, structural aspects and coordination chemistry of metal porphyrin complexes with emphasis on, 39, 31

Azo-oximes, 13, 30

Behaviour of acylcobalt carbonyls under oxo conditions, 16, 9

Bending frequencies of some first row transition metal dihalides electron diffraction studies, 18, 257

Bi-, tetra- and polynuclear copper(II) halogenocarboxylates, mono-, 36, 1

Bidentate ligands with enantiotopic donor atoms, isomerism in complexes of, 29, 87

Bidentate ligands, complexes of V with, 1, 382,383

Bimetallic tetrathiocyanates and selenocyanates at Lewis acids, 32, 33

Binuclear complexes, stereochemistry of tartrato(4-)-bridged, 4, 323

Binuclear oxo-bridged iron(III) complexes, 12, 1

Binuclear rhodium(I) isocyanide complexes, photophysical properties of the lowest electronic excited states of, 43, 349

- Binucleating ligands, transition metal complexes with, 23, 31
- Biochemical aspects of molybdenum coordination chemistry, 4, 475
- Bioinorganic chemistry of the actinides, some aspects of the, 31, 221
- Biological function, substitution-inert metal ions as probes of, 25, 103
- Biological systems with the E and C model, interpretation of reactivity in chemical and, 33, 251
- Biological systems, calcium in, 18, 29
- Biological systems, inorganic oxygen carriers as models, 19, 1
- 2,2'-Bipyridyl -- Equilibria in complexes of N-heterocyclic molecules, 16, 67
- Bipyridyl, ruthenium(II) and its analogues, photophysics, photochemistry and solar energy conversion with tris, 46, 159
- bis(2,2'-Dipyridyl) and bis(1,10-phenanthroline) complexes of iron(II), some aspects of the chemistry, 3, 471
- Bivalent metals, 3d, 5-coordinated complexes with polyamines, 1, 222
- Blue-copper proteins: nuclear magnetic resonance investigations, 27, 109
- Bond distances and estimated bending frequencies of some first row transition metal dihalides: electron diffraction studies, 18, 356
- Bonding effects in circularly dichroic cobalt(III) complexes, 7, 331

Bonding in coordination compounds containing metal--metal bonds,
2, 371

Bonding, principles of structure, and reactivity of metal
nitrosyl complexes, 13, 339

Borazines, metal derivatives of the, 22, 185

Boron, metal sandwich complexes of cyclic planar and pyramidal
ligands containing, 28, 47

μ_2 Bridging carbonyl systems in transition metal complexes,
31, 1

Caeruloplasmin: the enigmatic copper protein, 33, 279

Calcium and membranes, 18, 95

Calcium in biological systems, 18, 29

Calculations of the electronic structures of organometallic
compounds and homogeneous catalytic processes. Part I. Main
group organometallic compounds, 38, 139

Cancer chemotherapy, transition metal complexes, 20, 349

Carbon donors and mono- and diatomic nitrogen and oxygen donors,
structural aspects and coordination chemistry of metal porphyrin
complexes with emphasis on axial ligand binding to, 39, 31

Carbon monoxide insertion into transition metal--carbon
sigma-bonds, 33, 195

Carbon monoxide insertion reactions, 1, 118

Carbon monoxide, homogeneous hydrogenation of, 43, 17

Carbon sigma-bonds, carbon monoxide insertion into transition
metal--, 33, 195

Carbon- and oxygen-bonded CO-Lewis acids, reaction of metal carbonyls with, 8, 15

Carbon--carbon bond formation with the aid of nickel catalysts, 8, 129

Carbon--oxygen stretching frequencies of carboxylato complexes and the type of carboxylate coordination, relationships between the, 33, 227

Carbon-bonded β -diketone complexes, 4, 225

Carbonato complexes of cobalt(III), 4, 147

Carbonatobis(ethylenediamine) cobalt(III), base hydrolysis of, 1, 66

Carbonyl anions, mixed cluster, containing nickel and cobalt, 8, 3

Carbonyl complexes, of Rh, 1, 517

Carbonyl complexes, of V, 1, 380

Carbonyl derivatives of rhenium(I), reactions of bromo, 16, 13

Carbonyl systems in transition metal complexes, μ_2 bridging, 31, 1

Carbonyl, (halo) of molybdenum and tungsten, steric effects in substituted, 6, 269

Carbonyl-oximes, 13, 15

Carbonyls and related species, matrix isolation studies on transition metal, 27, 1

Carbonyls, (reaction of metal) with Lewis acids -- carbon- and oxygen-bonded CO, 8, 15

- Carbonyls, group IVB derivatives of the iron triad, 25, 229
- Carbonyls, recent kinetic studies of metal -- namely metal bonded, 8, 81
- Carbonyls,--Behaviour of acylocobalt carbonyls under oxo conditions, 16, 9
- Carborane complexes -- Three- and four-coordinate rhodium(I) carborane complexes containing metal carbon bonds, 16, 19
- Carboxylate coordination, relationships between the carbon--oxygen stretching frequencies of carboxylato complexes and the type of, 33, 227
- Carboxylate group and it's role in octahedral substitution, 8, 103
- Carboxylates of V^{III}, 1, 394
- Carboxylates, Rhodium(II), 50, 109
- Carboxylato complexes and the type of carboxylate coordination, relationships between the carbon--oxygen stretching frequencies of, 33, 227
- Carboxylato-bis(ethylenediamine)- cobalt(III) complexes, the hydrolysis of some, 8, 95
- Carboxylic acids, actinide complexes with, 26, 85
- Carcinostatic and antiviral activity of sulphur--nitrogen ligands and their complexes, 13, 126
- Catalysis of pericyclic reactions, transition metal, 15, 109

Catalytic activity of tricarbonyl chromium complexes of phenanthrene, naphthalene and anthracene in the hydrogenation of dienes, 16, 27

Catalytic functions of metal ions and their complexes, 3, 49

Catalytic processes, calculations of the electronic structures of organometallic compounds and homogeneous. Part I. Main group organometallic compounds, 38, 139

Catalytic syntheses in rhodium chemistry, 8, 149

Catalyzed substitutions (platinum(III)) of platinum(IV) complexes, 7, 241

Catecholate ligands, o-benzoquinone and o-semiquinone, transition metal complexes of, 38, 45

Chalcogen, vibrational spectra of transition metal, compounds, 14, 115

Chelate ring systems by NMR, conformational analysis of, 44, 1

Chelates, metal, of fluorinated 1,3-diketones and related compounds, 22, 37

Chelating agents, metal complexes of sulphur--nitrogen, 13, 101

Chelating dioxygen compounds of the platinum metals, 9, 145

Chelating ligands containing sulfur and amidic nitrogen donor atoms, actinide complexes with, 28, 231

Chelating ligands, liquid-liquid extraction of metal ions by, 43, 299

Chelating reagents in solvent extraction processes -- the present position, 16, 285

Chemical and biological systems with the E and C model,
interpretation of reactivity in, 33, 251

Chemical shift, 13, 52

Chemistry of biological manganese, 27, 173

Chemistry of ruthenium, osmium, rhodium, iridium, palladium and
platinum in the higher oxidation states, 46, 1

Chemistry of, d^1 complexes of niobium, tantalum, zirconium and
hafnium, 9, 107

Chemistry of, plants which accumulate metals, 16, 1

Chemistry of, the outer-sphere complexes, 3, 91

Chiral lanthanide compounds, 48, 243

Chlorocuprates(II), 21, 93

Chloroplast membrane, iron--sulfur centers of the, 28, 1

Chromate(VI) ions, semi-empirical MO theory for, 1, 18

Chromatographic resolution of metal complexes on Sephadex ion
exchangers, 28, 205

Chromatography of coordination complexes, 3, 409

Chromatography of metal complexes and some non-metal compounds,
thin-layer and filter paper, 28, 23

Chromium (Specialist Review) 37, 91

Chromium (Transition Metal Chemistry Review) 45, 105

Chromium -- The catalytic activity of tricarbonyl chromium
complexes of phenanthrene, etc., in the hydrogenation of dienes,
16, 27

Chromium complexes: A bibliographic listing, stereochemistry of, 26, 161

Chromium(II) reduction -- mechanism of, binuclear (and tetranuclear) cobalt(III) complexes and the formation of cobalt(III)--chromium(III) intermediates, 8, 21

Chromium(III) complexes, electronic spectra, 4, 73

Chromium(III) photochemistry and photophysics, 39, 225

Chromium(III) polypyridyl complexes in fluid media, advances in the photochemistry and photophysics of 39, 121

Chromium(III), fluoro-diamine complexes of, 39, 265

Chromium(III), stereochemistry and reaction rates of anionopentaamine complexes of cobalt(III) and, 23, 223

Circular dichroism of transition metal complexes, 46, 129

Circular dichroism, measurements to problems on metal ion complexes, using Ni^{II} and lanthanides as examples. Some applications, 5, 279

Circular dichroism, of coordination compounds and optical rotatory dispersion, 2, 461

Circularly dichroic cobalt(III) complexes, bonding effects, 7, 331

Closoborate anions as a means of synthesizing new coordination compounds, 43, 313

Cluster complexes, electronic structures of transition metal, 38, 89

CO,H₂,N₂,CO₂ and related molecules. Properties of the system: transition metal compound--magnesium. Fixation and activation of, 26, 71

CO₂,CO,H₂,N₂ and related molecules. Properties of the system: transition metal compound--magnesium. Fixation and activation of, 26, 71

Cobalt (Specialist Review) 41, 191

Cobalt (Specialist Review), 35, 85

Cobalt -- Behaviour of acylocobalt carbonyls under oxo conditions, 16, 9

Cobalt and nickel in mixed cluster carbonyl anions, 8, 3

Cobalt chelates, recent developments in the field of organometallic derivatives, 8, 63

Cobalt complexes -- Effects of molecular nitrogen on the reactivity of coordination compounds, 16, 51

Cobalt(I) cyanide and related complexes, some aspects of the chemistry, 8, 167

Cobalt(II) compounds and related systems, recent developments in the studies of molecular oxygen adducts of, 39, 295

Cobalt(II), and nickel(II) complexes, stereochemistry of five-coordinate, 6, 285

Cobalt(II), complexes, high spin-low spin equilibrium in, 1, 133

Cobalt(II), iron(II), and nickel(II) complexes five-coordination, 11, 343

Cobalt(II), iron(II), and nickel(II) complexes with α -diimines and related bidentate ligands, 2, 173

Cobalt(II), nickel(II), bis(salicylaldehydato)-copper(II). Reactions of metal chelates. Hydrolytic cleavage of peptides. 3, 207

Cobalt(II), splitting of d-orbitals in square planar complexes of copper(II), nickel(II) and, 27, 275

Cobalt(II), with Schiff bases, stereochemistry of, 1, 418

Cobalt(II), with tert. phosphines, high spin-low spin equilibrium in, 1, 269

Cobalt(III) and chromium(III), stereochemistry and reaction rates of anionopentaamine complexes of, 23, 223

Cobalt(III) chelate, stability and reactivity of a binuclear μ -peroxo, 16, 147

Cobalt(III) complexes, and the formation of cobalt(III) -- chromium(III) intermediates, mechanisms of the Cr^{2+} reduction of binuclear (and tetranuclear), 8, 121

Cobalt(III) complexes, bases hydrolysis of, 1, 66

Cobalt(III) complexes, bonding effects in circularly dichroic, 7, 331

Cobalt(III) complexes, hydrolysis of some carboxylato-bis-(ethylenediamine), 8, 95

Cobalt(III) complexes, with flexible tetradentate ligands, 7, 161

Cobalt(III) trans-dioximines in non-aqueous media, kinetics and mechanism of substitution reactions of, 28, 177

Cobalt(III), carbonato complexes, 4, 147

Cobalt(III), cyclic, with tetra-amine, substitution reactions of, 1, 81

Cobalt(III), in aqueous perchlorate solution, aspects of the chemistry, 5, 349

Cobalt(III), see also

Dichlorobis(o-phenylenebis-dimethylarsine) cobalt(III), 1, 72

Cobalt(III), trans-dioximes, kinetics and mechanism of substitution reactions in, 17, 253

Cobalt(III), with Schiff bases, stereochemistry of, 1, 417

Cobalt, iron, and nickel, higher oxidation state chemistry, 12, 151

Cobalt, nickel and copper naked metal clusters and olefin chemisorption models, 28, 117

Cobalticyanide ions and ferrocyanide: Molecular orbital theory for metal complexes, 2, 29

Complex compounds of 1,5-disubstituted tetrazoles, 4, 463

Complex equilibria, computer evaluation of, 27, 195

Complex formation equilibria between 1,1,1-tris(aminomethyl) ethane and divalent transition metal ions, 16, 161

Complex formation in solution, solubility measurements, 3, 293

Complex formation with macromolecular ligands, problems of, 16, 195

Complexes of bidentate ligands with enantiotopic donor atoms, isomerism in, 29, 87

Complexes of cobalt(III) with flexible tetradentate ligands, 7, 161

Complexes of iron(II), cobalt(II), and nickel(II) with α -diimines and related bidentate ligands, 2, 173

Complexes of lanthanide(III) ions with nitrogen donor ligands, 10, 195

Computer evaluation of complex equilibria, 27, 195

Conductivity aspects of one-dimensional transition metal complexes, structural and, 36, 357

Conductivity measurements in organic solvents for the characterization of coordination compounds, 7, 81

d^3 configuration, spectroscopic behaviour of, 1, 51

Conformation and interconversion of Schiff base complexes of nickel(II) and copper(II), 43, 187

Conformation of Schiff-base complexes of copper(II): a stereo-electronic view, 17, 137

Conformational analysis of chelate ring systems by NMR, 44, 1

Coordinate properties of pentamethyl-cyclopentarsine, 3, 279

Coordination behaviour of some chelating ligands containing non- or weakly conjugated 2-pyridyl-groups, 5, 293

Coordination chemistry of acrylonitrile, 44, 149

Coordination chemistry of alkynyl (metal) compounds, 47, 89

Coordination chemistry of cyanogen, cyanogen halides and hydrogen cyanide, 47, 165

Coordination chemistry of hydrogen cyanide, cyanogen and cyanogen halides, 47, 165

Coordination chemistry of lanthanides with emphasis on derivatives with Ln--O--C bonds, 31, 67

Coordination chemistry of manganese and rhenium fragments $(C_5H_5)M(CO)_2$, 38, 1

Coordination chemistry of metal alkynyl compounds, 47, 89

Coordination chemistry of ylides, 48, 1

Coordination chemistry, flash photolysis and pulse radiolysis in, 16, 185

Coordination chemistry, high pressure in, 12, 185

Coordination chemistry, of allenes, 20, 81

Coordination chemistry, of aromatic amine N-oxides, 3, 375

Coordination chemistry, of certain transition-metal ions. The role of the solvent, 2, 239

Coordination chemistry, of metalloporphyrins, 6, 247

Coordination chemistry, of scandium, 7, 133

Coordination chemistry, of substituted hydrazines, 21, 29

Coordination chemistry, of thallium(I), 8, 289

Coordination chemistry, of the actinide halides, 2, 145

Coordination chemistry, of the thallium(III) halides and their behavior in non-aqueous media, 6, 1

Coordination chemistry, X-ray absorption edge spectrometry (XAES), 9, 275

Coordination complexes, of the aromatic diimine N-oxides and diazine N-oxides, 20, 37

Coordination compounds, Alfred Werner's research on geometrically isomeric, 15, 1

Coordination compounds, ligand-field models and the photochemistry of, 48, 157

Coordination compounds, Marcel Delépine's research on, 21, 181

Coordination compounds, nuclear quadrupole resonance in, 22, 123

Coordination compounds, of alkali and alkaline earth metals with covalent characteristics, 14, 1

Coordination compounds, of germanium, 3, 497

Coordination compounds, optical activity of, 29, 213

Coordination compounds, optical rotatory dispersion and circular dichroism of, 2, 461

Coordination compounds, optical rotatory dispersion and the Pfeiffer effect, 3, 201

Coordination compounds, oxygen bonding, 3, 255

Coordination compounds, polynuclear, Alfred Werner's research, 9, 339

Coordination compounds, quenching and sensitization processes of, 15, 321

Coordination compounds, role of electronic spectra in the stereochemistry of, 2, 83

- Coordination compounds, semi-empirical MO theory for, 1, 24
- Coordination compounds, some aspects of the photochemistry, 3, 169
- Coordination compounds, the application of diffuses reflectance spectroscopy to the chemistry of transition metal, 14, 181
- Coordination compounds, the vibronic spectra of, 14, 47
- Coordination metal complexes using lanthanide shift reagents, nuclear magnetic resonance studies of 48, 83
- Coordination number, factors influencing the, 1, 440
- Coordination, a ligand's-eye view of, 42, 1
- Coordinative reactivity of phosphine complexes of platinum(0), palladium(0), and nickel(0), 3, 319
- Copper (Specialist Review) 41, 423
- Copper (Specialist Review), 35, 211
- Copper chloride complexes, molecular orbital calculations, 2, 77
- Copper complexes with $g_{\parallel} < g_{\perp}$ in the solid state six-coordinate, 29, 67
- Copper complexes, photochemical properties of, 36, 45
- Copper protein, caeruloplasmin: the enigmatic, 33, 279
- Copper proteins, 18, 198
- Copper proteins, structure and function of 23, 119
- Copper proteins, structure and function of, 33, 55
- Copper(II) ammonia complexes, 5, 1
- Copper(II) complexes, its manifestation and causes, plasticity of the coordination sphere of, 19, 253

Copper(II) complexes, the stereochemistry and electronic properties of fluxional six-coordinate, 35, 267

Copper(II) complexes, with Schiff bases, stereochemistry, 1, 434

Copper(II) compounds, structural isomerism of, 47, 239

Copper(II) compounds, study of the relation between the structural data and magnetic interaction in oxo-bridged binuclear, 42, 259

Copper(II) halogenocarboxylates, mono-, bi-, tetra- and polynuclear, 36, 1

Copper(II) ion, electronic properties and stereochemistry of mono-nuclear complexes, 5, 143

Copper(II) polyamine complexes, progress in the thermodynamics of, 8, 31

Copper(II), nickel(II) and cobalt(II), splitting of d-orbitals in square planar complexes of, 27, 275

Copper(II), partial hydrolysis of a Schiff base ligand coordinated to, 8, 55

Copper(II), the conformation and interconversion of Schiff base complexes of nickel(II) and, 43, 187

Copper(II): a stereo-electronic view conformation of Schiff-base complexes of, 17, 137

Copper(II)bis(salicylaldehydato), nickel(II), and cobalt(II). Reactions of metal chelates. Hydrolytic cleavage of peptides, 3, 207

Copper, cobalt and nickel naked metal clusters and olefin chemisorption models, 28, 117

Copper-protein interaction based on solution and crystal structure studies, 12, 309

Correlational aspects of substituent effects in transition metal complexes containing non-fused phenyl rings, 32, 111

Correlations among solvent polarity scales, dielectric constant and dipole moment, and a means to reliable predictions of polarity scale values from current data, 29, 129

Covalent hydration and pseudobase formation in transition metal polypyridyl complexes, reality or myth? 50, 209

Crystal chemistry, the Jahn-Teller effect in, and spectroscopy, 14, 357

Crystal structures of technetium compounds, 44, 191

Crystal structures, model molybdenum compounds, 18, 7

Crystal structures, proteins, 18, 32

CS₂ and heteroallenes, novel coordination compounds formed from, 43, 165

Current methods in MO theory for inorganic systems and their future development -- an interpretative review, 12, 37

Cyanato--copper(II) complexes with nitrogen organic ligands: preparation, properties and structure, 27, 141

Cyanide complexes of the early transition metals (groups IVa-VIIa), 17, 177

Cyanide phosphine complexes of transition metals, 13, 133

Cyanide phosphine complexes of transition metals, some aspect of the chemistry, 8, 175

Cyanogen halides, hydrogen cyanide and cyanogen, the coordination chemistry of, 47, 165

Cyanogen, cyanogen halides and hydrogen cyanide, the coordination chemistry of, 47, 165

Cyclic phosphines and their derivatives, transition metal complexes of, 15, 239

Cyclic planar and pyramidal ligands containing boron, metal sandwich complexes of, 28, 47

Cyclic tetra-amine complex with Co^{III} , substitution reactions of, 1, 81

Cyclometallated compounds, 18, 327

Cyclopentadienyl donor ligand, organometallic intramolecular-coordination compounds containing a, 42, 31

Cytochromes of higher plants and algae, the, 26, 47

Cytochromes, 18, 145

d-Orbitals in square planar complexes of copper(II), nickel(II) and cobalt(II), splitting of, 27, 275

Data-fitting problem, numerical methods for, 19, 99

Decay on a specific nuclear coordinate (DOSENCO) or via random coordinate selection (DERCOS), mechanisms of photoreactivity of coordination compounds: limiting cases of, 39, 181

Decay via random coordinate selection (DERCOS), or on specific nuclear coordinate (DOSENCO) mechanisms of photoreactivity of coordination compounds: limiting cases of, 39, 181

DERCOS (decay via random coordinate selection) or DESENCO (on a specific nuclear coordinate), mechanisms of photoreactivity of coordination compounds: limiting cases of, 39, 181

Derivatives with Ln--O--C bonds, coordination chemistry of lanthanides with emphasis on, 31, 67

Descriptive introduction to analysis of the vibrational spectra of solids, 10, 183

Determination of structural properties of dimeric transition metal ion complexes from EPR spectra, 13, 173

Diamines, configuration of Werner complexes of, 1, 179

Diatomic nitrogen and oxygen donors, structural aspects and coordination chemistry of metal porphyrin complexes with emphasis on axial ligand binding to carbon donors and mono- and, 39, 31

Diazines N-oxides and aromatic diimines N-oxides, coordination complexes of, 20, 37

Dichlorobis(o-phenylenebisdimethylarsine)-cobalt(III), reaction mechanism of cis- and trans, 1, 72

1,3, Dienes, palladium-promoted addition reactions, 8, 139

Dielectric constant and dipole moment, and a means to reliable predictions of polarity scale values from current data, correlations among solvent polarity scales, 29, 129

Dihalides (Group II metal), infrared spectra and geometry, of, 9, 189

Dihalides in the solid state, ligand field parameters and spectra of first-row transition metal, 25, 31

α -Diimines and related bidentate ligands with complexes of iron(II), cobalt(II) and nickel(II), 2, 173

Diimines N-oxides, coordination complexes of, and diazines N-oxides, 20, 37

1,3-Diketo compounds of the non-metallic elements, 2, 163

1,3-diketones and related compounds metal chelates of fluorinated, 22, 37

Dimeric transition metal, the determination of structural properties of, ion complexes from EPR spectra, 13, 173

Dinitrogen(hydrido) and new cationic hydrido complexes of iron, 8, 77

Dinitrogen, activation of molecular nitrogen, 3, 429

Dioximes, 13, 6

Dioxygen activation in transition metal complexes in the light of molecular orbital calculations, 50, 1

Dioxygen reactivity structure correlations in manganese(II) complexes, 32, 1

Dipole moment, and a means to reliable predictions of polarity scale values from current data, correlations among solvent polarity scales, dielectric constant and, 29, 129

Discussion of the different kinds of solute-solute and solute-solvent interactions acting in homogeneous catalysis by transition metal complexes, 43, 275

Dissociate intermediates in substitution reactions of square-planar complexes, solvent paths and, 25, 1

Disulfur complexes, 46, 245

Ditertiaryphosphine dioxides, solvent extraction properties of, 47, 283

Dithiocyanatobis(triethylphosphine)-cobalt(II), high spin--low spin equilibrium in, 1, 133

Divalent transition metal β -keto-enolate complexes as Lewis acids, 4, 1

Donor properties of 1-amidino-O-alkylureas, 2, 441

Donor properties of hydroxamic acids, 26, 281

DOSENCO (decay on a specific nuclear coordinate) or DERCOS (via random coordinate selection), mechanisms of photoreactivity of coordination compounds: limiting cases of, 39, 181

E and C model, interpretation of reactivity in chemical and biological systems with the, 33, 251

EDTA, Mo complexes with, 1, 342

Effect of axial ligand fields on ground state properties of complexes with orbitally degenerate ground terms, 4, 101

Effects of molecular nitrogen on the reactivity of coordination compounds, 16, 51

Eight-coordination, 1, 446

- Eight-coordination, in the transition series, 1, 439
- Electrochemistry of transition metal clusters, 47, 55
- Electron diffraction studies, bond distances and estimated bending frequencies of some first row transition metal dihalides, 18, 257
- Electron paramagnetic resonance, electronic properties and stereochemistry of mono-nuclear complexes of the copper(II) ion, 5, 143
- Electron structures of organometallic compounds and homogeneous catalytic processes, calculations of the. Part I. Main group organometallic compounds, 38, 139
- Electron-donor properties of ferrocene, 8, 39
- Electron-rich nickel triad complexes, synthesis with, 33, 3
- Electron-transfer proteins, 18, 125
- Electronic factors and steric, influencing the structure of nickel(II) complexes, 10, 227
- Electronic properties and stereochemistry of mono-nuclear complexes of the copper(II) ion, 5, 143
- Electronic properties of fluxional six-coordinate copper(II) complexes, the stereochemistry and, 36, 267
- Electronic spectra of transition metal compounds. An experimental survey, vibrational fine structure in the, 31, 251
- Electronic spectra, (role of) in the stereochemistry of coordination compounds, 2, 83
- Electronic spectra, of quadrate chromium(III) complexes, 4, 73

Electronic spectra, of tetragonal metal complexes, analysis and significance, 3, 119

Electronic spectra, of the hexafluoro complexes of the transition metals, 16, 227

Electronic structure and spectrum of vitamin B₁₂, 2, 109

Electronic structure of coordination compounds from photoelectron spectroscopic techniques, advances in the knowledge of the, 43, 355

Electronic structures of transition metal cluster complexes, 38, 89

Electronic transitions of lanthanide and actinide complexes, hypersensitivity in, 18, 199

Elements of Group 1 (Specialist Review) Main Group Chemistry Review 1981, 49, 1

Elements of Group 1 (Specialist Review) Main Group Chemistry Review 1980, 40, 1

Elements of Group 1 (Specialist Review) Main Group Chemistry Review 1979, 34, 1

Elements of Group 1 (Specialist Review) Main Group Chemistry Review 1978, 30, 1

Elements of Group 2 (Specialist Review) Main Group Chemistry Review 1981, 49, 76

Elements of Group 2 (Specialist Review) Main Group Chemistry Review 1980, 40, 64

Elements of Group 2 (Specialist Review) Main Group Chemistry
Review 1979, 34, 50

Elements of Group 2 (Specialist Review) Main Group Chemistry
Review 1978, 30, 52

Elements of Group 3 (Specialist Review) Main Group Chemistry
Review 1981, 49, 117

Elements of Group 3 (Specialist Review) Main Group Chemistry
Review 1980, 40, 97

Elements of Group 3 (Specialist Review) Main Group Chemistry
Review 1979, 34, 74

Elements of Group 3 (Specialist Review) Main Group Chemistry
Review 1978, 30, 74

Elements of Group 4 (Specialist Review) Main Group Chemistry
Review 1981, 49, 193

Elements of Group 4 (Specialist Review) Main Group Chemistry
Review 1980, 40, 179

Elements of Group 4 (Specialist Review) Main Group Chemistry
Review 1979, 34, 154

Elements of Group 4 (Specialist Review) Main Group Chemistry
Review 1978, 30, 137

Elements of Group 5 (Specialist Review) Main Group Chemistry
Review 1981, 49, 280

Elements of Group 5 (Specialist Review) Main Group Chemistry
Review 1980, 40, 261

Elements of Group 5 (Specialist Review) Main Group Chemistry
Review 1979, 34, 262

Elements of Group 5 (Specialist Review) Main Group Chemistry
Review 1978, 30, 234

Elements of Group 6 (Specialist Review) Main Group Chemistry
Review 1981, 49, 383

Elements of Group 6 (Specialist Review) Main Group Chemistry
Review 1980, 40, 377

Elements of Group 6 (Specialist Review) Main Group Chemistry
Review 1979, 34, 376

Elements of Group 6 (Specialist Review) Main Group Chemistry
Review 1978, 30, 305

Emission and related phenomena in transition metal complexes,
multiple state, 36, 325

Empirical approach to ligand-effects on the kinetics of
substitution and redox reactions, 12, 263

Empirical approach to molecular interactions, 15, 207

Empirical rate laws, the mechanistic assignment of terms in, for
complexation and redox reactions of metal ions in aqueous
solution, 14, 287

Enantiotopic donor atoms, isomerism in complexes of bidentate
ligands with, 29, 87

Enzymes, mechanisms for the reactions of molybdenum in, 18, 1

EPR spectra, the determination of structural properties of
dimeric transition metal ion complexes from, 13, 173

- EPR studies of exchange coupled metal ions, 5, 209
- Equatorial-axial interactions in complexes as a manifestation of mutual influence of ligands, 43, 87
- Equilibria in complexes of N-heterocyclic molecules, 16, 67
- Equivalent cores, the concept of, 13, 70
- N,N'-Ethylenebis(salicylideneiminato) transition metal ion chelates, 9, 311
- Exchange coupled metal ions, EPR studies, 5, 209
- Exchange interactions, EPR spectra, 13, 174
- Extraction of metal ions from aqueous sulphate media by alkylamines, 11, 227
- Far infrared spectra and lattice vibrations of inorganic complex salts, 4, 423
- Ferrocene, and its electron-donor properties, 8, 39
- Ferrocene, in hydroxylic solvents, kinetics of the reduction of platinum(IV) complexes, 8, 111
- Ferrocene, series, some metalation and methoxymercuration reactions in, 16, 107
- Ferrocene-containing metal complexes, 39, 1
- Ferrocyanide and cobalticyanide ions: molecular orbital theory for metal complexes, 2, 29
- Filter paper chromatography of metal complexes and some non-metal compounds, thin-layer and, 28, 23
- First-row transition metal dihalides in the solid state, ligand field parameters and spectra of, 25, 31

Five coordinate geometry of complexes, 9, 365

Five-coordinate cobalt(II) and nickel(II) complexes, the influence of geometry and donor-atom set on the spin state, 8, 351

Five-coordinate nickel(II) and cobalt(II) complexes, stereochemistry of, 6, 285

Five-coordination in iron(II), cobalt(II), and nickel(II) complexes, 11, 343

Fixation and activation of N_2 , CO_2 , CO , H_2 and related molecules. Properties of the system: transition metal compound--magnesium, 26, 71

Flash photolysis and pulse radiolysis in coordination chemistry, 16, 185

Flash photolysis of coordination compounds, 23, 131

Flavodoxins, 18, 195

Fluid media, Advances in the photochemistry and photophysics of chromium(III) polypyridyl complexes in, 39, 121

Fluoride complexes in aqueous solution, simple electrostatic correlations, 12, 221

Fluorinated 1,3-diketones and related compounds, metal chelates of, 22, 37

Fluoro-diamine complexes of chromium(III), 39, 265

Fluxional six-coordinate copper(II) complexes, the stereochemistry and electronic properties of, 36, 267

- Force constants and vibrational spectra of pure ammine complexes,
19, 41
- Force fields (study) for octahedral hexahalogen molecules,
7, 257
- Force fields, study of, for tetrahedral molecules and ions,
11, 21
- Formation equilibria (two problems in solving), the selection of
species and the calculation of stability constants, 8, 45
- Free radical reactions of transition metal system, 32, 97
- Function and mechanism of action of peroxidases,
chloroperoxidase, 19, 237
- Function and mechanism of action of peroxidases, 19, 187
- Function and mechanism of action of peroxidases, catalases,
19, 192
- Function and mechanism of action of peroxidases, cytochrome c
peroxidase, 19, 235
- Function and mechanism of action of peroxidases, horse radish
peroxidase, 19, 222
- Function and mechanism of action of peroxidases, superoxide
dismutase, 19, 193
- Function of copper proteins, structure and, 33, 55
- Gallium, indium and thallium, metal-halogen stretching vibrations
in coordination complexes, 4, 29
- Gaseous transition metal complexes of group V and VII ligands,
thermochemistry of, 48, 101

- General quadratic valence force field, force constants of a,
1, 351
- Geometrical and optical isomerization of β -diketonate complexes,
6, 331
- Geometrically isomeric coordination compounds, Alfred Werner's
research on, 15, 1
- Geometry of pentacoordinate complexes, 9, 365
- Germanium, coordination compounds, 3, 497
- Germanium, coordination compounds, tin and lead, the structural
chemistry of bivalent, 18, 1
- Gold (Specialist Review), 35, 259
- Gold (Transition Metal Chemistry Review) 45, 319
- Gold(I) complex ions, dicyano, force constants of, 1, 355
- Gold(III) complex ions, dichlorodicyano-, force constants of,
1, 369
- Gold(III) complexes, square-planar, nucleophilic substitutions
in, 1, 106
- Gold(III), tetrachloro- and tetrabromo-, force constants of,
1, 265
- Gold, compounds of triphenylphosphine and, 1, 255
- Group II metal dihalides, infrared spectra and geometry of,
9, 189
- Group IVB derivatives of the iron triad carbonyls, 25, 229
- β -Diketonate complexes, as Lewis acids, divalent transition
metal, 4, 1

β -Diketonate complexes, carbon-bonded, 4, 225

β -Diketonate complexes, optical and geometrical isomerization,
6, 331

β -Diketonates, 1,3-diketo compounds of the non-metallic elements,
2, 163

H_2, N_2, CO_2, CO and related molecules. Properties of the system:
transition metal compound--magnesium. Fixation and activation
of, 26, 71

Hafnium, niobium, tantalum, zirconium, the chemistry of d^1
complexes, 9, 107

Halocarbonyls of molybdenum and tungsten, steric effects in
substituted, 6, 269

Halogen binding energies and their correlation with structure,
the X-ray photoelectron spectra of metal halides and their
complexes, 21, 63

Halogenocarboxylates, mono-, bi-, tetra- and polynuclear
copper(II), 36, 1

Halogens and hydrogen (Specialist Review) Main Group Chemistry
Review 1981, 49, 444

Halogens and hydrogen (Specialist Review) Main Group Chemistry
Review 1978, 30, 351

Halogens, oxidation and other products from the reaction of
thiones and phosphine sulphides with metal salts and, 27, 59

Hard and soft acids and bases, and nucleophilic displacement
reactions, 1, 89

- Heat changes, computer calculations of, 1, 280
- Hemerythrin, structural chemistry of, 24, 145
- Hemoglobin, 18, 160
- Heteroallenes, novel coordination compounds formed from CS₂ and, 43, 165
- Heterocyclic and macrocyclic amine complexes of silver(II) and silver(III), 20, 171
- Hexa-aquovanadate(III), 1, 387
- d⁶ Hexacoordinate metal complexes, the ligand field photosubstitution reactions of, 44, 61
- Hexafluoro complexes of the transition metals, the electronic spectra of the, 16, 227
- Hexagonal ligand fields, and pentagonal, splittings of dⁿ-configurations in. Comments on the magnetic properties and absorption spectra of sandwich molecules, 2, 137
- Hexahalogen molecules (octahedral), study of force fields, 7, 257
- High coordination complexes, structures of, 24, 179
- High frequency paramagnetism and electronic configuration of post-transition metal ions in pure salts, 2, 117
- High pressure in coordination chemistry, 12, 185
- High pressures, vibrational studies of solid inorganic and coordination complexes at, 29, 1
- High-spin behaviour and chemistry properties of organometallic derivatives of iron(III), 8, 57

Higher oxidation state chemistry of iron, cobalt and nickel, 12, 151

Higher oxidation state chemistry of manganese, 7, 353

Higher plants and algae, the cytochromes of, 26, 47

Homogeneous catalysis by transition metal complexes, a discussion of the different kinds of solute-solute and solute-solvent interactions acting in, 43, 275

Homogeneous catalysis of 1-butene isomerization with hydrido nickel phosphite complexes, 16, 129

Homogeneous catalytic processes, calculations of the electronic structures of organometallic compounds and. Part I. Main group organometallic compounds. 38, 139

Homogeneous catalytic reactions, 13, 156

Homogeneous hydrogenation of carbon monoxide, 43, 17

How to distinguish between inner and outer sphere complexes in aqueous solution. Thermodynamic and other criteria, 8, 21

Human serotransferrin: structure and function, 22, 1

Hydride ligands, transition metal complexes with bridging, 43, 251

Hydrides, new cationic hydrido and hydrido-dinitrogen complexes of iron, 8, 77

Hydrido complexes, of Re, 1, 494

Hydrido complexes, of Rh, containing tert. phosphines, 1, 510

Hydrogen and halogens (Specialist Review) Main Group Chemistry Review 1978, 30, 379

Hydrogen cyanide as a ligand in phosphino complexes of nickel(II), 8, 159

Hydrogen cyanide, cyanogen and cyanogen halides, the coordination chemistry of, 47, 165

Hydrogen, molecular in solution, activation of, 1, 506

Hydrolysis of some carboxylato-bis(ethylenediamine) cobalt(III) complexes, 8, 95

Hydrolytic cleavage of peptides by bis(salicylaldehydato)-copper(II), nickel(II), and cobalt(II). Reactions of metal chelates, 3, 207

Hydroxamic acid analogs, metal complexes, 3, 267

Hydroxamic acids, donor properties of, 26, 281

Hydroxy-oximes, 13, 32

Hydroxycarboxylic acid chelates, EPR spectra, 13, 232

Hydroxyl ion as ligand, 6, 65

Hypersensitivity, 18, 209, 213

Hypersensitivity, in the electronic transitions of lanthanide and actinide complexes, 18, 199

Imine-oximes, 13, 20

Indium(III), coordination chemistry of, 1, 286

Indium, gallium, and thallium, metalhalogen stretching vibrations in coordination complexes, 4, 29

Influence of geometry and donor-atom set on the spin state of five-coordinate cobalt(II) and nickel(II) complexes, 8, 351

Influence of the solvent on the stability of metal ion complexes,
16, 115

Infrared spectra, and geometry of Group II metal dihalides,
9, 189

Infrared spectra, of complexes of the thiocyanate and related
ions, 6, 407

Initial state and transition state solvation in inorganic
reactions, 31, 93

Inner and outer sphere complexes in aqueous solution and how to
distinguish them, 8, 21

Inorganic chemistry, some trends in, 31, 53

Inorganic oxygen carriers as models for biological systems,
cobalt models, 19, 5

Inorganic oxygen carriers as models for biological systems,
19, 1

Inorganic oxygen carriers as models for biological systems, iron
models, 19, 29

Inorganic reactions, initial state and transition state solvation
in, 31, 93

Interaction of spin labels with transition metals, 26, 207

Interpretation of reactivity in chemical and biological systems
with the E and C model, 33, 251

Intramolecular-coordination compounds containing a phosphorus
donor ligand, 32, 235

Ion binding in charged polymers, 19, 125

Ion complexes, the determination of structural properties of dimeric transition metal, from EPR spectra, 13, 173

Ion exchange and solvent extraction methods, metal--chloride complexes studied by. Part II. Transition-metal elements and the hexavalent actinides, 2, 257

Ion-exchange (metal--chloride complexes studied by) and solvent-extraction methods. Part I. Non-transition-metal ions, lanthanides, actinides and d^0 transition-metal ions, 2, 239

Ion-pair, equilibria, solvent effects on, 21, 159

Ion-pair, formation and thermodynamics of metalcomplex, 5, 379

Iridium compounds, new types of reactions involving rhodium and, 43, 377

Iridium, palladium, platinum, ruthenium, osmium and rhodium in the higher oxidation states, the chemistry of, 46, 1

Iron (Specialist Review) 41, 1

Iron (Specialist Review), 35, 1

Iron and tin coordination compounds magnetically perturbed Mössbauer spectra of, 10, 37

Iron triad carbonyls, group IVB derivatives of the, 25, 229

Iron(II), cobalt(II), and nickel(II) complexes with α -diimines and related bidentate ligands, 2, 173

Iron(II), complexes, spin transitions in six-coordinate, 18, 293

Iron(II), some aspects of the chemistry of bis-(2,2'-dipyridyl) and bis(1,10-phenanthroline) complexes, 3, 471

Iron(III), complexes, binuclear oxo-bridged, 12, 1

Iron(III), high-spin behaviour and chemical properties of organometallic derivatives, 8, 57

Iron(III), some aspects of the coordination chemistry of, 8, 185

Iron, cobalt, and nickel, higher oxidation state chemistry of, 12, 151

Iron, new cationic hydrido and hydrido -- dinitrogen complexes of, 8, 77

Iron--sulfur centers of the chloroplast membrane, 28, 1

Iron--sulphur proteins, 18, 162

Iron--sulphur proteins, structural studies, 5, 417

Isocyanide insertion and related reactions, 8, 225

Isocyanides, zerovalent transition metal complexes of organic, 32, 193

Isomerism in complexes of bidentate ligands with enantiotopic donor atoms, 29, 87

Jahn--Teller effect in crystal chemistry and spectroscopy, 14, 357

Kinetics (water-exchange) in labile aquo and substituted aquo transition metal ions by means of ^{17}O NMR studies, 7, 1

Kinetics and mechanism of substitution reactions of cobalt(III) trans-dioximines in non-aqueous media, 28, 177

Kinetics and mechanisms of substitution reactions, in cobalt(III) trans-dioximes, 17, 253

Kinetics and mechanisms of substitution reactions, of octahedral macrocyclic amine complexes, 10, 1

- Kinetics of nickel, palladium and platinum complexes, 10, 123
- Kinetics of substitution and redox reactions, empirical approach to ligand-effects, 12, 263
- Kinetics of the reduction of platinum(IV) complexes by ferrocene in hydroxylic solvents, 9, 111
- Kinetics, thermodynamics and, of the transition metal complexes of tripodal amines, 14, 29
- Lanthanide and actinide complexes, hypersensitivity in the electronic transition of, 18, 199
- Lanthanide coordination compounds in solution, absorption spectra and structure of, 27, 223
- Lanthanide halides, systematic features in the structural chemistry of the uranium halides, oxyhalides and related transition metal, 20, 197
- Lanthanide hexahalide anions (LnX_6^{3-}), normal coordinate treatment, 12, 295
- Lanthanide shift reagents, nuclear magnetic resonance studies of coordination metal complexes using, 48, 83
- Lanthanide(III) complexes, spectral and potentiometric studies of some, 3, 189
- Lanthanides and nickel, for examples, some applications of circular dichroism measurements to problems on metal ion complexes, 5, 279
- Lanthanides with emphasis on derivatives with Ln--O--C bonds, coordination chemistry of, 31, 67

Lanthanides, actinides, and d⁰ transition-metal ions, non-transition-metal ions. Metal--chloride complexes studied by ion-exchange and solvent-extraction methods. Part I, 2, 195

Lattice vibrations and far infrared spectra of inorganic complex salts, 4, 423

LCAO-MO-SCF method for complex inorganic molecules and the role of two-center coulomb integrals, 2, 15

Lead, germanium and tin, the structural chemistry of bivalent, 20, 1

Letter to Editor, 50,

Lewis acids, bimetallic tetrathiocyanates and selenocyanates as, 32, 33

Lewis acids, carbon- and oxygen-bonded CO reaction of metal carbonyls with, 8, 15

Ligand based redox series, 43, 39

Ligand binding to carbon donors and mono- and diatomic nitrogen and oxygen donors, structural aspects and coordination chemistry of metal porphyrin complexes with emphasis on axial, 39, 31

Ligand chemistry of tellurium, the, 42, 133

ligand design and synthesis, 9, 219

Ligand effects, 43, 337

Ligand field interpretation of some cases of pentacoordination, 3, 141

Ligand field parameters and spectra of first-row transition metal dihalides in the solid state, 25, 31

- Ligand's eye-view of coordination, 42, 1
- Ligand-field models and the photochemistry of coordination compounds, 48, 157
- Ligands, equatorial-axial interactions in complexes as a manifestation of mutual influences of, 43, 87
- Ligands, reactivity of, and nature of the bond with metal, 1, 58
- Ligand-central atom $p\pi \rightarrow d\pi$ bonding, 13, 68
- Limiting cases of decay on a specific nuclear coordinate (DOSENCO) or via random coordinate selection (DERCOS), mechanisms of photoreactivity of coordination compounds: 39, 181
- Linkage isomerism in metal complexes, 3, 225
- Linkage isomers: Their preparation and reactions, 20, 109
- Liquid-liquid extraction of metal ions by chelating ligands, 43, 299
- Ln--O--C bonds, coordination chemistry of lanthanides with emphasis on derivatives with, 31, 67
- Luigi Sacconi (from a speech by E. Ferroni, translated by the Editor, 43, 5
- Macrocyclic amine and heterocyclic amine complexes of silver(II) and silver(III), 20, 171
- Macrocyclic amine complexes, kinetics and mechanisms of substitution reactions of octahedral, 10, 1
- Macrocyclic coordination compounds formed by condensation of metal--amine complexes with aliphatic carbonyl compounds, 3, 3

Macromolecular ligands, problems of complex formation with,
16, 195

Magnesium, three-coordinate, 25, 173

Magnesium--transition metal compound. Fixation and activation of
 N_2 , CO_2 , CO , H_2 and related molecules. Properties of the system,
26, 71

Magnetic exchange in polynuclear metal complexes, 5, 313

Magnetic interaction in metal complexes with bridging
nitrogen--heterocyclic ligands, 21, 1

Magnetic interaction in oxo-bridged binuclear copper(II)
compounds, study of the relation between the structural data and,
42, 259

Magnetic properties of polynuclear transition metal complexes,
4, 361

Magnetic resonance methods in the study of the electric structure
of transition metal complexes, 7, 197

Magnetic resonance studies of coordination metal complexes using
lanthanide shift reagents, nuclear, 48, 83

Magnetic resonance studies of metal-enzymes, 20, 407

Magnetic(Para) anisotropy, 6, 147

Magnetically perturbed Mössbauer spectra of iron and tin
coordination compounds, 10, 37

Main group elements, complexes of, phosphorus, arsenic and
antimony, 19, 173

- Main group organometallic compounds. Calculations of the electronic structures of organometallic compounds and homogeneous catalytic processes. Part I. 38, 139
- Malonatobis(ethylenediamine)cobalt(III), base hydrolysis of, 1, 66
- Manganese (Specialist Review) 37, 167
- Manganese (Transition Metal Chemistry Review) 45, 237
- Manganese and rhenium fragments $(C_5H_5)M(CO)_2$, coordination chemistry of the, 38, 1
- Manganese complexes, photochemistry of, 28, 147
- Manganese porphyrin complexes, 7, 289
- Manganese(II) complexes, dioxygen reactivity-structure correlations in, 32, 1
- Manganese(III) in aqueous solution, some aspects, 4, 199
- Manganese, higher oxidation state chemistry, 7, 353
- Manganese, the chemistry of biological, 27, 173
- Marcel Delépine's research on coordination compounds, 21, 181
- Matrix isolation studies on transition metal carbonyls and related species, 27, 1
- Mechanism and function of action of peroxidases, 19, 187
- Mechanism for oxidation of some d^6 low-spin metal complexes by two peroxoanions, 8, 87
- Mechanism of octahedral complex formation by labile metal ions, 5, 45

Mechanism of substitution reactions in cobalt(III) trans-dioximes, 17, 253

Mechanisms and kinetics of substitution reactions of octahedral macrocyclic amines complexes, 10, 1

Mechanisms for the reactions of molybdenum in enzymes, 18, 1

Mechanisms of photoreactivity of coordination compounds: limiting cases of decay on a specific nuclear coordinate (DOSENCO) or via random coordinate selection (DERCOS), 39, 181

Mechanisms of the Cr^{2+} reduction of binuclear (and tetranuclear) cobalt(III) complexes and the formation of cobalt(III)--chromium(II) intermediates, 8, 121

Mechanistic assignment of terms in empirical rate laws for complexation and redox reactions of metal ions in aqueous solution: acid dependences in perchlorate media, 14, 287

Mercury (Specialist Review) 37, 323

Mercury (Transition Metal Chemistry Review) 45, 367

Metal -- recent kinetic studies -- metal bonded carbonyls, 8, 81

Metal alkynyl compounds, coordination chemistry of, 47, 89

Metal atom chemistry out of the cold, taking, 48, 203

Metal bonds, bonding in coordination compounds containing metal, 2, 371

Metal chelates of fluorinated 1,3-diketones and related compounds, 22, 37

Metal chelates, molecular structure details of, 1, 151

Metal complexes and some non-metal compounds, thin-layer and filter paper chromatography of, 28, 23

Metal complexes in solution, activation of saturated hydrocarbons by, 24, 97

Metal complexes of substituted phosphinites and secondary phosphites, 26, 263

Metal complexes of sulfur-containing ligands: sulfur 2p binding energies, the X-ray photoelectron spectra of, 31, 183

Metal complexes on Sephadex ion exchangers, chromatographic resolution of, 28, 205

Metal complexes, ferrocene-containing, 39, 1

Metal complexes, linkage isomerism, 3, 225

Metal complexes, of aromatic amine N-oxides, 11, 93

Metal complexes, of hydroxamic acid analogs, 3, 267

Metal complexes, of sulphur--nitrogen chelating agents, 13, 101

Metal complexes, of thio- β -diketones, 7, 29

Metal complexes, tetrahedral, MO theory for, 1, 2

Metal complexes, three coordination in, 24, 1

Metal compounds, steric effect in bis(2,2'-bipyridyl) and bis(1,10-phenanthroline), 6, 187

Metal derivatives of the borazines, 22, 185

Metal halides and their complexes: halogen binding energies and their correlation with structure, the X-ray photoelectron spectra of, 21, 63

Metal ion complexes, using nickel and lanthanides, as examples, some applications of circular dichroism measurements to problems, 5, 279

Metal ions in aqueous solution, radiation chemistry of, 22, 195

Metal ions in solution, solvent coordination numbers, 6, 309

Metal ions, extraction of, from aqueous sulphate media by alkylamines, 11, 227

Metal oxide alkoxide(trialkylsilyloxy) polymers, 2, 299

Metal porphyrin complexes with emphasis on axial ligand binding to carbon donors and mono- and diatomic nitrogen and oxygen donors, structural aspects and coordination chemistry of , 39, 31

Metal salts and halogens, oxidation and other products from the reaction of thiones and phosphine sulphides with, 27, 59

Metal sandwich complexes of cyclic planar and pyramidal ligands containing boron, 28, 47

Metal tolerant plants, 36, 155

Metal--amine complexes with aliphatic carbonyl compounds, macrocyclic coordination compounds, 3, 3

Metal--chloride complexes studied by ion-exchange and solvent-extraction methods, Part II. Transition-metal elements and the hexavalent actinides, 2, 257

Metal--chloride complexes studied by ion-exchange and solvent-extraction methods, Part I. Non-transition-metal ions, lanthanides, actinides and d^0 transition metal ions, 2, 195

Metal--halogen stretching vibrations in coordination complexes of gallium, indium, and thallium, 4, 29

Metal--ion oxidations in solution, role of complexes, 5, 245

Metal--metal multiple bonding, an entry to metal carbonyl derivatives. Penta-methylcyclopentadienyl metal complexes, 20, 155

Metal--nitrosyl complexes, infra-red spectra and bonding in, 1, 187

Metal--phosphorus bonding in coordination complexes, spectroscopic studies of, 9, 1

Metal-enzymes, magnetic resonance studies, 12, 407

Metallophthalocyanines, some new developments in the chemistry of, 32, 67

Metalloporphyrins, coordination chemistry of, 6, 247

Metalloproteins with phenolate coordination, 50, 73

Metals, 3d, complexes with substituted salicylaldimines, 1, 192

Metals, coordination compounds of alkali and alkaline earth, with covalent characteristics, 14, 1

Metal+ligand π back-bonding, detection of, 13, 62

Mixed cluster carbonyl anions containing nickel and cobalt, 8, 3

Modeling the molybdenum centers of the molybdenum hydroxylases, 48, 59

Models for copper--protein interaction based on solution and crystal structure studies, 12, 309

Molecular interactions, empirical approach to, 15, 207

Molecular orbital calculations (semi-empirical) on octahedral complexes: $[\text{TiCl}_6]^{2-}$, 2, 45

Molecular orbital calculations on, copper chloride complexes, 2, 77

Molecular orbital calculations on, porphyrins and their complexes, the status of, 16, 259

Molecular orbital calculations on, transition metal compounds, 6, 95

Molecular orbital calculations, dioxygen activation in transition metal complexes in the light of, 50, 1

Molecular orbital theory, for metal complexes: ferrocyanide and cobalticyanide ions, 2, 29

Molecular orbital theory, for tetrahedral metal complexes, 1, 2

Molecular orbital theory, LCAO--MO--SCF method for complex inorganic molecules and the role of two-center coulomb integrals, 2, 15

Molecular orbital theory, semi-empirical, for chromate(VI) ion, 1, 18

Molecular orbital theory, semi-empirical, for coordination compounds, 1, 24

Molecular orbital theory, semi-empirical, one centre integrals in, 1, 13

Molecular oxygen adducts of cobalt(II) compounds and related systems, recent developments in the studies of, 39, 295

Molybdenum (Specialist Review) 37, 117

Molybdenum and tungsten (Transition Metal Chemistry Review)
45, 153

Molybdenum centers of the molybdenum hydroxylases, modeling the,
48, 59

Molybdenum hydroxylases, modeling the molybdenum centers of the,
48, 59

Molybdenum(IV), molybdenum(V) and molybdenum(VI), structural
aspects of, 17, 99

Molybdenum, and tungsten, coordination chemistry, biochemical
aspects, 4, 475

Molybdenum, and tungsten, coordination compounds of, 1, 315

Molybdenum, and tungsten, in enzymes, mechanisms for the
reactions of, 18, 1

Molybdenum, and tungsten, steric effects in substituted
halocarbonyls, 6, 269

Mono- and diatomic nitrogen and oxygen donors, structural aspects
and coordination chemistry of metal porphyrin complexes with
emphasis on axial ligand binding to carbon donors and, 39, 31

Mono-, bi-, tetra- and polynuclear copper(II)
halogenocarboxylates, 36, 1

Monoolefin and acetylene complexes of nickel, palladium and
platinum, 6, 27

Monothio- β -diketones and their metal complexes, 7, 59

Monovalent, trivalent and tetravalent nickel, 33, 87

Mössbauer spectra, magnetically perturbed of iron and tin coordination compounds, 10, 37

Mössbauer spectra, partial (Partial quadrupole splittings in inorganic chemistry), 11, 247

Multicomponent equilibrium systems, principles of concentration distribution in 43, 233

Multiple state emission and related phenomena in transition metal complexes, 36, 325

Multiplet splitting, 13, 72

Multiply bonded ligands, stereochemical aspects of reactions of complexes of d^0 transition metal with, 47, 15

Mutual influence of ligands in transition metal coordination compounds with multiple metal--ligand bonds, 17, 1

Myoglobin, 18, 160

N_2, CO_2, CO, H_2 and related molecules. Properties of the system: transition metal compound--magnesium. Fixation and activation of, 26, 71

^{119}Sn NMR in coordination chemistry, 44, 229

^{17}O NMR studies, water-exchange kinetics in labile aquo and substituted aquo transition metal ions, 7, 1

Naked metal clusters and olefin chemisorption models, cobalt, nickel and copper, 28, 117

1,8-Naphthalene bis(dimethylarsine) with nickel(II) complexes, 2, 129

Nature and stability of olefin palladium(II) chloride complexes in acetic acid, 16, 59

Neptunium, aqueous coordination complexes of, 25, 133

New cationic hydrido and hydrido--dinitrogen complexes of iron, 8, 77

New coordination chemistry of saturated ligands, 26, 33

New types of reactions involving rhodium and iridium compounds, 43, 377

Nickel (Specialist Review) 37, 221

Nickel triad complexes, synthesis with electron-rich, 33, 3

Nickel(II) and cobalt(II), splitting of d-orbitals in square planar complexes of copper(II), 27, 275

Nickel(II) and copper(II), the conformation and interconversion of Schiff base complexes of, 43, 187

Nickel(II), and cobalt(II) complexes, stereochemistry of five-coordinate, 6, 285

Nickel(II), cobalt(II), and bis(salicylaldehydato) copper(II). Reactions of metal chelates. Hydrolytic cleavage of peptides, 3, 207

Nickel(II), cobalt(II), iron(II), complexes five-coordination in, 11, 343

Nickel(II), complexes and five-coordinate cobalt(II), influence of geometry and donor-atom set on the spin state, 8, 351

Nickel(II), complexes with 1,8-naphthalene bis(dimethylarsine), 2, 129

Nickel(II), complexes with coordination number exceeding four,
Schiff base, 3, 247

Nickel(II), complexes, steric and electronic factors influencing
the structure, 10, 227

Nickel(II), complexes, tetrahedral, 1, 126

Nickel(II), complexes, with Schiff bases, stereochemistry of,
1, 427

Nickel(II), hydrogen cyanide as a ligand in phosphino complexes
of, 8, 159

Nickel(II), iron(II), cobalt(II) complexes with α -diimines and
related bidentate ligands, 2, 173

Nickel(III) complexes, synthesis and reactions of, 39, 77

Nickel(0), platinum(0), and palladium(0), coordinative reactivity
of phosphine complexes, 3, 319

Nickel, and cobalt in mixed cluster carbonyl anions, 8, 3

Nickel, and lanthanides as examples, some applications of
circular dichroism measurements to problems on metal ion
complexes, 5, 279

Nickel, catalysts, carbon bond formation with the aid of, 8, 129

Nickel, cobalt and copper naked metal clusters and olefin
chemisorption models, 28, 117

Nickel, cobalt, and iron, higher oxidation state chemistry,
12, 151

Nickel, monovalent, trivalent and tetravalent, 33, 87

Nickel, palladium and platinum complexes kinetics of, 10, 123

Nickel, palladium and platinum, monoolefin and acetylene complexes, 6, 27

Nickel, phosphite complexes, homogeneous catalysis of 1-butene isomerization with hydrido, 16, 129

Niobium and tantalum (Specialist Review) 37, 77

Niobium and tantalum (Transition Metal Chemistry Review) 45, 87

Niobium, tantalum, zirconium, and hafnium, chemistry of d^1 complexes, 9, 107

Nitrate complexes, actinide, 36, 183

Nitrato complexes, a review of platinum metal, 25, 69

Nitrato complexes, eight-coordinate, of transition metals, 1, 455

Nitrato complexes, reactivity of ligands and nature of bonds in 1, 58

Nitrido complexes, transition metal, 8, 369

Nitrite complexes, transition metal, 42, 55

Nitrogen and oxygen donors, structural aspects and coordination chemistry of metal porphyrin complexes with emphasis on axial ligand binding to carbon donors and mono- and diatomic, 39, 31

Nitrogen complexes, 13, 398

Nitrogen donor ligands, complexes of lanthanide(III) ions, 10, 195

Nitrogen on the reactivity of coordination compounds, effects of molecular, 16, 51

Nitrogen organic ligands, cyanato--copper(II) complexes with:
preparation, properties and structure, 27, 141

Nitrogen--heterocyclic ligands, magnetic interaction in metal
complexes with bridging, 21, 1

Nitroprusside ion, the, 2, 385

Nitrosophenols, 13, 17

Nitrosyl chemistry, synthetic methods in transition metal,
14, 317

Nitrosyl complexes of ruthenium, 26, 7

Nitrosyl, principles of structure, bonding and reactivity of
metal, complexes, 13, 339

Nitrosyl, see Metal--nitrosyl complexes, 1, 187

NMR in coordination chemistry, ^{119}Sn , 44, 229

NMR, conformational analysis of chelate ring systems by, 44, 1

Noble gases (Specialist Review) Main Group Chemistry Review 1981,
49, 471

Noble gases (Specialist Review) Main Group Chemistry Review 1980,
40, 463

Noble gases (Specialist Review) Main Group Chemistry Review 1978,
30, 379

Non-aqueous media, coordination complexes of the thallium(III)
halides and their behaviour, 6, 1

Non-aqueous media, kinetics and mechanism of substitution
reactions of cobalt(III) trans-dioximines in, 28, 177

Non-fused phenyl rings, correlational aspects of substituent effects in transition metal complexes containing, 32, 111

Non-metal compounds, thin-layer and filter paper chromatography of metal complexes and some, 28, 23

Non-transition metals, reactions of zerovalent platinum and palladium complexes with organometallic compounds of, 27, 89

Normal coordinate analysis of transition metal complexes, some principles of, 21, 221

Normal coordinate treatment of lanthanide hexahalide anions (LnX_6^{3-}), 12, 295

Novel coordination compounds formed from CS_2 and heteroallenes, 43, 165

Nuclear magnetic resonance investigations, blue-copper proteins, 27, 109

Nuclear magnetic resonance studies of coordination metal complexes using lanthanide shift reagents, 48, 83

Nuclear magnetic resonance, in the study of ligand substitution processes, 2, 349

Nuclear magnetic resonance, methods in the study of the electric structure of transition metal complexes, 7, 197

Nuclear magnetic resonance, platinum-195, 44, 247

Nuclear quadrupole resonance in coordination compounds, 22, 123

Nuclear Quadrupole Resonance: Anomalous temperature variation of NQR frequencies and bonding in metal complexes, 17, 281

Nucleophilic displacement reactions, hard and soft acids and bases in, 1, 89

Numerical methods for data-fitting problems, 19, 99

o-Benzoquinone, o-semiquinone, and catecholate ligands, transition metal complexes of, 38, 45

o-Semiquinone, o-benzoquinone, and catecholate ligands, transition metal complexes of, 38, 45

Octahedral complex formation by labile metal ions, mechanism of, 5, 45

Octahedral hexahalogen molecules, study of force fields, 7, 257

Octahedral substitution, activation parameters and reaction mechanism in, 14, 217

Octahedral substitution, reactions, stereochemical changes, 4, 243

Octahedral substitution, role of the carboxylate group in, 8, 103

Octahedral vs. trigonal prismatic stereochemistry in complexes derived from innocent ligands, 9, 171

Olefin chemisorption models, cobalt, nickel and copper naked metal clusters and, 28, 117

Olefin palladium(II) chloride complexes in acetic acid, the nature and stability of, 16, 59

Olefinic complexes of Rh, 1, 512

Olefins, hydrogenation of, 1, 510

Olefins, isomerization of, 1, 515

- Olefins, polymerization of, 1, 515
- One-centre integrals in semi-empirical MO theory, 1, 18
- One-dimensional transition metal complexes, structural and conductivity aspects of, 36, 357
- One-electron energy, diagonal elements of, 1, 164
- Open shell retroxoanions: electronic structure and spectra, 2, 53
- Optical activity of coordination compounds, 29, 213
- Optical and geometrical isomerization of β -diketonate complexes, 6, 331
- Optical rotatory dispersion, and circular dichroism of coordination compounds, 2, 461
- Optical rotatory dispersion, and the Pfeiffer effect in coordination compounds, 3, 201
- Optically active coordination compounds -- Alfred Werner's research, 12, 105
- Optically active metal complexes, utilization of the Pfeiffer effect and outer-sphere complexation for the prediction of absolute configurations of, 43, 325
- Organic isocyanides, zerovalent transition metal complexes of, 32, 193
- Organoimido (NR) and related ligands, transition metal complexes containing, 31, 123
- Organomercury compounds, 18, 249

Organometallic complexes, associative substitution reactions of 18-electron transition metal, 43, 7

Organometallic compounds and homogeneous catalytic processes, calculations of the electronic structures of, Part I. Main group organometallic compounds, 38, 139

Organometallic compounds of non-transition metals, reactions of zerovalent platinum and palladium complexes with, 27, 89

Organometallic compounds, solvent effects on the reactivities of, 18, 225

Organometallic derivatives, of cobalt chelates, recent developments in the field, 8, 63

Organometallic derivatives, of iron(III) high-spin behaviour and chemical properties, 8, 57

Organometallic π -complexes of silacycles, 47, 1

Organometallic intramolecular-coordination compounds containing a phosphorus donor ligand, 32, 235

Organometallic intramolecular-coordination compounds containing a cyclopentadienyl donor ligands, 42, 31

Organometallic intramolecular-coordination compounds. Recent aspects in the study of sulfur donor ligands, 28, 97

Organometallic intramolecular-coordination compounds containing an arsine donor ligand, 42, 245

Organonitrile complexes of transition metals, 23, 1

Organostannate(IV) complexes, 47, 263

Organotin compounds in non-aqueous solvents, 5-coordination of,
1, 249

Osmium (Specialist Review) 41, 159

Osmium alkyl complexes, 44, 127

Osmium, rhodium, iridium, palladium, platinum and ruthenium in
the higher oxidation state, the chemistry of, 46, 1

Outer and inner sphere complexes in aqueous solution and how to
distinguish them, 8, 21

Outer-sphere complexes, chemistry, 3, 91

Oxalatobis(ethylenediamine)cobalt(III), base hydrolysis of,
1, 66

Oxidation and other products from the reaction of thiones and
phosphine sulphides with metal salts and halogens, 27, 59

Oxidation of platinum(II) complexes by tetrachloroaurate(III)
ions in the presence of tetraethylammonium chloride, 16, 95

Oxidation state chemistry (higher) of manganese, 7, 353

Oxidation state, the determination of, 13, 154

Oxidation states, 1, 164

Oxidative addition reaction, thermochemistry of the, 47, 205

Oximes, structural chemistry of transition metal complexes of,
13, 1

Oxines, Mo complexes with, 1, 342

Oxo-bridged binuclear copper(II) compounds, study of the relation
between the structural data and magnetic interaction in, 42, 259

Oxo-bridged iron(III) complexes binuclear, 12, 1

- Oxo-complexes, transition metal, 5, 459
- Oxovanadium complexes, 1, 293
- Oxovanadium(IV) complexes, spin -- spin coupling in, 16, 309
- Oxygen adducts of cobalt(II) compounds and related systems, recent developments in the studies of molecular, 39, 295
- Oxygen bonding in coordination compounds, 3, 255
- Oxygen donors, structural aspects and coordination chemistry of metal porphyrin complexes with emphasis on axial ligand binding to carbon donors and mono- and diatomic nitrogen and, 39, 31
- Oxygen stretching frequencies of carboxylato complexes and the type of carboxylate coordination, relationships between the carbon--, 33, 227
- Oxygen-bonded CO and carbon-Lewis acids, reaction of metal carbonyls with, 8, 15
- Oxyhalides, systematic features, in the structural chemistry of the uranium halides, and related transition metal and lanthanide halides, 20, 197
- Palladium and platinum (Specialist Review) 41, 319
- Palladium and platinum (Specialist Review), 35, 143
- Palladium and platinum zerovalent complexes, reactions with organometallic compounds of non-transition metals, 27, 89
- Palladium(II), chloride complexes in acetic acid, the nature and stability of olefin, 16, 59
- Palladium(II), complexes with Schiff bases, stereochemistry of, 1, 435

Palladium(0), complexes with electronegatively activated small rings, reactions of, 16, 35

Palladium(0), platinum(0), and nickel(0), coordinative reactivity of phosphine complexes, 3, 319

Palladium, nickel and platinum complexes kinetics of, 10, 123

Palladium, nickel and platinum, monoolefin and acetylene complexes, 6, 27

Palladium, platinum, ruthenium, osmium, rhodium and iridium in the higher oxidation states, the chemistry of, 46, 1

Palladium-promoted addition reactions of 1,3-dienes, 8, 139

Paramagnetic anisotropy, 6, 147

Paramagnetism (high-frequency) and electronic configuration of post-transition metal ions in pure salts, 2, 117

Partial hydrolysis of a Schiff base ligand coordinated to copper(II), 8, 55

Partial quadrupole splittings in inorganic chemistry, 11, 247

Pentacoordinate complexes, geometry of, 9, 365

Pentacoordination, ligand field interpretation of some cases, 3, 141

Pentagonal and hexagonal ligand fields, splittings of d^n -configurations in. Comments on the magnetic properties and absorption spectra of sandwich molecules, 2, 137

Pentamethylcyclopenta-arsine, coordinating properties of, 3, 279

Pentamethylcyclopentadienyl metal complexes: An entry to metal carbonyl derivatives with metal--metal multiple bonding, 20, 155

Peptides by bis(salicylaldehydato)-copper(II), nickel(II), and cobalt(II). Reaction of metal chelates. Hydrolytic cleavage, 3, 207

Peptides, transition-metal complexes of small, 1, 263

Perchlorate ion as ligand in solution, and the role of, 12, 241

Pericyclic reactions, transition metal catalysis of, 15, 109

Peroxidases, the function and mechanism of action of, 19, 187

Peroxoanions, mechanism for oxidation of some d^6 low-spin metal complexes by two, 8, 87

Pfeiffer effect and optical rotatory dispersion in coordination compounds, 3, 201

Pfeiffer effects of outer-sphere complexation for the prediction of absolute configurations of optically active metal complexes, utilization of the, 43, 325

1,10-Phenanthroline, --Equilibria in complexes of N-heterocyclic molecules, 16, 67

1,10-Phenanthroline, and bis(2,2'-dipyridyl) complexes of iron(II), some aspects of the chemistry, 3, 471

Phenolate coordination, metalloproteins with, 50, 73

Phenomenological model for redox reactions in solution: application to aquocobalt(III) systems, 14, 269

Phenyl rings, correlational aspects of substituent effects in transition metal complexes containing non-fused, 32, 111

Phosphine sulphides with metal salts and halogens, oxidation and other products from the reaction of thiones and, 27, 59

- Phosphine, cyanide, complexes of transition metals, 13, 133
- Phosphine--cyanide complexes of transition metals, some aspects of the chemistry, 8, 175
- Phosphines, cyclic and their derivatives, transition metal complexes of, 15, 239
- Phosphinites and secondary phosphites, metal complexes of substituted, 26, 263
- Phosphino complexes of nickel(II), hydrogen cyanide as a ligand, 8, 159
- Phosphites, metal complexes of substituted phosphinites and secondary, 26, 263
- Phosphorus donor ligand, organometallic intramolecular-coordination compounds containing a, 32, 235
- Phosphorus, arsenic and antimony complexes of the main group elements, 19, 173
- Phosphorus--Metal bonding, spectroscopic studies in coordination complexes, 9, 1
- Photochemical behaviour of the hexachlorotechnetate(IV) ion, 3, 285
- Photochemical properties of copper complexes, 36, 45
- Photochemical reactions (solid-state) of transition metal coordination compounds, 7, 11
- Photochemistry and photophysics of chromium(III) polypyridyl complexes in fluid media, advances in the, 39, 121
- Photochemistry and photophysics of chromium(III), 39, 225

Photochemistry of coordination compounds, aspects of, 3, 169

Photochemistry of coordination compounds, ligand-field models and the, 48, 157

Photochemistry of hexacoordinate complexes of the heavier transition metals, 14, 67

Photochemistry of manganese complexes, 28, 147

Photoelectron spectra of metal complexes of sulfur-containing ligands: sulfur 2p binding energies, the X-ray, 31, 183

Photoelectron spectroscopic techniques, advances in the knowledge of the electronic structure of coordination compounds from, 43, 355

Photoelectron spectroscopy, the application of X-ray, in inorganic chemistry, 13, 47

Photophysical properties of the lowest electronic excited states of binuclear rhodium(I) isocyanide complexes, 43, 349

Photophysics and Photochemistry of chromium(III), 39, 225

Photophysics of chromium(III) polypyridyl complexes in fluid media, advances in the photochemistry and, 39, 121

Photophysics, photochemistry and solar energy conversion with tris(bipyridyl)ruthenium(II) and its analogues, 46, 159

Photoreactivity of coordination compounds: limiting cases of decay on a specific nuclear coordinate (DOSENCO) or via random coordinate selection (DERCOS), mechanisms of, 39, 181

Photosensitizers of reduction of water to hydrogen, metal phthalocyanines and porphyrins as, 44, 83

Photosubstitution reactions of d^6 hexacoordinate metal complexes, the ligand field, 44, 61

Phthalocyanines and porphyrins of photosensitizers for reduction of water to hydrogen, metal, 44, 83

Phthalocyanines, EPR spectra, copper(II) and vanadyl porphyrins and, 13, 228

Plants which accumulate metals, the chemistry of, 16, 1

Plants, metal tolerant, 36, 155

Plasticity of the coordination sphere of copper(II) complexes, its manifestation and causes, 19, 253

Platinacyclobutane chemistry, 33, 149

Platinum and palladium zerovalent complexes, reactions with organometallic compounds of non-transition metals, 27, 89

Platinum metal nitrate complexes, a review of, 25, 69

Platinum metals, chelating dioxygen compounds of, 9, 145

Platinum(0), complexes with electronegatively activated small rings, reactions of, 16, 35

Platinum(II), complex ions, tetrachloro-, force constant of, 1, 365

Platinum(II), complexes, oxidation of, by tetrachloroaurate(III) ions in the presence of tetraethylammonium chloride, 16, 95

Platinum(II), complexes, square-planar, displacements on, 1, 111

Platinum(II), pyridine N-oxide complexes, 3, 345

Platinum(II), trans-effect in substitution reactions of, 1, 79

Platinum(II), with Schiff bases, stereochemistry of, 1, 435

Platinum(III)-catalyzed substitutions of platinum(IV) complexes,
7, 241

Platinum(IV) complexes, bis(di-tert.arsine), substitution
reaction of, 1, 100

Platinum(IV) complexes, by ferrocene in hydroxylic solvents,
kinetics of the reduction of, 8, 111

Platinum(IV) complexes, platinum(III)-catalyzed substitutions,
7, 241

Platinum(0), and nickel(0), coordinative reactivity of phosphine
complexes, 3, 319

Platinum, nickel and palladium monoolefin and acetylene
complexes, 6, 27

Platinum, nickel, and palladium complexes kinetics of, 10, 123

Platinum, ruthenium, osmium, rhodium, iridium and palladium in
the higher oxidation states, the chemistry of, 46, 1

Platinum-195 nuclear magnetic resonance, 44, 247

Plutonium, aqueous coordination complexes, 5, 101

Polarity scale values from current data, correlations among
solvent polarity scales, dielectric constant and dipole moment,
and a means to reliable predictions of, 29, 129

Polyamine complexes (CopperII) progress in the thermodynamics of,
8, 31

Polyamines, 5-coordinated complexes of 3d bivalent metals with,
1, 222

Polymers, ion binding in charged, 19, 125

Polynuclear coordination compounds, Alfred Werner's research,
9, 339

Polynuclear copper(II) halogenocarboxylates, mono-, bi-, tetra-
and, 36, 1

Polynuclear metal complexes, magnetic exchange, 5, 313

Polynuclear transition metal complexes, magnetic properties,
4, 361

Polypyridyl complexes in fluid media, advances in the
photochemistry and photophysics of chromium(III), 39, 121

Polypyridyl complexes, reality or myth? Covalent hydration and
pseudobase formation in transition metal, 50, 209

Porphyrin complexes (manganese), 7, 289

Porphyrin complexes with emphasis on axial ligand binding to
carbon donors and mono- and diatomic nitrogen and oxygen donors,
structural aspects and coordination chemistry of metal, 39, 31

Porphyrins and their complexes, the status of molecular orbital
calculations on, 16, 259

Porphyrins as photosensitizers for reduction of water to
hydrogen, metal phthalocyanines and, 44, 83

Porphyrins, EPR spectra, copper(II) and vanadyl, and
phthalocyanines, 13, 228

Positively-charged ligands, donor properties of, 1, 239

Potassium tetrachloroplatinate(II), vibronic absorption spectrum
and dichroism of, 1, 39, 44

Potentiometric and spectral studies of some lanthanide(III) complexes, 3, 189

Principles of concentration distributions in multicomponent equilibrium systems, 43, 233

Principles of structure, bonding and reactivity for metal nitrosyl complexes, 13, 339

Probes of biological function, substitution-inert metal ions as, 25, 103

Problems of complex formation with macromolecular ligands, 16, 195

Progress in the thermodynamics of copper(II) polyamine complexes, 8, 31

Properties and reactions of ruthenium(II) amine complexes, 5, 75

Properties of the system: transition metal compound--magnesium. Fixation and activation of N_2 , CO_2 , CO , H_2 and related molecules, 26, 71

Protein crystal structures, 18, 32

Protein interaction based on solution and crystal structure studies, models for copper--, 12, 309

Protein, caeruloplasmin: the enigmatic copper, 33, 279

Protein--calcium complexes, 18, 47

Proteins, electron-transfer, 18, 125

Proteins, structure and function of copper, 33, 55

Pseudobase formation in transition metal polypyridyl complexes, reality or myth? covalent hydration and, 50, 209

Pulse radiolysis in coordination chemistry, flash photolysis and,
16, 185

Pyramidal ligands containing boron, metal sandwich complexes of
cyclic planar and, 28, 47

Pyridine N-oxide complexes of platinum(II), 3, 345

Pyridine-oxime and related ligands, 13, 25

2-Pyridyl-groups, coordination behaviour of some chelating
ligands containing non- or weakly conjugated, 5, 293

Quenching and sensitization processes of coordination compounds,
15, 321

Radiation chemistry of metal ions in aqueous solution, 22, 195

Radical reactions of transition metal systems, free, 32, 97

Raman spectroscopic studies in coordination chemistry, 2, 349

Reaction kinetics, application of ultrasound absorption, 11, 189

Reaction mechanism, activation parameters and, in octahedral
substitution, 14, 217

Reaction of metal carbonyls with Lewis acids -- carbon- and
oxygen-bonded CO, 8, 15

Reactions involving metal complexes of sulphur ligands, 4, 41

Reactions of bromo carbonyl derivatives of rhenium(I), 16, 13

Reactions of metal chelates. Hydrolytic cleavage of peptides by
bis(salicylaldehydato)-copper(II), nickel(II), and cobalt(II),
3, 207

Reactions of nickel(III) complexes, synthesis and, 39, 77

Reactions of platinum(0) and palladium(0) complexes with electronegatively activate small rings, 16, 35

Reactions of transition metal compounds in solution, activation volumes of the, 36, 89

Reactions of zerovalent platinum and palladium complexes with organometallic compounds of non-transition metals, 27, 89

Reactivity in chemical and biological systems with the E and C model, interpretation of, 33, 251

Reactivity of a binuclear μ -peroxocobalt(III) chelalte, stability and, 16, 147

Reactivity, principles of structure, bonding and, for metal nitrosyl complexes, 13, 339

Recent developments in the field of organometallic derivatives of cobalt chelates, 8, 63

Recent developments in the studies of molecular ozygen adducts of cobalt(II) compounds and related systems, 39, 295

Recent kinetic studies of metal--metal bonded carbonyls, 8, 81

Redox potentials of transition metal complexes, trends in, 47, 41

Redox reactions, a phenomenological model for, in solution: application to aquocobalt(III) systems, 14, 269

Redox reactions, and substitution, empirical approach to ligand-effects, 12, 263

Redox reactions, the mechanistic assignment of terms in empirical rate laws for complexation and, of metal ions in aqueous solution, 14, 287

Redox series, ligand based, 43, 39

Relationship between the bonding and stereochemistry of transition-metal complex ions, 2, 9

Relationships between the carbon--oxygen stretching frequencies of carboxylato complexes and the type of carboxylate coordination, 33, 227

Review of platinum metal nitrate complexes, 25, 69

Rhenium fragments $(C_5H_5)M(CO)_2$, coordination chemistry of the manganese and, 38, 1

Rhenium(I), reactions of bromo carbonyl derivatives of, 16, 13

Rhenium, coordination chemistry of, 1, 457

Rhodium and iridium (Specialist Review) 41, 251

Rhodium and iridium (Specialist Review), 35, 113

Rhodium and iridium compounds, new types of reactions involving, 43, 377

Rhodium(I) carborane coompexes containing metal carbon bonds, three- and four-coordinate, 16, 19

Rhodium(I) isocyanide complexes, photophysical properties of the lowest electronic excited states of binuclear, 43, 349

Rhodium(II) carboxylates, 50, 109

- Rhodium(II) chemistry -- the hexachlorbis(NN-dimethylacetamide)dirhodate(II) and nonachloro-dirhodate(III) anions, some aspects of, 16, 153
- Rhodium(III), complexes, catalysed synthesis of, 1, 508
- Rhodium(III), hydrido-, with tert. phosphines, 1, 234
- Rhodium, allylic, 1, 514
- Rhodium, carbonyl, 1, 517
- Rhodium, chemistry, some aspects of catalytic syntheses, 8, 149
- Rhodium, complexes, acetylenic, 1, 512
- Rhodium, cyanide complexes, some aspects of the chemistry of, 16, 141
- Rhodium, iridium, palladium, platinum, ruthenium and osmium in the higher oxidation states, the chemistry of, 46, 1
- Rhodium, non-organometallic, 1, 519
- Rhodium, olefinic, 1, 512
- Rhodium, reactions of, and catalysis by, in solution, 1, 505
- Role of complexes in metal-ion oxidations in solution, 5, 245
- Role of electronic spectra in the stereochemistry of coordination compounds, 2, 83
- Role of the carboxylate group in octahedral substitution, 8, 103
- Role of the perchlorate ion as ligand in solution, 12, 241
- Ruthenium (Specialist Review) 41, 79
- Ruthenium and osmium (Specialist Review), 35, 41
- Ruthenium complexes -- effects of molecular nitrogen on the reactivity of coordination compounds, 16, 51

- Ruthenium(II) amine complexes, properties and reactions, 5, 75
- Ruthenium(II) and its analogues, photophysics, photochemistry and solar energy conversion with tris(bipyridyl), 46, 159
- Ruthenium, nitrosyl complexes of, 26, 7
- Ruthenium, osmium, rhodium, iridium, palladium and platinum in the higher oxidation states, the chemistry of, 46, 1
- Salicylaldimines, complexes of 3d metals with, 1, 192
- Sandwich molecules, comments on the magnetic properties and absorption spectra of. Splittings of d^n -configurations in pentagonal and hexagonal ligand fields, 2, 137
- Saturated hydrocarbons, activation of by metal complexes in solution, 24, 197
- Saturated ligands, new coordination chemistry of, 26, 33
- Scandium (Specialist Review) 37, 1
- Scandium (Transition Metal Chemistry Review) 45, 1
- Scandium, coordination chemistry, 7, 133
- Schiff base complexes of nickel(II) and copper(II), the conformation and interconversion of, 43, 187
- Schiff bases (tetradentate), structural aspects of metal complexes, 7, 385
- Schiff-base, complexes of copper(II): a stereo-electronic view, conformation of, 17, 137
- Schiff-base, complexes, stereochemistry of, 1, 415
- Schiff-base, ligand coordinated to copper(II) partial hydrolysis of, 8, 55

Schiff-base, metal complexes as ligands, 4, 391

Schiff-base, nickel(II) complexes with coordination number exceeding four, 3, 247

Schiff-base, tetrahedral NiII and CuII, 1, 126

Scientific personality of Luigi Sacconi (from the address at the opening ceremony by V. Cagliotti, translated by the Editor), 43, 3

Secondary phosphites, metal complexes of substituted phosphinites, 26, 263

Selenium and sulphur compounds of the d^0 transition metals, (in German), 10, 79

Seleno-, sulphido- and telluro-halides of the transition elements, 25, 199

Selenocyanates as Lewis acids, bimetallic tetrathiocyanates and, 32, 33

Semi-empirical MO theory, see Molecular orbital theory,

Semi-empirical molecular orbital calculations on octahedral complexes: $[\text{TiCl}_6]^{2-}$, 2, 45

Sensitization and quenching processes of coordination compounds, 15, 321

Sephadex ion exchangers, chromatographic resolution of metal complexes on, 28, 205

Serotransferrin, human: structure and function 22, 1

Shake-up, 13, 71

Sigma-bonds, carbon monoxide insertion into transition metal--carbon, 33, 195

Silacycles, organometallic π -complexes of, 47, 1

Silver (Specialist Review), 35, 253

Silver (Transition Metal Chemistry Review) 45, 307

Silver(I), system with pyridine, stability constants and heat changes in, 1, 280

Silver(II) and silver(III) heterocyclic and macrocyclic amine complexes of, 20, 171

Simple electrostatic correlations of fluoride complexes in aqueous solution, 12, 221

Six-coordinate copper complexes with $g_{\parallel} < g_{\perp}$ in the solid state, 29, 67

Six-coordinate copper(II) complexes, the stereochemistry and electronic properties of fluxional, 36, 267

Slater--Condon parameters for atoms and ions of the first transition period, 2, 65

Soft acids and bases, see Hard and soft acids and bases,

Solar energy conversion with tris(bipyridyl)ruthenium(II) and its analogues, photophysics, photochemistry and, 46, 159

Solid inorganic and coordination complexes at high pressures, vibrational studies of, 29, 1

Solid state, six-coordinate copper complexes with $g_{\parallel} < g_{\perp}$ in the, 29, 67

Solid-state photochemical reactions of transition metals coordination compounds, 7, 1

Solubility measurements and complex formation in solution, 3, 293

Solute-solute and solute-solvent interactions acting in homogeneous catalysis by transition metal complexes, a discussion of the different kinds of, 43, 275

Solvation in inorganic reactions, initial state and transition state, 31, 93

Solvent (role of), coordination chemistry of certain transition-metal ions, 2, 239

Solvent coordination numbers of metal ions in solution, 6, 309

Solvent effects on ion-pair equilibria, 21, 159

Solvent effects on the reactivities of organometallic compounds, 18, 225

Solvent extraction methods, metal--chloride complexes studied by ion exchange. Transition-metal elements and the hexavalent actinides, 2, 257

Solvent extraction processes, chelating reagents in, 16, 285

Solvent extraction properties of ditertiaryphosphine dioxides, 47, 283

Solvent parameters, 18, 228

Solvent paths and dissociate intermediates in substitution reactions of square-planar complexes, 25, 1

Solvent polarity scales, dielectric constant and dipole moment, and a means to reliable predictions of polarity scale values from current data, correlations among, 29, 129

Solvent-extraction and ion-exchange methods, metal--chloride complexes studied by, Part I. Non-transition-metal ions, lanthanides, actinides and d^0 transition metal ions, 2, 195

Some applications of circular dichroism measurements to problems on metal ion complexes, using $NiII$ and lanthanides as examples, 5, 279

Some aspects of catalytic syntheses in rhodium chemistry, 8, 149

Some aspects of rhodium(II) chemistry -- the hexachlorobis(NN-dimethylacetamide)dihydrodate(II) and nonachlorodihydrodate(III) anions, 16, 153

Some aspects of the bioinorganic chemistry of the actinides, 31, 221

Some aspects of the chemistry of bis(2,2'-dipyridyl) and bis(1,10-phenanthroline) complexes of iron(II), 3, 417

Some aspects of the chemistry of cobalt(I) cyanide and related complexes, 8, 167

Some aspects of the chemistry of manganese(III) in aqueous solution, 4, 199

Some aspects of the chemistry of phosphine--cyanide complexes of transition metals, 8, 175

Some aspects of the chemistry of rhodium cyanide complexes, 16, 141

- Some aspects of the coordination chemistry of iron(III), 8, 185
- Some aspects of the photochemistry of coordination compounds, 3, 169
- Some metalation and methoxymercuration reactions in ferrocene series, 16, 107
- Some new developments in the chemistry of metallophthalocyanines, 32, 67
- Some principles of normal coordinate analysis of transition metal complexes, 21, 221
- Some recent X-ray studies of coordination compounds of the transition elements, 2, 403
- Some suggested calculation procedures and the variation in results obtained from different calculation methods of evaluation of concentration stability constants of metal ion complexes in aqueous solution, 6, 337
- Some trends in inorganic chemistry, 31, 53
- Spectra of first-row transition metal dihalides in the solid state, ligand field parameters and, 25, 31
- Spectra, of sandwich molecules, comments on the magnetic properties and absorption. Splittings of d^n -configurations in pentagonal and hexagonal ligand fields, 2, 137
- Spectra, vibrational, of transition metal chalcogen compounds, 14, 115
- Spectra, vibronic, of coordination compounds, 14, 47

Spectral and potentiometric studies of some lanthanide(III) complexes, 3, 189

Spectroscopic studies of metal--phosphorus bonding in coordination complexes, 9, 1

Spectroscopy, the Jahn-Teller effect in crystal chemistry and, 14, 357

Spin labels with transition metals, interaction of, 26, 207

Spin state of five-coordinate cobalt(II) and nickel(II) complexes, influence of geometry and donor-atom set on, 8, 351

Spin transitions in six-coordinate iron(II) complexes, 18, 293

Spin-forbidden electronic excitations in transition metal complexes, 8, 241

Spin-orbit coupling, 13, 371

Spin-spin coupling in oxovanadium(IV) complexes, 16, 309

Splitting of d-orbitals in square planar complexes of copper(II), nickel(II) and cobalt(II), 27, 275

Splittings of d^n -configurations in pentagonal and hexagonal ligand fields. Comments on the magnetic properties and absorption spectra of sandwich molecules, 22, 137

Square planar complexes of copper(II), nickel(II) and cobalt(II), splitting of d-orbitals in, 27, 275

Square-planar complexes, solvent paths and dissociate intermediates in substitution reactions of, 25, 1

Stability and reactivity of a binuclear μ -peroxo cobalt(III) chelate, 16, 147

Stability constants, (selection of species and calculation for) two problems involved in solving complex formation equilibria, 8, 45

Stability constants, of metal ion complexes in aqueous solution, some suggested calculation procedures and the variation in results obtained from different calculation methods for evaluation of concentration, 6, 377

Stability constants, stepwise, computer calculations of, 1, 280

Stability of metal ion complexes influence of the solvent on the, 16, 113

Stability of mixed complexes in solution, 4, 273

Stabilization of metal complexes by large counterions, 3, 213

Status of molecular orbital calculations on porphyrins and their complexes, 16, 259

Stereochemical aspects of reactions of complexes of d^0 transition metals with multiply bonded ligands, 47, 15

Stereochemical changes during octahedral substitution reactions, 4, 243

Stereochemistry and electronic properties of fluxional six-coordinate copper(II) complexes, 36, 267

Stereochemistry and reaction rates of anionopentamine complexes of cobalt(III) and chromium(III), 23, 223

Stereochemistry of chromium complexes: a bibliographic listing, 26, 161

Stereochemistry, and electronic properties of mono-nuclear complexes of the copper(II) ion, 5, 143

Stereochemistry, of coordination compounds, role of electronic spectra in, 2, 83

Stereochemistry, of five-coordinate nickel(II) and cobalt(II) complexes, 6, 285

Stereochemistry, of tartrato(4-)-bridged binuclear complexes, 4, 323

Steric and electronic factors influencing the structure of nickel(II) complexes, 10, 227

Steric effect in bis(2,2'-bipyridyl) and bis(1,10-phenanthroline) metal compounds, 6, 187

Steric effects in substituted halocarbonyls of molybdenum and tungsten, 6, 269

Stretching frequencies of carboxylato complexes and the type of carboxylate coordination, relationships between the carbon--oxygen, 33, 227

Structural and conductivity aspects of one-dimensional transition metal complexes, 36, 357

Structural aspects and coordination chemistry of metal porphyrin complexes with emphasis on axial ligand binding to carbon donors and mono- and diatomic nitrogen and oxygen donors, 39, 31

Structural aspects, metal complexes with some tetradentate Schiff-base, 7, 385

Structural aspects, of molybdenum (IV), molybdenum (V) and molybdenum (VI) complexes, 17, 99

Structural chemistry of hemerythrin, 24, 145

Structural chemistry, of bivalent germanium, tin, and lead, 20, 1

Structural chemistry, of transition metal complexes of oximes, 13, 1

Structural chemistry, of zirconium compounds, 11, 1

Structural conductivity and spectroscopic aspects of one-dimensional transition metal complexes, 43, 205

Structural data and magnetic interaction in oxo-bridged binuclear copper(II) compounds, study of the relation between, 42, 259

Structural isomerism of copper(II) compounds, 47, 239

Structural isomerism, Alfred Werner's research, 11, 161

Structural properties, the determination of, of dimeric transition metal ion complexes from EPR spectra, 13, 173

Structural studies of iron--sulphur proteins, 5, 417

Structural variability in solution, 43, 133

Structure and function of copper proteins, 33, 55

Structure of lanthanide coordination compounds in solution, absorption spectra and, 27, 223

Structure, principles of, bonding and reactivity for metal nitrosyl complexes, 13, 339

Structures of high coordination complexes, 24, 179

Study of force fields for octahedral hexahalogen molecules,
7, 257

Study of force fields for tetrahedral molecules and ions, 11, 21

Substituent effects in transition metal complexes containing
non-fused phenyl rings, correlational aspects of, 32, 111

Substituted hydrazines, the coordination chemistry of, 21, 29

Substituted phosphinites and secondary phosphites, metal
complexes of, 26, 263

Substitution and redox-reactions, empirical approach to
ligand-effects, 12, 263

Substitution processes, uses of nuclear magnetic resonance in the
study of ligand, 2, 349

Substitution reactions of cobalt(III) trans-dioximines in
non-aqueous media, kinetics and mechanism of, 28, 177

Substitution reactions of square-planar complexes, solvent paths
and dissociate intermediates, in, 25, 1

Substitution reactions, (octahedral) stereochemical changes,
4, 243

Substitution reactions, in cobalt(III) transdioximes, kinetics
and mechanism of, 17, 253

Substitution reactions, of octahedral macrocyclic amine
complexes, kinetics and mechanisms of, 10, 1

Substitution-inert metal ions as probes of biological function,
25, 103

Sulfur 2p binding energies, the X-ray photoelectron spectra of metal complexes of sulfur-containing ligands: 31, 183

Sulfur and amidic nitrogen donor atoms, actinide complexes with chelating ligands containing, 28, 231

Sulfur donor ligands, organometallic intramolecular-coordination compounds. Recent aspects in the study of, 28, 97

Sulfur-containing ligands: sulfur 2p binding energies, the X-ray photoelectron spectra of metal complexes of, 31, 183

Sulphido-, seleno- and telluro-halides of the transition elements, 25, 199

Sulphur and selenium compounds of the d^0 transition metals, (in German), 10, 79

Sulphur ligands, reactions involving metal complexes, 4, 41

Sulphur-nitrogen, metal complexes of, chelating agents, 13, 101

Synthesis and ligand design, 9, 219

Synthesis and reactions of nickel(III) complexes, 39, 77

Synthesis with electron-rich nickel triad complexes, 33, 3

Synthetic methods in transition metal nitrosyl chemistry, 14, 317

Systematic features in the structural chemistry of the uranium halides, oxyhalides and related transition metal and lanthanide halides, 20, 197

Taking metal atom chemistry out of the the cold, 48, 203

Tantalum, niobium, zirconium, and hafnium the chemistry of d^1 complexes, 9, 107

Tartrato(4-)-bridged binuclear complexes, stereochemistry,
4, 323

Technetium and rhenium (Specialist Review) 37, 199

Technetium and rhenium (Transition Metal Chemistry Review)
45, 281

Technetium compounds, crystal structures of, 44, 191

Technetium, photochemical behaviour of the
hexachlorotech-netate(IV) ion, 3, 285

Tellurium, the ligand chemistry of, 42, 133

Telluro-, sulphido- and seleno-halides of the transition
elements, 25, 199

Tertiary phosphines, 1, 510

Tertiary phosphines, Co^{II} complexes with, high spin--low spin
equilibria in, 1, 269

Tertiary phosphines, hydrido complexes of Rh^{III} with, 1, 234

Tetra- and polynuclear copper(II) halogenocarboxylates, mono-,
bi-, 36, 1

Tetradentate ligands, complexes of cobalt(III) (flexible),
7, 161

Tetradentate Schiff bases, structural aspects of metal complexes,
7, 385

Tetragonal metal complexes analysis and significance of
electronic spectra, 3, 119

Tetrahedral metal complexes, MO theory for, 1, 2

Tetrahedral molecules and ions, study of force fields for,
11, 21

Tetravalent, monovalent, and trivalent nickel, 33, 87

Tetrazoles, complex compounds of 1,5-disubstituted, 4, 463

Thallium(I), the coordination chemistry of, 8, 289

Thallium(III), coordination complexes, and their behaviour in
non-aqueous media, 6, 1

Thallium, gallium and indium, metalhalogen stretching vibrations
in coordination complexes, 4, 29

The halogens and hydrogen (Specialist Review) Main Group
Chemistry Review 1980, 40, 436

The halogens and hydrogen (Specialist Review) Main Group
Chemistry Review 1979, 34, 429

The noble gases (Specialist Review) Main Group Chemistry Review
1979, 34, 462

Thermochemistry of gaseous transition metal complexes of group V
and VII ligands, 48, 101

Thermochemistry of the oxidative addition reaction, 47, 205

Thermochromic phase transitions in transition metal salts,
47, 125

Thermodynamics (progress in) of copper(II) polyamine complexes,
8, 31

Thermodynamics and kinetics of the transition metal complexes of
tripodal amines, 14, 29

Thermodynamics of metal-complex and ion-pair formation, 5, 379

Thin-layer and filter paper chromatography of metal complexes and some non-metal compounds, 28, 23

Thio- β -diketones, (mono) and their metal complexes, 7, 59

Thio- β -diketones, metal complexes, 7, 29

Thiocarbonyl and related complexes of the transition metals, 23, 183

Thiocyanate and related ions, infrared spectra of complexes, 6, 407

Thiocyanate ion, electronic structure of, 1, 7

Thiones and phosphine sulphides with metal salts and halogens, oxidation and other products from the reaction of, 27, 59

Thiosemicarbazide and thiosemicarbazones, transition metal complexes of, 15, 279

Thiosemicarbazones and thiosemicarbazide, transition metal complexes of, 15, 279

Three coordination in metal complexes, 24, 1

Three- and four-coordinate rhodium(I) carborane complexes containing metal carbon bonds, 16, 19

Three-coordinate magnesium, 25, 173

Tin, and iron coordination compounds, magnetically perturbed Mössbauer spectra of, 10, 37

Tin, germanium and lead, the structural chemistry of bivalent, 18, 1

Tin, see Organotin compounds,

Titanium (Specialist Review) 37, 9

- Titanium (Transition Metal Chemistry Review) 45, 9
- Titanium(III), electron-transfer reactions with, 1, 95
- Topological aspects of symmetric molecules, 2, 3
- (Trialkylsilyloxy) polymers, metal oxide alkoxide, 2, 299
- Trans-influence: its measurement and significance, 10, 335
- Transition elements, sulphido-, seleno- and telluro-halides of the, 25, 199
- Transition metal carbonyls and related species, matrix isolation studies on, 27, 1
- Transition metal catalysis of pericyclic reactions, 15, 109
- Transition metal chalcogen compounds, vibrational spectra of, 14, 115
- Transition metal cluster complexes, electronic structures of, 38, 89
- Transition metal clusters, electrochemistry of, 47, 55
- Transition metal complexes containing non-fused phenyl rings, correlational aspects of substituent effects in, 32, 111
- Transition metal complexes containing organoimido (NR) and related ligands, 31, 123
- Transition metal complexes in the light of molecular orbital calculations, dioxygen activation in, 50, 1
- Transition metal complexes of group V and VII ligands, thermochemistry of gaseous, 48, 101
- Transition metal complexes of o-benzoquinone, o-semiquinone, and catecholate ligands, 38, 45

Transition metal complexes of organic isocyanides, zerovalent,
32, 193

Transition metal complexes with binucleating ligands, 23, 31

Transition metal complexes with bridging hydride ligands,
43, 251

Transition metal complexes, a discussion of the different kinds
of solute-solute and solute-solvent interactions acting in
homogeneous catalysis by, 43, 275

Transition metal complexes, analytical treatment of the
electronic spectra of some low-symmetry, 43, 63

Transition metal complexes, circular dichroism of, 46, 129

Transition metal complexes, μ_2 bridging carbonyl systems in,
31, 1

Transition metal complexes, multiple state emission and related
phenomena in, 36, 325

Transition metal complexes, structural and conductivity aspects
of one dimensional, 36, 357

Transition metal complexes, structural conductivity and
spectroscopic aspects of one-dimensional, 43, 205

Transition metal complexes, trends in redox potentials of 47, 41

Transition metal compound--magnesium. Fixation and activation of
 N_2 , CO_2 , CO , H_2 and related molecules. Properties of the system,
26, 71

Transition metal compounds in solution, activation volumes of the
reactions of, 36, 89

Transition metal compounds, molecular orbital calculation on,
6, 95

Transition metal compounds. An experimental survey, vibrational
fine structure in the electronic spectra of, 31, 251

Transition metal nitrite complexes, 42, 55

Transition metal organometallic complexes, associative
substitution reactions of 18-electron, 43, 7

Transition metal polypyridyl complexes, reality or myth?
Covalent hydration and pseudobase formation in, 50, 209

Transition metal salts, thermochromic phase transitions in,
47, 125

Transition metal systems, free radical reactions of, 32, 97

Transition metal, dihalides, bond distances and estimated bending
frequencies of some first for, 18, 257

Transition metal, hydrides, 10, 265

Transition metal, nitrido complexes, 8, 369

Transition metal, organonitrile complexes of, 23, 1

Transition metal, oxo complexes, 5, 459

Transition metal, synthetic methods in, nitrosyl chemistry,
14, 317

Transition metal, the application of diffuse reflectance
spectroscopy to the chemistry of coordination compounds, 14, 181

Transition metal--carbon sigma-bonds, carbon monoxide insertion
into, 33, 195

- Transition metals complexes, acid-catalysed reactions of, 11, 277
- Transition metals complexes, in cancer chemotherapy, 12, 349
- Transition metals complexes, of cyclic phosphines and their derivatives, 15, 239
- Transition metals complexes, of thiosemicarbazide and thiosemicarbazones, 15, 279
- Transition metals complexes, some principles of normal coordinate analysis of, 21, 221
- Transition metals complexes, spin-forbidden electronic excitations in, 8, 241
- Transition metals, (groups IVa--VIIa), cyanide complexes of the early, 17, 177
- Transition metals, complexes with small peptides, 1, 263
- Transition metals, cyanide phosphine, complexes of, 13, 133
- Transition metals, eight-coordination for, 1, 439
- Transition metals, photochemistry of hexacoordinate complexes of the heavier, 14, 67
- Transition metals, structures in the chemistry of, 1, 156
- Transition metals, sulphur and selenium compounds of the d^0 , (in German), 10, 79
- Transition metals, the electronic spectra of the hexafluoro complexes of the, 16, 227
- Transition metals, thiocarbonyl and related complexes of the, 23, 183

d^0 Transition metals with multiply bonded ligands, stereochemical aspects of reactions of complexes of, 47, 15

Transition state solvation in inorganic reactions, initial state and, 31, 93

Transition-metal coordination compounds, solid-state photochemical reactions, 7, 11

Transition-metal coordination compounds, with multiple metal--ligand bonds, mutual influence of ligands in, 17, 1

Transition metals, interaction of spin labels with, 26, 207

Trends, in redox potentials of transition metal complexes, 47, 41

Tricarbonyl chromium complexes of phenanthrene, etc., in the hydrogenation of dienes, the catalytic activity of, 16, 27

Trigonal prismatic vs. octahedral stereochemistry in complexes derived from innocent ligands, 9, 171

Trigonal-bipyramidal complexes, 1, 164

Trigonal-bipyramidal complexes, visible and ultraviolet spectra of d^6 -, d^7 -, d^8 -metal ions in, 2, 99

Triphenylphosphine, compounds with gold, 1, 255

Tripodal amines, thermodynamics and kinetics of the transition metal complexes of, 14, 29

Tris(1,2-dithiolato) complexes with Re, 1, 496

Tris(bipyridyl)ruthenium(II) and its analogues, photophysics, photochemistry and solar energy conversion with, 46, 159

Trivalent, tetravalent and monovalent nickel, 33, 87

Tungsten (Specialist Review) 37, 157

Tungsten and molybdenum, steric effects in substituted halocarbonyls, 6, 269

Two problems involved in solving complex formation equilibria: the selection of species and the calculation of stability constants, 8, 45

Ultrasound absorption, application of, to reaction kinetics, 11, 189

Uranium halides, systematic features in the structural chemistry of oxyhalides and related transition metal and lanthanide halides, 20, 197

Uranyl acetylacetonato monohydrate, stereochemistry of, 1, 145

Use of conductivity measurements in organic solvents for the characterization of coordination compounds, 7, 81

Uses of nuclear magnetic resonance in the study of ligand substitution processes, 2, 349

Utilization of the Pfeiffer effect and outer-sphere complexation for the prediction of absolute configurations of optically active metal complexes, 43, 325

Valence orbital spectra, 13, 76

Vanadium (Specialist Review) 37, 61

Vanadium(IV) -- Spin--spin coupling in oxovanadium(IV) complexes, 16, 309

Vanadium, coordination chemistry of, 1, 379

Vanadium, see also Oxovanadium,

- Vibrational fine structure in the electronic spectra of transition metal compounds. An experimental survey, 31, 251
- Vibrational spectra, and force constants of pure ammine complexes, 19, 41
- Vibrational spectra, far infrared spectra and lattice vibrations of inorganic complex salts, 4, 423
- Vibrational spectra, metal-halogen stretching vibrations in coordination complexes of gallium, indium and thallium, 4, 29
- Vibrational spectra, of solids, descriptive introduction to analysis of, 10, 183
- Vibrational spectra, of transition metal chalcogen compounds, 14, 115
- Vibrational spectra, Raman spectroscopic studies in coordination chemistry, 2, 319
- Vibrational studies of solid inorganic and coordination complexes at high pressures, 29, 1
- Vibronic coupling, 13, 372
- Vibronic spectra of coordination compounds, 14, 47
- Visible and ultraviolet spectra of d^6 -, d^7 -, and d^8 -metal ions in trigonal bipyramidal complexes, 2, 99
- Vitamin B₁₂, electronic structure and spectrum of, 2, 109
- Water structure models, 6, 217
- Water to hydrogen, metal phthalocyanines and porphyrins as photosensitizers for reduction of, 44, 83

Water-exchange kinetics in labile aquo and substituted aquo transition metal ions by means of ^{17}O NMR studies, 7, 1

Werner's (Alfred) research on polynuclear coordination compounds, 9, 339

Werner complexes of diamines, optical configuration of, 1, 179

Werner's (Alfred) research on polynuclear coordination compounds, 9, 339

Werner's (Alfred) research on structural isomerism, 11, 161

X-ray photoelectron spectra of metal complexes of sulfur-containing ligands: sulfur 2p binding energies, 31, 183

X-ray, absorption edge spectrometry (XAES) as applied to coordination chemistry, 9, 275

X-ray, analysis, absolute configurations of metal complexes determined by, 13, 305

X-ray, bibliography, 6, 1,7,19; 7, 123,229,345,405; 8, 260; 9, 201,389; 10, 423; 11, 71,263,403; 12, 73,87; 13, 83, 279,291,407; 14, 107,197,305; 15, 93; 16, 245,341 17, 317; 18, 273,279

X-ray, photoelectron spectra of metal halides and their complexes: halogen binding energies and their correlation with structure, 21, 63

X-ray, photoelectron spectroscopy the, application of, in inorganic chemistry, 13, 47

X-ray, studies (some recent) of coordination compounds of the transition elements, 2, 403

Ylides, the coordination chemistry of, 48, 1

Zerovalent platinum and palladium complexes with organometallic compounds of non-transition metals, reactions of, 27, 89

Zerovalent transition metal complexes of organic isocyanides, 32, 193

Zirconium and hafnium (Specialist Review) 37, 41

Zinc and cadmium (Specialist Review) 37, 297

Zinc and cadmium (Transition Metal Chemistry Review) 45, 329

Zirconium and hafnium (Transition Metal Chemistry Review) 45, 41

Zirconium compounds, structural chemistry of, 11, 1

Zirconium, niobium, tantalum, and hafnium chemistry of d^1 complexes, 9, 107