

SUBJECT INDEX

Absorbent, for carbon dioxide . . . . .	269
— blanks, Behaviour in analytical procedures . . . . .	39
Absorption spectra, of Auramin-O dye . . . . .	599
Acid-base titration data on chelating resins . . . . .	217
Acids, bases and salts, algorithms for determination . . . . .	1311
Acid lithium sulfate, Decomposition . . . . .	89
Alachlor herbicide, Liposome immunoAnalysis . . . . .	1747
Alcohol, Determination by optode membrane . . . . .	969
Aldehydes and ketones in beer, Analysis . . . . .	1297
Algorithms, for the determination of acids, bases and salts . . . . .	311
Alkali and alkaline earth metals, complexes with chromofores . . . . .	1489
— — — — salts, Purification . . . . .	131
Alkalinity of humic substances, potentiometric titration . . . . .	1383
Alloyed steel, rapid classification . . . . .	1137
Aluminium, Determination, fluorimetric . . . . .	81, 1553
—, — spectrophotometric . . . . .	1631
— (III), Determination of traces by HPLC . . . . .	279
Amino acids, Dissociation constants . . . . .	1255
Amoxycillin, Determination, colorimetric . . . . .	691
Amperometry, Determination of urea . . . . .	1029
—, increasing signal-noise ratio . . . . .	309
—, Measurement of dopamine dynamics . . . . .	865
Analysis of steels and alloys, Sample preparation . . . . .	1089
Anion-selective membrane electrode . . . . .	881
Antibiotics, Determination by column switching technique . . . . .	1973
Antimony(III), Separation on polyurethane foam . . . . .	171
A practically minded mechanistic and theoretical electrochemist: Richard P. Buck . . . . .	837
Arsenic, Determination by electrothermal AAS . . . . .	205
—, — by FIA-AAS . . . . .	1785
— compounds, Speciation by HPLC . . . . .	495
Arsenite, Determination, FIA-spectrophotometric . . . . .	1965
Ascorbic acid, Determination, kinetic . . . . .	1225
Atomic absorption spectrometry (AAS), Analysis of cement . . . . .	1
— — —, Determination of Au . . . . .	381
— — —, — of Cd . . . . .	2165
— — —, — of Cu . . . . .	817
— — —, — of metals . . . . .	1281
— — —, — of Tl . . . . .	721
— — —, hydride generation, Determination of Se . . . . .	53, 67, 195
— — —, — — —, — of Se(VI) . . . . .	1675
— — —, — — —, Detector for HPLC . . . . .	495
— — —, electrothermal, Determination of As . . . . .	205
— — —, — — —, — of Tl . . . . .	1185
— — —, — — —, — of trace metals . . . . .	1165
— emission spectrometry (AES), inductively coupled plasma (ICP), Determination of Cr . . . . .	2043
— — —, — — —, Determination of Tl . . . . .	1185
— — —, — — —, — of trace metals . . . . .	1165
Auramine-O dye, Absorption and fluorescence spectra . . . . .	599
Benedetti-Pichler Award: Isiah Manuel Warner . . . . .	1615
Benzene, Sampler for determination in air . . . . .	1095
Benzoquinone, electrochemical properties . . . . .	875
Beryllium(II), Determination of traces by HPLC . . . . .	279
Bifunctionality, of chemical sensors based on polypyrrole . . . . .	323
Biologically active maleic anhydride copolymers . . . . .	1133
Biosensors, Alternative to FIA . . . . .	939
—, amperometric, for phenolic compounds . . . . .	455
—, —, for peroxide . . . . .	1603
—, based on NaDH detection . . . . .	1035
—, — on ultramicroelectrode arrays . . . . .	977
—, for hydrogen peroxide . . . . .	783
—, for sulfite analysis . . . . .	317

tert-Butylhydroxyanisole (BHA), Determination, catalytic voltammetric . . . . .	289
Butyltin compounds, Determination in sediments . . . . .	589
Cadmium, Determination by AAS. . . . .	2165
—, — by stripping potentiometry . . . . .	515
—, — spectrophotometric . . . . .	799
— and lead urate, polarography . . . . .	439
— (II) L-histidinate in aqueous solutions, study voltammetric . . . . .	1453
Calix/4/arene, as ionophore for sensors . . . . .	1041
—, neutral carrier ionophores in PVC . . . . .	1207
Capillary electrokinetic separations, use of fluorescent probe molecules . . . . .	1499
— electrophoresis, Review . . . . .	1411
Carbaryl pesticide, Determination by phosphorescence . . . . .	1617
Carbon dioxide, Absorbent for . . . . .	269
— 13 spin lattice relaxation . . . . .	849
Catechol derivatives, Determination on glassy carbon electrode . . . . .	147
Cations, interfering in Th(I) determination . . . . .	957
Cefoxitin, Determination, spectrofluorimetric . . . . .	557
Ceftriaxone and streptomycin, simultaneous determination . . . . .	673
Cephalexin, Determination kinetic . . . . .	225
Cerium, Determination fluorimetric . . . . .	415
— subgroup, Determination spectrophotometric . . . . .	1357
—(IV), Determination, spectrophotometric . . . . .	237
Cetyltrimethylammonium bromide micellar system . . . . .	765
Chalcogenide glass chemical sensors . . . . .	1059
Chelate adsorption, for trace voltammetric measurements . . . . .	659
Chelating resins, mechanistic studies . . . . .	747
Chemical enhancement method for determination of Hg . . . . .	255
Chemiluminescence, Determination of Ru . . . . .	707
<i>p</i> -Chloranil, Determination, potentiometric . . . . .	1725
Chloride, Determination by discontinuous-flow potentiometry . . . . .	301
Chlorine, Determination, colorimetric . . . . .	2091
Chlorinated hydrocarbon pollutants, fiber-optic sensor for . . . . .	2189
Chlorpromazine, Assay by FIA . . . . .	1865
Chlorpyrifos, Degradation . . . . .	651
Chromatograms, asymmetrical, Curve fitting . . . . .	1119
Chromatographic behaviour of trace metal ions . . . . .	1689
Chromatography, high-performance liquid (HPLC), Determination of ergosterol . . . . .	711
—, —, Separation of phospholipids . . . . .	581
—, —, Speciation of As compounds . . . . .	495
—, —, reversed-phase, of Be(II), Al(III) and Cr(III) . . . . .	279
—, —, —, of Pt group complexes . . . . .	1459
—, —, — — Determination of Ru, Os and Pd . . . . .	355
—, —, — —, — of V(V), Nb(V) and Ta(V) . . . . .	685
—, ion exchange, Retention . . . . .	1073
—, isocratic-ion, Determination of Cr(VI) . . . . .	1101
—, on chelating-resin impregnated paper . . . . .	1943
—, thin-layer (TLC), Detection of dichlorvos . . . . .	367
—, —, — of monocrotophos . . . . .	2127
Chromatomembrane, new device for extraction . . . . .	1765
Chromium, Determination by ICP-AES . . . . .	2043
—, —, spectrophotometric . . . . .	875
—(III), Determination of traces by HPLC . . . . .	279
—, — spectrophotometric . . . . .	1247
—(VI), — by isocratic-ion chromatography . . . . .	1101
Chromoionophores containing crown ethers, complexes with alkali and alkaline earth metals . . . . .	1489
Cobalt, Analysis of traces . . . . .	725
—, Determination by FIA . . . . .	531
—, — spectrophotometric . . . . .	1335
—(II), — — . . . . .	179
Column switching technique, Determination of antibiotics . . . . .	1973
Conductometry, Application of electroosmotic flow and injection . . . . .	1791
Conductivity cell, for determination of urea . . . . .	2195
Copper hexacyanoferrates: preparation, composition and structure. Review . . . . .	1435
— ion, Sensing of traces . . . . .	811
— traces, Determination by AAS . . . . .	817
—(II), Determination, kinetic fluorimetric . . . . .	1699
—, — — spectrophotometric . . . . .	1645
—, — spectrophotometric . . . . .	179
—, Extraction . . . . .	573
Crown ethers, as sensing reagent in ISE . . . . .	901
Crystalline silica, Determination in silica fume . . . . .	1663
Curve fitting to asymmetrical chromatograms . . . . .	1119

CW-laser thermal lens spectrometry. Review . . . . .	2015
Cyclodextrin/perylene complexes . . . . .	647
Degradation of chlorpyrifos . . . . .	651
Desiccant, Magnesium perchlorate, Preparation . . . . .	633
Detector, fibre optic, for FIA . . . . .	347
Dichlorvos, Detection by TLC . . . . .	367
Diffusive sampler, Mass transfer rates . . . . .	2003
Dimerization of Cu(II) carboxylate in solvent extraction . . . . .	573
2,3-Dioxobutane (diacetyl), Determination, fluorimetric . . . . .	75
Direct aqueous injection of volatile organic analytes . . . . .	1845
Discontinuous flow analysis (DFA), preformed-gradient titrimetry . . . . .	359
Dissociation constants, of amino acids . . . . .	1255
Dopamine, Amperometry for <i>in vivo</i> measurement . . . . .	865
Dulcin, Determination, spectrofluorimetric . . . . .	509
Electrochemically deposited films . . . . .	909
Electrode, Carbon paste, Determination of Ag(I). . . . .	2179
—, —, — of BHA antioxidant . . . . .	289
—, —, —, for voltammetry . . . . .	407
—, coated Pt, for glucose sensing . . . . .	875
—, — wire . . . . .	1589
—, — with ion-exchange polymer film . . . . .	473
—, Enzyme . . . . .	843
—, — polypyrrole . . . . .	925
—, for voltammetry signal stability . . . . .	449
—, Glass, Memory effect . . . . .	285
—, Glassy carbon, for determination of catechol derivatives . . . . .	147
—, Graphite paste, for end-point detection . . . . .	273
—, Ion-selective (ISE), for bromide . . . . .	765
—, —, for chloranilate . . . . .	1725
—, —, for K . . . . .	901
—, —, for Sb(V). . . . .	627
—, —, for study of cation exchange . . . . .	155
—, —, Na-selective . . . . .	1207
—, —, nitrite-selective . . . . .	1001
—, —, sulfide-selective . . . . .	1219
—, membrane, anion-selective . . . . .	881
—, —, Determination of tetraphenyl borate . . . . .	523
—, —, potentiometric properties . . . . .	295
—, —, sensitive to Ln(III) . . . . .	1393
—, —, tetramisole-selective . . . . .	135
—, pseudoliquid-membrane . . . . .	2183
—, Quinhydrone . . . . .	611
—, sodium, disposable . . . . .	1025
Electrodeposition and stripping process . . . . .	261
Electroosmotic flow and injection in conductimetry . . . . .	1791
Elimination of unknown irrelevant matrix absorbance . . . . .	1569
Enzyme activity, Determination by FIA and SIA . . . . .	1881
Equation for wavelength dispersive XRF . . . . .	2121
Equilibrium constants, Calculation by PC compatible computer program . . . . .	2105
— —, of acid-base reactions . . . . .	611
— —, Program for calculation . . . . .	1637
— ion exchange method . . . . .	1873
Ergosterol, Determination by HPLC . . . . .	711
Ethanol, Determination by MS . . . . .	1237
Europium, Determination, simultaneous, with Sa and Tb . . . . .	201
— oxide, Determination of impurities by ICP-AES . . . . .	1807
Experimental data, functional transformation . . . . .	1363
Extraction, of Cu(II) . . . . .	573
—, of Ga(III), In(III) and Tl(III) . . . . .	1951
—, equilibria, of rare earths . . . . .	433
Extrapolation of experimental equilibrium constant data. Review . . . . .	1507
Fentanyl, voltammetric properties . . . . .	1929
— derivative, Determination voltammetric . . . . .	1269
Fiber optic ammonia sensors . . . . .	1051
Flow injection analysis (FIA), alternative to biosensors . . . . .	939
—, amperometric detection system . . . . .	2113
—, Assay of glutamates . . . . .	1561
—, Determination of Co . . . . .	531
—, — of glycol . . . . .	395
—, — of rate constants . . . . .	1775
—, — of tetraphenylborate . . . . .	523
—, in presence of surfactants . . . . .	1319

—, Liposome immunoAnalysis, for alachlor herbicide . . . . .	1747
—, mathematical model . . . . .	1755
—, Reagent introduction . . . . .	1797
— titration, linear or logarithmic . . . . .	949
—, with chromatomembrane. . . . .	1765
—, with potentiometric chloride detection . . . . .	1771
— AAS, Determination of As and Se . . . . .	1785
— —, Determination of Au traces . . . . .	565
— chemiluminescence, Detection of Na nitroprusside . . . . .	1683
— colorimetry, Assay of vitamin C . . . . .	125
— coulometry, Determination of sodium bisulfite and starch . . . . .	31
— fluorescence, Determination of 3-hydroxybutyrate . . . . .	1583
— fluorimetry, Determination of sulfamethoxazole . . . . .	2159
— potentiometry, Determination of saccharin . . . . .	731
— spectrophotometry, Determination of Cd . . . . .	799
— —, Determination of fluoride . . . . .	115
— —, — of hydroxybenzaldehydes . . . . .	59
— —, — of nitrite . . . . .	1275
— —, — of rare earth elements . . . . .	1251
— —, — of thiamine . . . . .	2147
— stopped-flow, Determination of volatile analytes . . . . .	347
Flucithrinat, Determination, spectrophotometric. . . . .	761
Fluorescence, of sulfamethazine. . . . .	233
— spectra, of Auramine-0 dye . . . . .	599
— spectral definition of cyclodextrin/perylene complexes . . . . .	647
— spectroscopy, Determination of naphthols . . . . .	695
Fluorescent derivatives of Thromboxane B <sub>2</sub> . . . . .	485
— probe molecules, in capillary electrokinetic separations. . . . .	1499
Fluoride, Determination by FIA—spectrophotometry . . . . .	115
Fluorimetry, Determination of Ce . . . . .	415
—, — of 2,3-dioxobutane. . . . .	75
Food colorants, Determination spectrophotometric . . . . .	789
Formation constants, Dependence on ionic strength. . . . .	1577
Four-level orthogonal array design . . . . .	1917
Free energy interaction parameters, of ion exchange resins . . . . .	1127
Fulvic acids, Titration, potentiometric . . . . .	2095
Functional transformation of experimental data . . . . .	1363
Gallium(III), Determination spectrophotometric . . . . .	1951
Gas sensor, for organophosphorus nerve agents . . . . .	461
— —, SnO <sub>2</sub> -based . . . . .	1735
Glutamates, Assay with FIA system . . . . .	1561
Glycol, Determination by FIA . . . . .	395
Gold, Determination by AAS . . . . .	381
—, —, of traces by FIA—AAS . . . . .	565
H-point standard additions method . . . . .	39
Hydrogen peroxide, Determination, spectrophotometric . . . . .	2137
— —, — voltammetric . . . . .	1853
— —, Sensor for . . . . .	1999
3-Hydroxybutyrate, Determination by FIA fluorescence . . . . .	1583
Identification of species by NMR . . . . .	107
Imipramine, Determination, FIA—spectrophotometric . . . . .	1523
Impurities, Determination in Eu oxide . . . . .	1807
Incorporation reactions of Cu(II) and Zn(II) into porphyrin. . . . .	1699
Indium(III), Determination, spectrophotometric . . . . .	1951
Infrared spectroscopy, diffuse reflectance, effect of sample packing. . . . .	1143
— —, Fourier-transform, Determination of toluene. . . . .	739
In Memoriam: Professor James J. Lingane . . . . .	1613
Interaction of Mg(II) with hydroxyanthraquinones . . . . .	1291
Interpretation system, for XRF. . . . .	1169
Iodide and thiocyanate, Resolution in binary mixtures . . . . .	1545
Iodine azide reaction, induced by organothiophosphorus compounds . . . . .	1493
Ion exchange resins, structural properties . . . . .	1127
Iron, Determination by redox reaction . . . . .	1815
—, — potentiometric . . . . .	891
—, — spectrophotometric . . . . .	1937
—(II) and (III), Determination, voltammetric . . . . .	1943
—(III), Determination, spectrophotometric . . . . .	251, 1669
—, Hydrolysis . . . . .	1577
Ketoprofen, Assay spectrophotometric and voltametric . . . . .	639

Laccase, rare-earth inhibition . . . . .	735
Lactic and malic acids, Determination, bioelectrochemical . . . . .	917
L- and D-lactate, Assay with enzyme reactor . . . . .	1007
Lactose and glucose, Determination, simultaneous . . . . .	843
Lanthanide ions, Luminescence . . . . .	93
Lanthanum and cerium, Determination, spectrophotometric . . . . .	703
Latex piezoelectric immunoassay, Improvement . . . . .	401
Lead, Determination by stripping voltammetry . . . . .	515
Letter to the Editors . . . . .	445, 447
Ligands for lanthanide ions . . . . .	93
Liquid-liquid segmented flow, partition measurements . . . . .	1377
Luminescence, Detection of polyaromatic compounds . . . . .	595
—, of lanthanide ions . . . . .	93
—, of yttrium(III)-ion association compound . . . . .	2055
Macrocyclic polyether ligands, Synthesis and membrane transport characteristics . . . . .	327
Magnesium(II), Interaction with hydroxyanthraquinones . . . . .	1291
— perchlorate desiccant, Preparation . . . . .	633
Maleic anhydride copolymers, biologically active . . . . .	1133
Maneb, Determination, spectrophotometric . . . . .	2061
Mass spectrometry (MS), of ammonia, ethanol and acetic acid . . . . .	1237
— —, ICP-MS, Analysis of noble metals and salts . . . . .	1369
— —, ICP-MS, Correction of interferences . . . . .	187
— —, — —, Detector for HPLC . . . . .	495
— transfer rates, for diffusive sampler . . . . .	2003
Mathematical correction, of spectral interferences . . . . .	187
— model, of FIA . . . . .	1755
Matrix, Air, Determination of benzene . . . . .	1095
—, Alcoholic beverages, Determination of 2,3-dioxobutane . . . . .	75
—, Aqueous solutions, Luminescence of lanthanides . . . . .	93
—, Atmospheric precipitations, Determination of trace metals . . . . .	1165
—, Beer, Analysis of carbonyl compounds . . . . .	1297
—, Biological materials, Determination of monocrotophos . . . . .	2177
—, — —, Determination of Al . . . . .	81
—, — —, — of Cd . . . . .	2165
—, Blood serum, Determination of urea . . . . .	1229
—, Cement, Analysis . . . . .	1
—, Corn syrup, Analysis by FIA . . . . .	31
—, Cu ore, Determination of Fe . . . . .	1815
—, Deicing fluids, Determination of glycol . . . . .	395
—, Dietary products, Determination of saccharin . . . . .	731
—, Drug formulations, Determination of cephalixin . . . . .	225
—, Environmental samples, Determination of Al . . . . .	81
—, — —, — of As . . . . .	205
—, — —, — of Se(IV) . . . . .	1623
—, Fish tissue, Microwave digestion . . . . .	53, 195
—, Fly ash, Determination of species . . . . .	1151
—, Food, Determination of sulfite . . . . .	317
—, Freshwater, Determination of dissolved Se(VI) . . . . .	1675
—, Geological samples, Determination of Fe . . . . .	1937
—, Glasses, Determination of Sb(III) . . . . .	171
—, Heterocyclic compounds, decomposition . . . . .	89
—, Marine waters, Determination of H <sub>2</sub> O <sub>2</sub> . . . . .	2137
—, Milk, Determination of lactose and glucose . . . . .	843
—, —, Lactate assay . . . . .	1007
—, Ni alloys, Determination of Cc subgroup . . . . .	1357
—, Ores and alloys, Determination of V . . . . .	1161
—, Pharmaceuticals, Assay of chlorpromazine . . . . .	1865
—, —, Determination of amoxicillin . . . . .	691
—, —, — of cefoxitin . . . . .	557
—, —, — of imipramine . . . . .	1523
—, —, — of Nifurtimox . . . . .	1957
—, —, — of reserpine . . . . .	2131
—, —, — of sulfamethoxazole . . . . .	2159
—, Plasma, Determination of antibiotics . . . . .	1973
—, Rare earths, Determination of La and Ce . . . . .	703
—, — —, — of Y . . . . .	2055
—, Sea water, Determination of Hg . . . . .	1833
—, Sediments, Determination of butyltin compounds . . . . .	589
—, Serum, Determination of 3-hydroxybutyrate . . . . .	1583
—, Silica fume, Determination of crystalline silica . . . . .	1663
—, Silicate rocks, Determination of Ti . . . . .	1345
—, Soils, Determination of ergosterol . . . . .	711
—, —, — of Tl . . . . .	721
—, — extract, Determination of Al . . . . .	1553

—, Spinach and tomato leaves, Determination of As and Se . . . . .	1785
—, Tablets, Determination of salicylic acid acetate . . . . .	1981
—, Urine, Determination of Se . . . . .	2025
—, —, — of urea . . . . .	2195
—, Water, Determination of Cr . . . . .	2043
—, —, — of fluoride . . . . .	115
—, —, — of phosphate . . . . .	143
—, —, — of radon daughter nuclides . . . . .	2079
—, —, Removal of dissolved oxygen . . . . .	211
—, Wine, Determination of lactic and malic acids . . . . .	917
—, —, — of sulfite and phosphate . . . . .	2113
—, Zinc electrolyte, Determination of Co . . . . .	531
Memory effect, of pH glass electrodes . . . . .	285
Mercury complexes, with crown ethers, polarography . . . . .	1465
—, Determination, fluorimetric . . . . .	2073
—, — spectrophotometric . . . . .	255
—, improved speciation method . . . . .	371
— and methylmercury, Determination by cold-vapour AAS . . . . .	1833
—(II), Determination by derivative spectrophotometry . . . . .	1537
Metals, Determination by AAS . . . . .	1281
— complexes, Stability constants . . . . .	1107
3D-ions, behaviour with Cyanex 301 . . . . .	1341
— —, Preconcentration . . . . .	503
— —, Separation using micelles . . . . .	1261
— thiocyanate complexes, Behaviour on polyurethane foam . . . . .	617
Methicillin, Determination, fluorimetric . . . . .	21
Methotrimeprazine, thioridazine and their mixture, Determination, kinetic . . . . .	1895
Microwave digestion system . . . . .	1067
— —, of fish tissue . . . . .	195
Mixed-ligand chelate, for extraction of Nd . . . . .	9
Molybdenum(VI), Determination, voltammetric . . . . .	1597
Monocrotophos, Detection by TLC . . . . .	2127
Multielement analysis, Redundancy and relevancy of results . . . . .	1113
Multiparametric curve fitting . . . . .	217
NaDH detection, coupled to chemiluminescence . . . . .	1035
Nafcillin, Determination, fluorimetric . . . . .	21
Naphthols, Determination by fluorescence spectroscopy . . . . .	695
Neodymium(III), Extraction . . . . .	9
Nickel, Determination, spectrophotometric . . . . .	1353
— (II), — — . . . . .	179
Nifurtimox, Determination, spectrophotometric . . . . .	1957
Niobium(V), Determination by HPLC . . . . .	685
Nitrite, Determination FIA spectrophotometric . . . . .	1275
—, Sensor for . . . . .	963
— selective microelectrodes . . . . .	1001
Nitrogen, Determination by Kjeldahl method . . . . .	89
Noble metals and salts, Analysis by ICP-MS . . . . .	1369
Nonionic surfactants, Determination, tensammetric . . . . .	1529
Nuclear magnetic resonance spectroscopy (NMR), Identification of species . . . . .	107
Optimization of conditions for As determination . . . . .	205
Optode membrane, Determination of alcohol . . . . .	969
Organic cations, uphill transport . . . . .	663
— solvents, Effect on tyrosinase sensor response . . . . .	1015
Organophosphorus nerve agents, Gas sensor for . . . . .	461
Organothiophosphorus compounds, as inductors of iodine azide reaction . . . . .	1493
Osmium, Determination, simultaneous with Ru and Pd . . . . .	355
—, — kinetic spectrophotometric . . . . .	1651
Oxygen, dissolved, removal from water . . . . .	211
— probe, luminescent . . . . .	985
Palladium, Determination simultaneous with Ru and Os . . . . .	355
— (II), Determination, spectrophotometric . . . . .	775
Paraffin wax, Liquid-liquid extractions . . . . .	541
Partition measurements, in liquid-liquid segmented flow . . . . .	1377
PC program, for calculation of stability constants . . . . .	419
— compatible computer program, for calculation of equilibrium constants . . . . .	2105
Peroxidase-catalyzed fluorogenic reaction, Effect of medium . . . . .	2049
Pesticides, aromatic, Determination fluorimetric . . . . .	1475
pH Measurements, myocardial, <i>in vivo</i> . . . . .	931
Phenolic compounds, Determination in reversed micelles . . . . .	455
Phenol and resorcinol, Determination spectrophotometric . . . . .	547
Phenothiazine, Determination FIA-fluorimetric . . . . .	1985

Phosphate ion, Determination by FIA . . . . .	1797
— — — of traces . . . . .	143
Phospholipids, Separation by HPLC . . . . .	581
Phosphorescence, Determination of carbaryl pesticide . . . . .	1617
Phosphorus, Determination by XRF . . . . .	2087
—, — polarographic . . . . .	1917
Piezoelectric crystals, for detection of toxic gases . . . . .	159
— — detector, for water . . . . .	1083
— sensor . . . . .	1993
Platinum group metals, Determination by HPLC . . . . .	1459
Polarography, differential pulse, of Cd and Pb urate . . . . .	439
—, — —, Determination of Se . . . . .	53
—, — —, of Hg complexes . . . . .	1465
Polyaromatic hydrocarbons, Detection by luminescence . . . . .	595
Polybutadiene, thermal oxidation . . . . .	755
Polyethyleneimine-agarose metal absorbent . . . . .	1707
Poly(hydroxamic acid), from crosslinked poly(methacrylate) . . . . .	805
Polypyrrole enzyme electrode . . . . .	925
Polyurethane foam, Retention of water pollutants . . . . .	1481
— —, Separation of metal thiocyanate complexes . . . . .	617
— production, real-time monitoring . . . . .	425
poly( <i>N</i> -vinylcarbazole) films, Properties . . . . .	909
Porous-layer FIA . . . . .	1771
Potentiometric characterization of weak acids . . . . .	2033
Potentiometry, stripping, Determination of Cd and Pb . . . . .	515
Potential shifts, at electrodes . . . . .	473
Preconcentration, of Au by Donnan dialysis . . . . .	381
—, of fluoride by gas diffusion . . . . .	115
—, of iron(II) as PAN complex . . . . .	251
—, of Au traces . . . . .	565
Preparation of biological samples . . . . .	1067
Program, for calculation of equilibrium constants . . . . .	1637
1,2,3-Propanetricarboxylate, Salt effects on protonation and complex formation . . . . .	1715
Proteins, interaction with tetraphenylporphyrin tetrasulfonate . . . . .	1657
Protonation constants, Reliability . . . . .	99
Pseudoliquid membrane electrode . . . . .	2183
Pulsed slit nozzle, Application . . . . .	1933
PVC membrane containing bathocuproine, for sensing of trace Cu ion . . . . .	811
Radon daughters, simultaneous analysis . . . . .	243
— — nuclides, Determination . . . . .	2079
Rare earths, Determination by FIA . . . . .	1251
— —, Extraction equilibria . . . . .	433
— —, Inhibition of laccase . . . . .	735
— —, Reaction and kinetics . . . . .	15
— —, trivalent, Extraction . . . . .	541
Rate constants, Determination by FIA . . . . .	1775
Reagent, <i>p</i> -Acetylarzenazo, for La and Ce . . . . .	703
—, —, for Ni . . . . .	1353
—, <i>p</i> -Acetylchlorophosphonazo, for Ce subgroup . . . . .	1357
—, 1-Amino-4-hydroxyanthraquinone, for Fe(III) . . . . .	1669
—, 6-Amino-1-naphthol-3-sulfonic acid (J acid) for Se(IV) . . . . .	1623
—, Aminophenol, for phenol and resorcinol . . . . .	547
—, $\alpha$ -Benzyl dioxime, for Co . . . . .	725
—, 2-(5-Bromo-2-pyridylazo)-5-diethylaminophenol, for V, Nb and Ta . . . . .	685
—, 5-(2-Carbomethoxyphenyl)azo-8-quinolinol, for Hg(II) . . . . .	1537
—, Chromotropic acid, for Al . . . . .	81
—, Cyanex-272, for Co . . . . .	1335
—, Cyanex-301, for 3D metal ions . . . . .	1341
—, $\beta$ -Cyclodextrin, for dulcin . . . . .	509
—, 2,4-Dihydroxybenzophenone benzoic hydrazone, for Ce(IV) . . . . .	237
—, 2,4-dinitrophenol (DNP), use in immunoelectrochemical assays . . . . .	1191
—, (2-Ethylhexyl-3-pentadecylphenyl)phosphoric acid, for rare earths . . . . .	433
—, <i>p</i> -Hippurochlorophosphonazo, for rare earths . . . . .	15
—, Gallocyanine, for Os . . . . .	1651
—, Hydroxynaphthol Blue, for Al . . . . .	1631
—, Leuco Crystal Violet, for H <sub>2</sub> O <sub>2</sub> . . . . .	2137
—, Methyl Orange, for imipramine . . . . .	1523
—, Na diethyldithiocarbamate, for Cu(II), Ni(II) and Co(II) . . . . .	179
—, new, for trace V . . . . .	1841
—, 4-(5-Nitro-2-pyridylazo)resorcinol, for Pt group metals . . . . .	1459
—, Paracetamol, for Ce . . . . .	415
—, Perchloric acid, for urea . . . . .	1471
—, Pyrimidyl azo dye, for U(VI) . . . . .	2173
—, Quinaldic acid, for Sa, Eu and Tb . . . . .	201

—, Quinolazo compound, for Cd . . . . .	799
—, 3,3',5,5'-Tetramethylbenzidine, for Cl . . . . .	2091
—, Tetraphenylporphyrin tetrasulfonate, for proteins . . . . .	1657
—, 3-(5'-Tetrazolyazo)-2,6-diaminotoluene, for Pd(II) . . . . .	775
—, 1-(2-Thiazolyazo)-2-naphthol, Determination of Fe . . . . .	1937
—, Toluidine Blue, for ascorbic acid . . . . .	1225
—, Tribromocarboxyarsenazo, for Zr . . . . .	669
—, Xylenol Orange, for rare earth elements . . . . .	1251
Real-time monitoring, of polyurethane production . . . . .	425
Redundancy and relevancy of analytical results . . . . .	1113
Reliability, of protonation constants . . . . .	99
Reserpine, Determination, phosphorimetric . . . . .	2131
Resolution, of iodide and thiocyanate . . . . .	1545
—of ternary mixtures by partial least square analysis . . . . .	1821
Response of tyrosinase biosensor . . . . .	1397
Retention in ion exchange chromatography . . . . .	1073
Review: Capillary electrophoresis . . . . .	1411
—, Copper hexacyanoferrates: preparation, composition and structure . . . . .	1435
—, CW-laser thermal lens spectrometry . . . . .	2015
—, Extrapolation of experimental equilibrium constant data . . . . .	1507
Rheumatoid factor, Detection . . . . .	401
Ronald Belcher Memorial Award 1994 . . . . .	2013
Ruthenium, Determination by chemiluminescence . . . . .	707
— (II), diimino complexes as oxygen probes . . . . .	985
—, simultaneous determination with Os and Pd . . . . .	355
Saccharin, Determination FIA–potentiometric . . . . .	731
Salicylic acid acetate, Determination by Raman spectroscopy . . . . .	1981
Samarium, Determination, simultaneous with Eu and Tb . . . . .	201
Sample introduction, for total organic carbon analysis . . . . .	1627
— packing, Effect on scattering in diffuse reflectance IR spectroscopy . . . . .	1143
— preparation, for analysis of steels and alloys . . . . .	1089
Selectivity coefficients, for amperometric sensors . . . . .	857
Selenium, Determination by FIA–AAS . . . . .	1785
—, — fluorimetric . . . . .	2025
—, — polarographic . . . . .	53
—, Interferences in ICP–MS . . . . .	187
—, Preconcentration and separation . . . . .	67
— (IV), Determination, spectrophotometric . . . . .	1623
— (VI), — by hydride generation AAS . . . . .	1657
Sensors, amperometric, Selectivity coefficients . . . . .	857
—, Chalcogenide glass chemical . . . . .	1059
—, chemical Bifunctionality . . . . .	323
—, Ferroin membrane, for Fe . . . . .	891
—, Fiber optic, for ammonia . . . . .	1051
—, —, for chlorinated hydrocarbon pollutants . . . . .	2189
—, —, for hydrogen peroxide . . . . .	1999
—, —, for water . . . . .	993
—, for myocardial pH measurement . . . . .	931
—, for nitrite . . . . .	963
—, for urea . . . . .	1201
—, potentiometric, Standardization . . . . .	825
—, Tyrosinase, Effect of solvents on response . . . . .	1015
—, with calix/4/arene as ionofore . . . . .	1041
Sequential injection analysis (SIA), in capillary format . . . . .	1903
Silica gel, modified, for purification of alkali and alkaline earth salts . . . . .	131
— —, Sorption . . . . .	2067
Silver(I), Determination with carbon paste electrode . . . . .	2179
Simultaneous analysis, of radon daughters . . . . .	243
SnO <sub>2</sub> -based gas sensor . . . . .	1735
Sodium bisulfite and starch, Determination by FIA . . . . .	31
— electrodes, disposable . . . . .	1025
— nitroprusside, Determination by FIA–chemiluminescence . . . . .	1683
Speciation method, for Hg . . . . .	371
Spectral interferences, mathematical correction . . . . .	187
Spectrophotometry, derivative, Determination of Al . . . . .	1631
—, —, — of Fe(III) . . . . .	251
—, —, — of food colorants . . . . .	789
—, —, — of Hg(II) . . . . .	1537
—, —, of mixtures . . . . .	479, 673
—, —, of Zr and Cr . . . . .	2153
Spectrofluorimetry, Determination of cefoxitin . . . . .	557
—, — of dulcin . . . . .	509
Spectrometry, atomic fluorescence, Determination of Hg . . . . .	2073
—, optical emission, classification of alloyed steel . . . . .	1137



—, photoacoustic, Studies on the solid phase cell . . . . .	1861
—Raman, Determination of salicylic acid acetate . . . . .	1981
Spray reagent, for TLC . . . . .	367
Stability constants, Calculation . . . . .	419
—, —, of metal complexes . . . . .	1107
Starch, Determination by FIA . . . . .	31
Sulfamethazine, Solvent effect on determination . . . . .	233
Sulfamethazole, Determination FIA-fluorimetric . . . . .	2159
Sulfides, organic, inhibitory effects . . . . .	1603
—, Determination with sulfide-selective ISE . . . . .	1219
Sulfite, Determination of biosensor . . . . .	317
— and phosphate, Determination, simultaneous . . . . .	2113
Sulfathiazole, Determination by solid-phase spectrophotometry . . . . .	1327
Supersonic jet absorption spectrometry . . . . .	1933
Surface acoustic wave gas sensor . . . . .	461
Surfactants, Effect on FIA . . . . .	1319
Synchronous derivative fluorimetry, Determination of Sa, Eu and Tb . . . . .	201
TALANTA Advisory Board . . . . .	No. 1, V
—MEDAL: Prof. James D. Winefordner . . . . .	169
Tantalum(V), Determination by HPLC . . . . .	685
Tenax GR sampler, Evaluation . . . . .	1095
Tensammetric determination of nonionic surfactants . . . . .	1529
Ternary penicillin-containing mixture, Determination . . . . .	479
Tetramisole-selective electrode . . . . .	135
Tetraphenylborate, Determination by FIA . . . . .	523
Thallium, Determination by AAS . . . . .	721
—, — by flame AES and electrothermal AAS . . . . .	1185
—(I), — potentiometric . . . . .	957
—(III), — spectrophotometric . . . . .	1951
Thermal oxidation of polybutadiene . . . . .	755
Thiamine, Determination FIA-spectrophotometric . . . . .	2147
Thromboxane B <sub>2</sub> : fluorescent derivatives . . . . .	485
Titanium, Determination of ultratraces . . . . .	537
—, — spectrophotometric . . . . .	1345
—, — voltammetric . . . . .	1911
Titration, potentiometric, of alkalinity of humic substances . . . . .	1383
—, —, of amine drugs . . . . .	611
—, —, of Zn(II) . . . . .	273
Toluene in gasolines, Determination by FT-IR spectrometry . . . . .	739
Total organic carbon analysis, sample introduction . . . . .	1627
Toxic gases, Detection . . . . .	159
Trace elements, Determination of chemical species . . . . .	1151
— metals, Determination in atmospheric precipitations . . . . .	1165
— — ions, chromatographic behaviour . . . . .	1689
Transmission chronoabsorptometry, of Cu(II) . . . . .	261
Transient signals, with Sb(V) ISE . . . . .	627
Transport of H <sup>+</sup> and Na <sup>+</sup> through mobile-site membranes . . . . .	335
Tyrosinase biosensor, response . . . . .	1397
Unknown irrelevant matrix absorbance, Elimination . . . . .	1569
Uphill transport of organic cations . . . . .	663
Uranium(VI), Determination spectrophotometric . . . . .	2173
Urea, Determination, amperometric . . . . .	1029
—, —, by enzymatic FIA . . . . .	1229
—, —, conductometric . . . . .	2195
—, —, potentiometric . . . . .	1471
— sensor . . . . .	1201
Uric acid, Determination, voltammetric . . . . .	407, 439
UV/VIS photodiode array, Detector for FIA . . . . .	59
Vanadium, Determination by fluorescence quenching . . . . .	1841
—, —, spectrophotometric . . . . .	1161
—, —, voltammetric . . . . .	387
—(V), — by HPLC . . . . .	685
Vitamin C, Assay by FIA-colorimetry . . . . .	125
volatile analytes, Determination by stopped-flow FIA . . . . .	347
—, —, — by direct aqueous injection . . . . .	1845
Voltammetry, Determination of uric acid . . . . .	407
—, of 2,4-dinitrophenol (DNP), albumin and DNP-albumin . . . . .	1191
—, adsorptive stripping, Determination of Mo(VI) . . . . .	1597
—, —, — of uric acid . . . . .	439
—, —, — of V . . . . .	387
—, —, —, of fentanyl . . . . .	1929

—, —, —, of fentanyl derivatives . . . . .	1269
—, anodic stripping, Electrode for. . . . .	449
—, catalytic adsorptive stripping, Determination of Co traces . . . . .	725
—, —, —, — of Ti ultratraces . . . . .	537
—, chelate adsorption, for trace measurements . . . . .	659
—, differential pulse anodic stripping, Determination of Fe(II) and (III). . . . .	1943
—, square-wave, Determination of hydrogen peroxide . . . . .	1853
—, —, —, — of Ti . . . . .	1911
Water, piezoelectric crystal detector for . . . . .	1083
— pollutants, Retention by polyurethane foam . . . . .	1481
— in organic solvents, Sensor for . . . . .	993
Weak acids, potentiometric characterization . . . . .	2033
X-ray fluorescence spectrometry (XRF), Interpretation. . . . .	1169
XRF analysis without standards . . . . .	2121
XRF, Determination of P . . . . .	2087
Yttrium(III), Determination . . . . .	2055
Zeolite Y, Study of cation exchange . . . . .	155
Zinc, Identification as Zn tetrathiocyanatomercurate(II) . . . . .	283
—(II), Determination, kinetic fluorimetric . . . . .	1699
—, Titration, potentiometric . . . . .	273
Zirconium, Determination, spectrophotometric . . . . .	2153
—, new chromogenic reagent for . . . . .	669