

SUBJECT INDEX

¹H and ¹³C NMR spectroscopy 855
1,1,1,2-Tetrafluoroethane 1489
¹³C-NMR 295
¹⁹F-NMR 1489
¹H-NMR 295, 1259
2',3', 5-Triacetyl-6-azauridine 993
2, 6-Dichloroquinone chlorimide (DCQ) 955
2-Arylpropionic acids 901, 911
3-Hydroxypridin 923
3TC 255
4',5'- Dihydrocefradine 1137
4-Acetoxy-2-(4-methylphenyl)benzothiazole 389
4-Aminoantipyrine (AAP) 955
4-Aminopyridine 281
4-Methylpropranolol 1189
5-Fluorouracil (5 FU) 277
5 α -reductase inhibitor 705
750 MHz ¹H-NMR 5
8-Cl-cAMP 1289

α_1 -acid glycoprotein 1295
Absorbance changes 307
Absorption 1471
ACAT inhibitor 1163
Acceptance limits 1337
Accuracy 1233, 1337
Acetaminophen 85,1519
Acetaminophen-ethanol interactions 619
Acetazolamide 883
Acetylcholine chloride determination 1083
Acridinium esters 433
Administration set 99
Adsorptive stripping voltammetry 273
Aggregation 1035
Air-filled microspheres 1233
Albumin 1233
Alcohols 969
Alpha-difluoromethylornithine 1249
Amino acid neurotransmitters 319
Amoxycillin 1585
Amoxycillin trihydrate 347
Amperometric detection 787
Amperometry 1109
Ampicillin 347, 1585
Amrinone 407
Anaesthesia theory 969
Analysis 705, 917
Analysis of injections 653
Analytical considerations 1153
Angiotensin II 1411
Anti-C-peptide IgG 1079
Anti-HIV agent, NSC 629243 693
Anti-insulin IgG 1079
Anti-tussive pharmaceutical preparations 747
Anticholinergic 53, 59
Antihistaminic 53, 59

Antimicrobials 1325
Antineoplastic drugs 937
Antipyrine 1591
Antisera 1573
Antithrombotic drug 1047
Artificial sunlight 1529
Ascorbic acid 85
ASF 499
Aspidospermine 1283
Assay 407, 833
Assay calibration 523
Assay methods for salicylic acid 383
Assay validation 1023, 1265
Atomic absorption spectrometry 179
Atomic absorption spectroscopy 1209
Atomic emission detection 185
Automated sample preparation methods 1555
Automation 993, 1181, 1519
Azoospermia 5

β -cyclodextrin 1507
 β -cyclodextrin CSP 551
Base composition 1345
BenchMateTM workstation 1555
Benoxyaprofen 1501
Benzaldehyde 73
Benzodiazepine 53, 59, 165
Benzodiazepines 1417
Benzoic acid 73
Benzoylphenyl ureas 937
Benzyl alcohol 73
Bias 1337
Binding constant 1015
Binding data evaluation 1295
Bioanalysis 1443
Bioanalytical validation 1337
Bioassay 515
Biofluid 613
Biofluid peplomycin level analysis 145
Biofluids 1215
Biological fluids 281, 1417
Biological sample 287
Bioluminescence 433
Biosynthesis 301
Bisphosphonate drugs 983
Bloat 719
Blood 1205
Boldine 313
Boron neutron capture therapy 1091
Bovine IgG 1103

Caffeine 85
Caffeine metabolites 185
Calcein 307
Calibration 1265
Calorimetry 969
Cancer patients 1173
Capillary electrophoresis 1, 21, 319, 753, 1363, 1507
Capillary gel electrophoresis 1103
Capillary zone electrophoresis (CZE) 301, 579, 1063
Capsules 1601
Captopril 855, 1147
Carbamide peroxide 1277
Carbenicillin 845

- Carboplatin 81
Cationic exchange 105
Cefoperazone determination 653
Cefradine 1137
Ceftibuten 699
Ceftibuten-*trans* 699
Cefuroxime 875
Celiprolol 135
Central composite design 1495
Cephalosporin 699
Cephalosporins 533
Cephalexin 99
Cephalexin nafate 99
Ceruleotide 413
Charge transfer complex 343
Chemiluminescence 433
Chiral 753
Chiral HPLC 911
Chiral LC 1271
Chiral recognition 579
Chiral shift reagents 295
Chloroquine 111, 205, 667
Chlorphenamine maleate 1379
Chlorpheniramine maleate 85
Chlortetracycline 675
Choletec 573
Choline 5
Choline chemiluminometry-dot-blot 1083
Cilastatin sodium 1243
Ciprofloxacin hydrochloride 347
Circular-dichroism 1
Cisplatin 265
Citrate 5
Clanfenur 937
Class III antiarrhythmic 483
Clentiazem 1397
Clofibrate 249
Clopamide 151
Cluster analysis 867
Cocaine 179
Colorimetric method 277
Colorimetry 383, 951, 1131
Colour complex stoichiometry 1597
Column switching 105, 255, 397, 557, 699
Combined method 413
Comparison with HPLC 353
Compatibility 99
Competitive radioimmunoassay 413
Complex matrices 1069
Conalbumin column 557
Conformation 65, 1501
Conjugates 1189
Contact lens solutions 273
Conticosteroid 761
Continuous precipitation 179
Correlation 1265
Corticosteroid mixtures screening 805
Coulter Multisizer 1233
Creams and ointments 1227
Cross-reactivity 1573
Crystal packing 777
Cu(II)-lignocaine complex 1209
Cyclic peptide 65
Cyclic voltammetry 273
Cyclo[Gln-Trp-Phe-Gly-Leu-Met] 65
Cyclodextrin 1
Cyclodextrins 753, 1259
Cyclophosphamide 1131

- Data reduction 1215
Decomposition products 205, 543
Decontamination procedures 1123
Degradate 221
Degradation 81
Demeclocycline 675
Deoxycholate 833
Derivative spectrophotometry 151, 653, 951
Derivative spectroscopy 313
Derivative UV spectrophotometry 1243
Derivatives of drug glucuronides 249
Derivatization 1189, 1453
Derivatized cyclodextrins 1507
Determination of aspirin metabolites 1333
Dextran gel 533
Dextromethorphan 747
Dextromethorphan H Br 85
Diastereomer separation 1141
Dichloronitrophenol 343
Diclofenac sodium 343
Difference spectrophotometry 73
Differential pulse polarography 883
Differential radioimmunoassay 483
Differential-pulse voltammetry 273
Diffusion coefficients 499
Diflunisal 1075
Digoxigenin-bis-digitoxoside 713
Digoxin 713
Dihydrodiol metabolite 234
Dihydroergolines 27
¹H-NMR 27
Dihydroergots 41
Diltiazem 1397
Diltiazem metabolites 135
Dimethindene 753
Dimyristoylphosphatidylglycerol 851
Dioxetanes 433
Dipyrone 1109
Direct analysis 557
Direct injection 255, 397
Direct serum injection 1591
Direct standardization 1083
Disopyramide 425
Dissociation 1325
Dissociation constant 157
Dissolution 173, 1043, 1519
Dissolution medium effect 493
Dissolution rate 951
Dissolution testing automation 635
Distribution 1475
Disulfiram 249
Dithioketal 761
Diuretic and antihypertensive agent 1555
Dog blood 243
Dosage forms 955
Dosage forms assay 127
Doxycycline 675
Drug 1573
Drug enantiomers 557
Drug formulations 313
Drug metabolism 569
Drug stability 993
Drug substance 643
Drug-protein interaction 1295
DSC 1501
DuP 128 1163
Ebastin 509

- EC reaction kinetics 325
Effective renal plasma flow (ERPF) 1311
Electrical sensing zone technique 1233
Electrochemical characterization 335
Electrochemical detection 811, 943, 1147
Electrochemistry of quercetin 325
Electrochromatography 579
Electron capture detection 1003
Electron impact (EI) 41
Electroosmotic flow (eof) 579
Electrospray-ionization mass spectrometry (ESI-MS) 1075
ELISA 787
Enantiomeric resolution 901
Enantiomeric purity 295
Enantiomers 551, 1453
Enantioselective LC-bioassay 1537
Enloplatin 1023
Enzymatic assay 895
Enzyme activity 1363
Enzyme immunoassay 1411
Enzyme protein 969
Epicaptopril 855
Epimerization 1453
Ergots 41
Ergots (ergolines) 27
Erythropoietin 515
Ester hydrolysis 993
Estimation of curvature 523
Ethacrynic acid and its methyl ester 91
Ethinylestradiol 1303
- Face-centred central composite design 1379
Factor analysis 867
Famotidine 221, 343
Fast atom bombardment (FAB) 41
Fat emulsions 1115
Felbamate 1443
Felodipine 1003
Felodipine oxidative degradation 1003
Fenoctimine 771
Fenoterol 1069
Fenoterol hydrobromide 825
Ferrozine 635
FGF 1035
FI 1585
Fibrinogen receptor antagonist 1047
Field programming 1115
Finished products 1483
First-derivative spectrofluorimetry 1097
First-derivative ultraviolet spectrophotometry 747
First-derivative UV spectrophotometry 917
FK-506 235
Flameless atomic absorption spectrometry (FAAS) 1023
Flavonoids 325, 335
Flow cytometry 515
Flow injection analysis 343, 635, 787, 1475
Flow-injection 1109
Flunitrazepam 53
Flunitrazepam 931
Fluorescence 1, 1035, 1363
Fluorescence changes 307
Fluorescence detection 895, 1163, 1463, 1547
Fluorescence spectrophotometry 1495
Fluorescence spectroscopy 383
Fluorimetric detection 1537
Fluorimetry 1417
Fluoroquinolone antibiotics 157

- Fluoroquinolone iron (III) complex 157
Fluoroquinolones 1325
Flurbiprofen 131
Formation constant 157, 1015
Fourier transform infrared spectroscopy 1091
Fractionation 499
Frenadol™ sachets 85
Frit-FAB LC-MS 557
- G187084 195, 243, 659
Gadolinium 1015
Ganciclovir 429, 1205
Ganciclovir serum determination 429
Gas chromatographic-mass spectrometry 961
Gas chromatography 195
Gas chromatography/mass spectrometry 659
Gas-liquid chromatography 73
GC 1
GC - MS determination 373
GC/MS 659
Gel chromatography 533
GITC 1453
Gitoxin 713
GITS 1529
Glomerular filtration rate (GFR) 1311
Glutathione 91
GR90291 659
Gradient elution 1289
Gradient/isocratic elution 811
Graphite electrode 1147
Guaiphenesin 747
- Hair 1123
Hanging mercury drop electrode 273
Hapten 1573
Hemihydrate 1043
Hepatic metabolism 1425
Hepatitis B 1573
Heptakis(2,3-di-O-acetyl)β-cyclodextrin 1507
High molecular weight impurities of cephalosporins 533
High-performance liquid chromatography (HPLC) 81, 131, 383, 389
Homatropine hydrobromide 1199
HPLC 1, 99, 209, 235, 243, 255, 397, 569, 667, 795, 821, 833,
917, 1141, 1173, 1345, 1425, 1443, 1529, 1547, 1563
HPLC assay 839
HPLC determination 425
HPLC method 1463
HPLC, potentiometric titration 1015
HPLC-NMR 419
HSA 1501
Human 569
Human aqueous humour 131
Human blood 195, 243, 659
Human liver microsomes 839
Human neutrophil elastase inhibitor (ONO)-5046 397
Human plasma 119, 1091
Human serum 845
Hydrochlorothiazide 1555
Hydroxyl radical 863
Hydroxylation 1075
- Identification 59
Ifosfamide 1131
IIV 1573
Imidazole derivatives 1425

- Imipenem 1243
Immobilized antibody 389
Immobilized receptor 723
Immunoabsorption column 389
Immunoaffinity chromatography 1249
Immunoaffinity extraction 389
Immunoassay 433, 1079, 1249
Impurities 1483
Impurity 1137
In vitro hepatic metabolism 771
In vitro metabolism 811
In vivo microdialysis 619
Inclusion complex 1259
Indirect analysis 1209
Indirect chiral LC assay 1453
Indirect UV detection 983
Indolealkaloids 1283
INEPT 295
Influenza vaccine 833
Infrared 777
Interference 1199
Intravenous infusion 99
Ion chromatography 983, 1277
Ion paired high-performance liquid chromatography 1311
Ion-pair reversed-phase liquid chromatography 1379
Iothalamic acid 1311
Ipratropium bromide 825
IR spectroscopy 889
Iron chelator 923
Iron determination in drug formulations 635
Irreversible enzyme inhibitor 1249
(Iso) luminol 433
Isoniazid 493
Isosbestic points 951
Isotachophoresis 127
Isotope effect 209
Isotopes of carbon 185
- Ketoconazole 1425
Ketorolac tromethamine 343
Kinetics 209, 667, 993
- L-691, 121 483
L-cysteine 91
Laboratory robotics 1555
Lamivudine 1573
Lanthanide-induced shifts 295
LC 675, 845, 943
LC analysis 977
LC chiral separation 551
LC method 281, 1591
LC-atmospheric pressure chemical ionization (APCI) 221
LC-MS-MS 705
Linopirdine 1055
Linopirdine bis-N-oxide 1055
Linopirdine mono-N-oxide 1055
Lipidic amino acids 1141
Liposome-associated and unassociated drugs 961
Liposomes 307, 851, 977, 1495
Liquid chromatography 91, 205, 699, 993, 1137, 1283, 1303, 1519, 1555
Liquid chromatography-mass spectrometry 543
Liquid-liquid extraction 713
Liquid-solid extraction 287
Luminescence 1
Lung tissue 1463
Luxabendazole 1471

Lysine vasopressin 1355

m-hydroxymandelic acid 943
m-hydroxyphenylglycol 943
Macro-log P 1369
Major metabolites 839
Mandelic acid 1199
MAO-B 895
Mass fragmentation 1397
Mass spectral analysis 209
Mass spectrometry (MS) 41, 185, 195, 855
MCT 1115
Measurement error 1265
Mebrofenin 573
Meclocycline 675
Medium-chain triglyceride 1115
Mefloquine hydrochloride 889
MEKC 21
Mepyramine 53
Mercaptoundecahydrododecaborate 1091
Metabolism 419, 1425, 1489
Metabolite 397, 413
Metabolite identification 771
Metabolites 353, 613, 705, 943
Metal-ion complexation 1325
Methacycline 675
Methadone content 1123
Methanol-modified carbon dioxide mobile phase 1003
Methicillin 629
Method adaptation 1123
Method validation 643
Methyl 4-hydroxybenzoate 573
Methyl and propyl parahydroxybenzoate 1379
Methylparaben 509, 573
Methyluric acids 185
Methylxanthines 185
MIBG 1173
Micellar electrokinetic chromatography (MEKC) 579
Micro-log P 1369
Microcapsules 1601
Microdialysis 993, 1519
Micropellicular sorbent 821
Microwave-induced plasma 185
Midazolam 165
Milk 1097
Minocycline 675
Mitozantrone 1153
Mixed micelles 307
MK-383 1047
MK-434 705
Modified cyclodextrins 1507
Modified cyclodextrin column 1271
Molecular descriptors 867
Molecular dynamics 65
Molecular weight analysis 1103
Molybdic acid 1597
Moricizine hydrochloride 1043
Morphine 353
MRI contrast agent 1015
MS 235, 569, 771
MS/MS 1425
Multidimensional HPLC 105
Myo-inositol 5

N-methylscopolamine 53
n-octanol/water 1475

- Nafion-modified carbon paste electrode 1069
Naphthalene-2, 3-dicarboxyaldehyde 319
Narrow bore 105
Natural and synthetic corticosteroids 805
Nebulizer solutions 825
Neosporin® 1227
Netilmicin sulphate 347
Neurokinins 65
Nifedipine 119, 1529
Niflumic acid 1369
Nitrosation 1131
NK-2 antagonist 65
NMR 65, 569, 613, 125
NMR spectroscopy 1215, 1507
Non steroidal antiinflammatory drugs 901, 911
Non-linear regression 523
Noncompetitive inhibitor 969
Nonocapsules 373
Normal-phase HPLC 805
Novalgin 1109
NSAIDs 21
Nucleoside 255
- Octadecyl- and ion-exchanging silica bonded phases 463
Ocular penetration 131
Ofloxacin 1463
Omeprazole 839
Ondansetron 361
Oxalate esters 433
Oxazolidine-2-one-derivative 1537
Oxidation mechanism 325
Oxtriphylline (choline theophyllinate) 1083
Oxytetracycline 675
Oxyvanadium determination 1597
- p-aminobenzoic acid 1063
p-aminohippuric acid 1311
P-aminophenyl phosphate 787
Packed column supercritical fluid chromatography 1003
Paddle agitation rate 173
Palladium(II) 1585
Papaverine 179
Paracetamol 85, 379, 419, 1563
Partial least-squares calibration 509
Particle size distribution 1115
Partition constants 1475
Pattern recognition 1215
Penicillamine 1147
Peplomycin 145
Peptide 413
Peptide stability 811
Peptidoglycan 301
Peroxidase 1079
pH profile of lipophilicity 1369
Pharmaceutical analysis 675
Pharmaceutical dosage 629
Pharmaceutical dosage forms 205, 875
Pharmaceutical dosage formulations 221
Pharmaceutical formulations 21, 825, 1601
Pharmaceutical preparations 1083, 1417
Pharmaceutical products 643
Pharmaceuticals 1109, 1585
Pharmacokinetic interaction 135
Pharmacokinetics 353, 619, 1189, 1249, 1453
Phenazone 249
Phenethylamines 1507

- Phenobarbitone 373
Phenol hydroxylase inhibition 335
Phenylephrine 943
Phenylephrine hydrochloride 1379
Phosphate ion 1597
Phospholipids 301, 977
Phosphoramido mustard 961
Phosphorothioate oligonucleotides 1345
Photodecomposition 165, 917
Photodegradation 667, 1529
Photophosphorescence 1
Photostability 1529
Pindolol 151
Piperazine derivatives 1425
Plasma 265, 361, 397, 425, 557, 705, 1047, 1163, 1173, 1463
Plasma concentrations 135, 1153
Plasma pharmacokinetics 699
Plasmodium falciparum malaria cases 1317
Platinum 1023
Poloxalene 719
Poloxamer 719
Poly(styrene-divinylbenzene 1137
Poly- ϵ -caprolactone 373
Polyethylene 719
Polymeric columns 675
Polymorphism 889, 1043
Polymorphs 777
Polypropylene 719
Positive ion electron ionization MS 1397
Post-column derivatization 265
Potentiometric titration 347
Pralidoxime chloride 127
Pre-chromatographic derivatization 91
Precipitation 1035
Precision 1233, 1337
Precursors 301
Prenalterol hydrochloride 955
Primaxin® 1243
Proguanil 111
Proinsulin (fasting) 1079
Propafenone enantiomers 1295
Propranolol enantiomers 1189, 1537
Propyl 4-hydroxybenzoate 573
Propyl paraben 573
Protein 1025
Protein binding 47, 693
Protein folding 969
Protein phase transition 969
Proteins 499
Proton pump inhibitor 839
Protonation macro- and microconstants 1369
Pseudoephedrine HCl 1601
Pseudoephedrine hydrochloride 379
Purity 1289
PVC bag 99
Py Technology™ robotic system 1555
Pyridine solvent 347
- Quality control assay method 85
Quantification 301, 1063
Quantified maximum entropy 419
Quantitation 833
Quantitative analysis in aqueous media 1091
Quantitative determination 1163
Quantitative receptor assay 723
Quantitative structure-property relationship (QSPR) 867
Quebrachamine 1283

- R-and S-ibuprofen 551
Radioimmunoassay 47, 361, 483, 795, 1047, 1123, 1303, 1573
Radioligand 1573
Radioreceptor assays 53, 59
Raman 777
Rapid glycation 1355
Rapid LC assays 1153
Rat 771, 795
Rat brain 319
Raw materials 1483
Rearrangement 209
Regression 1265
Regression analysis 867
Regression models 1379
Reinecke's salt 179
Remifentanil 195, 243, 659
Renal blood flow (RBF) 1311
Response surface plots 1379
Restricted access media 1591
Reticulocyte 515
Retinoids 867
Reversed-phase 105
Reversed-phase chromatography 141, 407, 429, 851, 1181, 1277, 1317
 573, 805, 811, 937, 1147, 1189, 1289
Reversed-phase high-performance liquid chromatography 413
Reversed-phase HPLC Reversed-phase ion-pair chromatography 111
Reversed-phase ion-pair high-performance liquid chromatography 825
Reversed-phase liquid chromatography 119, 379, 693, 931, 1023, 1163, 1601
RIA validation 353
Ribonuclease A 1363
Rifampicin 493
Rifampicin and isoniazid 493
Rifampin 347, 493
Robotic sample preparation 1443
Robust methods 1265
RP-HPLC 249
RS-propafenone 1295
Rumenal tympany 719
- S-oxidation 761
Salbutamol sulphate 543, 825
Sample classification 1215
Sample handling 407
Sample preparation 287
Sample stacking 1363
Scavenging 863
Screening 53, 59, 1475
Second derivative fluorescence 1333
Second-derivative spectrofluorimetry 1097
Second-derivative spectroscopy 383
Second-derivative ultraviolet spectrophotometry 747
Second-order derivative spectroscopy 1199
Sedimentation field-flow fractionation 1115
Selected ion monitoring 659
Selegiline 895
Selegiline metabolites 895
Seminal Fluid 5
Separation 301, 1063
Separation method 961
Serum and tissues 1147
SIM 659
Simultaneous determination 509, 653
Site 761
Size exclusion chromatography 719
Small intestine 1471
Small, relatively polar analytes 463
Sodium borohydride 73

- Sodium lauryl sulphate 493
Solid phase extraction 1181
Solid-liquid extraction 1495
Solid-phase extraction 105, 287, 361, 463, 713
Solid-phase receptor assay 723
Solid-state investigation 889
Solid-state NMR 777
Solvabilized receptor 723
Somatostatin 821
Spacer thickness 1091
Specific displacement 47
Spectrofluorimetry 629, 875
Spectrophotometry 157, 1597
Spermine 5
SPLITT 499
Stability 81, 99, 165, 693, 931, 977, 1205, 1259, 1289
Stability constant 1015
Stability in plasma 119
Stability testing 277
Stabilization 1501
Stable isotope 961, 1397
Stereoisomer separation 1271
Stereoisomers 1453
Stereoselective pharmacokinetics 1537
Stereoselectivity 761
Structural characterization 543
Structure 1035
Structure elucidation 1397, 1425
Subcutaneous tissue 619
Submicron 1115
Substance P analogues 811
Succinylcholine chloride 1083
Sulbactam determination 653
Sulfamethoxazole 249
Sulphadoxine 1317
Sulphamethoxazole 1519
Sulphanilamide 1097
Sulphation 1075
Sulphoxide and sulphone metabolites 1163
Sulphoxide diastereoisomers (epimers) 761
Supercritical fluid extraction 1227
Suppression of artefact formation 1547
Suprofen 569
Surfactants 307, 499
Sustained-release formulations 635
Synchronous fluorescence spectra 1333
Synchronous spectrofluorimetry 313
Systematic errors 1153
Systematic toxicological analysis 53, 59
- TA-0910 795
Tablet discrimination 173
Tablets 1601
Temazepam 209
Terbutaline sulphate 825
Tetrabutylammonium hydroxide 347
Tetracycline 675, 1483
Tetrahydro- β -carbolines 1547
Thalassaemia 923
Therapeutic drug monitoring 53, 59
Thermal analysis 889
Thermogram 1501
Thiazide diuretics 917
Thioguanine 1495
Thiols 863
Thiomersal 273
Thymidine 1063

- Thyroid stimulating hormone 787
Tipredane 761
Tissue drug level analysis 145
Titrimetric assay 347
TLC 569, 667, 771
TOCSY 613
Todralazine 883
Topological indices 867
Toxicity 1215
Toxicology 931
TRH analogue 795
Trifluoroacetic acid 1489
Trimethoprim 1519
Triprolidine hydrochloride 379
Tris(4-methylbenzoate)cellulose 901
Tris-(4-methylbenzoates)cellulose column 911
Tritium 1573
Tropical stability 205
- Ultrafiltration as sample pre-treatment 141, 429
Ultraviolet and fluorescence detection 429
Unfolding 1035, 1501
Uracil 1063
Urea 1277
Urinary excretion 699
Urinary metabolites 569
Urine 255, 397, 1047, 1489, 1547
Urine samples 753
UV detection 265, 379
UV spectrophotometric method 277
UV spectrophotometry 509
- Validated HPLC assay 265
Validation 407
Vasal aplasia 5
- Warfarin 47, 1501
Wavelength switching 379
Whole blood 1173
- X-ray diffraction 889
- Zalcitabine (ddc) 1271
Zero-crossing technique 747
Zidovudine 141
Zidovudine serum determination 141
Zofenopril calcium 173