

## Subject Index to Volume 9 (1992)

- 1-aminobenzotriazole, 1099  
1-carba-1-dethiacephalosporin, solution stability, 250  
1-deoxymannojirimycin, pharmacokinetics, 1442  
1-phenylvinyl phosphate, kinetics, 378  
2-hydroxypropyl- $\beta$ -cyclodextrin, 1673  
2',3'-dideoxyinosine, nonlinear disposition, 1070  
2',3'-dideoxyinosine, pharmacokinetics, 822, 1070  
 $^2\text{H}$  nuclear magnetic resonance, 1415  
4-(2-*N,N*-Di-*n*-propylaminoethyl)-5-hydroxyindole derivatives, 735  
5-aminosalicylic acid, calcium alginate beads, 1128  
5-aminosalicylic acid, degradation, 933  
5-ester prodrugs, 1048  
5-fluorodeoxyuridine, oleoyl derivatives, 565  
5-iodo-2'-deoxyuridine, enhanced delivery, 1173  
5-iodo-2'-deoxyuridine, metabolism, 1048  
5-lipoxygenase inhibitor, 1465  
6-mercaptopurine, rectal administration, 697  
1,2-diaminomethyl-cyclobutane-platinum(II) lactate, 808  
13-*cis*-retinoic acid, solid state stability, 1203  
[ $^3\text{H}$ ]tetracycline kinetics, 1018  
 $\alpha$ -chymotrypsin, 864  
 $\alpha$ -cyclodextrin, NMR, 575  
 $\alpha_1$ -acid glycoprotein, 845  
absorption rate, 1380  
absorptive-mediated endocytosis, ACTH, 529  
acetophenone, 378  
acetylator phenotype, 812  
acitretin, HPLC, 1365  
acitretin, pharmacokinetics, 1365  
activated charcoal, XPS, 126  
acyclovir permeation enhancement, 1262  
acyclovir, controlled (*trans*)dermal delivery, 979  
adinazolam mesylate tablets, pharmacokinetics, 457  
ADR-529, pharmacokinetics, 101  
adrenocorticotrophic hormone, 529  
aerosol, impinger, 1123  
aerosol, formulation, 636  
aerosol, insulin, 764  
aerosols, 515  
aerosols, 1634  
age percutaneous absorption, 884  
air-gap electrode, 485  
albumin microspheres, 629  
alkylpyrazine odor modalities, 1321  
all-*trans*-retinoic acid, solid state stability, 1203  
amino acid side chains, 504  
aminopeptidase inhibitors, 535  
amoxicillin, otitis media, 920  
amoxicillin, pharmacokinetics, 1587  
angiotensin-converting enzyme inhibitors, 1480  
angiotensin-converting enzyme (ACE) inhibitors, 969  
anthracyclines, 739  
Anti-AIDS agents, 703  
antiepileptic, gabapentin, 595  
antipyrene pharmacokinetics, 1515  
antipyrene, pharmacokinetics, 1587  
antisense, oligonucleotide, 1010  
antiviral drug targeting, 541  
antiviral efficacy, systemic, topical, 979  
aspirin hydrolysis, kinetics, 1673  
aspirin, hydrolysis, 159  
asthma, new drugs, 585  
autoxidation, ethyl icosapentate, 1673  
azone, cimetidine, 817  
azone, penetration enhancer, 303  
 $\beta$ -cyclodextrin-anilinothalenesulfonates, 1568  
bacterial monitoring, vials, 357  
benzoyl peroxide, kinetics, 1341  
benzoyl peroxide, stability, 1341  
betamethasone dipropionate, bioavailability, 45  
bilayer, floating unit, 298  
bile salt, acylcarnitine, mixed micelles, 1262  
bile sequestrants, 670  
binding EGF, 40  
biodegradable microspheres, 1502  
bioequivalence index, 925  
bioequivalence studies, 1380  
biomimetic polymers, 586  
biosensor, 835  
bisacylphosphonates, 143  
bisphosphonates, 143  
bisphosphonates, bone resorption, 1018  
bone infections, treatment, 993  
brush border membrane, EGF binding sites, 1394  
bupranolol, pharmacodynamics, 554  
bupranolol, supersaturation, 554  
*c-myc* oligonucleotide uptake, 1010  
CACO-2 cell monolayers, 1290  
calcium alginate beads, 1128  
cancer immunotherapy, 425  
capacitive sensor, 1525  
captopril, 1224  
captopril, pulsatile release, 654  
captopril, systemic absorption, 654  
carbamazepine, bioavailability, 1612  
carbamazepine, pharmacokinetics, 1612  
carbopol gel, 1659  
cardiac glycosides, 1152  
cardioprotectant (ADR-529), HPLC, 101  
carotenoids, 700  
cefoxitin, bioavailability, 191  
cefoxitin, colon, 191  
cefuroxime axetil, diastereomers, 687  
celiprolol, 2D-NMR, 365  
celiprolol, crystal structure, 365  
cellulose acetate, 1664  
ceramides, 1415  
chemical dehydration, albumin emulsion, 776  
chemoprevention, garlic, 1668  
chemoreceptor, 835  
chewing gum products, medicated, 255  
chlorinated hydrocarbons, captopril, 1224  
chloroethylnitrosoureas, 743  
chlorpheniramine maleate, extended-release formulations, 450  
chlorpheniramine, absorption profile, 450  
CHO-K1 cells, 178  
cholecystokinin-B, 1092  
cholesterol, bile salt, 792  
cholestyramine, bile salt, 670  
CI-988, aqueous stability, 1092  
clinical pharmacokinetics, 966  
colonic absorption, thymidine analogues, 326  
colonic drug delivery, 1540

- colonic drug delivery, indomethacin, 276  
computer-controlled drug delivery, 800  
controlled drug delivery system, 312  
copolymers, mucoadhesion, 1563  
corticosteroid metabolism, 1275  
corticosteroids, topical, 45  
crisnatol metabolite, 623  
curdlan, drug delivery, 414  
cyclic hexapeptide, degradation, 1314  
cyclic hexapeptide, kinetics, 1314  
cyclic peptide, peptide bond cleavage, 617  
cyclodextrin (CD)-benzaldehyde complexes, 582  
cyclodextrin/drug complexation, 1568  
cyclodextrin/weak electrolyte, complexation, 1671  
cyclodextrins, 94  
cyclodextrins, nasal absorption promoters, 1157  
cyclosporin A, isomerization, 617  
cyclosporin a, 1252
- degradation of proteins, 1386  
degradation, drugs, solid state, 939  
dermal diffusion, 1256  
diallyl sulfide, chemoprevention, 1668  
diazepam, excretion in milk, 1299  
dicumarol, 845  
diethyl phthalate, 1648  
differential scanning calorimetry, freeze dried sucrose, 109  
dihydropyridine chemical delivery system, 743  
diltiazem, 1599  
dinitrate metabolites, 1284  
diphenhydramine, HPLC, GC-MSD, 929  
dipyridamole, 178  
discontinuous GI absorption, pharmacokinetic model, 350  
disopyramide, protein binding, 155  
dissolution testing system, 578  
dopaminergic agonism, 735  
droperidol, pharmacokinetics, 694  
drug absorption, pharmacokinetics, 161  
drug delivery device, electrically modulated, 215  
drug delivery systems, electric stimulus, 955  
drug delivery, ion exchange, 1654  
drug development, pharmacodynamics, 826  
drug development, pharmacokinetics, 826  
drug dissolution, ionizable drugs, 58  
drug interaction, HIV, 224  
drug monitoring, 812  
drug protein binding, 480  
drug release rate heat-induced, 658  
drug release, 1510  
drug release, film coated pellets, 398  
drug release, optimization, 206  
drug release, swelling controlled, 195, 1268  
drug targeting, antiviral, 541  
DuP 747, kappa agonist analgesic, 750  
DuP 925, physicochemical properties, 570
- electroosmosis, 1402  
electrophoresis, 215  
electrospray mass spectrometry (ES-MS), 945  
electrotopological state index, 1321  
emulsion filtration, 860  
emulsion stability, 860  
emulsions, renin inhibitor, 888  
enkephalin metabolites, 990  
enkephalin, nasal absorption, 1362  
enterohepatic circulation, 169  
enterohepatic recirculation of drugs, 1306  
enzyme electrode, 485  
enzyme technology, 835  
ephedrine, enantiomers, 1083  
ephedrine, thermodynamics, 1083  
epidermal growth factor (EGF), 40, 271  
epidermal growth factor, binding sites, 1394
- epithelial transport, 1029  
epitostanol, 1617  
erodible polymers, 1279  
ethylcosapentate, 1673  
etorphine, transdermal delivery, 963
- Fab, immunoreactivity, 643  
fenoterol, pharmacokinetic/dynamic correlation, 291  
fibrolase stability, 870  
flow-through diffusion cell, 82  
fluid cushion device, 753  
fluid-bed dryer, 1487, 1493  
fluorescein dyes, albumin microspheres, 629  
flurbiprofen, 492  
flurbiprofen, absorption, 901  
flurbiprofen, fasted state, 901  
Fourier transform infrared spectroscopy, BSH, 1199  
FR71021, powder X-ray diffraction, 138  
freeze drying, monoclonal antibody, 266  
freeze-drying, pharmaceuticals, 753  
furosemide, protein binding, 155
- gabapentin, stability studies, 595  
gelatin gels, drug stability, 607  
gene therapy, 1235  
glutaraldehyde cross-linking, 10  
glutathione S-transferase, 1460  
glyceryl trinitrate, 1460  
granulation monitoring, 1525  
griseofulvin release, 759
- $\eta$ -pyrromycinone derivative, 739  
hapten, monoclonal antibody, 1375  
hepatobiliary transport, phenol red, 908  
heteropolyanion, 570  
hexamethylene lauramide, 817  
human immunodeficiency virus (HIV), phagocytosis, 541  
human immunodeficiency virus (HIV-1), drug development, 703  
human serum albumin, acetylation, 480  
hydrochlorothiazide, fast release, 960  
hydrochlorothiazide, nonreverting, 960  
hydrocortisone, bioavailability, 1164  
hydrocortisone, percutaneous absorption, 1164  
hydrogel, colonic drug delivery, 1540  
hydrogels, loading, 283  
hydrogels, release kinetics, 283  
hydrogels, swelling, 283  
hydrophilic creams, 1336  
hydroxyurea, analysis, 115  
hydroxyurea, hydrolysis, 115  
hypolipidemic agents, 1324
- ibuprofen, 492  
iceberg formation, 159  
ICRF-187 (ADR-529), hydrolysis, 1209  
ICRF-187 [(+)-1,2-bis(3,4-dioxopiperazinyl-1-yl)propane], 1076  
IgG, immunoreactivity, 643  
imide, ICRF-187 (ADR-529), 1076  
imirestat, pharmacokinetics, 469  
imirestat, tissue binding, 469  
indomethacin, colonic delivery, 276  
indomethacin-loaded microspheres, 1132  
intestinal permeability, drug absorption, 1243  
infrared imaging/thermography, pharmaceuticals, 521  
infusion pumps, computer controlled, 800  
insulin dissociation, 864  
insulin preparation, 727  
insulin, chemical stability, 715, 727  
insulin, conjunctival penetration, 769  
insulin, hydrolytic degradation, 715  
insulin, intravenous, 1003  
insulin, pharmacodynamics, 1003  
insulin, phonophoresis, 952

- insulin, transdermal delivery, 952  
 insulin, vaginal absorption, 878  
 interleukin-2, sustained delivery, 425  
 interparticulate friction, 521  
 intestinal drug and water absorption, 894  
 intestinal perfusion, 894  
 intestinal perfusion, drug absorption, 1243  
 intestinal permeability, 1580  
 intestinal tissue permeability, 316  
 intrasubject variance, 345  
 intravenously injected substances, pain, 182  
 ion-selective electrodes, 94  
 ionizable drugs, mathematical model, 58  
 iontophoresis, 1402  
 isoflurane anesthesia, 1515
- jejunal drug absorption, 648
- ketoprofen, prodrugs, 915  
 ketotrilostane, pharmacokinetics, 464
- laurate hydroxylation, 1648  
*Leishmania donovani*, 782  
 leuprolide acetate, bioavailability, 244  
 leuprolide acetate, nasal, lung, delivery, 244  
 leuprolide, absorption enhancement, 1575  
 levothyroxine, degradation, 131  
 levothyroxine, solid state, 131  
 libenzapril, chronic hypertension, 236  
 lidocaine, iontophoresis, 211  
 lipid metabolism, 1324  
 lipophilic drug, 87  
 lipophilicity, ACE inhibitors, 1480  
 liposomal triamcinolone acetonide, 1359  
 liposome, thermosensitive, 658  
 liposomes, long circulating, 260  
 liposomes, nebulization, 515  
 liposomes, pH-sensitive, 1235  
 liquid crystalline phases, 1546, 1550  
 lobaplatin D19466, 808  
 local enhanced topical drug delivery, 1422  
 lonapalene, percutaneous absorption, 1145  
 lonapalene, psoriatic skin, 1145  
 loracarbef, solution stability, 250  
 lotprednol etabonate, 1275  
 lovastatin, plasma levels, 1629  
 lymphatic targeting, 1534  
 lymphatic transfer, 1195  
 lyophilization of proteins, 33
- macrogolstearate 400, lamellar phase, 1336  
 macromolecules, 1195  
 magnetic microspheres, oxantazole, 390  
 mathematical model, ionizable drugs, 58  
 matrix system, 1510  
 mefloquine stereoisomers, HPLC, 1640  
 mepirodipine, determination, 1227  
 mepitiostane, 1617  
 mercaptoundecahydrododecaborate, quantitative analysis, 1199  
 metered dose inhaler sprays, impinger, 1123  
 metered-dose inhalers, flammable propellants, 636  
 method equivalence, 601  
 methotrexate, 1295  
 methotrexate, oleoyl derivatives, 565  
 micellar electrokinetic capillary chromatography, 1219  
 micellar solubilization, 750  
 microbial metabolism, crisanolol, 623  
 microdialysis perfusion, 1256  
 microdialysis, pharmacokinetics, 155  
 microdialysis, theophylline, 1592  
 microencapsulation, 410  
 microencapsulation, griseofulvin, 759
- microfluidization, 1347  
 microspheres, poly(L-lactic acid), 149  
 microwave dryer, 1487  
 misoprostol, capsule, 298  
 mitoxanthrone, cytotoxicity, 178  
 mixed micelles, 1184  
 mixed-effects analysis of variance, 345  
 MK-927, kinetics, 339  
 MK-927, stereoselective binding, 339  
 ML-1035, a metoclopramide analogue, HPLC, 119  
 ML-1035, metabolites, 119  
 mobile order, 788  
 monoclonal antibody (MN12), lyophilization, 266  
 monoclonal antibody, 1386  
 monoclonal antibody, ES-MS, 945  
 monoclonal antibody, hapten, 1375  
 multidrug resistance, tumor cells, 700  
 multiple emulsification, indomethacin, 1132  
 muscarinic agonist, 1474  
 muscarinic cholinergic Hm1 receptor, 1644  
*myo*-inositol 1-phosphatase, inhibition, 1370
- N(4-methylphenyl)diphenimide, 1324  
*N*-desmethylnadiazolam, pharmacodynamics, 457  
*N*-methyl-1-deoxyojirimycin, 1442  
 Na,K-ATPase, saturable binding, 1607  
 naphthoic acid derivative, 82  
 naproxen, enteric-coated tablets, 1436  
 nasal absorption, 1184  
 nasal cytochrome P-450, 1  
 nasal delivery, polyvinyl alcohol, 1330  
 nasal metabolism, 1  
 nasal peptide delivery, 626  
 nicardipine, 1518  
 nicotine TTS, transdermal pharmacokinetics, 1451  
 nicotine, transdermal, pharmacodynamics, 1451  
 nifedipine, alcohol interaction, 683  
 nifedipine, pharmacokinetics, 683  
 nitration, methods and mechanism, 586  
 nitrofurantoin monohydrate, 307  
 nitrofurantoin, anhydrate, dissolution kinetics, 307  
 nitroglycerin, 1460  
 nitroglycerin, cutaneous metabolism, 187, 303  
 nitroglycerin, transdermal, 1284  
 NMR methods, drug design, 966  
 nonsteroidal antiinflammatory drugs (NSAIDs), extended release, 206  
 nordazepam, excretion in milk, 1299
- octanol-water partition coefficient, 504  
 octreotide, 52  
 ocular drug delivery, mucoadhesion, 1137  
 oleic acid, monoolein, emulsions, 1024  
 oligonucleotides, 441  
 osmotic pumps, 1664  
 ouabain, binding to Na,K-ATPase, 474  
 ouabain, kinetic modeling, 1607  
 ouabain, tissue binding, 474  
 oxantazole, magnetic microspheres, 390  
 oxidative decomposition, 5-aminosalicylic acid, 933
- p*-aminohippurate, 271  
*p*-chloro-*m*-xylenol (PCMX), pharmacokinetics, 677  
 pain, intravenously injected substances, 182  
 palmitoyl L-carnitine, 191  
 particle size, characterization, 856  
 pentachlorophenol, toxicokinetics, 1053  
 peptide analogues, intestinal absorption, 320  
 peptide bioavailability, 535  
 peptide drugs delivery, 260  
 peptide drugs, conjunctival penetration, 769  
 peptide drugs, metabolism, 969  
 peptide mapping, 1386

- peptide transporter, 969  
peptide, nasal absorption, 1362  
peptide, permeability, 435  
peptide, transport, 435  
peptides, absorption, 1103  
peptides, intestinal absorption, 320  
percutaneous absorption, 5-iodouracil, 1410  
percutaneous absorption, 1546, 1550  
percutaneous absorption, age, 884  
perfluorocarbon, centrifugation, emulsification, stability, 406  
permeability, membrane, 1029  
permselectivity, membrane, 1029  
pH-rate profile, ICRF-187, 1209  
phagocytosis, suppression, 1177  
pharmaceutical gel formulation, 1659  
pharmacokinetic model, discontinuous GI absorption, 350  
pharmacokinetic studies, 588  
pharmacokinetic/dynamic correlation, fenoterol, 291  
pharmacokinetics experimental design, 169  
pharmacokinetics, amoxicillin, 920  
pharmacokinetics, compartmental and noncompartmental, 17  
pharmacokinetics, drug absorption, 161  
pharmacokinetics, HIV, drugs, 224  
pharmacokinetics, human relaxin, 419  
pharmacokinetics, ketoprofen, 915  
pharmacokinetics, pulmonary delivered insulin, 764  
phenobarbital, chronic administration, 908  
phenobarbital, metabolism, 1633  
phenobarbital, pharmacodynamics, 1295  
phenobarbital, pharmacodynamics-pharmacokinetics, aging, 1456  
phenothiazine derivative, 845  
phenylpropanolamine hydrochloride, 255  
phenytoin, protein binding, 155  
phosphate esters, 497  
phosphinic acid dipeptide analogue, 626  
phosphomonoester prodrugs, 497  
pilocarpine derivatives, water soluble, 372  
pilocarpine, analysis, 1219  
pilocarpine, pharmacokinetics, pharmacodynamics, 1064  
pilocarpine, prodrugs, 372  
plasmid DNA, 1235  
plasticizers, 1648  
poisson distribution, random mixtures, 385  
poly ( $\epsilon$ -caprolactone), chemical stability, 200  
poly(D,L-lactide), chemical stability, 200  
poly(DL-lactic acid) tablets, 26  
poly(L-lactic acid) microspheres, 149  
poly(L-lactic acid), 37  
poly(vinyl alcohol) beads, composite, 10  
polyacrylic nanoparticles, 1534  
polyalkylcyanoacrylate, nanoparticles, 441  
polyalkylcyanoacrylates, 782  
polyanhydrides erosion, 1279  
polybasic gels, swelling kinetics, 76  
polycarboxiphil, 70  
polyelectrolyte gel beads, 1268  
polyethylene-imine, 37  
polymer-coated vesicles, 1137  
polymeric surfactants, 1177  
polyvinyl alcohol, microparticles, 1330  
powder mixing, 385  
powdered solution technology, 1351  
probenecid, 228  
progesterone, pharmacokinetics, 1502  
proliposomes, mixed micelles, 1556  
propranolol hydrochloride, degradation, 312  
propranolol, sustained delivery, 1507  
prostaglandin E<sub>1</sub>, NMR, 575  
protein release, 37  
protein-peptide interactions, 990  
pseudolatex, 200  
pulmonary absorption, terbutaline, 220  
pulse polarography, 582  
pyelonephritis, experimental, 1252  
R(+)-and S(-)-2-*n*-propyl-4-pentynoic acid, 850  
radioligand binding, 1474  
radioreceptor assay, mepirodipine, 1227  
ranitidine, site of absorption, 1190  
receptor binding pocket, 1644  
receptor-mediated endocytosis, 1394  
recombinant interleukin-2, 425  
rectal delivery, droperidol, 694  
relaxin, pharmacokinetics, 419  
renin inhibitor, nasal delivery, 1024  
renin inhibitor, oral delivery, 888  
reptile venom, 1231  
resorfin, 1099  
salmon calcitonin, degradation, 1521  
salts of *p*-aminosalicylic acid, 1428  
samarium-153, 1436  
self-emulsifying drug delivery systems, 87  
shape analysis, 856  
shed snake skin, permeability, 1168  
silicone elastomer dispersion, 398  
simvastatin, plasma levels, 1629  
site-directed mutagenesis, 1644  
skin metabolism, 187  
skin penetration, 1215  
skin permeability, 663  
skin pharmacology and toxicology, 585  
skin transport enhancement, 1035  
sodium 5-(4-oxo-phenoxy-4H-quinolizine-3-carboxamide)-tetrazolate, 138  
sodium caprate, absorption enhancer, 648  
sodiumtaurodihydrofusidate, absorption enhancer, 52  
solid state stability, drugs, 939  
sonophoresis, 559  
sonophoresis, 1043  
statistical power calculations, 601  
steady state volume, 17  
stereoselective enzymatic hydrolysis, 492  
sterility of the interior microcapsules, 410  
submicron emulsions, 1347  
sucrose, freeze dried, 109  
surface free energy, microadhesion, 70  
sustained-release, propranolol, 1507  
Sweetana-Grass diffusion cells, 316  
swelling kinetics, polybasic gels, 76  
swelling-controlled drug release, 195  
tableting indices, 26  
taurocholate uptake, 1152  
teniposide, 1556  
terbutaline, ionized, 1035  
terbutaline, release rate, 220  
testosterone, metabolism, 1290  
tetrachlorohydroquinone, 1053  
theophylline, microdialysis, 1592  
theophylline-containing curdlan tablets, 414  
therapeutic products, 1107  
thermal stability, salts of *p*-aminosalicylic acid, 1428  
thermodynamic activity, cholesterol, 792  
thymidine analogues, metabolism, 326  
thyrotropin releasing hormone, 1113  
tobramycin, implantable dosage form, 993  
tomato lectin, bioadhesion, 547  
tomato lectin, specific binding, 547  
topical drug delivery, 1422  
topical vehicle formulation, 1546  
torque, 1525  
transdermal delivery, etorphine, 963  
transdermal drug delivery, 559, 1550  
transdermal drug delivery, ultrasound enhanced, 1043  
transdermal penetration enhancers, 1168  
transepithelial electrical resistance (TEER), 316  
transport pathways, 1113  
triamcinolone acetonide, 1359

trichlormethiazide, 607  
tricyclic antidepressants, 94  
trilostane, pharmacokinetics, 464  
tryptophan fluorescence, 990  
tumor necrosis factor, 33

**UNIFAC, 788**

uranyl nitrate acute renal failure, 1599  
urokase, 776

vaginal administration, insulin, 878  
valproate, 1622  
valproic acid, enantiomers, 850

valpromide, pharmacokinetics, 1058  
valpromide, stable analogues, 1058  
vasoactive drugs, 211

X-ray fluorescence spectrometry, 5-iodouracil, 1410  
X-ray photoelectron spectroscopy (XPS), 126  
XE820, 1518

zidovudine distribution, brain, 332  
zidovudine, 224  
zidovudine, pharmacokinetics, 228  
zileuton, degradation, 1465  
zinc binding, fibrolase, 870