

LIST OF CONTENTS

Number 1

iii	Editorial
v	APQ Newsletter
<i>Analytical Survey</i>	
D. T. Burns	1 Cyclodextrins as versatile chiral recognition reagents for use in a variety of optical and separative analyses
<i>Full Papers</i>	
M. J. Lynch, J. Masters, J. P. Pryor, J. C. Lindon, M. Spraul, P. J. D. Foxall and J. K. Nicholson	5 Ultra high field NMR spectroscopic studies on human seminal fluid, seminal vesicle and prostatic secretions
M. G. Donato, W. Baeyens, W. van den Bossche and P. Sandra	21 The determination of non-steroidal antiinflammatory drugs in pharmaceuticals by capillary zone electrophoresis and micellar electrokinetic capillary chromatography
A. F. Casy	27 Rapid identification of ergot derivatives by ¹ H-NMR spectroscopy
A. F. Casy	41 Mass spectrometry as an aid to the identification of ergots and dihydroergots: comparison of hard and soft ionization techniques
P. Ballard, M. D. Malone and B. Law	47 The use of competitive displacement agents to resolve albumin binding problems observed during the development of a radioimmunoassay for ICI 215001
K. Ensing, I. J. Bosman, A. C. G. Egberts, J. P. Franke and R. A. de Zeeuw	53 Application of radioreceptor assays for systematic toxicological analysis—1. Procedures for radioreceptor assays for antihistaminics, anticholinergics and benzodiazepines
K. Ensing, I. J. Bosman, A. C. G. Egberts, J. P. Franke and R. A. de Zeeuw	59 Application of radioreceptor assays for systematic toxicological analysis—2. Theoretical considerations and evaluation
T. J. Siahhaan and K. Lutz	65 Conformational study of cyclo[Gln-Trp-Phe-Gly-Leu-Met] as NK-2 antagonist by NMR and molecular dynamics
I. I. Hewala	73 Gas-liquid chromatographic and difference spectrophotometric techniques for the determination of benzaldehyde in benzyl alcohol
J. Prat, M. Pujol, V. Girona, M. Muñoz and L.-A. Solé	81 Stability of carboplatin in 5% glucose solution in glass, polyethylene and polypropylene containers
B. R. Thomas, X. G. Fang, P. Shen and S. Ghodbane	85 Mixed ion pair liquid chromatography method for the simultaneous assay of ascorbic acid, caffeine, chlorpheniramine maleate, dextromethorphan HBr monohydrate and paracetamol in Frenadol™ sachets
A. M. Di Pietra, R. Gotti, D. Bonazzi, V. Andrisano and V. Cavrini	91 HPLC determination of glutathione and L-cysteine in pharmaceuticals after derivatization with ethacrynic acid
M. A. Faouzi, T. Dine, M. Luyckx, F. Goudaliez, M. L. Mallevais, B. Gressier, C. Brunet, M. Cazin and J. C. Cazin	99 Stability and compatibility studies of cephamandole nafate with PVC infusion bags
K. Wang, R. W. Blain and A. J. Szuna	105 Multidimensional narrow bore liquid chromatography analysis of Ro 24-0238 in human plasma
J.-F. Chaulet, G. Grelaud, P. Bellemin-Magninot, C. Mounier and J.-L. Brazier	111 Simultaneous determination of chloroquine, proguanil and their metabolites in human biological fluids by high-performance liquid chromatography
P. Thongnopnua and K. Viwatwongsa	119 Quantitative analysis of nifedipine in plasma by high-performance liquid chromatography

<i>Short Communications</i>	
M. Bodiroga, D. Agbaba, D. Zivanov-Stakic and R. Popovic	127
S. Kumbhat	131
D. R. Rutledge, A. H. Abadi and L. M. Lopez	135
P. Nebinger and M. Koel	141

Number 2

<i>Full Papers</i>	
J.-R. Lin, N. S. Brown, R. A. Newman and D. H. Ho	145
I. Panderi and M. Parissi-Poulou	151
D.-S. Lee, H.-J. Han, K. Kim, W.-B. Park, J.-K. Cho and J.-H. Kim	157
R. Andersin, J. Ovaskainen and S. Kaltia	165
R. Lozano, J. M. Joseph and B. J. Kline	173
M. Eisman, M. Gallego and M. Varcárcel	179
M. S. Boukraa, D. Deruaz, A. Bannier, M. Desage and J. L. Brazier	185
C. M. Grosse, I. M. Davis, R. F. Arrendale, J. Jersey and J. Amin	195
A. N. Abdelrahman, E. I. A. Karim and K. E. E. Ibrahim	205
S. K. Yang	209
X.-Z. Qin, D. P. Ip, K. H.-C. Chang, P. M. Dradransky, M. A. Brooks and T. Sakuma	221
G. Lhoëst, N. Maton, A. Laurent and R. K. Verbeeck	235
K. Selinger, C. Lanzo and A. Sekut	243
C. Kohl, H. Oelschläger and D. Rothley	249
D. M. Morris and K. Selinger	255
H. H. Farrish, P.-H. Hsyu, J. F. Pritchard, K. R. Brouwer and J. Jarrett	265
<i>Short Communications</i>	
P. Gratteri, S. Furlanetto, S. Pinzauti, E. La Porta, P. Mura and G. Santoni	273

- A. Sumathi and V. U. Rao 277 Comparison of accelerated stability data for 5-fluorouracil obtained by a newly developed colorimetric method and by the standard spectrophotometric method
- M. J. Fossler, J. Leslie, M. Burke, J. Devane and D. Young 281 A reversed-phase ion-pair liquid chromatography method for the determination of 4-aminopyridine in Sprague-Dawley rats

Number 3

Review

- T. R. Krishnan and I. Ibrahim 287 Solid-phase extraction technique for the analysis of biological samples
- Full Papers*
- J. W. Jaroszewski and A. Olsson 295 Determination of enantiomeric purity of nicotine in pharmaceutical preparations by ¹³C-NMR in the presence of a chiral lanthanide shift reagent
- R. M. E. Richards and D. K. L. Xing 301 Capillary zone electrophoresis assay of the uridine diphosphate *N*-acetylmuramyl peptide precursors and the disaccharide pentapeptide derivative of bacterial cell wall peptidoglycan
- A. Memoli, L. G. Palermi, V. Travagli and F. Alhaique 307 Effects of surfactants on the spectral behaviour of calcein
- J. L. Vilchez, G. Sánchez-Palencia, R. Avidad and A. Navalón 313 Determination of boldine in drug formulations by first-derivative synchronous spectrofluorimetry
- P. L. Weber, T. J. O'Shea and S. M. Lunte 319 Separation and quantitation of the amino acid neurotransmitters in rat brain by capillary electrophoresis
- H. P. Hendrickson, A. D. Kaufman and C. E. Lunte 325 Electrochemistry of catechol-containing flavonoids
- H. P. Hendrickson, M. Sahafayen, M. A. Bell, A. D. Kaufman, M. E. Hadwiger and C. E. Lunte 335 Relationship of flavonoid oxidation potential and effect on rat hepatic microsomal metabolism of benzene and phenol
- B. V. Kamath, K. Shivram and A. C. Shah 343 Determination of diclofenac sodium, famotidine and ketorolac tromethamine by flow injection analysis using dichloronitrophenol
- E. Kiliç, F. Köseoğlu and M. A. Akay 347 The non-aqueous titrimetric assay of selected antibiotics using tetra-*N*-butylammonium hydroxide as titrant
- D. J. Chapman, S. P. Joel and G. W. Aherne 353 Evaluation of a differential radioimmunoassay technique for the determination of morphine and morphine-6-glucuronide in human plasma
- S. A. Wring, R. M. Rooney, C. P. Goddard, I. Waterhouse and W. N. Jenner 361 A sensitive radioimmunoassay, combined with solid-phase extraction, for the sub-nanogram per ml determination of ondansetron in human plasma
- M. Berrabah, D. André, F. Prévot, A. M. Orecchioni and O. Lafont 373 GC-MS determination of phenobarbitone entrapped in poly-ε-caprolactone nanocapsules
- M. J. Akhtar, S. Khan and M. Hafiz 379 High-performance liquid chromatographic assay for the determination of paracetamol, pseudoephedrine hydrochloride and triprolidine hydrochloride
- S. Torrado, S. Torrado and R. Cadórniga 383 Comparison of assay methods by second-derivative spectroscopy, colorimetry and fluorescence spectroscopy of salicylic acid in aspirin preparations with a high-performance liquid chromatographic method
- S. Miyairi, H. Shimada, N. Awata, J. Goto and T. Nambara 389 Novel immunoaffinity extraction for liquid chromatographic determination of major metabolites of 4-acetoxy-2-(4-methylphenyl) benzothiazole in plasma

T. Shintani, M. Takamoto, M. Sawada, H. Aishita and T. Nakagawa	397	Simultaneous determination of human neutrophil elastase inhibitor (ONO-5046) and its metabolite in plasma and urine by direct injection column-switching HPLC
S. Laganière and L. Goernert	407	Amrinone and <i>N</i> -acetylamrinone assay in human plasma using solid-phase extraction and reversed-phase chromatography
G. Kominami, H. Okabe, K. Imoda and K. Mizojiri	413	Combined high-performance liquid chromatography and radio-immunoassay for ceruletide and its metabolites in dog plasma and urine
<i>Short Communications</i>		
M. J. Seddon, M. Spraul, I. D. Wilson, J. K. Nicholson and J. C. Lindon	419	Improvement in the characterization of minor drug metabolites from HPLC–NMR studies through the use of quantified maximum entropy processing of NMR spectra
A. Witek, P. Zawisza and L. Przyborowski	425	Determination of disopyramide in plasma by high-performance liquid chromatography
M. Koel and P. Nebinger	429	HPLC determination of serum ganciclovir using ultrafiltration, ultraviolet and fluorescence detection

Number 4

<i>Review</i>		
H. A. H. Rongen, R. M. W. Hoetelmans, A. Bult and W. P. van Bennekom	433	Chemiluminescence and immunoassays
<i>Full Papers</i>		
M. Moors, B. Steenssens, I. Tielemans and D. L. Massart	463	Solid-phase extraction of small drugs on apolar and ion-exchanging silica bonded phases: towards the development of a general strategy
T. F. Greber, T. V. Olah, J. D. Gilbert, A. G. Porras and M. Hichens	483	Determination of L-691, 121, a new Class III antiarrhythmic, and its principal metabolite in plasma by differential radioimmunoassay
K. C. Jindal, R. S. Chaudhary, A. K. Singla, S. S. Gangwal and S. Khanna	493	Dissolution test method for rifampicin–isoniazid fixed dose formulations
S. Levin and G. Tawil	499	Effect of surfactants on the diffusion coefficients of proteins, measured by analytical SPLITT fractionation (ASF) in the diffusion mode
M. Blanco, J. Coello, F. González, H. Iturriaga, S. Maspoch and X. Tomás	509	Spectrophotometric determination of pharmaceutical dosages by partial least-squares calibration
A. G. Barbone, B. Aparicio, D. W. Anderson, J. Natarajan and D. M. Ritchie	515	Reticulocyte measurements as a bioassay for erythropoietin
J. L. Burrows and K. V. Watson	523	Development and application of a calibration regression routine in conjunction with linear and non-linear chromatographic detector responses
H. Changqin, J. Shaohong and W. Kaimin	533	The chromatographic behaviour of cephalosporins in gel filtration chromatography, a novel method to separate high molecular weight impurities
L. Mälkki-Laine and A. P. Bruins	543	Structural characterization of the decomposition products of salbutamol by liquid chromatography–ionspray mass spectrometry
W. Naidong and J. W. Lee	551	Development and validation of a liquid chromatographic method for the quantitation of ibuprofen enantiomers in human plasma
N. Mano, Y. Oda, H. Ohe, N. Asakawa, Y. Yoshida and T. Sato	557	Resolution of 4-(4-chlorobenzyl)-2-(hexahydro-1-methyl-1H-azepin-4yl)-1 (2H)-phthalazinone enantiomers in plasma with frit-FAB LC–MS using a conalbumin column

Short Communications

- W.-N. Wu and J. A. Masucci 569 Identification of two new suprofen metabolites in human urine
- J. P. Zodda, J. A. Monteferrante and M. N. Eakins 573 Separation and simultaneous determination of methyl paraben and propyl paraben in Choletec® (kit for the preparation of Tc-99m mebrofenin) by high-performance liquid chromatography
- I Announcements

Number 5

Review

- N. W. Smith and M. B. Evans 579 Capillary zone electrophoresis in pharmaceutical and biomedical analysis

Full Papers

- M. Spraul, J. K. Nicholson, M. J. Lynch and J. C. Lindon 613 Application of the one-dimensional TOCSY pulse sequence in 750 MHz ¹H-NMR spectroscopy for assignment of endogenous metabolite resonances in biofluids
- M. C. Linhares and P. T. Kissinger 619 Pharmacokinetic studies using microdialysis probes in subcutaneous tissue: effects of the co-administration of ethanol and acetaminophen
- J. A. Murillo and A. Alañón 629 New rapid assay for methicillin by spectrofluorimetry in pharmaceutical dosage forms
- C. A. Georgiou, G. N. Valsami, P. E. Macheras and M. A. Koupparis 635 Automated flow-injection technique for use in dissolution studies of sustained-release formulations: application to iron(II) formulations
- G. S. Clarke 643 The validation of analytical methods for drug substances and drug products in UK pharmaceutical laboratories
- A. Parra, J. Garcia-Villanova, V. Rodenas and M. D. Gomez 653 First and second derivative spectrophotometric determination of cefoperazone and sulbactam in injections
- D. Lessard, B. Comeau, A. Charlebois, L. Letarte and I. M. Davis 659 Quantification of GR90291 in human blood by high resolution gas chromatography-mass selective detection (HRGC-MSD)
- E. I. A. Karim, K. E. E. Ibrahim, A. N. Abdelrahman and A. F. Fell 667 Photodegradation studies on chloroquine phosphate by high-performance liquid chromatography
- P. D. Bryan and J. T. Stewart 675 Chromatographic analysis of selected tetracyclines from dosage forms and bulk drug substance using polymeric columns with acidic mobile phases
- A. A. Nomeir, M. F. McComish, A. L. Mongan, J. M. Covey and N. F. Ferrala 693 Liquid chromatographic analysis, stability and protein binding studies of the anti-HIV agent benzoic acid, 2-chloro-5[[[1-methylethoxy]thioxomethyl]amino]-,1-methylethyl ester
- J. M. Lim, H. Kim, A. Marco, P. Mojaverian and C.-C. Lin 699 Liquid chromatographic determination of ceftibuten, a new oral cephalosporin, in human plasma and urine
- T. V. Olah, J. D. Gilbert, A. Barrish, T. F. Greber and D. A. McLoughlin 705 A rapid and specific assay, based on liquid chromatography-atmospheric pressure chemical ionization mass spectrometry, for the determination of MK-434 (a 5 α -reductase inhibitor) and its metabolites in plasma
- Short Communications*
- G. W. Ponder and J. T. Stewart 713 Recovery of digoxin and related glycosides from an injection dosage form by liquid-liquid and solid-phase extraction
- L. S. Wigman, H. Abdel-Kader and G. K. Menon 719 Size exclusion chromatography of poloxalene poloxamers: polyethylene glycol-polypropylene glycol co-polymers used to control cattle bloat

Number 6

- Review*
 J. Šmisterová, K. Ensing and R. A. De Zeeuw 723 Methodological aspects of quantitative receptor assays
- Full Papers*
 A. R. Lee and T. M. Hu 747 Determination of guaiphenesin in anti-tussive pharmaceutical preparations containing dextromethorphan by first- and second-derivative ultraviolet spectrophotometry
- M. Heuermann and G. Blaschke 753 Simultaneous enantioselective determination and quantification of dimethindene and its metabolite *N*-demethyl-dimethindene in human urine using cyclodextrins as chiral additives in capillary electrophoresis
- M. R. Euerby, C. M. Johnson, R. J. Lewis and S. C. Nichols 761 The S-oxidative degradation of a novel corticosteroid tipredane (INN). Part II—Detailed investigations into the primary S-oxidation of tipredane using achiral oxidants
- L. A. McKown, W.-N. Wu and P. J. O'Neill 771 Characterization and identification of the metabolites of fenoctimine using *in vitro* drug metabolizing systems
- K. Raghavan, A. Dwivedi, G. C. Campbell Jr, G. Nemeth and M. A. Hussain 777 A spectroscopic investigation of DuP 747 polymorphs
- Z. Yu, Y. Xu and M. P. C. Ip 787 An ultra-sensitive electrochemical enzyme immunoassay for thyroid stimulating hormone in human serum
- S. Chishima 795 A radioimmunoassay for TA-0910, a new metabolically stable thyrotrophin-releasing hormone analogue
- L. Valvo, A. Paris, A. L. Savella, B. Gallinella and E. Ciranni Signoretti 805 General high-performance liquid chromatographic procedures for the rapid screening of natural and synthetic corticosteroids
- J. Cummings, A. MacLellan, S. P. Langdon and J. F. Smyth 811 Stability and *in vitro* metabolism of the mitogenic neuropeptide antagonists [D-Arg¹, D-Phe⁵, D-Trp^{7,9}, Leu¹¹]-substance P and [Arg⁶, D-Trp^{7,9}, MePhe⁸]-substance P (6-11) characterized by high-performance liquid chromatography
- V. Brizzi and D. Corradini 821 Rapid analysis of somatostatin in pharmaceutical preparations by HPLC with a micropellicular reversed-phase column
- G. A. Jacobson and G. M. Peterson 825 High-performance liquid chromatographic assay for the simultaneous determination of ipratropium bromide, fenoterol, salbutamol and terbutaline in nebulizer solution
- M. Girard, K. Hannah, J. A. Menzies, G. Solomonraj and L. W. Whitehouse 833 Reversed-phase LC assay method for deoxycholate in influenza vaccine
- K. Kobayashi, K. Chiba, M. Tani, Y. Kuroiwa and T. Ishizaki 839 Development and preliminary application of a high-performance liquid chromatographic assay for omeprazole metabolism in human liver microsomes
- W. Naidong, A. M. Dzerk and J. W. Lee 845 Development and validation of an LC method for the quantitation of carbenicillin in human serum
- Short Communication*
 K. M. Wasan, A. C. Hayman and G. Lopez-Berestein 851 Determination of dimyristoylphosphatidylglycerol in human serum by liquid-liquid extraction and reversed-phase liquid chromatography

Number 7

- Full Papers*
 A. F. Casey and G. H. Dewar 855 Captopril and its probable contaminants: NMR and MS features of analytical value

J. Russell, J. Ness, M. Chopra, J. McMurray and W. E. Smith	863	The assessment of the HO· scavenging action of therapeutic agents
M. Salo, S. Sarna and H. Vuorela	867	Statistical evaluation of molecular descriptors and quantitative structure–property relationship studies of retinoids
J. A. Murillo, J. M. Lemus and L. F. García	875	Spectrofluorimetric analysis of cefuroxime in pharmaceutical dosage forms
Z. G. de Balugera, M. A. Goicolea and R. J. Barrio	883	Joint determination of todralazine and acetazolamide in human serum by differential pulse polarography
A. Kiss, J. Répási, Z. Salamon, Cs. Novák, G. Pokol and K. Tomor	889	Solid state investigation of mefloquine hydrochloride
I. Mahmood, S. H. Neau and W. D. Mason	895	An enzymatic assay for the MAO-B inhibitor selegiline in plasma
A. Van Overbeke, W. Baeyens, W. Van Den Bossche and C. Dewaele	901	Separation of 2-arylpropionic acids on a cellulose based chiral stationary phase by RP-HPLC
A. Van Overbeke, W. Baeyens, W. Van Den Bossche and C. Dewaele	911	Enantiomeric separation of amide derivatives of some 2-arylpropionic acids by HPLC on a cellulose-based chiral stationary phase
V. Ulvi and H. Keski-Hynnälä	917	First-derivative UV spectrophotometric and high-performance liquid chromatographic analysis of some thiazide diuretics in the presence of their photodecomposition products
R. O. Epemolu, R. Ackerman, J. B. Porter, R. C. Hider, L. A. Damani and S. Singh	923	HPLC determination of 1,2-diethyl-3-hydroxypyridin-4-one (CP94), its iron complex [Fe(II) (CP94) ₃] and glucuronide conjugate [CP94-GLUC] in serum and urine of thalassaemic patients
F. Benhamou-Batut, F. Demotes-Mainard, L. Labat, G. Vinçon and B. Bannwarth	931	Determination of flunitrazepam in plasma by liquid chromatography
H. P. J. M. Noteborn, F. J. Varossieau, M. Monshouwer, R. Brands and H. M. Pinedo	937	A reversed-phase high-performance liquid chromatographic method for the determination of Clanfenur in rat and human plasma
K. Gumbhír and W. D. Mason	943	Determination of <i>m</i> -hydroxymandelic acid, <i>m</i> -hydroxyphenylglycol and their conjugates in human plasma using liquid chromatography with electrochemical detection
<i>Short Communications</i>		
A. Z. M. Wahbi, E. M. Hassan and A. A. Gazy	951	Use of isosbestic points of derivative absorption curves: the dissolution rate determination of Aspirin
F. A. Aly, F. Belal and M. I. Walsh	955	Colorimetric determination of prenaloterol hydrochloride in dosage forms

Number 8

Papers from the Eighth Annual American Association of Pharmaceutical Scientists Meeting, November 1993, Orlando, Florida, USA

	959	Editorial
A. A. Srigritsanapol and K. K. Chan	961	A rapid method for the separation and analysis of leaked and liposomal entrapped phosphoramidate mustard in plasma
J.-S. Chiou and I. Ueda	969	Ethanol unfolds firefly luciferase while competitive inhibitors antagonize unfolding: DSC and FTIR analyses
I. Jääskeläinen and A. Urtti	977	Liquid chromatography determination of liposome components using a light-scattering evaporative detector

- E. W. Tsai, S. D. Chamberlin,
R. J. Forsyth, C. Bell, D. P. Ip and
M. A. Brooks 983 Determination of bisphosphonate drugs in pharmaceutical dosage
formulations by ion chromatography with indirect UV detection
- K. P. Shah, J. Zhou, R. Lee,
R. L. Schowen, R. Elsbernd, J. M. Ault,
J. F. Stobaugh, M. Slavik and C. M. Riley 993 Automated analytical systems for drug development studies.
I—A system for the determination of drug stability
- General Papers*
- J. T. B. Strode III, L. T. Taylor,
A. L. Howard, D. Ip and M. A. Brooks 1003 Analysis of felodipine by packed column supercritical fluid chroma-
tography with electron capture and ultraviolet absorbance detection
- E. M. Chellquist, R. Searle, D. L. Ladd
and R. K. Hollister 1015 Binding constant determination of WIN 22169, a novel polymeric
ligand
- P. Amorusi, D. Lessard, S. K. Bansal,
K. Selinger, A. Yacobi and A. P. Tonelli 1023 Analysis of enloplatin by liquid chromatography and of platinum
by atomic absorption spectrometry in various biological fluids
- Z. Shahrokhi, G. Eberlein and
Y. J. Wang 1035 Probing the conformation of protein (bFGF) precipitates by fluor-
escence spectroscopy
- L.-S. Wu, C. Gerard, C. Koval,
S. Rowe and M. A. Hussain 1043 Crystallinity, hygroscopicity and dissolution of moricizine hydro-
chloride hemihydrate
- E. L. Hand, J. D. Gilbert, A. S. Yuan,
T. V. Olah and M. Hichens 1047 Determination of MK-383, a non-peptide fibrinogen receptor
antagonist, in human plasma and urine by radioimmunoassay
- Short Communication*
- D. C. Rakestraw, D. A. Bilski and
G. N. Lam 1055 Determination of linopirdine and its N-oxide metabolites in rat
plasma by liquid chromatography

Number 9

- Full Papers*
- R. M. E. Richards and D. K. L. Xing 1063 Determination of thymidine, uracil and *p*-aminobenzoic acid in
bacteriological cultures by capillary zone electrophoresis
- D. Boyd, J. R. B. Rodríguez, P. T. Blanco
and M. R. Smyth 1069 Application of a Nafion-modified carbon paste electrode for the
adsorptive stripping voltammetric determination of fenoterol in
pharmaceutical preparations and biological fluids
- R. G. Dickinson, A. R. King, M. A. Kelly,
I. A. Kaltashov and C. Fenselau 1075 Excretion of 3-hydroxy-diflunisal as a monosulphate conjugate—
identification using ESI-MS
- V. Doyle and R. Devery 1079 A direct two-site peroxidase-based enzyme-linked immunosorbent
assay for proinsulin
- S. Luterotti and D. Maysinger 1083 Chemiluminometric determination of choline-related substances
in pharmaceutical preparations by dot-blot
- P. Saini, J. C. K. Lai and D. R. Lu 1091 FT-IR measurement of mercaptoundecahydrododecaborate in
human plasma
- M. C. Mahedero, F. Salinas and
J. J. Aaron 1097 Determination of sulphanilamide in milk by first-derivative and
second-derivative spectrofluorimetry
- L. E. Bennett, W. N. Charman,
D. B. Williams and S. A. Charman 1103 Analysis of bovine immunoglobulin G by capillary gel electro-
phoresis
- T. Pérez-Ruiz, C. M. Lozano and
V. Tomás 1109 Flow-injection determination of Novalgine using amperometric
detection at a glassy carbon electrode
- S. Levin, E. Klausner and
S. Muchtar 1115 Characterization of submicron MCT o/w emulsions using sedimen-
tation field-flow fractionation (FFF) with power field programming
- A. Marsh and M. B. Evans 1123 Radioimmunoassay of drugs of abuse in hair. Part 1: Methadone in
human hair, method adaptation and the evaluation of decontam-
ination procedures

- Z. H. Mohamed, S. M. Amer and A. M. El-Kousasy 1131 Colorimetric determination of cyclophosphamide and ifosfamide
- Zhu Yongxin, C. Hendrix, R. Busson, G. Janssen, E. Roets and J. Hoogmartens 1137 Isolation and structural elucidation of an impurity of cefradine
- D. Korakas, K. Valkó, C. Sakarellos, M. Sakarellos-Daisiotis and W. A. Gibbons 1141 Analytical and semi-preparative separation of diastereomeric lipidic amino acid conjugates
- H. Wakabayashi, S. Yamato, M. Nakajima and K. Shimada 1147 Application of an electrochemical detector with a graphite electrode to liquid chromatographic determination of penicillamine and captopril in biological samples
- M. J. Priston and G. J. Sewell 1153 Improved LC assay for the determination of mitozantrone in plasma: analytical considerations
- C. M. Lai, B. Brogdon, C. Y. Quon and H. J. Pieniaszek Jr 1163 Determination of DuP 128, an ACAT inhibitor and its sulphoxide and sulphone metabolites in human plasma by liquid chromatography
- A. R. Wafelman, M. C. P. Konings, H. Rosing, C. A. Hoefnagel, B. G. Taal, R. A. A. Maes and J. H. Beijnen 1173 High-performance liquid chromatographic determination of meta-iodobenzylguanidine in whole blood and plasma of cancer patients
- G. S. Murkitt, E. Z. Trafankowska, M. Dunne and G. R. Manchee 1181 Fully automated assay for the determination of GR117289X in human plasma using mixed mode solid-phase extraction and high-performance liquid chromatography with ultraviolet detection
- C. Pham-Huy, A. Sahui-Gnassi, V. Saada, J. P. Gramond, H. Galons, S. Ellouk-Achard, V. Levrès, D. Fompeydie and J. R. Claude 1189 Microassay of propranolol enantiomers and conjugates in human plasma and urine by high-performance liquid chromatography after chiral derivatization for pharmacokinetic study
- Short Communications*
- J. S. Millership 1199 Interference of mandelic acid with the determination of homatropine hydrobromide by second-order derivative spectroscopy
- R. Bouliou and N. Bleyzac 1205 Stability of ganciclovir in blood samples
- M. A. El-Ries, F. M. Abou Attia, F. M. Abdel-Gawad and S. M. Abu El-Wafa 1209 Preparation and characterization of Cu(II)-lignocaine complex. Indirect estimation of lignocaine in pharmaceutical preparations by atomic absorption spectroscopy (AAS)

Number 10

Full Papers

- M. Spraul, P. Neidig, U. Klauck, P. Kessler, E. Holmes, J. K. Nicholson, B. C. Sweatman, S. R. Salman, R. D. Farrant, E. Rahr, C. R. Beddell and J. C. Lindon 1215 Automatic reduction of NMR spectroscopic data for statistical and pattern recognition classification of samples
- W. N. Moore and L. T. Taylor 1227 Analytical inverse supercritical fluid extraction of polar pharmaceutical compounds from cream and ointment matrices
- P. C. Sontum and C. Christiansen 1233 Precision and accuracy of analysis of air-filled albumin microspheres using Coulter Multisizer Mark II
- R. J. Forsyth and D. P. Ip 1243 Determination of imipenem and cilastatin sodium in Primaxin® by first order derivative ultraviolet spectrophotometry
- P. C. Gunaratna, G. S. Wilson and M. Slavik 1249 Pharmacokinetic studies of α -difluoromethylornithine in rabbits using an enzyme-linked immunosorbent assay
- K. Raghavan, G. Nemeth, D. Gray and M. A. Hussain 1259 Stabilization of an anthrapyrazole antitumour agent, DuP 937, on complexation with heptakis(2,6-di-O-methyl)- β -cyclodextrin in aqueous solution

T. Roy	1265	Fitting a straight line when both variables are subject to error: pharmaceutical applications
S. Scypinski and A. J. Ross	1271	Liquid chromatographic separation of zalcitabine and its stereoisomers
T. A. Walker	1277	A liquid chromatographic assay for urea in over-the-counter carbamide peroxide products
H. F. Deutsch, M. A. Evenson, P. Drescher, C. Sparwasser and P. O. Madsen	1283	Isolation and biological activity of aspidospermine and quebrachamine from an <i>Aspidosperma</i> tree source
J. Cummings, H. Fielding and W. R. Miller	1289	Pharmaceutical analysis of 8-chloroadenosine 3', 5'-monophosphate
L. Šoltés, B. Sébille and P. Szalay	1295	Propafenone binding interaction with human α_1 -acid glycoprotein: assessing experimental design and data evaluation
R. L. Tacey, W. J. Harman and L. L. Kelly	1303	Development of a highly sensitive and specific assay for plasma ethinylestradiol using combined extraction, liquid chromatography and radioimmunoassay
A. K. Seneviratne, A. L. Jayewardene and J. G. Gambertoglio	1311	Paired ion reversed-phase HPLC assay for the determination of iothalamic acid and para aminohippuric acid in urine
V. K. Dua, R. Sarin and V. P. Sharma	1317	Sulphadoxine concentrations in plasma, red blood cells and whole blood in healthy and <i>Plasmodium falciparum</i> malaria cases after treatment with Fansidar using high-performance liquid chromatography
<i>Short Communications</i>		
D. L. Ross and C. M. Riley	1325	Dissociation and complexation of the fluoroquinolone antimicrobials—an update
P. Damiani, G. Ibáñez and A. C. Olivieri	1333	Zero-crossing first and second derivative synchronous fluorescence spectroscopic determination of aspirin metabolites in urine

Number 11

<i>Analytical Survey</i>		
C. Hartmann, D. L. Massart and R. D. McDowall	1337	An analysis of the Washington Conference Report on bioanalytical method validation
<i>Full Papers</i>		
J. M. Schuette, D. L. Cole and G. S. Srivatsa	1345	Development and validation of a method for routine base composition analysis of phosphorothioate oligonucleotides
E. Tarelli, P. H. Corran, B. R. Bingham, H. Mollison and R. Wait	1355	Lysine vasopressin undergoes rapid glycation in the presence of reducing sugars
R. Nellore and H. R. Bhagat	1363	Development and validation of capillary electrophoresis assay for Ribonuclease A
K. Takács-Novák, A. Avdeef, K. J. Box, B. Podányi and G. Szász	1369	Determination of protonation macro- and microconstants and octanol/water partition coefficient of the antiinflammatory drug niflumic acid
J. O. De Beer, C. V. Vandenbroucke and D. L. Massart	1379	Experimental design for the rapid selection of separation conditions for methyl and propyl parahydroxybenzoate, phenylephrine hydrochloride and chlorphenamine maleate by ion-pair liquid chromatography
Y. Sugawara and S. Nakamura	1397	Positive ion EI mass spectra of 2,3,5-trisubstituted-1,5-benzothiazepines, diltiazem, clentiazem and their fat-soluble metabolites
J. M. López, M. Redondo, T. Téllez and M. Morell	1411	A sensitive enzyme immunoassay for angiotensin II in serum

- M. I. Walash, F. Belal, M. E. Metwally and M. M. Hefnawy 1417 A selective fluorimetric method for the determination of some 1,4-benzodiazepine drugs containing a hydroxyl group at C-3
- L. W. Whitehouse, A. Menzies, B. Dawson, T. D. Cyr, A. W. By, D. B. Black and J. Zamecnik 1425 Mouse hepatic metabolites of ketoconazole: isolation and structure elucidation
- J. Hempenius, G. Hendriks, J. Hingstman, C. K. Mensink, J. H. G. Jonkman and C. C. Lin 1443 An automated analytical method for the determination of felbamate in human plasma by robotic sample preparation and reversed-phase high performance liquid chromatography
- M. J. McNulty, T. L. Page and D. L. Deal 1453 Development and validation of a chiral LC method for analysis of the four stereoisomers of 1045U85 in plasma
- D. Fabre, F. Bressolle, J. M. Kinowski, O. Bouvet, F. Paganin and M. Galtier 1463 A reproducible, simple and sensitive HPLC assay for determination of ofloxacin in plasma and lung tissue. Application in pharmacokinetic studies
- Short Communication*
- J. L. del Estal, M. L. Alvarez-Bujidos, R. Balaña Fouce, D. Ordóñez and J. G. Prieto 1471 The intestinal absorption of Luxabendazole in rats

Number 12

Full Papers

- L.-G. Danielsson and Zhang Yu-Hui 1475 Mechanized determination of *n*-octanol/water partition constants using liquid-liquid segmented flow extraction
- J. W. Muritu, I. O. Kibwage, C. K. Maitai and J. Hoogmartens 1483 Evaluation of tetracycline raw materials and finished products found on the Kenyan market
- S. Y. Monté, I. Ismail, D. N. Mallett, C. Matthews and R. J. N. Tanner 1489 The minimal metabolism of inhaled 1,1,1,2-tetrafluoroethane to trifluoroacetic acid in man as determined by high sensitivity ¹⁹F nuclear magnetic resonance spectroscopy of urine samples
- M. Foradada, M. Gallardo and J. Estelrich 1495 Design and applications of a new fluorimetric assay of thioguanine in liposomes
- K. Lohner, A. C. Sen, R. Pranker, A. F. Esser and J. H. Perrin 1501 Effects of drug-binding of the thermal denaturation of human serum albumin
- S. K. Branch, U. Holzgrabe, T. M. Jefferies, H. Mallwitz and M. W. Matchett 1507 Chiral discrimination of phenethylamines with β -cyclodextrin and *heptakis*(2,3-di-O-acetyl) β -cyclodextrin by capillary electrophoresis and NMR spectroscopy
- K. P. Shah, Ming Chang and C. M. Riley 1519 Automated analytical systems for drug development studies. II—A system for dissolution testing
- J. S. Grundy, R. Kherani and R. T. Foster 1529 Photostability determination of commercially available nifedipine oral dosage formulations
- G. Egginger, W. Linder, G. Brunner and K. Stoschitzky 1537 Direct enantioselective determination of (R)- and (S)-propranolol in human plasma. Application to pharmacokinetic studies
- H. Tsuchiya, S. Ohtani, K. Yamada, N. Takagi and T. Hayashi 1547 Determination of tetrahydro- β -carbolines in urine by high performance liquid chromatography with suppression of artefact formation
- J. Y.-K. Hsieh, C. Lin, B. K. Matuszewski and M. R. Dobrinska 1555 Fully automated methods for the determination of hydrochlorothiazide in human plasma and urine
- G. S. N. Lau and J. A. J. H. Critchley 1563 The estimation of paracetamol and its major metabolites in both plasma and urine by a single high-performance liquid chromatography assay

Short Communications

- S. A. Wring, R. M. O'Neill, J. L. Williams,
W. N. Jenner, M. J. Daniel, M. R. D. Gray,
J. J. Newman, G. N. Wells and
D. R. Sutherland 1573 The production and evaluation of a radioligand and antiserum for
the radioimmunoassay of sub-nanogram per millilitre concentrations
of lamivudine
- M. S. García, C. Sánchez-Pedreño,
M. I. Albero and V. Ródenas 1585 Determination of ampicillin or amoxicillin in pharmaceutical
samples by flow injection analysis
- B. J. Gurley, S. Zermatten and D. Skelton 1591 Determination of antipyrine in human serum by direct injection
restricted access media liquid chromatography
- C. Rodriguez, E. S. Estape-Wainwright,
M. B. Sidhom, J. L. Cangiano and
M. Martinez-Maldonado 1597 A simple spectrophotometric determination of submicromolar
quantities of vanadium oxyions
- A. K. Dash 1601 Determination of pseudoephedrine hydrochloride in dosage forms
by liquid chromatography
- I Volume Contents, Author Index and Subject Index, Volume 12,
1994