

**CUMULATIVE  
AUTHOR AND SUBJECT INDEXES  
VOLUMES 121-130**

Supplied free of charge to the 1977 subscribers of the Journal of Chromatography

JOURNAL OF

# CHROMATOGRAPHY

INTERNATIONAL JOURNAL ON CHROMATOGRAPHY, ELECTROPHORESIS AND RELATED METHODS

EDITOR, Michael Lederer (Rome)

ASSOCIATE EDITOR, K. Macek (Prague)

**EDITORIAL BOARD**

W. A. Aue (Halifax)  
V. G. Berezkin (Moscow)  
A. Bevenue (Honolulu, Hawaii)  
P. Boulanger (Lille)  
A. A. Boulton (Saskatoon)  
G. P. Cartoni (Rome)  
K. V. Chmutov (Moscow)  
G. Duyckaerts (Liège)  
L. Fishbein (Jefferson, Ark.)  
A. Frigerio (Milan)  
C. W. Gehrke (Columbia, Mo.)  
E. Gil-Av (Rehovot)  
G. Guiochon (Palaiseau)  
I. M. Hais (Hradec Králové)  
E. Heftmann (Berkeley, Calif.)  
S. Hjertén (Uppsala)  
E. C. Horning (Houston, Texas)  
C. Horvath (New Haven, Conn.)  
J. F. K. Huber (Vienna)  
A. T. James (Sharnbrook)  
J. Janák (Brno)  
K. A. Kraus (Oak Ridge, Tenn.)  
E. Lederer (Gif-sur-Yvette)  
A. Liberti (Rome)  
H. M. McNair (Blacksburg, Va.)  
Y. Marcus (Jerusalem)  
G. B. Marini-Bettolo (Rome)  
R. Neher (Basel)  
G. Nickless (Bristol)  
J. Novák (Brno)  
N. A. Parris (Hitchin)  
O. Samuelson (Göteborg)  
G.-M. Schwab (Munich)  
G. Semenza (Zürich)  
L. R. Snyder (Tarrytown, N.Y.)  
A. Zlatkis (Houston, Texas)

**EDITORS, BIBLIOGRAPHY SECTION**

K. Macek (Prague), J. Janák (Brno), Z. Deyl (Prague)

**EDITOR, BOOK REVIEW SECTION**

R. Amos (Abingdon)

**EDITOR, NEWS SECTION**

J. F. K. Huber (Vienna)

**COORD. EDITOR, DATA SECTION**

J. GaspariĚ (Hradec Králové)

ELSEVIER SCIENTIFIC PUBLISHING COMPANY  
AMSTERDAM

## PUBLICATION SCHEDULE FOR 1977

*Journal of Chromatography* (incorporating *Biomedical Applications* and *Chromatographic Reviews*)  
In the course of 1977, also the cumulative indexes for Vols. 121-130 and 131-140 will appear.

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
Journal of Chromatography	130 131	132/1 132/2 132/3	133/1 133/2	134/1 134/2	135/1 135/2	136/1 136/2 136/3	137/1 137/2	138/1 138/2	139/1 139/2	140/1 140/2 140/3	142 144/1	144/2 144/3
Biomedical Applications	143/1		143/2		143/3		143/4		143/5		143/6	
Chromatographic Reviews				141/1				141/2				141/3

**Scope.** The *Journal of Chromatography* publishes papers on all aspects of chromatography, electrophoresis and related methods. Contributions consist mainly of research papers dealing with chromatographic theory, instrumental development and their applications. The section *Biomedical Applications*, which is under separate editorship, deals with the following aspects: developments in and applications of chromatographic and electrophoretic techniques related to clinical diagnosis (including the publication of normal values); screening and profiling procedures with special reference to metabolic disorders; results from basic medical research with direct consequences in clinical practice; combinations of chromatographic and electrophoretic methods with other physico-chemical techniques such as mass spectrometry. In *Chromatographic Reviews*, reviews on all aspects of chromatography, electrophoresis and related methods are published.

**Submission of Papers.** Papers in English, French and German may be submitted, if possible in three copies. Manuscripts should be submitted to:

The Editor of *Journal of Chromatography*, P.O. Box 681, Amsterdam, The Netherlands

or to:

The Editor of *Journal of Chromatography, Biomedical Applications*, P.O. Box 681, Amsterdam, The Netherlands.

Reviews are invited or proposed by letter to the Editors and will appear in *Chromatographic Reviews* or *Biomedical Applications*. An outline of the proposed review should first be forwarded to the Editors for preliminary discussion prior to preparation.

**Subscription Orders.** Subscription orders should be sent to: Elsevier Scientific Publishing Company, P.O. Box 211, Amsterdam, The Netherlands. The *Journal of Chromatography, Biomedical Applications* can be subscribed to separately.

**Publication.** The *Journal of Chromatography* (including *Biomedical Applications* and *Chromatographic Reviews*) has 15 volumes in 1977. The subscription price for 1977 (Vols. 130-144) is Dfl. 1650.00 plus Dfl. 210.00 (postage) (total ca. US\$ 744.00). The subscription price for the *Biomedical Applications* section only (Vol. 143) is Dfl. 110.00 plus Dfl. 14.00 (postage) (total ca. US\$ 49.60). Journals are automatically sent by air mail to the U.S.A. and Canada at no extra costs, and to Japan, Australia and New Zealand with a small additional postal charge. Back volumes of the *Journal of Chromatography* (Vols. 1 through 129) are available at Dfl. 100.00 (plus postage). Claims for issues not received should be made within three months of publication of the issue. If not, they cannot be honoured free of charge.

**For further information, see page 3 of cover.**

---

© ELSEVIER SCIENTIFIC PUBLISHING COMPANY — 1977

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher, Elsevier Scientific Publishing Company, P.O. Box 330, Amsterdam, The Netherlands.

Submission of an article for publication implies the transfer of the copyright from the author to the publisher and is also understood to imply that the article is not being considered for publication elsewhere.

Printed in The Netherlands

---



JOURNAL OF CHROMATOGRAPHY

*Cumulative Author and Subject Indexes*

VOLUMES 121-130

# JOURNAL *of* CHROMATOGRAPHY

INTERNATIONAL JOURNAL ON CHROMATOGRAPHY,  
ELECTROPHORESIS AND RELATED METHODS

## *Cumulative Author and Subject Indexes Volumes 121-130 (1976-1977)*

EDITOR

MICHAEL LEDERER (Rome)

ASSOCIATE EDITOR

K. MACEK (Prague)

EDITORIAL BOARD

W. A. Aue (Halifax), V. G. Berezkin (Moscow), A. Bevenue (Honolulu, Hawaii), P. Boulanger (Lille), A. A. Boulton (Saskatoon), G. P. Cartoni (Rome), K. V. Chmutov (Moscow), G. Duyckaerts (Liège), L. Fishbein (Jefferson, Ark.), A. Frigerio (Milan), C. W. Gehrke (Columbia, Mo.), E. Gil-Av (Rehovot), G. Guiochon (Palaiseau), I. M. Hais (Hradec Králové), E. Heftmann (Berkeley, Calif.), S. Hjertén (Uppsala), E. C. Horning (Houston, Texas), C. Horvath (New Haven, Conn.), J. F. K. Huber (Vienna), A. T. James (Sharnbrook), J. Janák (Brno), K. A. Kraus (Oak Ridge, Tenn.), E. Lederer (Gif-sur-Yvette), A. Liberti (Rome), H. M. McNair (Blacksburg, Va.), Y. Marcus (Jerusalem), G. B. Marini-Bettolo (Rome), R. Neher (Basel), G. Nickless (Bristol), J. Novák (Brno), N. A. Parris (Hitchin), O. Samuelson (Göteborg), G.-M. Schwab (Munich), G. Semenza (Zürich), L. R. Snyder (Tarrytown, N.Y.), A. Zlatkis (Houston, Texas)

EDITORS, BIBLIOGRAPHY SECTION

K. Macek (Prague), J. Janák (Brno), Z. Deyl (Prague)

EDITOR, BOOK REVIEW SECTION

R. Amos (Abingdon)

EDITOR, NEWS SECTION

J. F. K. Huber (Vienna)

COORDINATING EDITOR, DATA SECTION

J. Gasparič (Hradec Králové)

1977

Electronic data processing:  
Dipl.-Kfm. Karlheinz Wenzel KG  
and  
ADV-Service Wilfried Meyer GmbH,  
Hanau, G.F.R.

© ELSEVIER SCIENTIFIC PUBLISHING COMPANY — 1977

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher, Elsevier Scientific Publishing Company, P.O. Box 330, Amsterdam, The Netherlands.

Submission of an article for publication implies the transfer of the copyright from the author to the publisher and is also understood to imply that the article is not being considered for publication elsewhere.

Printed in The Netherlands

## AUTHOR INDEX

### VOLUMES 121-130

*The volume number is placed in parentheses before the page number*

# A

- Abbott, S.R., see Achener, P. (130) 29
- Abbott, S.R., Berg, J.R., Achener, P. and Stevenson, R.L.  
Chromatographic reproducibility in HPLC gradient elution (126) 421
- Abdel-Monem, M.M., see Newton, N.E. (124) 277
- Abernethy, J.L. and Srulovitch, D.  
TLC for detection of peptide cleavage or integrity during reactions of the Z-alanylglycines with aniline or phenylhydrazine under papain catalysis (123) 309
- Abraham, C.V. and Joslin, H.D.  
Simultaneous GC analysis for the four commonly used antiepileptic drugs in serum (128) 281
- Abraham, K.I., see Joshi, P.N. (121) 65
- Achener, P., Abbott, S.R. and Stevenson, R.L.  
Experimental evaluation of compressibility effects in syringe pumps for LC (130) 29
- Achener, P., see Abbott, S.R. (126) 421
- Ackman, R.G.  
Contrast improvement in the copying of recorder charts on the Xerox Model 4500 copier (130) 454
- Adamovics, J. and Stermitz, F.R.  
HPLC of some anthocyanidins and flavonoids (129) 464
- Agarwal, D.P. and Goedde, H.W.  
TLC separation of <sup>14</sup>C-labelled succinylcholine, succinylmonocholine and choline (121) 170
- Agayeva, M.N., see Berezkin, V.G. (130) 318
- Agris, P.F., see Sargent, E.R. (123) 490
- Ahmed, M., see Sugden, D. (121) 401
- Al-Alawi, S.J., see Heathcote, J.G. (129) 211
- Alberti, G., Casciola, M., Costantino, U. and Luciani, M.L.  
Crystalline insoluble acid salts of tetravalent metals. XXIV. Ion-exchange behaviour of fibrous cerium(IV) phosphate (128) 289
- Alden, K.E. Jr., see Wu, A.C.M. (128) 87
- Alexander, G., see Maskarinec, M.P. (126) 559
- Alexander, J., see Jellum, E. (126) 487
- Ali, S.L.  
Application of GLC and HPLC to the analysis of trace amounts of salicylic acid, acetylsalicylic anhydride and acetylsalicylsalicylic acid in aspirin samples and aspirin formulations (126) 651
- Alibert, G. and Puech, J.-L.  
Automatic separation and determination of benzoic and cinnamic aldehydes by LC (in French) (124) 369
- Ambrosius, D., see Klimisch, H.-J. (121) 93
- Anderson, E., see Bertsch, W. (126) 213
- Anderson, F.S. and Murphy, R.C.  
Isocratic separation of some purine nucleotide, nucleoside, and base metabolites from biological extracts by HPLC (121) 251
- Andronikashvili, T.G., see Tsitsishvili, G.V. (130) 13
- Annino, R., Curren, J. Jr., Kalinowski, R., Karas, E., Lindquist, R. and Prescott, R.  
Totally pneumatic GC process stream analyzer (126) 301
- Antal, M. and Toman, R.  
DEAHP-starch and DEAHP-cellulose, new ion exchangers for fractionating polysaccharides and other biopolymers (123) 434
- Appelqvist, L.-Å. and Nair, B.M.  
Improved technique for the GLC separation of the N-trifluoroacetyl n-butyl derivatives of amino acids (124) 239
- Archer, M.C., see Reed, L.S. (121) 100
- Arjmand, M. and Mumma, R.O.  
Metabolism of 2,4-dichlorophenoxyacetic acid. IX. GLC of methyl esters of amino acid conjugates (124) 97
- Arora, A.K., see Kohli, J.C. (129) 473
- Arsov, A., see Dousheva, M. (121) 131
- Artyukov, A.A. and Molodtsov, N.V.  
Hydrophobic chromatography of N-acetyl-β-D-hexosaminidase (130) 451
- Arx, E. von, see Von Arx, E. (123) 439
- Asai, K., Kanno, Y.-I., Nakamoto, A. and Hara, T.  
Flow controller for HPLC and its applications (126) 369
- Asmus, P.A., Jorgenson, J.W. and Novotný, M.  
Fluorescence enhancement. New selective detection principle for liquid chromatography (126) 317

- Asmus, P.A., Low, C.-E. and Novotný, M.  
Preparation and chromatographic  
evaluation of chemically bonded ion-  
exchange stationary phases. II. Weak and  
strong cation exchangers (123) 109
- Audebert, R., see Lecourtier, J. (121) 173
- Aue, W.A., see Hill, H.H. Jr. (122) 515
- Axelsson, M. and Sjövall, J.  
Selective LC isolation procedure for GC-MS  
analysis of 3-ketosteroids in biological  
materials (126) 705
- Ayad, S.R. and Delinassios, J.G.  
Fractionation of Sendai virus RNA by  
polylysine-Kieselguhr column  
chromatography (130) 396

## B

- Badger, C.M.A., Harris, J.A., Scott, K.F., Walker,  
M.J. and Phillips, C.S.G.  
Heater-displacement chromatography  
(126) 11
- Baerheim Svendsen, A., see Verpoorte, R.  
(124) 152
- Bailey, D.G., Davis, H.L. and Johnson, G.E.  
Improved theophylline serum analysis by  
an appropriate internal standard for GC  
(121) 263
- Bailey, D.S.  
Separation of isomeric pentoses and  
hexoses by continuous-flow TLC (130) 431
- Bailey, F.  
Applications of HPLC in the  
pharmaceutical industry (122) 73
- Bakalyar, S.R. and Henry, R.A.  
Variables affecting precision and accuracy  
in HPLC (126) 327
- Baker, G.B., see Martin, I.L. (123) 45
- Baranowski, J.D., see Lin, J.S. (130) 426
- Bardou, L., see Menez, J.F. (129) 155
- Barna, J., see März, L. (123) 495
- Barnes, D., see Subach, D.J. (125) 435
- Barnes, W.T., see Kalász, H. (128) 300
- Barnhart, J.W. and Caldwell, W.J.  
GC determination of hydrocodone in serum  
(130) 243
- Barton, R.A., Schulman, A., Jacobson, E.L. and  
Jacobson, M.K.  
Chromatographic separation of pyridine  
and adenine nucleotides on thin layers of  
poly(ethyleneimine) cellulose (130) 145
- Bather, J.M. and Gray, R.A.C.  
Relationship between chromatographic  
performance and surface structure of silica  
microspheres (122) 159
- Battistuzzi, R., see Peyronel, G. (123) 367
- Baudisch, J., see Papendick, H.-D. (122) 443
- Baudot, P., Monal, J.L., Livertoux, M.H. and  
Truhaut, R.  
Identification of toxic metals after  
extraction and TLC of their dithizonates.  
Toxicological applications (in French)  
(128) 141
- Bauer, H., see Voelter, W. (126) 693
- Becker, G., see Stahl, E. (129) 41
- Becker, N., see Unger, K.K. (125) 115
- Beiss, A., see Klimisch, H.-J. (128) 117
- Beitler, U. and Feibush, B.  
Interaction between asymmetric solutes  
and solvents. Diamides derived from L-  
valine as stationary phases in gas-liquid  
partition chromatography (123) 149
- Bejnarowicz, E.A., see Rao, G.S. (123) 486

- Belenky, B.G., Valchikhina, M.D., Vakhtina, I.A., Gankina, E.S. and Tarakanov, O.G. TLC of oligomers (129) 115
- Bell, S.H., see Drysdale, A.C. (124) 418
- Benet, L.Z., see Lee, C.S. (128) 188
- Beretta, E., see Morrone, A. (128) 27
- Berezkin, V.G., Rudenko, B.A., Popova, T.P., Agayeva, M.N., Lipavsky, V.N., Sokolin, G.F. and Zabokritsky, M.P. Use of carbon disulphide and formamide as the mobile phase and flame-forming agent in the flame-ionization detector (130) 318
- Berg, J.H.M. van den, see Van den Berg, J.H.M. (125) 307
- Berg, J.R., see Abbott, S.R. (126) 421
- Berger, J.-A., see Chabard, J.-L. (121) 295
- Bergman, A., Göthe, R. and Wachtmeister, C.A. Impregnation of silica gel with tetraalkylammonium salts in adsorption chromatography of neutral aromatic compounds (123) 231
- Berthou, F., see Menez, J.F. (129) 155
- Berticat, P., see Collet, G. (121) 213
- Bertoni, G., see Ciccioi, P. (126) 757
- Bertsch, W., Anderson, E. and Holzer, G. Characterization of coal-derived fluids by capillary column GC-MS (126) 213
- Bertsch, W., see Holzer, G. (126) 771
- Bethke, H., Delz, B. and Stich, K. Determination of the content and purity of ergotamine preparations by means of HPLC (123) 193
- Bianchetti, G., Latini, R. and Morselli, P.L. GC determination of acenocoumarin in human plasma (124) 331
- Biddington, N.L. and Thomas, T.H. Effect of pH on the elution of cytokinins from polyvinylpyrrolidone columns (121) 107
- Billiet, H.A.H., see Tijssen, R. (122) 185
- Binder, H. and Stürzenbecher, E. GC and TLC investigation of malonic acid dinitrile (in German) (130) 405
- Biswas, A., see Dutta, J. (124) 29
- Blasius, E. and Maurer, P.G. Exchangers with monobenzenocryptate K ( $2_B.2.2$ ) as anchor group (in German) (125) 511
- Blatná, J., see Holasová, M. (123) 225
- Blomberg, L. GC separation of some sulphur compounds on glass capillary columns using flame photometric detection (125) 389
- Bloomquist, C.A.A., see Horwitz, E.P. (125) 203
- Blu, G., see Martin, M. (130) 458
- Blüchel, E., see Hofmann, K. (130) 444
- Bly, D.D., see Yau, W.W. (125) 219
- Bodrogi, L., see Fehér, T. (123) 460
- Boksányi, L. and Kováts, E.sz. Study of column performances in GC.  $C_{87}$  hydrocarbon on chemically modified supports (126) 87
- Bollet, C. and Caude, M. Separation by HPLC of phenylthiohydantoin derivatives of amino acids released by Edman degradation (in French) (121) 323
- Bollet, C., see Chevalier, G. (124) 343
- Bonferoni, B., see Corona, G.L. (124) 401
- Bonilla, C.A. and Rammel, O.J. Comparative biochemistry and pharmacology of salivary gland secretions. III. Chromatographic isolation of a myocardial depressor protein (MDP) from the venom of *Crotalus atrox* (124) 303
- Bories, G. Use of polyamide for the separation of different polycyclic aromatic hydrocarbons by TLC (in French) (130) 387
- Bortnikov, G.N., Brevnova, T.N., Kiselev, A.V., Makarenko, N.P., Tcherepennikova, N.F. and Yashin, Y.I. LC of *tert*-butyl per-esters of silyl-substituted carboxylic acids on modified adsorbents (124) 337
- Boshart, G., see Mikeš, F. (122) 205
- Boshoff, P.R., Hopkins, B.J. and Pretorius, V. TLC transport detector for HPLC (126) 35
- Bossuyt, R., Van Renterghem, R. and Waes, G. Identification of antibiotic residues in milk by TLC (124) 37
- Bough, W.A., see Wu, A.C.M. (128) 87
- Boulton, A.A., see Slingsby, J.M. (123) 51
- Boyde, T.R.C. Swelling and contraction of polyacrylamide gel slabs in aqueous solutions (124) 219
- Brancaleoni, E., see Ciccioi, P. (126) 757
- Brantner, J.H., Medicus, R.G. and McRorie, R.A. Fractionation of proteolytic enzymes by affinity chromatography on Sepharose aminocaproyl proflavin (129) 97
- Brazhnikov, V.V. and Shmidel, E.B. Thermionic ionization detector for the analysis of phosphorus- and nitrogen-containing organic compounds (122) 527
- Brent, D.A., see Sabatka, J.J. (125) 523
- Bresler, S.E., Katushkina, N.V., Kolikov, V.M., Potokin, J.L. and Vinogradskaya, G.N. Adsorption chromatography of viruses (130) 275
- Brevnova, T.N., see Bortnikov, G.N. (124) 337
- Brinkman, U.A.T. and De Kok, A. HPLC analysis of the heptachloronaphthalenes present in Halowax 1051 (129) 451
- Brinkman, U.A.T., De Kok, A., De Vries, G. and Reymer, H.G.M. High-speed LC and TLC of polychlorinated biphenyls (128) 101
- Brinkman, U.A.T., De Kok, A., Reymer, H.G.M. and De Vries, G. Analysis of polychlorinated naphthalenes by HPLC and TLC (129) 193

- Brinkman, U.A.T. and Reymer, H.G.M.  
Polychlorinated naphthalenes (Review)  
(127) 203
- Bristow, P.A.  
Computer-controlled preparative liquid  
chromatograph (122) 277
- Brodasky, T.F., Lewis, C. and Eble, T.E.  
Bioautographic TLC analysis of antibiotics  
and their metabolites in the whole animal.  
I. Clindamycin in the rat (123) 33
- Bromilow, R.H. and Lord, K.A.  
Analysis of sulphur-containing carbamates  
by formation of derivatives in the gas-  
liquid chromatograph using trimethyl-  
phenylammonium hydroxide (125) 495
- Brooks, C.J.W., see Gaskell, S.J. (122) 415
- Brooks, C.J.W., see Gaskell, S.J. (126) 591
- Broš, E. and Page, F.M.  
Continuous stirred reactor model as basis  
for optimisation of electron capture  
detector operation in coulometric and  
constant current modes (126) 271
- Brötell, H., see Gyllenhaal, O. (122) 471
- Brötell, H., see Gyllenhaal, O. (129) 295
- Brown, A.C. III, see Cram, S.P. (126) 279
- Brown, I.R.F.  
Simple screening method for urinary  
purines (125) 530
- Brown, N.D. and Michalski, E.J.  
Improved HPLC method for quantifying *p*-  
aminobenzoic acid and some of its  
metabolites (121) 76
- Brown, P.R., see Hartwick, R.A. (126) 679
- Brown, W.V., see Moore, B.P. (121) 279
- Brown, W.V., see Moore, B.P. (128) 178
- Brüderle, V., see Stahl, E. (129) 41
- Bruner, F., see Ciccioli, P. (126) 757
- Brunfeldt, K., see Lund, E. (130) 51
- Bryan, A.M., see Olafsson, P.G. (124) 388
- Buchatsky, P.M., see Matorina, N.N. (129) 19
- Bugge, A.  
Quantitative HPLC of diazepam and N-  
desmethyldiazepam in blood (128) 111
- Bullman, H., see O'Hare, M.J. (125) 357
- Burns, D.T., see Stretton, R.J. (129) 321
- Bursa, J., see Rezl, V. (126) 723
- Buryan, P., see Dvořák, B. (124) 1
- Buser, H.R.  
Preparation of qualitative standard  
mixtures of polychlorinated dibenzo-*p*-  
dioxins and dibenzofurans by UV and  $\gamma$ -  
irradiation of the octachloro compounds  
(129) 303
- Bush, B., see Dell'Acqua, R. (128) 271
- Butts, E.T., see Rabel, F.M. (126) 731
- C**
- Caldwell, W.J., see Barnhart, J.W. (130) 243
- Camillo, D.J., see Gilpin, R.K. (121) 13
- Campbell, M., see Stretton, R.J. (129) 321
- Cant, P.A.E. and Walker, N.J.  
Regeneration of monocarbonyls from their  
2,4-dinitrophenylhydrazone derivatives  
(130) 267
- Čapek, A., see Mařík, J. (128) 1
- Capponi, G., see Di Corcia, A. (121) 370
- Caputo, A.G., see Rabel, F.M. (126) 731
- Caravaggio, T., see Righetti, P.G. (127) 1
- Carbonell, R.G., see Wong, A.K. (129) 1
- Carr, K., Woosley, R.L. and Oates, J.A.  
Simultaneous quantification of  
procainamide and N-acetylprocainamide  
with HPLC (129) 363
- Cartoni, G.P. and Ferretti, I.  
Separation of isotopic molecules by HPLC  
(122) 287
- Cartoni, G.P. and Natalizia, F.  
Determination of pemoline by HPLC  
(123) 474
- Casanova, J., see Maysinger, D. (130) 129
- Casciola, M., see Alberti, G. (128) 289
- Cassidy, R.M. and Niro, C.M.  
Application of high-speed LC to the  
analysis of polyoxyethylene surfactants and  
their decomposition products in industrial  
process waters (126) 787
- Castele, K. vande, see Vande Castele, K.  
(121) 49
- Caude, M., see Bollet, C. (121) 323
- Caude, M., see Chevalier, G. (124) 343
- Černá, J., see Káš, J. (124) 53
- Chabard, J.-L., Védrine, F., Godeneche, D.,  
Petit, J. and Berger, J.-A.  
Quantitative separation of biological lipids  
by successive chromatographic runs on  
juxtaposed thin layers (in French) (121) 295
- Chambaz, E.M., see Madani, C. (126) 161
- Chang, S.H., Gooding, K.M. and Regnier, F.E.  
HPLC of proteins (125) 103
- Charles, J., see Sabatka, J.J. (125) 523
- Chasseaud, L.F., see Elsom, L.F. (123) 463
- Chebroux, P., see Madani, C. (126) 161
- Chelvarajan, D.W., see Wijesekera, R.O.B.  
(121) 388
- Chen, T.F., see Lacko, A.G. (130) 446
- Chesler, S., see Wasik, S. (122) 451
- Chesler, S.N., see Cram, S.P. (126) 279
- Chevalier, G., Bollet, C., Rohrbach, P., Risse, C.,  
Caude, M. and Rosset, R.  
HPLC of penimocycline (in French)  
(124) 343
- Chin, W.-T., see Szalkowski, M.B. (129) 426
- Chmutov, K.V., see Matorina, N.N. (129) 19
- Chojnowski, J., see Kowalski, J. (130) 351



- Choudhary, G. and Moss, C.W.  
GC-MS of some biologically important short chain acid butyl esters (128) 261
- Choulis, N.H.  
TLC studies of methadone salts (124) 172
- Chrétien, J.R. and Dubois, J.-É.  
New perspectives in the prediction of Kováts indices (126) 171
- Christiansen, J.  
Quantitative *in situ* TLC of quinidine and salicylic acid in capillary blood (123) 57
- Ciccioli, P., Bertoni, G., Brancaloni, E., Fratarcangeli, R. and Bruner, F.  
Evaluation of organic pollutants in the open air and atmospheres in industrial sites using graphitized carbon black traps and GC-MS analysis with specific detectors (126) 757
- Clerc, J.T., Kutter, M., Reinhard, M. and Schwarzenbach, R.  
Improving the efficiency of small GC-MS data systems by means of simple algorithms (123) 271
- Clercq, H. de, see De Clercq, H. (122) 535
- Cobb, P.H. and Hill, G.T.  
HPLC of some sulphonamides (123) 444
- Coca, J., see Langer, S.H. (122) 487
- Cockerill, A.F., Hall, M., Mallen, D.N.B., Osborne, D.J. and Prime, D.M.  
Analysis of isomeric impurities in a synthesis of the novel anti-inflammatory drug, benoxaprofen (129) 339
- Coggon, P., see Hoefler, A.C. (129) 460
- Coleman, W.M., Wooton, D.L., Dorn, H.C. and Taylor, L.T.  
Chromatographic separation studies of solvent refined coal (123) 419
- Colin, H., Eon, C. and Guiochon, G.  
Reversed-phase LSC on modified carbon black (122) 223
- Colin, H. and Guiochon, G.  
Development and use of carbon adsorbents in high-performance LSC. I. Carbon-coated silica particles (126) 43
- Collet, G., Rocca, J.L., Sage, D. and Berticat, P.  
Polyamides in HPLC (in French) (121) 213
- Colombo, R.J., see Leoni, V. (125) 399
- Colomé, J., see Sánchez, M.C. (126) 601
- Comba, M.E., see Onuska, F.I. (126) 133
- Compaan, H., see Dhont, J.H. (130) 205
- Cone, E.J.  
General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355
- Conrad, E.C., see Wu, A.C.M. (128) 87
- Conway, R.L. and Hood, L.F.  
Comparison of spectrodensitometric and colorimetric methods for quantifying starch hydrolysis products separated by TLC (129) 415
- Corcia, A. di, see Di Corcia, A. (121) 370
- Corcia, A. di, see Di Corcia, A. (122) 459
- Corona, G.L. and Bonferoni, B.  
Simultaneous determination of therapeutic levels of amitriptyline and nortriptyline in plasma by GLC (124) 401
- Cossu, P., see De Marco, C. (129) 369
- Costantino, U., see Alberti, G. (128) 289
- Cotter, R.L., see Little, J.N. (126) 439
- Čoupek, J., see Luan, N.-T. (130) 378
- Čoupek, J., see Popl, M. (130) 195
- Court, W.A.  
High-performance reversed-phase liquid chromatography of naturally occurring phenolic compounds (130) 287
- Covacevich, M.T. and Richards, G.N.  
Continuous quantitative TLC of oligosaccharides (129) 420
- Cox, H.C. and Teven, J.M.G.  
Mechanism of the molecular-sieve effect in polyacrylamide gel electrophoresis (123) 261
- Cram, S.P., Chesler, S.N. and Brown, A.C. III  
Effects of digital filters on chromatographic signals (126) 279
- Crone, H.D. and Dawson, R.M.  
Residual anionic properties of a covalently substituted controlled-pore glass, Glyceryl-CPG (129) 91
- Crosby, N.T., see Hunt, D.C. (130) 320
- Culberson, C.F. and Johnson, A.  
Standardized two-dimensional TLC method for lichen products (128) 253
- Curren, J. Jr., see Annino, R. (126) 301
- Curry, S.H., see Whelpton, R. (121) 88
- Curtius, H.C., Mettler, M. and Ettlinger, L.  
Study of the intestinal tyrosine metabolism using stable isotopes and GC-MS (126) 569
- Czebotar, V. and Dietz, A.A.  
Chromatography of the components of the purine reutilization pathway (124) 141
- Czerwiec, Z. and Markowski, J.  
GC analysis of aromatic sulphinylamines (124) 76

## D

- Dalmonego, H., see Ortner, H.M. (125) 517
- Dass, R.S., see Singh, M.V. (124) 145
- Davis, H.L., see Bailey, D.G. (121) 263
- Dawidowicz, A. and Sokolowski, S.  
Simplified numerical method for correction of polydispersities from GPC (125) 428
- Dawson, R.M., see Crone, H.D. (129) 91
- De Clercq, H., Despontin, M., Kaufman, L. and Massart, D.L.  
Selection of representative substances by operations research techniques. Application to the selection of functional probes for GLC (122) 535
- De Graeve, J. and Vanroy, J.  
Simultaneous determination of methylated barbiturates and other anticonvulsant drugs by high-resolution GC (129) 171
- De Groot, M., see Versino, B. (122) 373
- De Kok, A., see Brinkman, U.A.T. (128) 101
- De Kok, A., see Brinkman, U.A.T. (129) 193
- De Kok, A., see Brinkman, U.A.T. (129) 451
- De la Farge, F. and Valduigie, P.  
Purification of Fab and Fc fragments from human serum immunoglobulin G by electrophoresis and affinity chromatography (123) 247
- De Ligny, C.L., see Gelsema, W.J. (130) 41
- De Marco, C., Cossu, P., Dernini, S. and Rinaldi, A.  
Chromatographic separation of selenohypotaurine, selenotaurine, selenohomohypotaurine and selenohomotaurine (129) 369
- De Pooter, H., see Vande Castele, K. (121) 49
- De Ridder, J.J. and Van Hal, H.J.M.  
Unexpected HPLC separation of Org GC 94 and  $\{3,3,4,4\text{-}^2\text{H}_4\}$ Org GC 94 (121) 96
- De Villiers, L.S., see Serfontein, W.J. (130) 342
- De Vries, G., see Brinkman, U.A.T. (128) 101
- De Vries, G., see Brinkman, U.A.T. (129) 193
- De Zeeuw, R.A., see Dhont, J.H. (130) 205
- De Zeeuw, R.A., see Jonkman, J.H.G. (128) 208
- Dean, W.W., Lubrano, G.J., Heinsohn, H.G. and Stastny, M.  
Analysis of Romanowsky blood stains by HPLC (124) 287
- Deb, C., see Dutta, J. (124) 29
- Debbi, G., see Peyronel, G. (123) 367
- Decuypere, J.A., see Dierick, N.A. (129) 403
- Deelder, R.S., Kroll, M.G.F. and Van den Berg, J.H.M.  
Determination of trace amounts of hydroperoxides by column liquid chromatography and colorimetric detection (125) 307
- Degen, P.H. and Riess, W.  
Simplified method for the determination of oxprenolol and other  $\beta$ -receptor blocking agents in biological fluids by GLC (121) 72
- Delacourte, A., see Desreumaux, C. (130) 336
- Delinassios, J.G., see Ayad, S.R. (130) 396
- Dell'Acqua, R., Bush, B. and Egan, J.  
Identification of gasoline contamination of groundwater by GC (128) 271
- Delphin, W.H., see Horwitz, E.P. (125) 203
- Delz, B., see Bethke, H. (123) 193
- Deml, M., see Kouřilová, D. (128) 79
- Derge, K., see Leung, A.T. (122) 355
- Dericbourg, J.  
Rapid determination of ortho- and parahydrogen by GSC (in French) (123) 405
- Dernini, S., see De Marco, C. (129) 369
- Desager, J.P., see Hulhoven, R. (125) 369
- Desager, J.P., Vanderbist, M., Hwang, B. and Levandoski, P.  
GLC determination of tienilic acid (SKF 62,698) in human plasma and urine (123) 379
- Desideri, P.G., see Lepri, L. (123) 175
- Desideri, P.G., see Lepri, L. (129) 239
- Despontin, M., see De Clercq, H. (122) 535
- Desreumaux, C., Fruchart, J.C., Dewailly, P., Jaillard, J., Sezille, G., Moschetto, Y. and Delacourte, A.  
Fractionation of serum lipoproteins by preparative electrophoresis in polyacrylamide gel (130) 336
- Dessy, R.E., Reynolds, W.D., Nunn, W.G., Titus, C.A. and Moler, G.F.  
New mini-computer automated linear photodiode array spectrometer system for high-resolution LC (126) 347
- Detavernier, M.R., Dryon, L. and Massart, D.L.  
Separation of some tricyclic antidepressants by HPLC (128) 204
- Devaux, P., see Godbille, E. (122) 317
- Dewailly, P., see Desreumaux, C. (130) 336
- Deyl, Z.  
Advances in separation techniques in sequence analysis of proteins and peptides (Review) (127) 91
- Dhar, M.L., Jain, S.M. and Raina, R.  
*o*-Vanillin oxime as a chromatographic spray reagent for metal ions (129) 488
- Dhont, J.H., Vinkenborg, C., Compaan, H., Ritter, F.J., Verweij, A. and De Zeeuw, R.A.  
Application of  $R_F$  correction in TLC by means of two reference  $R_F$  values. III. Results obtained in reversed-phase TLC (130) 205
- Di Corcia, A., Liberti, A. and Samperi, R.  
GC analysis of aliphatic and aromatic hydrocarbons with 2,4,5,7-tetranitrofluorenone-modified graphitized carbon black (122) 459
- Di Corcia, A., Samperi, R. and Capponi, G.  
2,4,7-Trinitrofluorenone-modified

- graphitized carbon black as stationary phase for the GC separation of aromatic hydrocarbons (121) 370
- Di Gregorio, V. and Sinibaldi, M.  
Adsorption of inorganic anions on Sephadex gels. Part II (129) 407
- Dielmann, R., see Schomburg, G. (122) 55
- Dierick, N.A., Vervaeke, I.J., Decuyper, J.A. and Henderickx, H.K.  
Determination of biogenic amines in intestinal contents by ion-exchange chromatography (129) 403
- Dietrich, C.P., McDuffie, N.M. and Sampaio, L.O.  
Identification of acidic mucopolysaccharides by agarose gel electrophoresis (130) 299
- Dietz, A.A., see Czebotar, V. (124) 141
- Dilli, S. and Patsalides, E.  
GC of some oxovanadium(IV) tetradentate  $\beta$ -ketoamine chelates (130) 251
- Dimitrova, Z.S., see Vitenberg, A.G. (126) 205
- Dobberstein, P., see Zune, A. (122) 365
- Dobbins, M.F., see Touchstone, J.C. (124) 111
- Dolanský, V., see Popl, M. (130) 195
- Dolphin, R.J., Willmott, F.W., Mills, A.D. and Hoogeveen, L.P.J.  
Column switching techniques in the LC analysis of organochlorine pesticides in milk (122) 259
- Done, J.N.  
Sample loading and efficiency in adsorption, partition and bonded-phase high-speed LC (125) 43
- Dorn, H.C., see Coleman, W.M. (123) 419
- Dousheva, M., Arsov, A., Kostova, V. and Mesrob, B.  
TLC of disperse dyes (121) 131
- D'Ovidio, A.M., see Leoni, V. (125) 399
- Dowsett, M., see Eastman, A.R. (128) 224
- Dryon, L., see Detaevernier, M.R. (128) 204
- Drysdale, A.C., Green, W. and Bell, S.H.  
Relatively non-chemical approach to the isolation of peptide materials from plasma (124) 418
- Du Preez, J.C. and Lategan, P.M.  
GC determination of  $C_2$ - $C_5$  fatty acids in aqueous media with a Porapak N column (124) 63
- Duane, W.C., see Szalkowski, M.B. (129) 426
- Dubois, J.-E., see Chrétien, J.R. (126) 171
- Duggin, G.G.  
Phenacetin estimation from biological samples by HPLC (121) 156
- Dumas, T.  
Determination of ethylene oxide in air by GC (121) 147
- Durand, J., see Madani, C. (126) 161
- Dutta, J., Biswas, A., Saha, S. and Deb, C.  
Method for the estimation of free and esterified cholesterol involving TLC (124) 29
- Dutta, J., see Sen, P.C. (129) 469
- Duvivier, J., see Germeau, P. (129) 471
- Dvořák, B., Buryan, P. and Pašek, J.  
Chromatographic analysis of a mixture of isomeric methylcyclohexanones and methylcyclohexanols (124) 1

# E

- Easterbrook, S.M. and Hersey, J.A.  
Bioautography of erythromycin and its esters (121) 390
- Eastin, E.F.  
Separation of bifenox and related compounds by TLC (124) 422
- Eastin, E.F.  
Separation of benthocarb and related compounds by TLC (130) 439
- Eastman, A.R. and Dowsett, M.  
Simultaneous separation of individual prostaglandins by TLC on an unmodified support (128) 224
- Ebel, S. and Hocke, J.  
Computer-controlled evaluation in TLC. Results and possibilities (126) 449
- Ebermann, R., see März, L. (123) 495
- Eble, T.E., see Brodasky, T.F. (123) 33
- Eckelman, W.C., see Rzeszotarski, W.J. (124) 88
- Eder, G.  
Evaluation of environmental polychlorobiphenyls and DDE in terms of mixtures of commercial preparations from peak heights of packed-column gas chromatograms using a programmable calculator (121) 269
- Edmonds, C.G., see Gaskell, S.J. (126) 591
- Egan, J., see Dell'Acqua, R. (128) 271
- Eijk, G.W. van, see Van Eijk, G.W. (124) 66
- Eisen, O., see Rang, S. (128) 53
- Eisen, O., see Rang, S. (128) 59
- Eisenbrand, G., see Von Rappard, E. (124) 247
- El Rassi, Z., Gonnet, C. and Rocca, J.L.  
Chromatographic studies of the influence of water and thermal treatment on the activity of silica gel (125) 179
- Elphick, M.C. and Lawlor, J.P.  
Quantitative recovery of free and esterified fatty acids from thin-layer plates coated with silica gel (130) 139
- Elsom, L.F., Hawkins, D.R. and Chasseaud, L.F.  
Identification of a major metabolite of the new hypolipidaemic agent, isopropyl 2-4-(*p*-chlorobenzoyl)phenoxy-2-methylpropionate (procetofene) in humans by GC-MS (123) 463
- Engel, G.  
Investigations on the production of mycotoxins and their quantitative analysis. VI. Citreoviridin (in German) (130) 293
- Engelhardt, H., see Karch, K. (122) 171
- Eon, C., see Colin, H. (122) 223
- Eon, C., see Karger, B.L. (125) 71
- Eon, C., see Martin, M. (125) 17
- Eon, C., see Martin, M. (130) 458
- Erni, F. and Frei, R.W.  
Comparison of reversed-phase and partition HPLC of some digitalis glycosides (130) 169
- Erni, F., Frei, R.W. and Lindner, W.  
Low-cost gradient system for HPLC. Quantitation of complex pharmaceutical raw materials (125) 265
- Ernst, W. and Niedner, R.  
Simple apparatus for preparative polyacrylamide gel electrophoresis (130) 331
- Ettlinger, L., see Curtius, H.C. (126) 569
- Evans, N., Jackson, A.H., Matlin, S.A. and Towill, R.  
HPLC analysis of porphyrins in clinical materials (125) 345
- Evans, S., see McFadden, W.H. (122) 389
- Everaerts, F.M., Verheggen, T.P.E.M. and Van de Venne, J.L.M.  
Isotachophoretic experiments with a counter flow of electrolyte (123) 139

# F

- Fang, P., see McGinnis, G.D. (130) 181
- Farge, F. de la, see De la Farge, F. (123) 247
- Farrand, J.R., see Gulyassy, P.F. (129) 107
- Faupel, M., see Von Arx, E. (123) 439
- Fehér, T., Bodrogi, L. and Váradi, A.  
Simple GC method with flame ionization  
detection for the determination of  
aldadiene in human urine (123) 460
- Feibush, B., see Beitler, U. (123) 149
- Feibush, B., see Weinstein, S. (126) 97
- Fejes, P., see Kiricsi, I. (123) 279
- Fell, V. and Lee, C.R.  
Determination of urinary monohydric and  
dihydric phenols by GC of the acetate and  
TMS derivatives. 4-Dimethylaminopyridine  
as a catalyst for acetylation reactions  
(121) 41
- Ferretti, I., see Cartoni, G.P. (122) 287
- Ferry, D.G., see Parry, G.J.G. (128) 166
- Fitt, P.S., Peterkin, P.I. and Grey, V.L.  
Separation of deoxythymidine and  
deoxythymidine nucleotides by CC and  
TLC (124) 137
- Floch, H.H., see Menez, J.F. (129) 155
- Foglietti, M.J.  
Purification of a vegetal galactokinase.  
Advantages of affinity chromatography (in  
French) (128) 309
- Foltz, R.L., see Graffeo, A.P. (126) 717
- Formalnova, T.I., see Matorina, N.N. (129) 19
- Franc, J. and Pour, J.  
Continuous elemental analysis of sulphur-  
containing substances by GC (129) 315
- Franco, R., see Frigerio, A. (130) 354
- Franken, J.J., Rutten, G.A.F.M. and Rijks, J.A.  
Preparation of glass capillary columns  
coated with polar phase for high-  
temperature GC. I. Study of roughening of  
the glass surface (126) 117
- Fransson, B., Wahlund, K.-G., Johansson, I.M.  
and Schill, G.  
Ion-pair chromatography of acidic drug  
metabolites and endogenic compounds  
(125) 327
- Fratarcangeli, R., see Ciccio, P. (126) 757
- Frei, R.W., see Erni, F. (125) 265
- Frei, R.W., see Erni, F. (130) 169
- Frei, R.W., see Lawrence, J.F. (121) 343
- Frei, R.W., Michel, L. and Santi, W.  
Post-column fluorescence derivatization of  
peptides. Problems and potential in HPLC  
(126) 665
- Frei, R.W., see Nachtmann, F. (122) 293
- Frey, J., see Perier, C. (125) 526
- Frigerio, A. and Pantarotto, C.  
Quantitative determination of sulpyrid in  
biological samples from rats by GLC and  
chemical ionization-mass fragmentography  
(130) 361
- Frigerio, A., Pantarotto, C., Franco, R., Gomeni,  
R. and Morselli, P.L.  
Quantitative determination of doxepin and  
desmethyldoxepin in rat plasma by means  
of GLC-mass fragmentography (130) 354
- Fritz, D., see Riedo, F. (126) 63
- Fruchart, J.C., see Desreumaux, C. (130) 336
- Fudano, S., Terai, S. and Konishi, K.  
Attempt to predict elution behaviour in a  
LLC model system (128) 199
- Fujii, Y., see Shimada, K. (124) 79
- Fujita, A., see Nakamura, T. (130) 384
- Fukuda, T., Nakamura, T. and Ohashi, S.  
Anomalous behaviour of diphosphate  
anions in ion-exchange chromatography  
(128) 212
- Furukawa, T., see Karashima, D. (130) 77

## G

- Gabriel, T.F., Michalewsky, J. and Meienhofer, J.  
Preparative HPLC applied to peptide synthesis (129) 287
- Gallo, G.G., see Roggia, S. (124) 169
- Gal'pern, G.D., Gollandskikh, N.I. and Gordadze, G.N.  
Application of methylene-insertion reactions to cyclic sulphides ( $C_4H_8S$ ,  $C_5H_{10}S$  and  $C_6H_{12}S$ ) to produce standard compounds for GC (124) 43
- Galpin, I.J., Handa, B.K., Kenner, G.W., Moore, S. and Ramage, R.  
Gel filtration of protected peptides on Enzacryl K2 in dimethylformamide and N-methyl-2-pyrrolidone (123) 237
- Gankina, E.S., see Belenky, B.G. (129) 115
- Gant, J.R., see Karger, B.L. (128) 65
- Gaskell, S.J. and Brooks, C.J.W.  
New derivatives for the analysis of sphingosine long-chain bases by GLC-MS (122) 415
- Gaskell, S.J., Edmonds, C.G. and Brooks, C.J.W.  
Applications of boronate derivatives in the study of ceramides by GLC-MS (126) 591
- Gault, M.H., see Sabatka, J.J. (125) 523
- Gault, M.H., see Sugden, D. (121) 401
- Gawdzik, J., Suprynowicz, Z. and Jaroniec, M.  
Determination of the pre-exponential factor of Henry's constant by gas adsorption chromatography (121) 185
- Gazdag, M., see Szepesi, G. (122) 479
- Gehrke, C.W. and Patel, A.B.  
GLC of nucleosides. Derivatization and chromatography (123) 335
- Gehrke, C.W. and Patel, A.B.  
GLC of nucleosides. Effect of silylating reagents and solvents (130) 103
- Gehrke, C.W., see Patel, A.B. (130) 115
- Geiss, F., see Versino, B. (122) 373
- Gelpi, E., see Mahy, N. (130) 237
- Gelpi, E., see Rosello, J. (122) 469
- Gelpi, E., see Rosello, J. (130) 65
- Gelpi, E., see Sánchez, M.C. (126) 601
- Gelsema, W.J. and De Ligny, C.L.  
Isoelectric focusing as a method for the characterization of ampholytes (130) 41
- George, R.D., see MacArthur Moodie, I. (124) 315
- Gerber, N., see Thompson, R.M. (124) 321
- Germeau, P. and Duvivier, J.  
Chromatography of sex gland hormones on Sephadex LH-20 (in French) (129) 471
- Ghebrezabher, M., Rufini, S., Monaldi, B. and Lato, M.  
TLC of carbohydrates (Review) (127) 133
- Ghosh, A., see Sen, P.C. (129) 469
- Giannovario, J.A., Grob, R.L. and Rulon, P.W.  
Analysis of trace pollutants in the air by means of cryogenic GC (121) 285
- Giddings, J.C.  
Field-flow fractionation. Extending the molecular weight range of LC to one trillion ( $10^{12}$ ) (125) 3
- Giese, R.W., see Petersen, B.A. (126) 503
- Gil-Av, E., see Mikeš, F. (122) 205
- Gil-Av, E., see Weinstein, S. (126) 97
- Gilgan, M.W.  
Separation of ecdysterone, inokosterone, makisterone A,  $\alpha$ -ecdysone and ponasterone A by a combination of adsorptive and reversed-phase LC (129) 447
- Gilpin, R.K., Camillo, D.J. and Janicki, C.A.  
Preparation and use of *in situ* chemically bonded small-particle silica as packings in HPLC (121) 13
- Gilpin, R.K. and Sisco, W.R.  
Preparation and characterization of chemically bonded TLC plates (124) 257
- Giumanini, A.G., see Lanzarini, G. (130) 261
- Godbille, E. and Devaux, P.  
Use of an 18-mm I.D. column for analytical- and semi-preparative-scale HPLC (122) 317
- Godeneche, D., see Chabard, J.-L. (121) 295
- Goedde, H.W., see Agarwal, D.P. (121) 170
- Golder, W.A. and Sippell, W.G.  
Sephadex LH-20 multiple-column chromatography for the simultaneous separation of progesterone, deoxycorticosterone and 17 $\alpha$ -hydroxyprogesterone from small plasma samples (123) 293
- Goldstein, G.  
Separation of polycyclic aromatic hydrocarbons by LC on cross-linked polyvinylpyrrolidone (129) 61
- Goldstein, G.  
LC separation of plant phenolics using polyethylene glycol dimethacrylate gel (129) 466
- Gollandskikh, N.I., see Gal'pern, G.D. (124) 43
- Golovnya, R.V., Uralets, V.P. and Kuzmenko, T.E.  
Characterization of fatty acid methyl esters by GC on siloxane liquid phases (121) 118
- Gomeni, R., see Frigerio, A. (130) 354
- Gonnet, C., see El Rassi, Z. (125) 179
- Goodall, R.R.  
Significant factors in the preparation and scanning of thin-layer chromatograms, particularly by transmission in the UV (123) 5
- Gooding, K.M., see Chang, S.H. (125) 103
- Gordadze, G.N., see Gal'pern, G.D. (124) 43
- Gorp, R.E. van, see Van Gorp, R.E. (128) 208
- Göthe, R., see Bergman, Å. (123) 231
- Gräbner, R., Schneider, G. and Sembdner, G.  
Gibberellins. XLIII. Fractionation of gibberellins, gibberellin-conjugates and other phytohormones by DEAE-Sephadex-chromatography (in German) (121) 110

- Graeve, J. de, see De Graeve, J. (129) 171
- Graffeo, A.P., Lin, D.C.K. and Foltz, R.L.  
Analysis of benzoylecgonine in urine by  
HPLC and GC-MS (126) 717
- Graham, K.C., Wilson, W.L. and Vilim, A.  
Simple TLC identification method for  
erythromycin stearate (125) 447
- Grant, D.W.  
Column development and technology in GC  
(122) 107
- Gray, R.A.C., see Bather, J.M. (122) 159
- Green, W., see Drysdale, A.C. (124) 418
- Greenhalgh, R. and Wilson, M.A.  
Optimization and response of the Pye  
flame photometric detector to some  
insecticides in the phosphorus and sulphur  
modes (128) 157
- Gregorio, V. di, see Di Gregorio, V. (129) 407
- Greving, J.E., see Jonkman, J.H.G. (128) 208
- Grey, V.L., see Fitt, P.S. (124) 137
- Griffith, T.D., see Langer, S.H. (122) 487
- Grob, G., see Grob, K. (125) 471
- Grob, K. and Grob, G.  
New, generally applicable procedure for the  
preparation of glass capillary columns  
(125) 471
- Grob, R.L., see Giannovario, J.A. (121) 285
- Groot, M. de, see De Groot, M. (122) 373
- Grossoni, G., see Roggia, S. (124) 169
- Gruft, H., see Ruck, R. (129) 382
- Grushka, E., see Milano, M.J. (125) 315
- Grushka, E., see Mott, S.D. (126) 191
- Guha, O.K., see Novák, J. (123) 497
- Guiochon, G., see Colin, H. (122) 223
- Guiochon, G., see Colin, H. (126) 43
- Guiochon, G., see Martin, M. (125) 17
- Guiochon, G., see Martin, M. (130) 458
- Gulyassy, P.F. and Farrand, J.R.  
Comparison of batch and chromatographic  
assays of cyclic nucleotide  
phosphodiesterases (129) 107
- Gump, B.H., see Kauffman, G.B. (121) 138
- Gump, B.H., see Kauffman, G.B. (121) 395
- Gump, B.H., see Kauffman, G.B. (123) 448
- Guy, P., see Karasek, F.W. (124) 179
- Gyllenhaal, O., Brötell, H. and Hartvig, P.  
Determination of free fatty acids as  
pentafluorobenzyl esters by electron  
capture GC (129) 295
- Gyllenhaal, O., Brötell, H. and Sandgren, B.  
Determination of phenobarbital in human  
saliva by GC with electron-capture  
detection (122) 471
- Habboush, A.E. and Najm, K.A.B.  
Separation of monosubstituted  
benzonitriles by GLC (130) 161
- Hack, M.H. and Helmy, F.M.  
Some additional observations on the  
analysis of glyceryl ethers and  
chromatographically related lipids (128) 239
- Haefelfinger, P.  
Determination of nanogram amounts of  
aromatic compounds by spectrophotometry  
on thin-layer chromatograms (124) 351
- Haegele, K.D., Skrdlant, H.B., Robie, N.W.,  
Lalka, D. and McNay, J.L. Jr.  
Determination of hydralazine and its  
metabolites by GC-MS (126) 517
- Haken, J.K. and Ho, D.K.M.  
Quantitative pyrolysis studies of styrene,  
acrylate ester systems, and their *a*-methyl-  
substituted homologs (126) 239
- Hal, H.J.M. van, see Van Hal, H.J.M. (121) 96
- Halász, I., see Karch, K. (122) 3
- Halász, I., see Karch, K. (122) 171
- Halász, I., Schmidt, H. and Vogtel, P.  
Particle size, pressure and analysis time in  
routine HPLC (126) 19
- Hall, M., see Cockerill, A.F. (129) 339
- Hallén, A., see Pertoft, H. (128) 125
- Handa, B.K., see Galpin, I.J. (123) 237
- Hanefeld, M. and Herrmann, K.  
Quantitative determination of caffeic acid  
esters and catechins by direct  
measurement on thin-layer chromatograms  
(123) 391
- Haney, W.G., see McHugh, W. (124) 376
- Hanifl, E., see Wad, N. (128) 231
- Hansen, G.R., see Touchstone, J.C. (124) 111
- Hansen, S.A.  
TLC method for the identification of  
organic acids (124) 123
- Hansen, S.H. and Thomsen, M.  
Comparison of candicidin, levorin and  
trichomycin by means of HPLC (123) 205
- Hanson, R.N., see Petersen, B.A. (126) 503
- Hara, T., see Asai, K. (126) 369
- Haraldson, L., see Olsson, A.-M. (128) 35
- Harpalani, S.P., see Tewari, S.N. (130) 229
- Harris, J.A., see Badger, C.M.A. (126) 11
- Hartkopf, A., see Karger, B.L. (128) 65
- Hartvig, P., see Gyllenhaal, O. (129) 295
- Hartvig, P., Karlsson, K.-E., Johansson, L. and  
Lindberg, C.  
Determination of pethidine in plasma by  
electron capture GC after reaction with  
trichloroethyl chloroformate (121) 235
- Hartwick, R.A. and Brown, P.R.  
Evaluation of microparticle chemically



- bonded reversed-phase packings in the HPLC analysis of nucleosides and their bases (126) 679
- Hasebe, K., see Shimada, K. (124) 79
- Hasegawa, K., see Lee, K.-R. (123) 119
- Hasegawa, M., see Shimada, K. (124) 79
- Hastings Vogt, C.R., see Ryan, T.R. (130) 346
- Hatano, H., see Rokushika, S. (130) 324
- Hawkes, S.J.  
Plate height in porous-layer open-tubular columns (124) 359
- Hawkins, D.R., see Elsom, L.F. (123) 463
- Hayashi, A., see Viswanathan, C.V. (123) 243
- Hayashi, T., see Terada, H. (130) 281
- Hayes, K.C., see Hojnacki, J.L. (128) 133
- Heathcote, J.G. and Al-Alawi, S.J.  
Improved technique for the analysis of amino acids and related compounds on thin layers of cellulose. XI. Direct, visual micro-method for investigating the primary structural sequence of collagen and other proteins (129) 211
- Heide, R. ter, see Ter Heide, R. (129) 143
- Heidemann, G. and Lekim, D.  
Densitometric analysis of ethanalamine- and serine-containing phosphoglycerides (128) 235
- Heinsohn, H.G., see Dean, W.W. (124) 287
- Helland, P., see Jellum, E. (126) 487
- Helmy, F.M., see Hack, M.H. (128) 239
- Henderickx, H.K., see Dierick, N.A. (129) 403
- Henderson, D.E., see Uden, P.C. (126) 225
- Henderson, G.L., see Lau, D.H.M. (129) 329
- Henry, R.A., see Bakalyar, S.R. (126) 327
- Henry, R.A., see Leung, A.T. (122) 355
- Hentschel, P.R., see Swallow, W.H. (130) 403
- Hermann, U., see Wehrli, A. (125) 59
- Hermansson, J. and Karlén, B.  
Assay of the major (4-hydroxylated) metabolite of diphenylhydantoin in human urine by reversed-phase HPLC (130) 422
- Herrmann, K., see Hanefeld, M. (123) 391
- Herrmann, K., see Schmidlein, H. (123) 385
- Hersey, J.A., see Easterbrook, S.M. (121) 390
- Herzel, F., see Pribyl, J. (125) 487
- Higgins, J.W.  
HPLC analysis of the benzoate esters of sapogenins isolated from *Agave* (121) 329
- Hill, G.T., see Cobb, P.H. (123) 444
- Hill, H.H. Jr. and Aue, W.A.  
Performance of a silicon-doped hydrogen atmosphere flame ionization detector for GC (122) 515
- Hill, H.H. Jr., see Karasek, F.W. (124) 179
- Hirose, A., see Nose, N. (123) 167
- Hirose, A., see Nose, N. (125) 439
- Hirose, A., see Nose, N. (130) 410
- Hložek, V., see Pailer, M. (128) 163
- Ho, D.K.M., see Haken, J.K. (126) 239
- Hocke, J., see Ebel, S. (126) 449
- Hodda, A.E.  
Detection and significance of glycols in drug screening (124) 424
- Hoefler, A.C. and Coggon, P.  
Reversed-phase HPLC of tea constituents (129) 460
- Hofmann, K. and Blüchel, E.  
Storage and densitometry of electrophoretic gel plates in vacuum transparent bags (in German) (130) 444
- Hojnacki, J.L., Nicolosi, R.J. and Hayes, K.C.  
Densitometric quantitation of neutral lipids on ammonium sulfate impregnated thin-layer chromatograms (128) 133
- Holasová, M. and Blatná, J.  
Gel chromatographic separation of retinol, retinyl esters and other fat-soluble vitamins (123) 225
- Holzer, G., see Bertsch, W. (126) 213
- Holzer, G., Oró, J. and Bertsch, W.  
GC-MS evaluation of exhaled tobacco smoke (126) 771
- Hood, L.F., see Conway, R.L. (129) 415
- Hoogveen, L.P.J., see Dolphin, R.J. (122) 259
- Hopkins, B.J., see Boshoff, P.R. (126) 35
- Hörchner, P. and Rietveld, T.  
Rapid method for the quantitative determination of porphyrin methyl esters by HPLC (123) 414
- Horning, E.C., see Pfaffenberger, C.D. (126) 535
- Horning, M.G., see Stafford, M. (126) 495
- Horvath, C. and Lin, H.-J.  
Movement and band spreading of unadsorbed solutes in LC (126) 401
- Horváth, C., Melander, W. and Molnár, I.  
Solvophobic interactions in LC with nonpolar stationary phases (125) 129
- Horwitz, E.P., Delphin, W.H., Bloomquist, C.A.A. and Vandegriff, G.F.  
Radiochemical and isotope separations by high-efficiency LLC (125) 203
- Hoshika, Y.  
Selective and sensitive GC determination of benzaldehyde (129) 436
- Hostettmann, K. and Jacot-Guillarmod, A.  
Application of HPLC and MS to the identification of xanthenes (in French) (124) 381
- Houghten, R.A. Jr., see Kauffman, G.B. (123) 448
- Houx, N.W.H. and Voerman, S.  
HPLC of potential insect sex attractants and other geometrical isomers on a silver-loaded ion exchanger (129) 456
- Hradil, J., see Peška, J. (125) 455
- Hsu, F., see Shanfield, H. (126) 457
- Huber, J.F.K. and Vodenik, R.  
Exploitation of phase-system selectivity by two-column LC. Separation of carbamate pesticides (Summary) (122) 331
- Huber, J.F.K., see Wehrli, A. (125) 59
- Hucker, H.B. and Stauffer, S.C.  
GLC determination of nanogram amounts of cyclobenzaprine in plasma using a nitrogen detector (124) 164
- Huesgen, G., see Liebich, H.M. (126) 465

- Hulhoven, R. and Desager, J.P.  
Quantitative determination of low levels of daunomycin and daunomycinol in plasma by HPLC (125) 369
- Hulshoff, A. and Perrin, J.H.  
Chromatographic characterization of phenothiazine drugs by a reversed-phase thin-layer technique (129) 249
- Hulshoff, A. and Perrin, J.H.  
Comparison of the determination of partition coefficients of 1,4-benzodiazepines by HPLC and TLC (129) 263
- Hunt, D.C., Wild, P.J. and Crosby, N.T.  
Phthalimidopropylsilane: A new chemically bonded stationary phase for the determination of polynuclear aromatic hydrocarbons by HPLC (130) 320
- Husmann, H., see Schomburg, G. (122) 55
- Hwang, B., see Desager, J.P. (123) 379
- I**
- Iatridis, B. and Parissakis, G.  
Chlorination and GC determination of arsenic in oxides, sulphides, ores and alloys (122) 505
- Ichiba, T., see Tsuda, T. (130) 87
- Ilavský, M., see Peška, J. (125) 455
- Improta, C., see Nota, G. (123) 411
- Inczédy, J., see Vigh, G. (129) 81
- Inglis, A.S.  
Improved conversion of thiazolinones to phenylthiohydantoin during amino acid sequence analysis (123) 482
- Inoue, O., see Ogihara, Y. (128) 218
- Inoue, T., see Niwaguchi, T. (121) 165
- Inturrisi, C.E., see Szeto, H.H. (125) 503
- Ioffe, B.V., see Vitenberg, A.G. (126) 205
- Irvine, D.G.  
Autotransfer chromatography in the characterization of pyrroles. Chemistry of multiple-spot phenomena (123) 69
- Ishii, D., see Tsuda, T. (130) 87
- Iwai, K., see Lee, K.-R. (123) 119
- Iwaoka, W. and Tannenbaum, S.R.  
LC of N-nitrosoamino acids and their *syn* and *anti* conformers (124) 105

## J

- Jackson, A.H., see Evans, N. (125) 345  
 Jacobson, E.L., see Barton, R.A. (130) 145  
 Jacobson, M.K., see Barton, R.A. (130) 145  
 Jacot-Guillarmod, A., see Hostettmann, K. (124) 381  
 Jähnchen, E., see Schmitt, K.-F. (130) 418  
 Jaillard, J., see Desreumaux, C. (130) 336  
 Jain, S.M., see Dhar, M.L. (129) 488  
 Jakubowski, A., see Mielniczuk, Z. (125) 444  
 Jamieson, G.R. and Reid, E.H.  
   GLC characteristics of some long-chain acetylenic methyl esters (128) 193  
 Janák, J., see Novák, J. (123) 497  
 Janča, J., Kolínský, M. and Mrkvičková, L.  
   Calibration of separation systems for GPC (121) 23  
 Janicki, C.A., see Gilpin, R.K. (121) 13  
 Janiga, Š., see Krupčík, J. (126) 147  
 Jaroniec, M., see Gawdzik, J. (121) 185  
 Jellum, E., Størseth, P., Alexander, J., Helland, P., Stokke, O. and Teig, E.  
   Application of glass capillary-column GC-MS to the studies of human diseases (126) 487  
 Jinnai, N., see Takeshita, R. (123) 301  
 Johansson, I.M., see Fransson, B. (125) 327  
 Johansson, L., see Hartvig, P. (121) 235  
 Johnson, A., see Culbertson, C.F. (128) 253  
 Johnson, G.E., see Bailey, D.G. (121) 263  
 Jones, R.A., Neale, M.E. and Ridlington, J.  
   Chemistry of terpenes. VII. New procedure for the determination of nerol and geranial in essential oils (130) 368  
 Jonkman, J.H.G., Wijsbeek, J., Greving, J.E., Van Gorp, R.E. and De Zeeuw, R.A.  
   Determination of thiazinamium sulphoxide in urine by means of Amberlite XAD-2 CC and thin-layer densitometry (128) 208  
 Jönsson, J.Å., see Olsson, A.-M. (128) 35  
 Jorgenson, J.W., see Asmus, P.A. (126) 317  
 Joshi, P.N., Shankar, V., Abraham, K.I. and Sreenivasan, K.  
   Separation of chymopapain from papaya latex (*Carica papaya*) on Amberlite IR-120 (Hg<sup>2+</sup>) (121) 65  
 Joslin, H.D., see Abraham, C.V. (128) 281  
 Jurand, J., see Knox, J.H. (125) 89

## K

- Kainuma, K., Nogami, A. and Mercier, C.  
   GPC of maltosaccharides on polyacrylamide gel (121) 361  
 Kaiser, R.E., see Ševčík, J. (126) 263  
 Kalász, H., Magyar, K. and Barnes, W.T.  
   Numerical calculation of the separation parameters in gel chromatography (128) 300  
 Kalinowski, R., see Annino, R. (126) 301  
 Kaljurand, M., see Küllik, E. (126) 249  
 Kambara, T., see Ohzeki, K. (121) 199  
 Kanno, Y.-I., see Asai, K. (126) 369  
 Karabasis, I.Z., see Katsanos, N.A. (130) 3  
 Karaiskakis, G., see Katsanos, N.A. (130) 3  
 Karas, E., see Annino, R. (126) 301  
 Karasek, F.W., Guy, P., Hill, H.H. Jr. and Tiernay, J.M.  
   Chromatographic design and temperature-related characteristics of the piezoelectric detector (124) 179  
 Karashima, D., Shigematsu, A., Furukawa, T., Nagayoshi, T. and Matsumoto, I.  
   Esterification of trifluoroacetic acid with phenyldiazomethane for quantitative GC analysis. Methods involving separation from biological materials (130) 77  
 Karch, K., Sebastian, I. and Halász, I.  
   Preparation and properties of reversed phases (122) 3  
 Karch, K., Sebastian, I., Halász, I. and Engelhardt, H.  
   Optimization of reversed-phase separations (122) 171  
 Karger, B.L., Gant, J.R., Hartkopf, A. and Weiner, P.H.  
   Hydrophobic effects in reversed-phase LC (128) 65  
 Karger, B.L., see Petersen, B.A. (126) 503  
 Karger, B.L., Snyder, L.R. and Eon, C.  
   Expanded solubility parameter treatment for classification and use of chromatographic solvents and adsorbents. Parameters for dispersion, dipole and hydrogen bonding interactions (125) 71  
 Karl, H., see Thiem, J. (130) 305  
 Karlén, B., see Hermansson, J. (130) 422  
 Karlsson, K.-E., see Hartvig, P. (121) 235  
 Karmen, A., see Lehrer, M. (126) 615  
 Káš, J. and Černá, J.  
   Chromatography of folates on Sephadex G-10 (124) 53  
 Kasprzyk, Z., see Wilkomirski, B. (129) 440  
 Katsanos, N.A., Karaiskakis, G. and Karabasis, I.Z.  
   Theory of non-equilibrium stopped-flow GC (130) 3  
 Katushkina, N.V., see Bresler, S.E. (130) 275

- Kauffman, G.B., Gump, B.H. and Stedjee, B.J.  
Separation of inorganic isomers by TLC.  
IV. Ligand isomers of various coordination numbers (121) 138
- Kauffman, G.B., Gump, B.H. and Stedjee, B.J.  
Separation of inorganic isomers by TLC. V. Structural, linkage, geometric, and conformational isomers of various coordination numbers (121) 395
- Kauffman, G.B., Gump, B.H., Stedjee, B.J. and Houghten, R.A. Jr.  
Separation of inorganic isomers by TLC.  
VI. Isomers of the non-metals boron, phosphorus and silica (123) 448
- Kaufman, L., see De Clercq, H. (122) 535
- Kaushik, R.C., see Qureshi, M. (128) 149
- Kawaguchi, H., see Sakamoto, T. (121) 383
- Kawai, K.-I., see Ogihara, Y. (128) 218
- Kawai, M., see Rosenfeld, J. (129) 387
- Kawai, S., see Terada, H. (130) 281
- Kawanishi, Y., see Machida, A. (130) 390
- Kelly, D.P., see Silver, M. (123) 479
- Kenner, G.W., see Galpin, I.J. (123) 237
- Kern, R., see Unger, K. (122) 345
- Khan, T., see Qureshi, M. (128) 149
- Khandelwal, J.K., see Rosenfeld, J. (129) 387
- Khym, J.X.  
Rapid resolution of 5'-mono-, -di-, and -triphosphate ribo- and deoxyribonucleoside mixtures by conventional anion-exchange chromatography (124) 415
- Kim, K., see Zlatkis, A. (126) 475
- King, J.W., see MacDonald, J. (124) 364
- Kiricsi, I., Varga, K. and Fejes, P.  
Some theoretical and practical aspects of the use of radio gas chromatographs (123) 279
- Kirkland, J.J.  
Porous silica microspheres for high-performance size exclusion chromatography (125) 231
- Kirkland, J.J., see Yau, W.W. (125) 219
- Kirkpatrick, D.  
Separation of optical brighteners by LSC (121) 153
- Kiselev, A.V., see Bortnikov, G.N. (124) 337
- Klee, R. and Steubing, L.  
Quantitative analysis of atranorin by TLC (129) 478
- Kleijn, E. van der, see Van der Kleijn, E. (121) 150
- Klein, J. and Widdecke, H.  
Influence of the support material and liquid loading on retention indices in GLC (129) 375
- Klimisch, H.-J. and Ambrosius, D.  
Quantitative determination of nitrosamines after separation of their derivatives by HPLC (in German) (121) 93
- Klimisch, H.-J. and Beiss, A.  
Separation of N-heteropolycyclic aromatic hydrocarbons from polycyclic aromatic hydrocarbons. Separation by ion-exchange chromatography and fractionation of cigarette smoke condensate (in German) (128) 117
- Knight, B.I., see Skellern, G.G. (124) 405
- Knight, C.G.  
Chromogenic substrates for proteinases. Purification by chromatography on lipophilic Sephadex (123) 429
- Knop, H.J., see Vree, T.B. (121) 150
- Knöppel, H., see Versino, B. (122) 373
- Knox, J.H. and Jurand, J.  
Separation of catecholamines and their metabolites by adsorption, ion-pair and soap chromatography (125) 89
- Knox, J.H. and Laird, G.R.  
Soap chromatography: A new HPLC technique for separation of ionizable materials. Dyestuff intermediates (122) 17
- Knox, J.H., Laird, G.R. and Raven, P.A.  
Interaction of radial and axial dispersion in LC in relation to the "infinite diameter effect" (122) 129
- Kobashi, M., see Lee, K.-R. (123) 119
- Kobayashi, S., see Nose, N. (123) 167
- Kobayashi, S., see Nose, N. (125) 439
- Kobayashi, S., see Nose, N. (130) 410
- Kodama, K., see Ohzeki, K. (121) 199
- Koel, M., see Küllik, E. (126) 249
- Kohli, J.C.  
General spray reagent for the detection of terpene derivatives on thin-layer plates (121) 116
- Kohli, J.C. and Arora, A.K.  
Specific separation of equol from estrogens by TLC (129) 473
- Kok, A. de, see De Kok, A. (128) 101
- Kok, A. de, see De Kok, A. (129) 193
- Kok, A. de, see De Kok, A. (129) 451
- Kolb, B.  
Application of an automated head-space procedure for trace analysis by GC (122) 553
- Kolikov, V.M., see Bresler, S.E. (130) 275
- Kolínský, M., see Janča, J. (121) 23
- Komárek, K., see Novrocik, J. (124) 73
- Konishi, K., see Fudano, S. (128) 199
- Kopecká, H., see Kraus, M. (124) 360
- Korol, A.N.  
Selectivity of stationary phases for the resolution of some simple substances (129) 125
- Korolczuk, J., see Mielniczuk, Z. (125) 444
- Koshy, K.T.  
Structure-GC electron capture sensitivity relationships of some substituted 17 $\alpha$ -acetoxyprogesterones (126) 641
- Kostova, V., see Dousheva, M. (121) 131
- Kouřilová, D., Krejčí, M., Slavík, V. and Deml, M.  
Device for LC with a dynamic temperature gradient (128) 79
- Kováts, E.sz., see Boksányi, L. (126) 87
- Kováts, E.sz., see Riedo, F. (126) 63

- Kowalski, J., Scibiorek, M. and Chojnowski, J.  
Correlation of the response factors of thermal-conductivity detector with molecular weight for methylsiloxanes (130) 351
- Kraak, J.C., Poppe, H. and Smedes, F.  
Construction of columns for LC with very large plate numbers. Theory and practice (122) 147
- Králíček, J., see Mařík, J. (128) 1
- Kraus, M. and Kopecká, H.  
Importance of macropores in polymer packings for GC (124) 360
- Krejčí, M., see Kouřilová, D. (128) 79
- Kringstad, R.  
Quantitative determination of phorbic acid by GLC (130) 414
- Kristin, M., see Krupčík, J. (126) 147
- Krohn, K.  
Osmium tetroxide as specific detection reagent in TLC (in German) (130) 327
- Kroll, M.G.F., see Deelder, R.S. (125) 307
- Krška, M., see Rittich, B. (130) 189
- Krupčík, J., Kristin, M., Valachovičová, M. and Janiga, Š.  
Effect of etching with gaseous hydrogen chloride on the quality of glass capillary columns (126) 147
- Kucera, P., see Scott, R.P.W. (125) 251
- Kuleš, M., see Trkovnik, M. (128) 227
- Küllik, E., Kaljurand, M. and Koel, M.  
Analysis of pyrolysis gas chromatograms using pattern recognition techniques (126) 249
- Kuningas, K., see Rang, S. (128) 59
- Kunningas, K., see Rang, S. (128) 53
- Kutter, M., see Clerc, J.T. (123) 271
- Kuzmenko, T.E., see Golovnyia, R.V. (121) 118
- L**
- Lacko, A.G. and Chen, T.F.  
Enzyme purification by affinity chromatography using a non-covalently bound adsorbent (130) 446
- Laffort, P. and Patte, F.  
Solubility factors in GLC. Comparison between two approaches and application to some biological studies (126) 625
- Lagerström, P.-O., see Persson, B.-A. (122) 305
- Laird, G.R., see Knox, J.H. (122) 17
- Laird, G.R., see Knox, J.H. (122) 129
- Lakshmi, M.B. and Subrahmanyam, D.  
Separation and detection of lipases using polyacrylamide gel electrophoresis (130) 441
- Lalka, D., see Haegele, K.D. (126) 517
- Lam, C.H. and Lie Ken Jie, M.S.F.  
Fatty acids. VIII. GLC properties of all dimethylene interrupted methyl *trans,trans*-octadecadienoates (121) 303
- Lam, C.H., see Lie Ken Jie, M.S.F. (124) 147
- Lam, C.H., see Lie Ken Jie, M.S.F. (129) 181
- Lam, S., see Milano, M.J. (125) 315
- Landini, M., see Lepri, L. (129) 239
- Langer, S.H., Melton, H.R., Griffith, T.D. and Coca, J.  
GC reactor study of the kinetics of methylcyclopentadiene dimer dissociation (122) 487
- Lankelma, J. and Poppe, H.  
Design and characterization of a coulometric detector with a glassy carbon electrode for HPLC (125) 375
- Lankelma, J., see Tjaden, U.R. (125) 275
- Lanouette, M. and Lodge, B.A.  
TLC separation of corticosteroids from their respective 17-oxo-oxidation products (129) 475
- Lanzarini, G., Morselli, L., Pifferi, P.G. and Giumanini, A.G.  
Pyrolysis GC-MS for the identification of anthocyanins (130) 261
- Lategan, P.M., see Du Preez, J.C. (124) 63
- Latini, R., see Bianchetti, G. (124) 331
- Lato, M., see Ghebrezabher, M. (127) 133
- Lau, D.H.M. and Henderson, G.L.  
Comparative study on the derivatization of *l*- $\alpha$ -acetylmethadol metabolites for electron capture GLC (129) 329
- Lau, K., see Olafsson, P.G. (124) 388
- Lawlor, J.P., see Elphick, M.C. (130) 139
- Lawrence, J.F.  
GC separation of herbicides of major interest in Canada, with electrolytic conductivity detection in the nitrogen and chlorine modes (121) 85

- Lawrence, J.F.  
GC analysis of heptafluorobutyryl derivatives of some carbamate insecticides (123) 287
- Lawrence, J.F.  
Sensitivity enhancement of the Coulson conductivity detector by modification of the bridge circuitry (128) 154
- Lawrence, J.F., Renault, C. and Frei, R.W.  
Fluorogenic labeling of organophosphate pesticides with dansyl chloride. Application to residue analysis by HPLC and TLC (121) 343
- Lawrence, J.F. and Ryan, J.J.  
Comparison of electron-capture and electrolytic-conductivity detection for the GLC analysis of heptafluorobutyryl derivatives of some agricultural chemicals (130) 97
- Lawrence, J.F., see Sen, N.P. (128) 169
- Leboda, R., see Sokółowski, S. (128) 180
- Leboda, R., Waksmundzki, A. and Sokółowski, S.  
Influence of the energetic heterogeneity of a column packing on the separation process in GSC (124) 60
- Lecaillon, J.-B. and Souppart, C.  
Quantitative assay of sulphinyprazole in plasma and urine by HPLC (121) 227
- Lecourtier, J., Audebert, R. and Quivoron, C.  
Theoretical study of chromatographic separations performed with cross-linked organic polymers (121) 173
- Lederer, M., see Sinibaldi, M. (129) 412
- Lee, C.R., see Fell, V. (121) 41
- Lee, C.S. and Benet, L.Z.  
GLC determination of ethambutol in plasma and urine of man and monkey (128) 188
- Lee, K.-R., Suzuki, T., Kobashi, M., Hasegawa, K. and Iwai, K.  
Quantitative microanalysis of capsaicin, dihydrocapsaicin and nordihydrocapsaicin using mass fragmentography (123) 119
- Lee, S.-C. and Yin, S.-J.  
TLC separation of imidazole compounds and its application to radiotracing studies of brain histidine metabolism (129) 482
- Legg, J.I., see White, W.I. (124) 134
- Lehrer, M. and Karmen, A.  
Chemical ionization MS for rapid assay of drugs in serum (126) 615
- Lekim, D., see Heidemann, G. (128) 235
- Leley, V.K., see Viswanathan, C.V. (128) 302
- Lemar, M. and Porthault, M.  
Amperometric detection in HPLC with non-conductive eluents (in French) (130) 372
- Leoni, V., Puccetti, G., Colombo, R.J. and D'Ovidio, A.M.  
Use of Tenax for the extraction of pesticides and polychlorinated biphenyls from water. II. Tests with artificially polluted and natural waters (125) 399
- Lepori, M., see Lepri, L. (123) 175
- Lepri, L., Desideri, P.G., Landini, M. and Tanturli, G.  
Chromatographic behaviour of phenols on thin layers of anion and cation exchangers. III. AG 1-X4 and BD-cellulose (129) 239
- Lepri, L., Desideri, P.G. and Lepori, M.  
Chromatographic behaviour of alkaloids on thin layers of cation exchangers. II. Alginate acid, Rexyn 102, Dowex 50-X4 and CMCNa (123) 175
- Leung, A.T., Rock, J.V., Henry, R.A., Derge, K. and McIlwrick, R.  
Effect of microprocessors on traditional chromatography instrumentation (122) 355
- Levandoski, P., see Desager, J.P. (123) 379
- Lewis, C., see Brodasky, T.F. (123) 33
- Liberti, A., see Di Corcia, A. (122) 459
- Lie Ken Jie, M.S.F. and Lam, C.H.  
Fatty acids. IX. The TLC behaviour of all of the *cis,cis*- and *trans,trans*-dimethylene-interrupted methyl octadecadienoates and methyl octadecadiynoates (124) 147
- Lie Ken Jie, M.S.F. and Lam, C.H.  
Fatty acids. XI. The synthesis of epoxides from methyl octadecadienoates and a study of their chromatographic properties (129) 181
- Lie Ken Jie, M.S.F., see Lam, C.H. (121) 303
- Liebich, H.M. and Huesgen, G.  
Rapid quantitative microanalysis of ketones in urine by GC-mass fragmentography (126) 465
- Lierop, J.B.H. van, see Van Lierop, J.B.H. (128) 183
- Ligny, C.L. de, see De Ligny, C.L. (130) 41
- Lin, D.C.K., see Graffeo, A.P. (126) 717
- Lin, H.-J., see Horvath, C. (126) 401
- Lin, J.S., Baranowski, J.D. and Olcott, H.S.  
Rapid TLC-densitometric determination of histamine in tuna (130) 426
- Lindberg, C., see Hartvig, P. (121) 235
- Lindner, W., see Erni, F. (125) 265
- Lindquist, R., see Annino, R. (126) 301
- Lindström, K. and Nordin, J.  
GC-MS of chlorophenols in spent bleach liquors (128) 13
- Lipavsky, V.N., see Berezkin, V.G. (130) 318
- Little, J.N., Cotter, R.L., Prendergast, J.A. and McDonald, P.D.  
Preparative LC using radially compressed columns (126) 439
- Livertoux, M.H., see Baudot, P. (128) 141
- Lloyd, R.J., see Uden, P.C. (126) 225
- Lodge, B.A., see Lanouette, M. (129) 475
- Lord, K.A., see Bromilow, R.H. (125) 495
- Lovelock, A.J., see Simmonds, P.G. (126) 3
- Lovelock, J.E., see Simmonds, P.G. (126) 3
- Low, C.-E., see Asmus, P.A. (123) 109
- Luan, N.-T., Pokorný, J., Čoupek, J. and Pokorný, S.  
Fractionation of the oxidation products of  $\alpha$ -tocopherol and their condensation

- products with L-lysine by combined TLC and gel chromatography (130) 378
- Lubkowitz, J.A. and Petit, L.R.  
Determination of metamidophos and acetamidophos in formulations by reversed-phase HPLC (121) 161
- Lubrano, G.J., see Dean, W.W. (124) 287
- Luciani, M.L., see Alberti, G. (128) 289
- Lund, E., Thomsen, J. and Brunfeldt, K.  
Use of *o*-phthalaldehyde for fluorescence detection in conventional amino acid analyzers. Sub-nanomole sensitivity in the analysis of phenylthiohydantoin-amino acids (130) 51
- Lund, U., see Wahlund, K.-G. (122) 269
- ## M
- MacArthur Moodie, I. and George, R.D.  
GLC of amino acids. Determination of cystine and cysteine as N-acetyl, *n*-propyl S-carboxymethylcysteinate (124) 315
- McCorkle, T., see Scott, C.G. (125) 157
- McCoy, B.J., see Wong, A.K. (129) 1
- MacDonald, J. and King, J.W.  
Improved Hall conductivity detection system without solvent interference (124) 364
- McDonald, P.D., see Little, J.N. (126) 439
- McDuffie, N.M., see Dietrich, C.P. (130) 299
- McFadden, W.H., Schwartz, H.L. and Evans, S.  
Direct analysis of LC effluents (122) 389
- McFadyen, P.  
Determination of free toluene diisocyanate in polyurethane prepolymers by HPLC (123) 468
- McGinnis, G.D. and Fang, P.  
Separation of substituted carbohydrates by HPLC (130) 181
- Machida, A., Ogawa, T., Ono, T. and Kawanishi, Y.  
PC behaviour of  $\alpha$ -DNP-lysine in comparison with other DNP-amino acids (130) 390
- Machin, A.F., see Mundy, D.E. (121) 335
- McHugh, W., Sandmann, R.A., Haney, W.G., Sood, S.P. and Wittmer, D.P.  
Characterization of selected fluorescamine-amino acid reaction products by HPLC (124) 376
- McIllwrick, R., see Leung, A.T. (122) 355
- MacKenzie, S.L.  
Analysis of methionine in plant materials. Improved GC procedure (130) 399
- McKeown, M.C., see Siegel, M.W. (122) 397
- McKerrel, E.H., see Webber, T.J.N. (122) 243
- McNay, J.L. Jr., see Haegele, K.D. (126) 517
- McRorie, R.A., see Brantner, J.H. (129) 97
- Madani, C., Chambaz, E.M., Rigaud, M., Durand, J. and Chebroux, P.  
New method for the preparation of highly stable polysiloxane-coated glass open-tubular capillary columns and application to the analysis of hormonal steroids (126) 161
- Maes, R.A.A., see Plomp, T.A. (121) 243
- Magee-Brown, R., see O'Hare, M.J. (125) 357
- Magic, S.E.  
Determination of  $\beta$ -cetotetrine in plasma and urine using HPLC with electrochemical detection (129) 73
- Mague, T.H., see Siezen, R.J. (130) 151
- Magyar, K., see Kalász, H. (128) 300



- Mahy, N. and Gelpi, E.  
GC separation of histamine and its metabolites (130) 237
- Mahy, N., see Rosello, J. (122) 469
- Maini, P.  
Electron-capture GC determination of residues of anthraquinone bird repellent (128) 174
- Makarenko, N.P., see Bortnikov, G.N. (124) 337
- Makita, M., Yamamoto, S., Sakai, K. and Shiraishi, M.  
GLC of the N-isobutyloxycarbonyl methyl esters of non-protein amino acids (124) 92
- Málek, J., see Nondek, L. (129) 393
- Mallen, D.N.B., see Cockerill, A.F. (129) 339
- Malspeis, L., see Sams, R.A. (125) 409
- Mára, M. and Michalec, Č.  
Chromatographic study of mycolic acid-like substances in lipids of *Listeria monocytogenes* (130) 434
- Marco, C. de, see De Marco, C. (129) 369
- Marcus, C.S., see Maysinger, D. (130) 129
- Mařík, J., Čapek, A. and Králíček, J.  
GC-MS of trimethylsilyl derivatives of  $\omega$ -amino acids (128) 1
- Markowski, J., see Czerwiec, Z. (124) 76
- Marriott, J.L., see Ross, M.S.F. (124) 157
- Marshall, J.L. and Parker, D.A.  
Investigations into the preparation of glass open-tube GC columns (122) 425
- Marshall, P.N.  
TLC of some cationic dyes commonly used in histology (129) 277
- Martin, A.J.P., see Shanfield, H. (126) 457
- Martin, I.L. and Baker, G.B.  
Procedural difficulties in the GLC assay of the arylalkylamines (123) 45
- Martin, M., Guiochon, G., Blu, G. and Eon, C.  
Compressibility effects in syringe pumps for LC (130) 458
- Martin, M., Verillon, F., Eon, C. and Guiochon, G.  
Theoretical and experimental study of recycling in HPLC (125) 17
- März, L., Barna, J. and Ebermann, R.  
Localization of glycosidases on polyacrylamide gel (123) 495
- Maskarinec, M.P., Alexander, G. and Novotný, M.  
Analysis of the acidic fraction of marijuana smoke condensate by capillary GC-MS (126) 559
- Massart, D.L., see De Clercq, H. (122) 535
- Massart, D.L., see Detaevnier, M.R. (128) 204
- Mathews, R.G., see Schwartz, R.D. (126) 113
- Mathiasson, L., see Olsson, A.-M. (128) 35
- Matlin, S.A., see Evans, N. (125) 345
- Matorina, N.N., Chmutov, K.V., Shepetyuk, L.V., Buchatsky, P.M. and Formalnova, T.I.  
Specific factors involved in the spreading of chromatographic zones in ion-exchange complexing chromatography (129) 19
- Matricini, G., see Sinibaldi, M. (129) 412
- Matsumoto, I., see Karashima, D. (130) 77
- Mattsson, P.E. and Nygren, S.  
GC determination of polychlorinated biphenyls and some chlorinated pesticides in sewage sludge using a glass capillary column (124) 265
- Mattsson, P.E., see Nygren, S. (123) 101
- Matucha, M. and Smolková, E.  
GC of  $^3\text{H}$ - and  $^{14}\text{C}$ -labelled compounds (Review) (127) 163
- Maurer, K.H., see Zune, A. (122) 365
- Maurer, P.G., see Blasius, E. (125) 511
- Maysinger, D., Marcus, C.S., Wolf, W., Tarle, M. and Casanova, J.  
Preparation and HPLC of iodinated diethylstilbestrols and some related steroids (130) 129
- Medicus, R.G., see Brantner, J.H. (129) 97
- Meienhofer, J., see Gabriel, T.F. (129) 287
- Melander, W., see Horváth, C. (125) 129
- Mellor, N.  
Thermionic detectors in GC. Selective detection of phosphorus, nitrogen, and sulphur compounds (123) 396
- Melton, H.R., see Langer, S.H. (122) 487
- Menez, J.F., Berthou, F., Picart, D., Bardou, L. and Floch, H.H.  
GC analysis of dialkylbarbituric acids (129) 155
- Mercier, C., see Kainuma, K. (121) 361
- Mesrob, B., see Dousheva, M. (121) 131
- Mettler, M., see Curtius, H.C. (126) 569
- Michalec, Č., see Mára, M. (130) 434
- Michalewsky, J., see Gabriel, T.F. (129) 287
- Michalski, E.J., see Brown, N.D. (121) 76
- Michel, L., see Frei, R.W. (126) 665
- Middleditch, B.S.  
Aldehyde condensation products as derivatives for the vapor phase analysis of biogenic amines (126) 581
- Mielniczuk, Z., Korolczuk, J. and Jakubowski, A.  
Long-chain acetates as internal standards in the GLC of volatile fatty acids (125) 444
- Mikeš, F., Boshart, G. and Gil-Av, E.  
Resolution of optical isomers by HPLC, using coated and bonded chiral charge-transfer complexing agents as stationary phases (122) 205
- Milano, M.J., Lam, S. and Grushka, E.  
Rapid scanning diode array as a multi-wavelength detector in LC (125) 315
- Miles, W.F., see Sen, N.P. (128) 169
- Miller, V., Pacáková, V. and Smolková, E.  
GC analysis of pharmaceuticals based on pyrimidine and purine substances (123) 216
- Mills, A.D., see Dolphin, R.J. (122) 259
- Mizuike, A., see Sakamoto, T. (121) 383
- Moler, G.F., see Dessy, R.E. (126) 347
- Molnár, I., see Horváth, C. (125) 129
- Molodtsov, N.V., see Artyukov, A.A. (130) 451
- Monal, J.L., see Baudot, P. (128) 141
- Monaldi, B., see Ghebregzabher, M. (127) 133
- Montgomery, W.G., see Morita, H. (123) 454

- Moore, B.P. and Brown, W.V.  
3,4,5-Trimethoxybenzylhydrazine: An efficient subtraction reagent for aldehydes and ketones in GC (121) 279
- Moore, B.P. and Brown, W.V.  
GC detection of small amounts of formic acid as dimethylformamide (128) 178
- Moore, S., see Galpin, I.J. (123) 237
- Mori, S.  
Identification and determination of phthalate esters in river water by HPLC (129) 53
- Morita, H. and Montgomery, W.G.  
GC of chloromethylsilylated phenolic acids (123) 454
- Morrone, A. and Beretta, E.  
GC determination of diflalone in human plasma by use of an automatic sampler (128) 27
- Morselli, L., see Lanzarini, G. (130) 261
- Morselli, P.L., see Bianchetti, G. (124) 331
- Morselli, P.L., see Frigerio, A. (130) 354
- Moschetto, Y., see Desreumaux, C. (130) 336
- Moss, C.W., see Choudhary, G. (128) 261
- Mostecký, J., see Trdlička, V. (130) 437
- Mott, S.D. and Grushka, E.  
Chromatographic solute identification using peak shape analysis (126) 191
- Mrkvičková, L., see Janča, J. (121) 23
- Mumma, R.O., see Arjmand, M. (124) 97
- Mundy, D.E., Quick, M.P. and Machin, A.F.  
Determination of warfarin in animal relicta and feeding stuffs by HPLC with confirmation of identity by MS (121) 335
- Murakami, F., see Rokushika, S. (130) 324
- Muramatsu, H., see Tsuda, T. (130) 87
- Murphy, J., see Sabatka, J.J. (125) 523
- Murphy, R.C., see Anderson, F.S. (121) 251
- Muusze, R.G., see Tjaden, U.R. (125) 275
- N**
- Nachtmann, F., Spitz, H. and Frei, R.W.  
Rapid and sensitive high-resolution procedure for digitalis glycoside analysis by derivatization LC (122) 293
- Nagayoshi, T., see Karashima, D. (130) 77
- Nair, B.M., see Appelqvist, L.-Å. (124) 239
- Najm, K.A.B., see Habboush, A.E. (130) 161
- Nakajima, M., Ozawa, Y., Tanimura, T. and Tamura, Z.  
Highly efficient carboxylic acid analyzer and its application (123) 129
- Nakamoto, A., see Asai, K. (126) 369
- Nakamura, H. and Pisano, J.J.  
Derivatization of compounds at the origin of thin-layer plates with fluorescamine (121) 33
- Nakamura, H. and Pisano, J.J.  
Detection of compounds with primary amino groups on thin-layer plates by dipping in a fluorescamine solution (121) 79
- Nakamura, T., see Fukuda, T. (128) 212
- Nakamura, T., Yano, T., Fujita, A. and Ohashi, S.  
Anion-exchange chromatographic separation of linear phosphates with eluent containing a chelating agent (130) 384
- Nambara, T., see Shimada, K. (124) 79
- Natalizia, F., see Cartoni, G.P. (123) 474
- Nau, H.  
GC-MS of permethylated peptides and their reduced and trimethylsilylated derivatives (121) 376
- Nayyar, C.P., see Singh, M.V. (124) 145
- Neale, M.E., see Jones, R.A. (130) 368
- Nelson, W.C. and Wankat, P.C.  
Application of cycling zone separation to preparative HPLC (121) 205
- Neuhoff, V., see Osborne, N.N. (123) 212
- Neuhoff, V., see Zimmer, H.G. (124) 120
- Newton, N.E., Ohno, K. and Abdel-Monem, M.M.  
Determination of diamines and polyamines in tissues by HPLC (124) 277
- Nice, E.C., see O'Hare, M.J. (125) 357
- Nicolosi, R.J., see Hojnacki, J.L. (128) 133
- Niedner, R., see Ernst, W. (130) 331
- Niro, C.M., see Cassidy, R.M. (126) 787
- Niwaguchi, T. and Inoue, T.  
Direct quantitative analysis of lysergic acid diethylamide (LSD) and 2,5-dimethoxy-4-methylamphetamine (STP) on thin-layer chromatograms (121) 165
- Nogami, A., see Kainuma, K. (121) 361
- Nondek, L., Šilhavý, P. and Málek, J.  
LC of benzenedicarboxylic acids and their 2-hydroxyethyl esters on silica gel (129) 393
- Nordin, J., see Lindström, K. (128) 13

- Nose, N., Kobayashi, S., Hirose, A. and Watanabe, A.  
GLC determination of sulphonamides (123) 167
- Nose, N., Kobayashi, S., Tanaka, A., Hirose, A. and Watanabe, A.  
Microdetermination of *o*-phenylphenol in citrus fruits by GLC (125) 439
- Nose, N., Kobayashi, S., Tanaka, A., Hirose, A. and Watanabe, A.  
Determination of thiabendazole by electron-capture GLC after reaction with pentafluorobenzoyl chloride (130) 410
- Nota, G., Palombari, R. and Improta, C.  
Determination of complex cyanides in water by GC (123) 411
- Novák, J., Guha, O.K. and Janák, J.  
Effect of column temperature on the sensitivity of katharometer response (123) 497
- Novotný, M., see Asmus, P.A. (123) 109
- Novotný, M., see Asmus, P.A. (126) 317
- Novotný, M., see Maskarinec, M.P. (126) 559
- Novrociak, J., Komárek, K. and Poskočil, J.  
GLC of some *o*-xylene, indane and tetralin derivatives (124) 73
- Nunn, W.G., see Dessy, R.E. (126) 347
- Nygren, S. and Mattsson, P.E.  
Flow programming in glass capillary column-electron capture GC by using the valve in the splitter line (123) 101
- Nygren, S., see Mattsson, P.E. (124) 265
- Oates, J.A., see Carr, K. (129) 363
- Ogawa, T., see Machida, A. (130) 390
- Ogihara, Y., Inoue, O., Otsuka, H., Kawai, K.-I., Tanimura, T. and Shibata, S.  
Droplet counter-current chromatography for the separation of plant products (128) 218
- O'Hare, M.J., Nice, E.C., Magee-Brown, R. and Bullman, H.  
HPLC of steroids secreted by human adrenal and testis cells in monolayer culture (125) 357
- Ohashi, S., see Fukuda, T. (128) 212
- Ohashi, S., see Nakamura, T. (130) 384
- Ohno, K., see Newton, N.E. (124) 277
- Ohno, T., see Terada, H. (130) 281
- Ohzeki, K., Kambara, T. and Kodama, K.  
Effect of column length on HETP in GC (121) 199
- Olafsson, P.G., Bryan, A.M. and Lau, K.  
Differential scanning calorimetric-TLC study of 5-halo-2'-deoxynucleosides (124) 388
- Olcott, H.S., see Lin, J.S. (130) 426
- Olsson, A.-M., Mathiasson, L., Jönsson, J.Å. and Haraldson, L.  
Determination of the loss of stationary phase in GLC from the change in retention volume (128) 35
- Olsson, L., Renne, N. and Samuelson, O.  
Chromatography of aromatic compounds on cross-linked polyvinylpyrrolidone and on anion-exchange resins (123) 355
- Ono, T., see Machida, A. (130) 390
- Onuska, F.I. and Comba, M.E.  
Preparation and application of surface-modified high-resolution wall-coated open tubular columns (126) 133
- Orav, A., see Rang, S. (128) 53
- Orav, A., see Rang, S. (128) 59
- Oró, J., see Holzer, G. (126) 771
- Ortner, H.M. and Dalmonego, H.  
Behaviour of rhenium(VII) on Sephadex G-10 (in German) (125) 517
- Osborne, D.J., see Cockerill, A.F. (129) 339
- Osborne, N.N., Stahl, W.L. and Neuhoff, V.  
Separation of amino acids as methyl derivatives on polyamide layers (123) 212
- Osipova, N.A., see Tsitsishvili, G.V. (130) 13
- Otsuka, H., see Ogihara, Y. (128) 218
- Ozawa, T., see Saitoh, K. (124) 231
- Ozawa, Y., see Nakajima, M. (123) 129

## P

- Pacáková, V., see Miller, V. (123) 216
- Page, F.M., see Broś, E. (126) 271
- Pailer, M. and Hložek, V.  
Use of a nematic liquid crystal for the GC separation of aza-heterocyclic compounds (128) 163
- Palombari, R., see Nota, G. (123) 411
- Pantarotto, C., see Frigerio, A. (130) 354
- Pantarotto, C., see Frigerio, A. (130) 361
- Papendick, H.-D. and Baudisch, J.  
Tapeworm columns in GC (122) 443
- Parissakis, G., see Iatridis, B. (122) 505
- Parker, D.A., see Marshall, J.L. (122) 425
- Parry, G.J.G. and Ferry, D.G.  
Rapid GC method for the determination of clonazepam in serum and cerebrospinal fluid (128) 166
- Pašek, J., see Dvořák, B. (124) 1
- Patel, A.B. and Gehrke, C.W.  
Derivatization and chromatography of nucleosides and nucleotides (130) 115
- Patel, A.B., see Gehrke, C.W. (123) 335
- Patel, A.B., see Gehrke, C.W. (130) 103
- Patsalides, E., see Dilli, S. (130) 251
- Patte, F., see Laffort, P. (126) 625
- Peil, A., see Versino, B. (122) 373
- Pelizza, G., see Roggia, S. (124) 169
- Perier, C., Ronzière, M.-C., Rattner, A. and Frey, J.  
GC separation of  $\epsilon$ -hydroxynorleucine (in French) (125) 526
- Perrett, D.  
Simplified low-pressure high-resolution nucleotide analyser (124) 187
- Perrin, J.H., see Hulshoff, A. (129) 249
- Perrin, J.H., see Hulshoff, A. (129) 263
- Persson, B.-A. and Lagerström, P.-O.  
Ion-pair partition chromatography in the analysis of drugs and biogenic substances in plasma and urine (122) 305
- Pertoft, H. and Hallén, A.  
Preparation of silica-agarose beads for gel chromatography (128) 125
- Peška, J., Štamberg, J., Hradil, J. and Ilavský, M.  
Cellulose in bead form. Properties related to chromatographic uses (125) 455
- Peterkin, P.I., see Fitt, P.S. (124) 137
- Petersen, B.A., Hanson, R.N., Giese, R.W. and Karger, B.L.  
Picogram analysis of free triiodothyronine and free thyroxine hormones in serum by equilibrium dialysis and electron capture GC (126) 503
- Petit, J., see Chabard, J.-L. (121) 295
- Petit, L.R., see Lubkowitz, J.A. (121) 161
- Petrin, M.J., see Scott, C.G. (125) 157
- Petrin, P.  
Versatile twin-trough developing tank for TLC (123) 65
- Peyronel, G., Battistuzzi, R. and Debbi, G.  
Radiochromatographic study of some ethylthiourea complexes of copper(I), silver(I) and gold(I) (123) 367
- Pfaffenberger, C.D., Szafranek, J. and Horning, E.C.  
GC study of free polyols and aldoses in cataractous human lens tissue (126) 535
- Phillipou, G.  
Allyldimethylsilyl ethers. New derivatives for the analysis of steroids by GC-MS (129) 384
- Phillips, C.S.G., see Badger, C.M.A. (126) 11
- Picart, D., see Menez, J.F. (129) 155
- Pifferi, P.G., see Lanzarini, G. (130) 261
- Pirkle, W.H. and Sikkenga, D.L.  
Resolution of optical isomers by LC (123) 400
- Pisano, J.J., see Nakamura, H. (121) 33
- Pisano, J.J., see Nakamura, H. (121) 79
- Plomp, T.A., Maes, R.A.A. and Thiery, M.  
Rapid GC determination of thiamphenicol in plasma and amniotic fluid (121) 243
- Poelmann, J., see Versino, B. (122) 373
- Poitrenaud, C.  
Partition of chelating agents between a cationic ion exchanger swollen with water and a water-immiscible solvent (in French) (124) 197
- Poitrenaud, C., see Rodriguez, A.R. (121) 104
- Poitrenaud, C., see Rodriguez, A.R. (127) 29
- Pokorný, J., see Luan, N.-T. (130) 378
- Pokorný, S., see Luan, N.-T. (130) 378
- Polcaro, C.  
Simple combination of  $R_F$  value and melting-point determination for the identification of barbiturates (125) 431
- Pollak, V.  
Background theory for the design of a photometric instrument for quantitative thin-media chromatography (123) 11
- Pooter, H. de, see De Pooter, H. (121) 49
- Popl, M., Dolanský, V. and Čoupek, J.  
Chromatography of aromatic hydrocarbons on macroporous polystyrene gel (130) 195
- Popova, T.P., see Berezkin, V.G. (130) 318
- Poppe, H., see Kraak, J.C. (122) 147
- Poppe, H., see Lankelma, J. (125) 375
- Poppe, H., see Tjaden, U.R. (125) 275
- Porthault, M., see Lemar, M. (130) 372
- Poskočil, J., see Novročík, J. (124) 73
- Potokin, J.L., see Bresler, S.E. (130) 275
- Pour, J., see Franc, J. (129) 315
- Preez, J.C. du, see Du Preez, J.C. (124) 63
- Prendergast, J.A., see Little, J.N. (126) 439
- Prescott, R., see Annino, R. (126) 301
- Pretorius, V., see Boshoff, P.R. (126) 35
- Preussmann, R., see Von Rappard, E. (124) 247
- Pribyl, J. and Herzel, F.  
LC parameters of groups of herbicidal

active substances. I. Urea herbicides (in German) (125) 487  
Prime, D.M., see Cockerill, A.F. (129) 339  
Privitera, P.J., see Saelens, D.A. (123) 185  
Puccetti, G., see Leoni, V. (125) 399  
Puech, J.-L., see Alibert, G. (124) 369

## Q

Quick, M.P., see Mundy, D.E. (121) 335  
Quivoron, C., see Lecourtier, J. (121) 173  
Qureshi, M., Sharma, V., Kaushik, R.C. and Khan, T.  
Influence of drying temperature on the ion-exchange properties of stannic tungstoarsenate. II. Separation of  $\text{Hg}^{2+}$  and  $\text{Pb}^{2+}$  and of  $\text{Al}^{3+}$  and  $\text{Ca}^{2+}$  (128) 149

## R

- Rabel, F.M., Caputo, A.G. and Butts, E.T.  
Separation of carbohydrates on a new polar bonded phase material (126) 731
- Raina, R., see Dhar, M.L. (129) 488
- Rajapakse, L.S., see Wijesekera, R.O.B. (121) 388
- Ramage, R., see Galpin, I.J. (123) 237
- Rammel, O.J., see Bonilla, C.A. (124) 303
- Rang, S., Kuningas, K., Orav, A. and Eisen, O.  
Capillary GC of *n*-alkynes. III. Correlation of retention index increments with molecular structure (128) 59
- Rang, S., Kuningas, K., Orav, A. and Eisen, O.  
Capillary GC of *n*-alkynes. II. Variation of retention indices with temperature (128) 53
- Rao, G.S. and Bejnarowicz, E.A.  
TLC of sarcosine and its *N*-lauroyl and *N*-nitroso derivatives (123) 486
- Rapp, U., see Zune, A. (122) 365
- Rappard, E. von, see Von Rappard, E. (124) 247
- Rassi, Z. el, see El Rassi, Z. (125) 179
- Ratti, B., see Roggia, S. (124) 169
- Rattner, A., see Perier, C. (125) 526
- Raven, P.A., see Knox, J.H. (122) 129
- Reba, R.C., see Rzeszutarski, W.J. (124) 88
- Reed, L.S. and Archer, M.C.  
Separation of folic acid derivatives by HPLC (121) 100
- Regnier, F.E., see Chang, S.H. (125) 103
- Rehg, W.R., see Tesch, J.W. (126) 743
- Reid, E.H., see Jamieson, G.R. (128) 193
- Reinhard, M., see Clerc, J.T. (123) 271
- Renault, C., see Lawrence, J.F. (121) 343
- Renne, N., see Olsson, L. (123) 355
- Renterghem, R. van, see Van Renterghem, R. (124) 37
- Reymer, H.G.M., see Brinkman, U.A.T. (127) 203
- Reymer, H.G.M., see Brinkman, U.A.T. (128) 101
- Reymer, H.G.M., see Brinkman, U.A.T. (129) 193
- Reynolds, W.D., see Dessy, R.E. (126) 347
- Rezl, V. and Bursa, J.  
Identification of organic compounds by an elution GC-reactor-frontal GC system (126) 723
- Richards, G.N., see Covacevich, M.T. (129) 420
- Ridder, J.J. de, see De Ridder, J.J. (121) 96
- Ridlington, J., see Jones, R.A. (130) 368
- Rieder, R., see Ševčík, J. (126) 263
- Riedo, F., Fritz, D., Tarján, G. and Kováts, E.sz.  
Tailor-made C<sub>87</sub> hydrocarbon as a possible non-polar standard stationary phase for GC (126) 63
- Riess, W., see Degen, P.H. (121) 72
- Rietveld, T., see Hörchner, P. (123) 414
- Rigaud, M., see Madani, C. (126) 161
- Rigg, J.R.A., see Rosenfeld, J. (129) 387
- Righetti, P.G. and Caravaggio, T.  
Isoelectric points and molecular weights of proteins. A table (Review) (127) 1
- Rijks, J.A., see Franken, J.J. (126) 117
- Rinaldi, A., see De Marco, C. (129) 369
- Risse, C., see Chevalier, G. (124) 343
- Ritter, F.J., see Dhont, J.H. (130) 205
- Rittich, B. and Krška, M.  
Separation of quinones and their derivatives by HPLC (130) 189
- Robie, N.W., see Haegele, K.D. (126) 517
- Rocca, J.L., see Collet, G. (121) 213
- Rocca, J.L., see El Rassi, Z. (125) 179
- Rock, J.V., see Leung, A.T. (122) 355
- Rodriguez, A.R. and Poitrenaud, C.  
Swelling of a sulphonic resin equilibrated with mixtures of water-acetic acid and water-tetrahydrofuran (in French) (121) 104
- Rodriguez, A.R. and Poitrenaud, C.  
Swelling of cation-exchange resins in aqueous organic solvents (Review) (in French) (127) 29
- Roeymans, H.J., see Van Eijk, G.W. (124) 66
- Roggia, S., Grossoni, G., Pelizza, G., Ratti, B. and Gallo, G.G.  
Determination of diftalone and its main metabolites in human plasma and synovial fluid by HPLC (124) 169
- Rohrbach, P., see Chevalier, G. (124) 343
- Rokushika, S., Murakami, F. and Hatano, H.  
Single-wavelength detection for amino acid analysis (130) 324
- Ronzière, M.-C., see Perier, C. (125) 526
- Rosello, J., Mahy, N., Tusell, J. and Gelpi, E.  
GC profiles of prostaglandins A, B, E and F (series I and II) and histidine metabolites (Summary) (122) 469
- Rosello, J., Tusell, J. and Gelpi, E.  
Profiles of prostaglandins A, B, E and F (series I and II) obtained by GC with multiple-ion detection (130) 65
- Rosenfeld, J., Kawai, M., Rigg, J.R.A. and Khandelwal, J.K.  
GC method for the analysis of butyrophenones based on the Hofmann degradation reaction (129) 387
- Rosenmund, H., see Wad, N. (128) 231
- Ross, M.S.F. and Marriott, J.L.  
Forensic examination of sawdusts by TLC and flying spot densitometry (124) 157
- Rosset, R., see Chevalier, G. (124) 343
- Roumeliotis, P., see Unger, K.K. (125) 115
- Rubinstein, R.N. and Silchenko, S.A.  
Dynamics of sorption with a rectangular isotherm and kinetics limited by particle diffusion (123) 251
- Ruck, R. and Gruft, H.  
Disposable tubes for acrylamide gel disc electrophoresis (129) 382
- Ručman, R.  
Lysergic acids. II. Isolation and separation of lysergic acids (in German) (121) 353
- Rudenko, B.A., see Berezkin, V.G. (130) 318
- Rufini, S., see Ghebrezabher, M. (127) 133

Ruh, T.S.

Simultaneous separation of estrogens and androgens using TLC (121) 82

Rulon, P.W., see Giannovario, J.A. (121) 285

Rutten, G.A.F.M., see Franken, J.J. (126) 117

Ryan, J.J.

Chromatographic analysis of hormone residues in food (Review) (127) 53

Ryan, J.J., see Lawrence, J.F. (130) 97

Ryan, T.R. and Hastings Vogt, C.R.

Determination of physiological levels of Cr(III) in urine by GC (130) 346

Ryba, M.

Adsorption properties of stainless-steel capillaries used in the preparation of open tubular GC columns (123) 317

Ryba, M.

Di-*n*-butyl tetrachlorophthalate as a liquid phase in the GC identification of hydrocarbons (123) 327

Rzeszutowski, W.J., Eckelman, W.C. and Reba, R.C.

Reversed-phase HPLC of bleomycin (124) 88

## S

Sabatka, J.J., Brent, D.A., Murphy, J., Charles, J., Vance, J. and Gault, M.H.

Separation of digoxin and dihydrodigoxin by TLC or PC (125) 523

Sabelashvili, S.D., see Tsitsishvili, G.V. (130) 13

Saelens, D.A., Walle, T. and Privitera, P.J.

Quantitative determination of propranolol, propranolol glycol and *N*-desisopropylpropranolol in brain tissue by electron capture GC (123) 185

Sage, D., see Collet, G. (121) 213

Saha, S., see Dutta, J. (124) 29

Saitoh, K., Ozawa, T. and Suzuki, N.

Solvent dependence of gel swelling in the system of Merckogel OR-2000 and various organic solvents (124) 231

Sakai, K., see Makita, M. (124) 92

Sakamoto, T., Kawaguchi, H. and Mizuike, A.

Determination of traces of copper and aluminium in zinc by GC with the microwave plasma detector (121) 383

Sakodynski, K.I., Sokolovski, R.I., Tunitzki, N.N. and Volkov, S.A.

Possibility of increasing the selectivity of chromatographic separation under the action of laser radiation (126) 257

Saleh, N.A.M.

Chromatographic differentiation of tamarixetin and isorhamnetin by spraying (124) 174

Sampaio, L.O., see Dietrich, C.P. (130) 299

Samperi, R., see Di Corcia, A. (121) 370

Samperi, R., see Di Corcia, A. (122) 459

Sams, R.A. and Malspeis, L.

Determination of naloxone and naltrexone as perfluoroalkyl ester derivatives by electron-capture GLC (125) 409

Samuelson, O., see Olsson, L. (123) 355

Sánchez, M.C., Colomé, J. and Gelpí, E.

Electron capture and multiple ion detection of benzodiazepine esters in pharmacokinetic studies (126) 601

Sandgren, B., see Gyllenhaal, O. (122) 471

Sandmann, R.A., see McHugh, W. (124) 376

Santi, W., see Frei, R.W. (126) 665

Sargent, E.R. and Agris, P.F.

Chromatography and electrophoresis techniques for demonstrating the presence of cellular N<sup>6</sup>-(Δ<sup>2</sup>-isopentenyl)-adenosine-3'-monophosphate (123) 490

Saunders, D.L.

Adsorbent deactivation in HPLC (125) 163

Schauenburg, H., see Versino, B. (122) 373

Schill, G., see Fransson, B. (125) 327

Schmidt, H., see Halász, I. (126) 19



- Schmidlein, H. and Herrmann, K.  
Quantitative analysis of flavanones and 3-hydroxyflavanones by TLC (123) 385
- Schmitt, K.-F. and Jähnchen, E.  
Rapid GC determination of underivatized phenprocoumon in plasma (130) 418
- Schneider, G., see Gräbner, R. (121) 110
- Schoenmakers, P.J., see Tijssen, R. (122) 185
- Schomburg, G., Dielmann, R., Husmann, H. and Weeke, F.  
GC analysis with glass capillary columns (122) 55
- Schulman, A., see Barton, R.A. (130) 145
- Schulze, E., see Zimmer, H.G. (124) 120
- Schwartz, H.L., see McFadden, W.H. (122) 389
- Schwartz, R.D. and Mathews, R.G.  
Selectivity of high-temperature liquid phases for GC (126) 113
- Schwarzenbach, R.  
LC of neohesperidin dihydrochalcone (129) 31
- Schwarzenbach, R., see Clerc, J.T. (123) 271
- Scibiorek, M., see Kowalski, J. (130) 351
- Scott, C.D., Spence, R.D. and Sisson, W.G.  
Pressurized, annular chromatograph for continuous separations (126) 381
- Scott, C.G., Petrin, M.J. and McCorkle, T.  
Liquid chromatographic separation of some acyclic isoprenoid acid enantiomers via diastereomer derivatization (125) 157
- Scott, K.F., see Badger, C.M.A. (126) 11
- Scott, R.P.W.  
Role of molecular interactions in chromatography (122) 35
- Scott, R.P.W. and Kucera, P.  
Exclusion properties of some commercially available silica gels (125) 251
- Seaman, S., see Sen, N.P. (128) 169
- Sebastian, I., see Karch, K. (122) 3
- Sebastian, I., see Karch, K. (122) 171
- Segelman, A.B. and Segelman, F.P.  
*Cannabis sativa* L. (marijuana). VII. The relative specificity of the RIM test (123) 79
- Segelman, F.P., see Segelman, A.B. (123) 79
- Seki, T.  
Chromatographic separation of catecholamines on a weakly acidic ion-exchange resin using a borate-containing eluent (124) 411
- Sembdner, G., see Gräbner, R. (121) 110
- Sen, N.P., Miles, W.F., Seaman, S. and Lawrence, J.F.  
Trace analysis of 3-hydroxy-1-nitrosopyrrolidine, a non-volatile N-nitrosamine, by combined GC-MS method (128) 169
- Sen, P.C., Ghosh, A. and Dutta, J.  
Argentation CC. A new ternary solvent system for the separation of methyl esters of polyunsaturated fatty acids (129) 469
- Serfontein, W.J. and De Villiers, L.S.  
Quantitative GC analysis of barbiturates and hydantoins with quaternary ammonium hydroxides (130) 342
- Ševčík, J., Kaiser, R.E. and Rieder, R.  
Semi-specific flame-ionization detection system (126) 263
- Sezille, G., see Desreumaux, C. (130) 336
- Shanfield, H., Hsu, F. and Martin, A.J.P.  
Use of a gaseous electrical discharge to induce fluorescence in organic compounds separated by TLC (126) 457
- Shankar, V., see Joshi, P.N. (121) 65
- Sharma, V., see Qureshi, M. (128) 149
- Sharpe, J.E.E., see Sutherland, I.A. (122) 333
- Shepetyuk, L.V., see Matorina, N.N. (129) 19
- Sherma, J., see Touchstone, J.C. (124) 111
- Shibata, S., see Ogihara, Y. (128) 218
- Shigematsu, A., see Karashima, D. (130) 77
- Shimada, K., Hasegawa, M., Hasebe, K., Fujii, Y. and Nambara, T.  
Studies on steroids. CXIV. Separation of cardiotonic steroid conjugates by HPLC (124) 79
- Shiraishi, M., see Makita, M. (124) 92
- Shmidel, E.B., see Brazhnikov, V.V. (122) 527
- Siegel, M.W. and McKeown, M.C.  
Ions and electrons in the electron capture detector. Quantitative identification by atmospheric pressure ionization MS (122) 397
- Sievers, A., see Thiem, J. (130) 305
- Sievers, R.E., see Tesch, J.W. (126) 743
- Siezen, R.J. and Mague, T.H.  
GLC of the N-heptafluorobutyl isobutyl esters of fifty biologically interesting amino acids (130) 151
- Sikkenga, D.L., see Pirkle, W.H. (123) 400
- Silchenko, S.A., see Rubinstein, R.N. (123) 251
- Šilhavý, P., see Nondek, L. (129) 393
- Silver, M. and Kelly, D.P.  
TLC of oxidised and reduced lipoate and lipoamide and their persulfides (123) 479
- Simmonds, P.G., Lovelock, A.J. and Lovelock, J.E.  
Continuous and ultrasensitive apparatus for the measurement of air-borne tracer substances (126) 3
- Singh, B., see Singh, M.V. (124) 145
- Singh, B.N., see Willox, S. (128) 196
- Singh, M.V., Dass, R.S., Nayyar, C.P. and Singh, B.  
PC of radiopharmaceuticals labelled with indium-113m (124) 145
- Sinibaldi, M., see Di Gregorio, V. (129) 407
- Sinibaldi, M., Matricini, G. and Lederer, M.  
Interactions between hydrolysis polymers of metal ions and other ions in aqueous solution. A gel chromatographic study (129) 412
- Sinner, M.  
Separation of methyl ethers of xylose, glucose and some other sugars by LC (121) 122
- Sippell, W.G., see Golder, W.A. (123) 293
- Sisco, W.R., see Gilpin, R.K. (124) 257
- Sisson, W.G., see Scott, C.D. (126) 381
- Sjövall, J., see Axelson, M. (126) 705

- Skellern, G.G., Knight, B.I. and Stenlake, J.B.  
Improved method for the determination of methimazole in plasma by HPLC (124) 405
- Skrdlant, H.B., see Haegele, K.D. (126) 517
- Slavik, V., see Kouřilová, D. (128) 79
- Slingsby, J.M. and Boulton, A.A.  
Separation and quantitation of some urinary arylalkylamines (123) 51
- Smedes, F., see Kraak, J.C. (122) 147
- Smith, A.E.  
Use of acetonitrile for the extraction of herbicide residues from soils (129) 309
- Smith, R.N. and Vaughan, C.G.  
HPLC of cannabis. Quantitative analysis of acidic and neutral cannabinoids (129) 347
- Smith, R.N. and Zetlein, M.  
Use of dual-wavelength detection in HPLC for the quantitative determination of unresolved or partially resolved compounds (130) 314
- Smolková, E., see Matucha, M. (127) 163
- Smolková, E., see Miller, V. (123) 216
- Snyder, L.R.  
Reaction colorimeters as detectors in HPLC. Extra-column band broadening with segmented flow through the reaction coil (125) 287
- Snyder, L.R., see Karger, B.L. (125) 71
- Soczeswiński, E., see Szumiło, H. (124) 394
- Soczeński, E.  
Solvent composition effects in liquid-solid systems (130) 23
- Sokolin, G.F., see Berezkin, V.G. (130) 318
- Sokolovski, R.I., see Sakodynski, K.I. (126) 257
- Sokołowski, S., see Dawidowicz, A. (125) 428
- Sokołowski, S., Leboda, R. and Waksmundzki, A.  
Cluster expansion for retention volume in GSC (128) 180
- Sokołowski, S., see Leboda, R. (124) 60
- Sood, S.P., see McHugh, W. (124) 376
- Souppart, C., see Lecaillon, J.-B. (121) 227
- Spence, R.D., see Scott, C.D. (126) 381
- Spiker, S.  
Identification of histones F2b and F1 in stained gels (128) 244
- Spitz, H., see Nachtmann, F. (122) 293
- Sreenivasan, K., see Joshi, P.N. (121) 65
- Srulevitch, D., see Abernethy, J.L. (123) 309
- Stafford, M., Horning, M.G. and Zlatkis, A.  
Profiles of volatile metabolites in body fluids (126) 495
- Stahl, E., Becker, G. and Brüderle, V.  
Impregnation of silica gel layers by formamide in the gas phase (in German) (129) 41
- Stahl, W.L., see Osborne, N.N. (123) 212
- Štamberg, J., see Peška, J. (125) 455
- Stastrny, M., see Dean, W.W. (124) 287
- Stauffer, S.C., see Hucker, H.B. (124) 164
- Štedjee, B.J., see Kauffman, G.B. (121) 138
- Stedjee, B.J., see Kauffman, G.B. (121) 395
- Stedjee, B.J., see Kauffman, G.B. (123) 448
- Štefanac, Z., Štengl, B. and Vasilčić, Ž.  
Quantitative determination of organophosphorus pesticides by thin-layer densitometry (124) 127
- Stek, W., see Van Lierop, J.B.H. (128) 183
- Štengl, B., see Štefanac, Z. (124) 127
- Stenlake, J.B., see Skellern, G.G. (124) 405
- Stermitz, F.R., see Adamovics, J. (129) 464
- Steubing, L., see Klee, R. (129) 478
- Stevenson, R.L., see Abbott, S.R. (126) 421
- Stevenson, R.L., see Achener, P. (130) 29
- Stich, K., see Bethke, H. (123) 193
- Stillwell, R.N. and Stillwell, W.G.  
GC-MS-computer methods in the study of drug metabolism (126) 547
- Stillwell, W.G., see Stillwell, R.N. (126) 547
- Stoffyn, A., see Stoffyn, P. (129) 379
- Stoffyn, P. and Stoffyn, A.  
Simple, disposable, streaking sample applicator for TLC (129) 379
- Stokke, O., see Jellum, E. (126) 487
- Stoklosa, H.J., see Yau, W.W. (125) 219
- Størseth, P., see Jellum, E. (126) 487
- Stretton, R.J., Campbell, M. and Burns, D.T.  
Pyrolysis GC as an aid to the identification of *Aspergillus* species (129) 321
- Strömberg, L.  
Minor components of cannabis resin. VI. MS data and GC retention times of components eluted after cannabinol (121) 313
- Strukova, T.P., see Vitenberg, A.G. (126) 205
- Stürzenbecher, E., see Binder, H. (130) 405
- Subach, D.J., Barnes, D. and Wyche, C.  
LC and TLC of some substituted ureas (125) 435
- Subrahmanyam, D., see Lakshmi, M.B. (130) 441
- Sugden, D., Ahmed, M. and Gault, M.H.  
Fractionation of tritiated digoxin and dihydrodigoxin with DEAE-Sephadex LH-20 (121) 401
- Suhadolnik, R.J., see Uematsu, T. (123) 347
- Sumere, C.F. van, see Van Sumere, C.F. (121) 49
- Suprynowicz, Z., see Gawdzik, J. (121) 185
- Sutherland, I.A. and Sharpe, J.E.E.  
Counter-current chromatography using a new coil planet centrifuge (122) 333
- Suzuki, N., see Saitoh, K. (124) 231
- Suzuki, T., see Lee, K.-R. (123) 119
- Swallow, W.H. and Hentschel, P.R.  
Limitations in the specificity of Porapak Q columns in the GC analysis of ethanol in body fluids (130) 403
- Szafranek, J., see Pfaffenberger, C.D. (126) 535
- Szalkowski, M.B., Duane, W.C. and Chin, W.-T.  
Separation and detection of thiofanox and its metabolites by TLC (129) 426
- Szalontai, G.  
HPLC of organophosphorus insecticides (124) 9

- Szepesi, G. and Gazdag, M.  
Determination of dihydroergotoxine  
alkaloids by GLC (122) 479
- Szeto, H.H. and Inturrisi, C.E.  
Simultaneous determination of meperidine  
and normeperidine in biofluids (125) 503
- Szumilo, H. and Soczeswiński, E.  
Investigations on the mechanism and  
selectivity of chromatography on thin  
layers of polyamide. IV. Chromatography of  
amino acids and complex phenolic  
substances (124) 394

## T

- Tabaković, I., see Trkovnik, M. (128) 227
- Takeshita, R., Jinnai, N. and Yoshida, H.  
Detection of sodium alkanesulphonates and  
alkylbenzenesulphonates by polyamide TLC  
(123) 301
- Tamura, Z., see Nakajima, M. (123) 129
- Tamura, Z., see Yoshioka, M. (123) 220
- Tanaka, A., see Nose, N. (125) 439
- Tanaka, A., see Nose, N. (130) 410
- Tanaka, F.S., see Wien, R.G. (130) 55
- Tanimura, T., see Nakajima, M. (123) 129
- Tanimura, T., see Ogihara, Y. (128) 218
- Tannenbaum, S.R., see Iwaoka, W. (124) 105
- Tanturli, G., see Lepri, L. (129) 239
- Tarakanov, O.G., see Belenky, B.G. (129) 115
- Tarján, G., see Riedo, F. (126) 63
- Tarle, M., see Maysinger, D. (130) 129
- Taylor, L.T., see Coleman, W.M. (123) 419
- Tcherepennikova, N.F., see Bortnikov, G.N.  
(124) 337
- Teig, E., see Jellum, E. (126) 487
- Ter Heide, R.  
Studies on terpenes. III. GC of acyclic  
monoterpene alcohols (129) 143
- Terada, H., Hayashi, T., Kawai, S. and Ohno, T.  
HPLC determination of pyruvic acid and  $\alpha$ -  
ketoglutaric acid in serum (130) 281
- Terai, S., see Fudano, S. (128) 199
- Tesch, J.W., Rehg, W.R. and Sievers, R.E.  
Microdetermination of nitrates and nitrites  
in saliva, blood, water, and suspended  
particulates in air by GC (126) 743
- Teven, J.M.G., see Cox, H.C. (123) 261
- Tewari, S.N. and Harpalani, S.P.  
Detection and determination of  
organophosphorus insecticides in tissues by  
TLC (130) 229
- Theobald, J.  
Determination of  $\alpha$ -chloralose in  
rodenticide formulations by GLC (129) 444
- Thiem, J., Sievers, A. and Karl, H.  
Preparative approach to mannobiose and  
laminaribiose (in German) (130) 305
- Thiery, M., see Plomp, T.A. (121) 243
- Thomas, T.H., see Biddington, N.L. (121) 107
- Thompson, R.M. and Gerber, N.  
Separation of permethylated isomeric  
glucuronides by GC and analysis of the  
mass spectra (124) 321
- Thomsen, J., see Lund, E. (130) 51
- Thomsen, M., see Hansen, S.H. (123) 205
- Thunell, S.  
TLC procedure for the detection, isolation  
and identification of basic psychotropic  
drugs in urine (130) 209
- Tiernay, J.M., see Karasek, F.W. (124) 179

Tijssen, R., Billiet, H.A.H. and Schoenmakers, P.J.

Use of the solubility parameter for predicting selectivity and retention in chromatography (122) 185

Titus, C.A., see Dessy, R.E. (126) 347

Tjaden, U.R., Lankelma, J., Poppe, H. and Muusze, R.G.

Anodic coulometric detection with a glassy carbon electrode in combination with reversed-phase HPLC. Determination of blood levels of perphenazine and fluphenazine (125) 275

Toman, R., see Antal, M. (123) 434

Tomasz, J.

Two-dimensional combination of the hydrogen and the ammonium forms of a cation-exchange layer for the separation of minor nucleic acid bases (128) 304

Tomita, H., see Watanabe, C. (121) 1

Touchstone, J.C., Sherma, J., Dobbins, M.F. and Hansen, G.R.

Optimal use of fluorescamine for *in situ* TLC quantitation of amino acids (124) 111

Towill, R., see Evans, N. (125) 345

Trdlička, V. and Mostecký, J.

TLC behaviour of organic thiophosphorus compounds on silica gel (in German) (130) 437

Treiber, L.R.

Development and practical utilization of a linear spectrodensitometer (123) 23

Treiber, L.R.

Extension of the programmed multiple development (PMD) technique (124) 69

Trkovnik, M., Kuleš, M., Tabaković, I. and Zečević, M.

TLC of some coumarin derivatives (128) 227

Truhaut, R., see Baudot, P. (128) 141

Tsitsishvili, G.V., Andronikashvili, T.G.,

Sabelashvili, S.D. and Osipova, N.A.

Chromatographic properties of some silica-rich zeolites (130) 13

Tsuda, T., Ichiba, T., Muramatsu, H. and Ishii, D.

Gas-modified solid chromatography using organic vapours as carrier gas. II.

Mechanism and application for aromatic amines (130) 87

Tunitzki, N.N., see Sakodyski, K.I. (126) 257

Tusell, J., see Rosello, J. (122) 469

Tusell, J., see Rosello, J. (130) 65

## U

Uden, P.C., Henderson, D.E. and Lloyd, R.J.

Comprehensive interfaced pyrolysis GC peak identification system (126) 225

Uematsu, T. and Suhadolnik, R.J.

Separation of nucleic acid hydrolysis products, purines, pyrimidines, nucleosides, nucleotides, ribonucleic acid hydrolyzates, and mixtures from nucleotide syntheses by CC on Amberlite XAD-4 (123) 347

Unger, K. and Kern, R.

Column parameters controlling resolution in high-performance GPC (122) 345

Unger, K.K., Becker, N. and Roumeliotis, P.

Recent developments in the evaluation of chemically bonded silica packings for LC (125) 115

Uralets, V.P., see Golovnya, R.V. (121) 118

# V

- Vakhtina, I.A., see Belenky, B.G. (129) 115
- Valachovičová, M., see Krupčík, J. (126) 147
- Valchikhina, M.D., see Belenky, B.G. (129) 115
- Valdiguie, P., see De la Farge, F. (123) 247
- Van de Venne, J.L.M., see Everaerts, F.M. (123) 139
- Van den Berg, J.H.M., see Deelder, R.S. (125) 307
- Van der Kleijn, E., see Vree, T.B. (121) 150
- Van Eijk, G.W. and Roeymans, H.J.  
GLC of trimethylsilyl ethers of naturally occurring anthraquinones (124) 66
- Van Gorp, R.E., see Jonkman, J.H.G. (128) 208
- Van Hal, H.J.M., see De Ridder, J.J. (121) 96
- Van Lierop, J.B.H. and Stek, W.  
Analysis of vinyl chloride in food simulants at low parts per billion levels by mass fragmentography (128) 183
- Van Renterghem, R., see Bossuyt, R. (124) 37
- Van Sumere, C.F., see Vande Castele, K. (121) 49
- Vance, J., see Sabatka, J.J. (125) 523
- Vande Castele, K., De Pooter, H. and Van Sumere, C.F.  
GC separation and analysis of trimethylsilyl derivatives of some naturally occurring non-volatile phenolic compounds and related substances (121) 49
- Vandegrift, G.F., see Horwitz, E.P. (125) 203
- Vanderbist, M., see Desager, J.P. (123) 379
- Vanhaelen, M., see Vanhaelen-Fastré, R. (129) 397
- Vanhaelen-Fastré, R. and Vanhaelen, M.  
HPLC and TLC of coumarin anticoagulants and their degradation products (129) 397
- Vanroy, J., see De Graeve, J. (129) 171
- Váradi, A., see Fehér, T. (123) 460
- Varga, K., see Kiricsi, I. (123) 279
- Varma, R. and Varma, R.S.  
Simultaneous determination of neutral sugars and hexosamines in glycoproteins and acid mucopolysaccharides (glycosaminoglycans) by GLC (128) 45
- Varma, R.S., see Varma, R. (128) 45
- Vasilić, Ž., see Štefanac, Z. (124) 127
- Vaughan, C.G., see Smith, R.N. (129) 347
- Védrine, F., see Chabard, J.-L. (121) 295
- Venne, J.L.M. van de, see Van de Venne, J.L.M. (123) 139
- Verheggen, T.P.E.M., see Everaerts, F.M. (123) 139
- Verillon, F., see Martin, M. (125) 17
- Verpoorte, R. and Baerheim Svendsen, A.  
TLC of some quaternary alkaloids and alkaloid N-oxides (124) 152
- Versino, B., Knöppel, H., De Groot, M., Peil, A., Poelmann, J., Schauenburg, H., Vissers, H. and Geiss, F.  
Organic micropollutants in air and water. Sampling, GC-MS analysis and computer identification (122) 373
- Vervaeke, I.J., see Dierick, N.A. (129) 403
- Verweij, A., see Dhont, J.H. (130) 205
- Vigh, G. and Inczédy, J.  
Separation of chloramphenicol intermediates by HPLC on MicroPak-NH<sub>2</sub> columns (129) 81
- Vilim, A., see Graham, K.C. (125) 447
- Villiers, L.S. de, see De Villiers, L.S. (130) 342
- Vinkenborg, C., see Dhont, J.H. (130) 205
- Vinogradskaya, G.N., see Bresler, S.E. (130) 275
- Vissers, H., see Versino, B. (122) 373
- Viswanathan, C.V. and Hayashi, A.  
Ascending dry-column chromatography as an aid in the preparative isolation of glycolipids (123) 243
- Viswanathan, C.V. and Leley, V.K.  
Simple technique for the development of a dry column chromatogram (128) 302
- Vitenberg, A.G., Ioffe, B.V., Dimitrova, Z.S. and Strukova, T.P.  
Application of GC headspace analysis to the characterization of chemical equilibria in solutions (126) 205
- Vodenik, R., see Huber, J.F.K. (122) 331
- Voelter, W. and Bauer, H.  
HPLC analysis of the isomerization products of carbohydrates (126) 693
- Voerman, S., see Houx, N.W.H. (129) 456
- Vogtel, P., see Halász, I. (126) 19
- Volkov, S.A., see Sakodyski, K.I. (126) 257
- Von Arx, E. and Faupel, M.  
Application of cellulose acetate plates as separative layer in chromatography (in German) (123) 439
- Von Rappard, E., Eisenbrand, G. and Preussmann, R.  
Selective detection of N-nitrosamines by GC using a modified microelectrolytic conductivity detector in the pyrolytic mode (124) 247
- Vree, T.B., Van der Kleijn, E. and Knop, H.J.  
Rapid determination of 4-hydroxybutyric acid (Gamma OH) and 2-propylpentanoate (Depakine) in human plasma by means of GLC (121) 150
- Vries, G. de, see De Vries, G. (128) 101
- Vries, G. de, see De Vries, G. (129) 193

# W

- Wachtmeister, C.A., see Bergman, A. (123) 231
- Wad, N., Rosenmund, H. and Hanifl, E.  
Simplified quantitative method for the simultaneous determination of diazepam and its metabolites in serum by TLC (128) 231
- Waes, G., see Bossuyt, R. (124) 37
- Wahlund, K.-G., see Fransson, B. (125) 327
- Wahlund, K.-G. and Lund, U.  
Reversed-phase ion-pair partition chromatography of phenylacetic, mandelic and pyridinecarboxylic acid derivatives (122) 269
- Waksmundzki, A., see Lebeda, R. (124) 60
- Waksmundzki, A., see Sokolowski, S. (128) 180
- Walker, M.J., see Badger, C.M.A. (126) 11
- Walker, N.J., see Cant, P.A.E. (130) 267
- Walle, T., see Saelens, D.A. (123) 185
- Wankat, P.C., see Nelson, W.C. (121) 205
- Wasik, S. and Chesler, S.  
Use of a nematic liquid crystal for the GLC separation of naphthalene homologues (122) 451
- Watanabe, A., see Nose, N. (123) 167
- Watanabe, A., see Nose, N. (125) 439
- Watanabe, A., see Nose, N. (130) 410
- Watanabe, C. and Tomita, H.  
Characteristics of non-polar glass support-coated open-tubular columns (121) 1
- Webber, T.J.N. and McKerrel, E.H.  
Optimisation of LC performance on columns packed with microparticulate silicas (122) 243
- Weeke, F., see Schomburg, G. (122) 55
- Wehrli, A., Hermann, U. and Huber, J.F.K.  
Effect of phase system selectivity in preparative column LC (125) 59
- Weiner, P.H., see Karger, B.L. (128) 65
- Weinstein, S., Feibush, B. and Gil-Av, E.  
N-Acyl derivatives of chiral amines as novel, readily prepared phases for the separation of optical isomers by GC (126) 97
- Weissmann, G.  
GC separation of phenol and pyrocatechol methyl ethers (in German) (129) 431
- Wheals, B.B.  
Forensic aspects of HPLC (122) 85
- Whelpton, R. and Curry, S.H.  
Chromatographic properties of imines formed from dedimethylchlorpromazine and various aldehydes and ketones (121) 88
- White, W.I. and Legg, J.I.  
CC and TLC of azophenol dyes and their cobalt(III) complexes. Adsorption chromatography with lipophilic Sephadex and silica gel (124) 134
- Widdecke, H., see Klein, J. (129) 375
- Wien, R.G. and Tanaka, F.S.  
GC of N-methyl and N-aryl carbamates by flash-heater reaction with trimethylanilinium hydroxide (130) 55
- Wijesekera, R.O.B., Rajapakse, L.S. and Chelvarajan, D.W.  
Simple TLC method for separation of cinchona alkaloids (121) 388
- Wijsbeek, J., see Jonkman, J.H.G. (128) 208
- Wild, P.J., see Hunt, D.C. (130) 320
- Willmott, F.W., see Dolphin, R.J. (122) 259
- Willox, S. and Singh, B.N.  
Sensitive GC method for the estimation of a new antiarrhythmic compound, mexiletine (Ko1173), in biological fluids (128) 196
- Wilson, M.A., see Greenhalgh, R. (128) 157
- Wilson, W.L., see Graham, K.C. (125) 447
- Wiłkomirski, B. and Kasprzyk, Z.  
GLC separation of oxidation products of triterpene pentacyclic alcohols (129) 440
- Wittmer, D.P., see McHugh, W. (124) 376
- Wolf, W., see Maysinger, D. (130) 129
- Wong, A.K., McCoy, B.J. and Carbonell, R.G.  
Theory of capillary chromatography. Effect of coiling and interphase mass transfer (129) 1
- Woosley, R.L., see Carr, K. (129) 363
- Wooton, D.L., see Coleman, W.M. (123) 419
- Wu, A.C.M., Bough, W.A., Conrad, E.C. and Alden, K.E. Jr.  
Determination of molecular-weight distribution of chitosan by HPLC (128) 87
- Wyche, C., see Subach, D.J. (125) 435

## Y

- Yamamoto, S., see Makita, M. (124) 92  
 Yano, T., see Nakamura, T. (130) 384  
 Yashin, Y.I., see Bortnikov, G.N. (124) 337  
 Yau, W.W., Kirkland, J.J., Bly, D.D. and Stoklosa, H.J.  
 Effect of column performance on the accuracy of molecular weights obtained from size exclusion chromatography (GPC) (125) 219  
 Yin, S.-J., see Lee, S.-C. (129) 482  
 Yoshida, H., see Takeshita, R. (123) 301  
 Yoshioka, M. and Tamura, Z.  
 Fluorimetric determination of adenine and adenosine and its nucleotides by HPLC (123) 220  
 Young, J.C.  
 Detection and determination of N-nitrosamines by TLC using fluorescamine (124) 17  
 Young, J.C.  
 Detection of N-aryl-N-nitrosamines on TLC plates with 2,4-dinitrophenylhydrazine and phosphomolybdic acid (124) 115  
 Young, J.C.  
 Fluorescence method for detecting aldehydes at picomole level on TLC plates (130) 392

## Z

- Zabokritsky, M.P., see Berezkin, V.G. (130) 318  
 Zacharius, R.M.  
 Quantitative determination of hexosamines in glycoprotein by ion-exchange chromatography (125) 421  
 Zečević, M., see Trkovnik, M. (128) 227  
 Zeeuw, R.A. de, see De Zeeuw, R.A. (128) 208  
 Zeeuw, R.A. de, see De Zeeuw, R.A. (130) 205  
 Zetlein, M., see Smith, R.N. (130) 314  
 Zimmer, H.G., Neuhoﬀ, V. and Schulze, E.  
 Low-fluorescence polyamide sheets for TLC (124) 120  
 Zlatkis, A. and Kim, K.  
 Column elution and concentration of volatile compounds in biological fluids (126) 475  
 Zlatkis, A., see Stafford, M. (126) 495  
 Zune, A., Dobberstein, P., Maurer, K.H. and Rapp, U.  
 Identification of drugs using a GC-MS system equipped with electron impact-chemical ionization and electron impact-field ionization-field desorption combination sources (122) 365

## SUBJECT INDEX

## VOLUMES 121-130

*The volume number is placed in parentheses before the page number*

## A

- Accuracy**  
Variables affecting precision and accuracy in HPLC (126) 327
- Acenocoumarin**  
GC determination of acenocoumarin in human plasma (124) 331
- Acetamidophos**  
Determination of metamidophos and acetamidophos in formulations by reversed-phase HPLC (121) 161
- Acetoxyprogesterones**  
Structure-GC electron capture sensitivity relationships of some substituted 17 $\alpha$ -acetoxyprogesterones (126) 641
- Acetylacetone**  
Partition of chelating agents between a cationic ion exchanger swollen with water and a water-immiscible solvent (in French) (124) 197
- Acetylenic methyl esters**  
GLC characteristics of some long-chain acetylenic methyl esters (128) 193
- Acetylhexosaminidase**  
Hydrophobic chromatography of N-acetyl- $\beta$ -D-hexosaminidase (130) 451
- Acetylmethadol**  
Comparative study on the derivatization of *l*- $\alpha$ -acetylmethadol metabolites for electron capture GLC (129) 329
- Acetylprocainamide**  
Simultaneous quantification of procainamide and N-acetylprocainamide with HPLC (129) 363
- Acetylsalicylic anhydride**  
Application of GLC and HPLC to the analysis of trace amounts of salicylic acid, acetylsalicylic anhydride and acetylsalicylsalicylic acid in aspirin samples and aspirin formulations (126) 651
- Acetylsalicylsalicylic acid**  
Application of GLC and HPLC to the analysis of trace amounts of salicylic acid, acetylsalicylic anhydride and acetylsalicylsalicylic acid in aspirin samples and aspirin formulations (126) 651
- Acid mucopolysaccharides**  
Simultaneous determination of neutral sugars and hexosamines in glycoproteins and acid mucopolysaccharides (glycosaminoglycans) by GLC (128) 45
- Acrosin**  
Fractionation of proteolytic enzymes by affinity chromatography on Sepharose aminocaproyl proflavin (129) 97
- Acrylamide gel disc electrophoresis**  
Disposable tubes for acrylamide gel disc electrophoresis (129) 382
- Acrylate ester systems**  
Quantitative pyrolysis studies of styrene, acrylate ester systems, and their  $\alpha$ -methyl-substituted homologs (126) 239
- Acyclic monoterpene alcohols**  
Studies on terpenes. III. GC of acyclic monoterpene alcohols (129) 143
- Adenine**  
Fluorimetric determination of adenine and adenosine and its nucleotides by HPLC (123) 220
- Adenosine**  
Fluorimetric determination of adenine and adenosine and its nucleotides by HPLC (123) 220
- Adrenergic  $\beta$ -receptor blocking agents**  
Simplified method for the determination of oxprenolol and other  $\beta$ -receptor blocking agents in biological fluids by GLC (121) 72
- Adsorbent deactivation**  
Adsorbent deactivation in HPLC (125) 163



**Adsorbents**

Impregnation of silica gel with tetraalkylammonium salts in adsorption chromatography of neutral aromatic compounds (123) 231

**Adsorbents**

Dynamics of sorption with a rectangular isotherm and kinetics limited by particle diffusion (123) 251

**Adsorbents**

Expanded solubility parameter treatment for classification and use of chromatographic solvents and adsorbents. Parameters for dispersion, dipole and hydrogen bonding interactions (125) 71

**Adsorbents**

Development and use of carbon adsorbents in high-performance LSC. I. Carbon-coated silica particles (126) 43

**Agave**

HPLC analysis of the benzoate esters of saponins isolated from *Agave* (121) 329

**Aglycones**

Rapid and sensitive high-resolution procedure for digitalis glycoside analysis by derivatization LC (122) 293

**Agricultural chemicals**

Comparison of electron-capture and electrolytic-conductivity detection for the GLC analysis of heptafluorobutyl derivatives of some agricultural chemicals (130) 97

**Air pollution**

Analysis of trace pollutants in the air by means of cryogenic GC (121) 285

**Alcohols, alicyclic**

Chromatographic analysis of a mixture of isomeric methylcyclohexanones and methylcyclohexanols (124) 1

**Aldadiene**

Simple GC method with flame ionization detection for the determination of aldadiene in human urine (123) 460

**Aldehydes**

3,4,5-Trimethoxybenzylhydrazine: An efficient subtraction reagent for aldehydes and ketones in GC (121) 279

**Aldehydes**

Automatic separation and determination of benzoic and cinnamic aldehydes by LC (in French) (124) 369

**Aldehydes**

Fluorescence method for detecting aldehydes at picomole level on TLC plates (130) 392

**Aldoses**

GC study of free polyols and aldoses in cataractous human lens tissue (126) 535

**Alginate acid**

Chromatographic behaviour of alkaloids on thin layers of cation exchangers. II. Alginate acid, Rexyn 102, Dowex 50-X4 and CMCNa (123) 175

**Algorithms**

Improving the efficiency of small GC-MS data systems by means of simple algorithms (123) 271

**Alkaloids**

Lysergic acids. II. Isolation and separation of lysergic acids (in German) (121) 353

**Alkaloids**

Simple TLC method for separation of cinchona alkaloids (121) 388

**Alkaloids**

Applications of HPLC in the pharmaceutical industry (122) 73

**Alkaloids**

Determination of dihydroergotamine alkaloids by GLC (122) 479

**Alkaloids**

Chromatographic behaviour of alkaloids on thin layers of cation exchangers. II. Alginate acid, Rexyn 102, Dowex 50-X4 and CMCNa (123) 175

**Alkaloids**

TLC of some quaternary alkaloids and alkaloid N-oxides (124) 152

**Alkaloids**

Low-cost gradient system for HPLC. Quantitation of complex pharmaceutical raw materials (125) 265

**Alkanesulphonates**

Detection of sodium alkanesulphonates and alkylbenzenesulphonates by polyamide TLC (123) 301

**Alkylbenzenesulphonates**

Detection of sodium alkanesulphonates and alkylbenzenesulphonates by polyamide TLC (123) 301

**Alkynes**

Capillary GC of *n*-alkynes. II. Variation of retention indices with temperature (128) 53

**Alkynes**

Capillary GC of *n*-alkynes. III. Correlation of retention index increments with molecular structure (128) 59

**Allopurinol**

GC analysis of pharmaceuticals based on pyrimidine and purine substances (123) 216

**Allyldimethylsilyl ethers**

Allyldimethylsilyl ethers. New derivatives for the analysis of steroids by GC-MS (129) 384

**Alprenolol**

Simplified method for the determination of alprenolol and other  $\beta$ -receptor blocking agents in biological fluids by GLC (121) 72

**Aluminium**

Determination of traces of copper and aluminium in zinc by GC with the microwave plasma detector (121) 383

**Aluminium(III)**

Influence of drying temperature on the ion-exchange properties of stannic tungstoarsenate. II. Separation of  $\text{Hg}^{2+}$  and  $\text{Pb}^{2+}$  and of  $\text{Al}^{3+}$  and  $\text{Ca}^{2+}$  (128) 149

**Amines**

Derivatization of compounds at the origin of thin-layer plates with fluorescamine (121) 33

**Amines**

Detection of compounds with primary amino groups on thin-layer plates by dipping in a fluorescamine solution (121) 79

**Amines**

Procedural difficulties in the GLC assay of the arylalkylamines (123) 45

**Amines**

Separation and quantitation of some urinary arylalkylamines (123) 51

**Amines**

N-Acyl derivatives of chiral amines as novel, readily prepared phases for the separation of optical isomers by GC (126) 97

**Amines**

Aldehyde condensation products as derivatives for the vapor phase analysis of biogenic amines (126) 581

**Amines**

Determination of biogenic amines in intestinal contents by ion-exchange chromatography (129) 403

**Amines, aromatic**

Gas-modified solid chromatography using organic vapours as carrier gas. II. Mechanism and application for aromatic amines (130) 87

**Amino acid conjugates**

Metabolism of 2,4-dichlorophenoxyacetic acid. IX. GLC of methyl esters of amino acid conjugates (124) 97

**Amino acids**

Derivatization of compounds at the origin of thin-layer plates with fluorescamine (121) 33

**Amino acids**

Detection of compounds with primary amino groups on thin-layer plates by dipping in a fluorescamine solution (121) 79

**Amino acids**

Separation by HPLC of phenylthiohydantoin derivatives of amino acids released by Edman degradation (in French) (121) 323

**Amino acids**

Interaction between asymmetric solutes and solvents. Diamides derived from L-valine as stationary phases in gas-liquid partition chromatography (123) 149

**Amino acids**

Separation of amino acids as mansyl derivatives on polyamide layers (123) 212

**Amino acids**

Optimal use of fluorescamine for *in situ* TLC quantitation of amino acids (124) 111

**Amino acids**

Improved technique for the GLC separation of the N-trifluoroacetyl *n*-butyl derivatives of amino acids (124) 239

**Amino acids**

GLC of amino acids. Determination of cystine and cysteine as N-acetyl, *n*-propyl S-carboxymethylcysteinate (124) 315

**Amino acids**

Characterization of selected fluorescamine-amino acid reaction products by HPLC (124) 376

**Amino acids**

Investigations on the mechanism and selectivity of chromatography on thin layers of polyamide. IV. Chromatography of amino acids and complex phenolic substances (124) 394

**Amino acids**

Advances in separation techniques in sequence analysis of proteins and peptides (Review) (127) 91

**Amino acids**

GC-MS of trimethylsilyl derivatives of  $\omega$ -amino acids (128) 1

**Amino acids**

Improved technique for the analysis of amino acids and related compounds on thin layers of cellulose. XI. Direct, visual micro-method for investigating the primary structural sequence of collagen and other proteins (129) 211

**Amino acids**

Use of *o*-phthalaldehyde for fluorescence detection in conventional amino acid analyzers. Sub-nanomole sensitivity in the analysis of phenylthiohydantoin-amino acids (130) 51

**Amino acids**

GLC of the N-heptafluorobutyryl isobutyl esters of fifty biologically interesting amino acids (130) 151

**Amino acids**

Single-wavelength detection for amino acid analysis (130) 324

**Amino acids**

Analysis of methionine in plant materials. Improved GC procedure (130) 399

**Amino acids, non-protein**

GLC of the N-isobutyloxycarbonyl methyl esters of non-protein amino acids (124) 92

**Aminobenzoic acid**

Improved HPLC method for quantifying *p*-aminobenzoic acid and some of its metabolites (121) 76

**Amitriptyline**

Simultaneous determination of therapeutic levels of amitriptyline and nortriptyline in plasma by GLC (124) 401

**Amperometric detection**

Amperometric detection in HPLC with non-conductive eluents (in French) (130) 372

**Amphetamine-related materials**

Forensic aspects of HPLC (122) 85

**Ampholytes**

Isoelectric focusing as a method for the characterization of ampholytes (130) 41

**Analysis time**

Particle size, pressure and analysis time in routine HPLC (126) 19

**Androgens**

Simultaneous separation of estrogens and androgens using TLC (121) 82

**Androgens**

Chromatographic analysis of hormone residues in food (Review) (127) 53

**Anion-exchange resins**

Chromatography of aromatic compounds on cross-linked polyvinylpyrrolidone and on anion-exchange resins (123) 355

**Anions**

Anomalous behaviour of diphosphate anions in ion-exchange chromatography (128) 212

**Anthocyanidins**

HPLC of some anthocyanidins and flavonoids (129) 464

**Anthocyanins**

Pyrolysis GC-MS for the identification of anthocyanins (130) 261

**Anthraquinone bird repellent**

Electron-capture GC determination of residues of anthraquinone bird repellent (128) 174

**Anthraquinones**

GLC of trimethylsilyl ethers of naturally occurring anthraquinones (124) 66

**Antibiotic residues**

Identification of antibiotic residues in milk by TLC (124) 37

**Antibiotics**

Rapid GC determination of thiamphenicol in plasma and amniotic fluid (121) 243

**Antibiotics**

Applications of HPLC in the pharmaceutical industry (122) 73

**Antibiotics**

Bioautographic TLC analysis of antibiotics and their metabolites in the whole animal. I. Clindamycin in the rat (123) 33

**Antibiotics**

Comparison of candidin, levorin and trichomycin by means of HPLC (123) 205

**Antibiotics**

Reversed-phase HPLC of bleomycin (124) 88

**Antibiotics**

HPLC of penimocycline (in French) (124) 343

**Antibiotics**

Quantitative determination of low levels of daunomycin and daunomycinol in plasma by HPLC (125) 369

**Antibiotics**

Determination of  $\beta$ -cetotetrine in plasma and urine using HPLC with electrochemical detection (129) 73

**Antibiotics**

Separation of chloramphenicol intermediates by HPLC on MicroPak-NH<sub>2</sub> columns (129) 81

**Antidepressants**

Separation of some tricyclic antidepressants by HPLC (128) 204

**Argentation column chromatography**

Argentation CC. A new ternary solvent system for the separation of methyl esters of polyunsaturated fatty acids (129) 469

**Aromatic compounds**

Impregnation of silica gel with tetraalkylammonium salts in adsorption chromatography of neutral aromatic compounds (123) 231

**Aromatic compounds**

Chromatography of aromatic compounds on cross-linked polyvinylpyrrolidone and on anion-exchange resins (123) 355

**Aromatic compounds**

Determination of nanogram amounts of aromatic compounds by spectrophotometry on thin-layer chromatograms (124) 351

**Aromatic hydrocarbons**

2,4,7-Trinitrofluorenone-modified graphitized carbon black as stationary phase for the GC separation of aromatic hydrocarbons (121) 370

**Aromatic hydrocarbons**

Improving the efficiency of small GC-MS data systems by means of simple algorithms (123) 271

**Arsenic**

Chlorination and GC determination of arsenic in oxides, sulphides, ores and alloys (122) 505

**Arylalkylamines**

Procedural difficulties in the GLC assay of the arylalkylamines (123) 45

**Arylalkylamines**

Separation and quantitation of some urinary arylalkylamines (123) 51

**Arylnitrosamines**

Detection of N-aryl-N-nitrosamines on TLC plates with 2,4-dinitrophenylhydrazine and phosphomolybdic acid (124) 115

***Aspergillus* species**

Pyrolysis GC as an aid to the identification of *Aspergillus* species (129) 321

**Aspirin**

Application of GLC and HPLC to the analysis of trace amounts of salicylic acid, acetylsalicylic anhydride and acetylsalicylsalicylic acid in aspirin samples and aspirin formulations (126) 651

**Atmospheric pressure ionization mass spectrometry**

Ions and electrons in the electron capture detector. Quantitative identification by atmospheric pressure ionization MS (122) 397

**Atranorin**

Quantitative analysis of atranorin by TLC (129) 478

**Automation**

Effect of microprocessors on traditional chromatography instrumentation (122) 355

**Autotransfer chromatography**

Autotransfer chromatography in the characterization of pyrroles. Chemistry of multiple-spot phenomena (123) 69

**Axial dispersion**

Interaction of radial and axial dispersion in LC in relation to the "infinite diameter effect" (122) 129

**Aza-heterocyclic compounds**

Use of a nematic liquid crystal for the GC separation of aza-heterocyclic compounds (128) 163

**Azauridine**

GC analysis of pharmaceuticals based on pyrimidine and purine substances (123) 216

**Azophenol dyes**

CC and TLC of azophenol dyes and their cobalt(III) complexes. Adsorption chromatography with lipophilic Sephadex and silica gel (124) 134

**B****Backflushing**

Column switching techniques in the LC analysis of organochlorine pesticides in milk (122) 259

**Band spreading**

Movement and band spreading of unadsorbed solutes in LC (126) 401

**Barbiturates**

Determination of phenobarbital in human saliva by GC with electron-capture detection (122) 471

**Barbiturates**

Chromatographic studies of the influence of water and thermal treatment on the activity of silica gel (125) 179

**Barbiturates**

Simple combination of  $R_f$  value and melting-point determination for the identification of barbiturates (125) 431

**Barbiturates**

GC analysis of dialkylbarbituric acids (129) 155

**Barbiturates**

Simultaneous determination of methylated barbiturates and other anticonvulsant drugs by high-resolution GC (129) 171

**Barbiturates**

Quantitative GC analysis of barbiturates and hydantoins with quaternary ammonium hydroxides (130) 342

**Benoxaprofen**

Analysis of isomeric impurities in a synthesis of the novel anti-inflammatory drug, benoxaprofen (129) 339

**Benthioncarb**

Separation of benthioncarb and related compounds by TLC (130) 439

**Benzaldehyde**

GC separation and analysis of trimethylsilyl derivatives of some naturally occurring non-volatile phenolic compounds and related substances (121) 49

**Benzaldehyde**

Selective and sensitive GC determination of benzaldehyde (129) 436

**Benzene**

Determination of the pre-exponential factor of Henry's constant by gas adsorption chromatography (121) 185

**Benzenedicarboxylic acids**

LC of benzenedicarboxylic acids and their 2-hydroxyethyl esters on silica gel (129) 393

**Benzodiazepine esters**

Electron capture and multiple ion detection of benzodiazepine esters in pharmacokinetic studies (126) 601

**Benzodiazepines**

Comparison of the determination of partition coefficients of 1,4-benzodiazepines by HPLC and TLC (129) 263

**Benzoic acid**

GC separation and analysis of trimethylsilyl derivatives of some naturally occurring non-volatile phenolic compounds and related substances (121) 49

**Benzoic aldehydes**

Automatic separation and determination of benzoic and cinnamic aldehydes by LC (in French) (124) 369

**Benzonitriles**

Separation of monosubstituted benzonitriles by GLC (130) 161

**Benzoylcegonine**

Analysis of benzoylcegonine in urine by HPLC and GC-MS (126) 717

**Bifenox**

Separation of bifenox and related compounds by TLC (124) 422

**Biogenic amines**

Aldehyde condensation products as derivatives for the vapor phase analysis of biogenic amines (126) 581

**Biogenic amines**

Determination of biogenic amines in intestinal contents by ion-exchange chromatography (129) 403

**Biogenic substances**

Ion-pair partition chromatography in the analysis of drugs and biogenic substances in plasma and urine (122) 305

**Biological fluids**

Column elution and concentration of volatile compounds in biological fluids (126) 475

**Bleomycin**

Reversed-phase HPLC of bleomycin (124) 88

**Blood stains**

Analysis of Romanowsky blood stains by HPLC (124) 287

**Body fluids**

Profiles of volatile metabolites in body fluids (126) 495

**Boron**

Separation of inorganic isomers by TLC. VI. Isomers of the non-metals boron, phosphorus and silica (123) 448

**Brighteners**

Separation of optical brighteners by LSC (121) 153

**Bromelain**

Fractionation of proteolytic enzymes by affinity chromatography on Sepharose aminocaproyl proflavin (129) 97

**Butyrophenones**

GC method for the analysis of butyrophenones based on the Hofmann degradation reaction (129) 387

# C

## Caffeic acid esters

Quantitative determination of caffeic acid esters and catechins by direct measurement on thin-layer chromatograms (123) 391

## Calcium(II)

Influence of drying temperature on the ion-exchange properties of stannic tungstoarsenate. II. Separation of  $Hg^{2+}$  and  $Pb^{2+}$  and of  $Al^{3+}$  and  $Ca^{2+}$  (128) 149

## Calcium isotopes

Radiochemical and isotope separations by high-efficiency LLC (125) 203

## Calibration of separation systems

Calibration of separation systems for GPC (121) 23

## Candicidin

Comparison of candicidin, levorin and trichomyacin by means of HPLC (123) 205

## Cannabinoids

HPLC of cannabis. Quantitative analysis of acidic and neutral cannabinoids (129) 347

## Cannabis

Forensic aspects of HPLC (122) 85

## Cannabis

HPLC of cannabis. Quantitative analysis of acidic and neutral cannabinoids (129) 347

## Cannabis resin

Minor components of cannabis resin. VI. MS data and GC retention times of components eluted after cannabinol (121) 313

## Capillary chromatography

Theory of capillary chromatography. Effect of coiling and interphase mass transfer (129) 1

## Capillary columns

Preparation of glass capillary columns coated with polar phase for high-temperature GC. I. Study of roughening of the glass surface (126) 117

## Capillary columns

Preparation and application of surface-modified high-resolution wall-coated open tubular columns (126) 133

## Capillary columns

Effect of etching with gaseous hydrogen chloride on the quality of glass capillary columns (126) 147

## Capillary columns

New method for the preparation of highly stable polysiloxane-coated glass open-tubular

capillary columns and application to the analysis of hormonal steroids (126) 161

## Capillary columns, rectangular

Tapeworm columns in GC (122) 443

## Capillary columns, stainless-steel

Adsorption properties of stainless-steel capillaries used in the preparation of open tubular GC columns (123) 317

## Capillary gas chromatography

GC analysis with glass capillary columns (122) 55

## Capsaicin

Quantitative microanalysis of capsaicin, dihydrocapsaicin and nordihydrocapsaicin using mass fragmentography (123) 119

## Carbamate insecticides

GC analysis of heptafluorobutyl derivatives of some carbamate insecticides (123) 287

## Carbamate pesticides

Exploitation of phase-system selectivity by two-column LC. Separation of carbamate pesticides (Summary) (122) 331

## Carbamates

Analysis of sulphur-containing carbamates by formation of derivatives in the gas-liquid chromatograph using trimethylphenylammonium hydroxide (125) 495

## Carbamates

GC of N-methyl and N-aryl carbamates by flash-heater reaction with trimethylanilinium hydroxide (130) 55

## Carbamazepine

Simultaneous GC analysis for the four commonly used antiepileptic drugs in serum (128) 281

## Carbaryl

Direct analysis of LC effluents (122) 389

## Carbimazole

Improved method for the determination of methimazole in plasma by HPLC (124) 405

## Carbohydrates

Application of glass capillary-column GC-MS to the studies of human diseases (126) 487

## Carbohydrates

HPLC analysis of the isomerization products of carbohydrates (126) 693

## Carbohydrates

Separation of carbohydrates on a new polar bonded phase material (126) 731

## Carbohydrates

TLC of carbohydrates (Review) (127) 133

## Carbohydrates

Separation of substituted carbohydrates by HPLC (130) 181

**Carbon black, modified**

Reversed-phase LSC on modified carbon black (122) 223

**Carbon disulphide**

Use of carbon disulphide and formamide as the mobile phase and flame-forming agent in the flame-ionization detector (130) 318

**Carboxylic acid analyzer**

Highly efficient carboxylic acid analyzer and its application (123) 129

**Carboxylic acids**

LC of *tert*-butyl per-esters of silyl-substituted carboxylic acids on modified adsorbents (124) 337

**Carboxymethylcysteinate**

GLC of amino acids. Determination of cystine and cysteine as *N*-acetyl, *n*-propyl *S*-carboxymethylcysteinate (124) 315

**Cardiotonic steroid conjugates**

Studies on steroids. CXIV. Separation of cardiotonic steroid conjugates by HPLC (124) 79

**Catechins**

Quantitative determination of caffeic acid esters and catechins by direct measurement on thin-layer chromatograms (123) 391

**Catecholamines**

Chromatographic separation of catecholamines on a weakly acidic ion-exchange resin using a borate-containing eluent (124) 411

**Catecholamines**

Separation of catecholamines and their metabolites by adsorption, ion-pair and soap chromatography (125) 89

**Cation exchangers**

Swelling of cation-exchange resins in aqueous organic solvents (Review) (in French) (127) 29

**Cation-exchange resins**

Swelling of a sulphonic resin equilibrated with mixtures of water-acetic acid and water-tetrahydrofuran (in French) (121) 104

**Cation-exchange thin layers**

Chromatographic behaviour of alkaloids on thin layers of cation exchangers. II. Alginate acid, Rexyn 102, Dowex 50-X4 and CMCNa (123) 175

**Cellulose acetate**

Application of cellulose acetate plates as separative layer in chromatography (in German) (123) 439

**Cellulose, bead form**

Cellulose in bead form. Properties related to chromatographic uses (125) 455

**Ceramides**

Applications of boronate derivatives in the study of ceramides by GLC-MS (126) 591

**Cerium(IV) phosphate**

Crystalline insoluble acid salts of tetravalent metals. XXIV. Ion-exchange behaviour of fibrous cerium(IV) phosphate (128) 289

**Cetotetrine**

Determination of  $\beta$ -cetotetrine in plasma and urine using HPLC with electrochemical detection (129) 73

**Charge-transfer complexing agents**

Resolution of optical isomers by HPLC, using coated and bonded chiral charge-transfer complexing agents as stationary phases (122) 205

**Chelates**

GC of some oxovanadium(IV) tetradentate  $\beta$ -ketoamine chelates (130) 251

**Chelating agents**

Partition of chelating agents between a cationic ion exchanger swollen with water and a water-immiscible solvent (in French) (124) 197

**Chemical equilibria**

Application of GC headspace analysis to the characterization of chemical equilibria in solutions (126) 205

**Chemically bonded silica packings**

Recent developments in the evaluation of chemically bonded silica packings for LC (125) 115

**Chiral amines**

*N*-Acyl derivatives of chiral amines as novel, readily prepared phases for the separation of optical isomers by GC (126) 97

**Chitosan**

Determination of molecular-weight distribution of chitosan by HPLC (128) 87

**Chloralose**

Determination of  $\alpha$ -chloralose in rodenticide formulations by GLC (129) 444

**Chloramphenicol**

Separation of chloramphenicol intermediates by HPLC on MicroPak-NH<sub>2</sub> columns (129) 81

**Chlorinated naphthalenes**

Polychlorinated naphthalenes (Review) (127) 203

**Chlorophenols**

GC-MS of chlorophenols in spent bleach liquors (128) 13

**Chlorpheniramine**

Determination of nanogram amounts of aromatic compounds by spectrophotometry on thin-layer chromatograms (124) 351

**Chlorpromazine**

Chromatographic properties of imines formed from dedimethylchlorpromazine and various aldehydes and ketones (121) 88

**Cholesterol**

Method for the estimation of free and esterified cholesterol involving TLC (124) 29

**Choline**

TLC separation of  $^{14}\text{C}$ -labelled succinylcholine, succinylmonocholine and choline (121) 170

**Chromatography instrumentation**

Effect of microprocessors on traditional chromatography instrumentation (122) 355

**Chromium(III)**

Determination of physiological levels of Cr(III) in urine by GC (130) 346

**Chromogenic substrates**

Chromogenic substrates for proteinases. Purification by chromatography on lipophilic Sephadex (123) 429

**Chymopapain**

Separation of chymopapain from papaya latex (*Carica papaya*) on Amberlite IR-120 ( $\text{Hg}^{2+}$ ) (121) 65

**Chymotrypsin**

Fractionation of proteolytic enzymes by affinity chromatography on Sepharose aminocaproyl proflavin (129) 97

**Cinchona alkaloids**

Simple TLC method for separation of cinchona alkaloids (121) 388

**Cinnamaldehyde**

GC separation and analysis of trimethylsilyl derivatives of some naturally occurring non-volatile phenolic compounds and related substances (121) 49

**Cinnamic acid**

GC separation and analysis of trimethylsilyl derivatives of some naturally occurring non-volatile phenolic compounds and related substances (121) 49

**Cinnamic aldehydes**

Automatic separation and determination of benzoic and cinnamic aldehydes by LC (in French) (124) 369

**Citreoviridin**

Investigations on the production of mycotoxins and their quantitative analysis. VI. Citreoviridin (in German) (130) 293

**Clindamycin**

Bioautographic TLC analysis of antibiotics and their metabolites in the whole animal. I. Clindamycin in the rat (123) 33

**Clonazepam**

Rapid GC method for the determination of clonazepam in serum and cerebrospinal fluid (128) 166

**CMCNa**

Chromatographic behaviour of alkaloids on

thin layers of cation exchangers. II. Alginic acid, Rexyn 102, Dowex 50-X4 and CMCNa (123) 175

**Coal, solvent refined**

Chromatographic separation studies of solvent refined coal (123) 419

**Coal-derived fluids**

Characterization of coal-derived fluids by capillary column GC-MS (126) 213

**Codeine**

Determination of nanogram amounts of aromatic compounds by spectrophotometry on thin-layer chromatograms (124) 351

**Coil planet centrifuge**

Counter-current chromatography using a new coil planet centrifuge (122) 333

**Collagen**

Improved technique for the analysis of amino acids and related compounds on thin layers of cellulose. XI. Direct, visual micro-method for investigating the primary structural sequence of collagen and other proteins (129) 211

**Colorimetric detection**

Reaction colorimeters as detectors in HPLC. Extra-column band broadening with segmented flow through the reaction coil (125) 287

**Colorimetric detection**

Determination of trace amounts of hydroperoxides by column liquid chromatography and colorimetric detection (125) 307

**Column coiling**

Theory of capillary chromatography. Effect of coiling and interphase mass transfer (129) 1

**Column packings**

Influence of the energetic heterogeneity of a column packing on the separation process in GSC (124) 60

**Column parameters**

Column parameters controlling resolution in high-performance GPC (122) 345

**Column performance**

Effect of column performance on the accuracy of molecular weights obtained from size exclusion chromatography (GPC) (125) 219

**Column performances**

Study of column performances in GC.  $\text{C}_{87}$  hydrocarbon on chemically modified supports (126) 87

**Column switching**

Column switching techniques in the LC analysis of organochlorine pesticides in milk (122) 259

**Columns**

Characteristics of non-polar glass support-coated open-tubular columns (121) 1



**Columns**

Column development and technology in GC (122) 107

**Columns**

Construction of columns for LC with very large plate numbers. Theory and practice (122) 147

**Columns**

Investigations into the preparation of glass open-tube GC columns (122) 425

**Columns**

Tapeworm columns in GC (122) 443

**Columns**

Plate height in porous-layer open-tubular columns (124) 359

**Columns**

New, generally applicable procedure for the preparation of glass capillary columns (125) 471

**Columns**

Preparation of glass capillary columns coated with polar phase for high-temperature GC. I. Study of roughening of the glass surface (126) 117

**Columns**

Preparation and application of surface-modified high-resolution wall-coated open tubular columns (126) 133

**Columns**

Effect of etching with gaseous hydrogen chloride on the quality of glass capillary columns (126) 147

**Columns**

New method for the preparation of highly stable polysiloxane-coated glass open-tubular capillary columns and application to the analysis of hormonal steroids (126) 161

**Columns**

Preparative LC using radially compressed columns (126) 439

**Compressibility effects**

Experimental evaluation of compressibility effects in syringe pumps for LC (130) 29

**Computer-controlled evaluation in TLC**

Computer-controlled evaluation in TLC. Results and possibilities (126) 449

**Continuous separations**

Pressurized, annular chromatograph for continuous separations (126) 381

**Copper**

Determination of traces of copper and aluminium in zinc by GC with the microwave plasma detector (121) 383

**Copying of recorder charts**

Contrast improvement in the copying of

recorder charts on the Xerox Model 4500 copier (130) 454

**Corticosteroids**

Chromatographic analysis of hormone residues in food (Review) (127) 53

**Corticosteroids**

TLC separation of corticosteroids from their respective 17-oxo-oxidation products (129) 475

**Coulometric detection**

Anodic coulometric detection with a glassy carbon electrode in combination with reversed-phase HPLC. Determination of blood levels of perphenazine and fluphenazine (125) 275

**Coulometric detector**

Design and characterization of a coulometric detector with a glassy carbon electrode for HPLC (125) 375

**Coulson conductivity detector**

Sensitivity enhancement of the Coulson conductivity detector by modification of the bridge circuitry (128) 154

**Coumarin**

GC separation and analysis of trimethylsilyl derivatives of some naturally occurring non-volatile phenolic compounds and related substances (121) 49

**Coumarin anticoagulants**

HPLC and TLC of coumarin anticoagulants and their degradation products (129) 397

**Coumarin derivatives**

TLC of some coumarin derivatives (128) 227

**Counter flow of electrolyte**

Isotachophoretic experiments with a counter flow of electrolyte (123) 139

**Counter-current chromatography**

Counter-current chromatography using a new coil planet centrifuge (122) 333

**Cyanide complexes**

Determination of complex cyanides in water by GC (123) 411

**Cyclic nucleotide phosphodiesterases**

Comparison of batch and chromatographic assays of cyclic nucleotide phosphodiesterases (129) 107

**Cycling zone separation**

Application of cycling zone separation to preparative HPLC (121) 205

**Cyclobenzaprine**

GLC determination of nanogram amounts of cyclobenzaprine in plasma using a nitrogen detector (124) 164

**Cyclohexane**

Determination of the pre-exponential factor of Henry's constant by gas adsorption chromatography (121) 185

**Cysteine**

GLC of amino acids. Determination of cystine and cysteine as N-acetyl, *n*-propyl S-carboxymethylcysteinate (124) 315

**Cystine**

GLC of amino acids. Determination of cystine and cysteine as N-acetyl, *n*-propyl S-carboxymethylcysteinate (124) 315

**Cytokinins**

Effect of pH on the elution of cytokinins from polyvinylpyrrolidone columns (121) 107

**D****Data systems, GC-MS**

Improving the efficiency of small GC-MS data systems by means of simple algorithms (123) 271

**Daunomycin**

Quantitative determination of low levels of daunomycin and daunomycinol in plasma by HPLC (125) 369

**Daunorubicin**

Quantitative determination of low levels of daunomycin and daunomycinol in plasma by HPLC (125) 369

**DDE**

Evaluation of environmental polychlorobiphenyls and DDE in terms of mixtures of commercial preparations from peak heights of packed-column gas chromatograms using a programmable calculator (121) 269

**DDT**

GC determination of polychlorinated biphenyls and some chlorinated pesticides in sewage sludge using a glass capillary column (124) 265

**Deadyn**

Determination of pemoline by HPLC (123) 474

**DEAHP-cellulose**

DEAHP-starch and DEAHP-cellulose, new ion exchangers for fractionating polysaccharides and other biopolymers (123) 434

**DEAHP-starch**

DEAHP-starch and DEAHP-cellulose, new ion exchangers for fractionating polysaccharides and other biopolymers (123) 434

**Dedimethylchlorpromazine**

Chromatographic properties of imines formed from dedimethylchlorpromazine and various aldehydes and ketones (121) 88

**Dehydrohecogenin**

HPLC analysis of the benzoate esters of sapogenins isolated from *Agave* (121) 323

**Dehydrotigogenin**

HPLC analysis of the benzoate esters of sapogenins isolated from *Agave* (121) 329

**Demonomethylchlorpromazine**

Chromatographic properties of imines formed from dedimethylchlorpromazine and various aldehydes and ketones (121) 88

**Deoxycorticosterone**

Sephadex LH-20 multiple-column chromatography for the simultaneous separation of progesterone, deoxycorticosterone and 17 $\alpha$ -hydroxyprogesterone from small plasma samples (123) 293

**Deoxyepinephrine**

Chromatographic separation of catecholamines on a weakly acidic ion-exchange resin using a borate-containing eluent (124) 411

**Deoxynucleosides**

Differential scanning calorimetric-TLC study of 5-halo-2'-deoxynucleosides (124) 388

**Deoxyribonucleosides**

Rapid resolution of 5'-mono-, -di-, and -triphosphate ribo- and deoxyribonucleoside mixtures by conventional anion-exchange chromatography (124) 415

**Deoxythymidine**

Separation of deoxythymidine and deoxythymidine nucleotides by CC and TLC (124) 137

**Deoxythymidine nucleotides**

Separation of deoxythymidine and deoxythymidine nucleotides by CC and TLC (124) 137

**Depakine**

Rapid determination of 4-hydroxybutyric acid (Gamma OH) and 2-propylpentanoate (Depakine) in human plasma by means of GLC (121) 150

**Desisopropylpropranolol**

Quantitative determination of propranolol, propranolol glycol and N-desisopropylpropranolol in brain tissue by electron capture GC (123) 185

**Desmethyldiazepam**

Quantitative HPLC of diazepam and N-desmethyldiazepam in blood (128) 111

**Desmethyldoxepin**

Quantitative determination of doxepin and desmethyldoxepin in rat plasma by means of GLC-mass fragmentography (130) 354

**Detection**

Fluorescence enhancement. New selective detection principle for liquid chromatography (126) 317

**Detectors**

Ions and electrons in the electron capture detector. Quantitative identification by atmospheric pressure ionization MS (122) 397

**Detectors**

Performance of a silicon-doped hydrogen atmosphere flame ionization detector for GC (122) 515

**Detectors**

Thermionic ionization detector for the analysis of phosphorus- and nitrogen-containing organic compounds (122) 527

**Detectors**

Thermionic detectors in GC. Selective detection of phosphorus, nitrogen, and sulphur compounds (123) 396

**Detectors**

Chromatographic design and temperature-related characteristics of the piezoelectric detector (124) 179

**Detectors**

Improved Hall conductivity detection system without solvent interference (124) 364

**Detectors**

Anodic coulometric detection with a glassy carbon electrode in combination with reversed-phase HPLC. Determination of blood levels of perphenazine and fluphenazine (125) 275

**Detectors**

Reaction colorimeters as detectors in HPLC. Extra-column band broadening with segmented flow through the reaction coil (125) 287

**Detectors**

Determination of trace amounts of hydroperoxides by column liquid chromatography and colorimetric detection (125) 307

**Detectors**

Rapid scanning diode array as a multi-wavelength detector in LC (125) 315

**Detectors**

Design and characterization of a coulometric detector with a glassy carbon electrode for HPLC (125) 375

**Detectors**

TLC transport detector for HPLC (126) 35

**Detectors**

Semi-specific flame-ionization detection system (126) 263

**Detectors**

Continuous stirred reactor model as basis for optimisation of electron capture detector operation in coulometric and constant current modes (126) 271

**Detectors**

New mini-computer automated linear photodiode array spectrometer system for high-resolution LC (126) 347

**Detectors**

Sensitivity enhancement of the Coulson conductivity detector by modification of the bridge circuitry (128) 154

**Detectors**

Optimization and response of the Pye flame photometric detector to some insecticides in the phosphorus and sulphur modes (128) 157

**Detectors**

Use of dual-wavelength detection in HPLC for the quantitative determination of unresolved or partially resolved compounds (130) 314

**Detectors**

Use of carbon disulphide and formamide as the mobile phase and flame-forming agent in the flame-ionization detector (130) 318

**Detectors**

Correlation of the response factors of thermal-conductivity detector with molecular weight for methylsiloxanes (130) 351

**Detectors**

Amperometric detection in HPLC with non-conductive eluents (in French) (130) 372

**Developing tank**

Versatile twin-trough developing tank for TLC (123) 65

**Dialkylbarbituric acids**

GC analysis of dialkylbarbituric acids (129) 155

**Diamines**

Determination of diamines and polyamines in tissues by HPLC (124) 277

**Diazepam**

Quantitative HPLC of diazepam and N-desmethyldiazepam in blood (128) 111

**Diazepam**

Simplified quantitative method for the simultaneous determination of diazepam and its metabolites in serum by TLC (128) 231

**Dibenzodioxins**

Preparation of qualitative standard mixtures of polychlorinated dibenzo-*p*-dioxins and dibenzofurans by UV and  $\gamma$ -irradiation of the octachloro compounds (129) 303

**Dibenzofurans**

Preparation of qualitative standard mixtures of polychlorinated dibenzo-*p*-dioxins and dibenzofurans by UV and  $\gamma$ -irradiation of the octachloro compounds (129) 303

**Dibutyl tetrachlorophthalate**

Di-*n*-butyl tetrachlorophthalate as a liquid phase in the GC identification of hydrocarbons (123) 327

**Dichlorophenoxyacetic acid**

Metabolism of 2,4-dichlorophenoxyacetic acid. IX. GLC of methyl esters of amino acid conjugates (124) 97

**Didascon**

Determination of pemoline by HPLC (123) 474

**Diethylstilbestrol**

Chromatographic analysis of hormone residues in food (Review) (127) 53

**Diethylstilbestrols**

Preparation and HPLC of iodinated diethylstilbestrols and some related steroids (130) 129

**Diflalone**

Determination of diflalone and its main metabolites in human plasma and synovial fluid by HPLC (124) 169

**Diflalone**

GC determination of diflalone in human plasma by use of an automatic sampler (128) 27

**Digital filters**

Effects of digital filters on chromatographic signals (126) 279

**Digitalis glycosides**

Rapid and sensitive high-resolution procedure for digitalis glycoside analysis by derivatization LC (122) 293

**Digitalis glycosides**

Comparison of reversed-phase and partition HPLC of some digitalis glycosides (130) 169

**Digoxin**

Fractionation of tritiated digoxin and dihydrodigoxin with DEAE-Sephadex LH-20 (121) 401

**Digoxin**

Separation of digoxin and dihydrodigoxin by TLC or PC (125) 523

**Dihydrocapsaicin**

Quantitative microanalysis of capsaicin, dihydrocapsaicin and nordihydrocapsaicin using mass fragmentography (123) 119

**Dihydrocodeinone**

GC determination of hydrocodone in serum (130) 243

**Dihydrodigoxin**

Fractionation of tritiated digoxin and dihydrodigoxin with DEAE-Sephadex LH-20 (121) 401

**Dihydrodigoxin**

Separation of digoxin and dihydrodigoxin by TLC or PC (125) 523

**Dihydroergotoxine alkaloids**

Determination of dihydroergotoxine alkaloids by GLC (122) 479

**Dimethoxymethylamphetamine**

Direct quantitative analysis of lysergic acid diethylamide (LSD) and 2,5-dimethoxy-4-methylamphetamine (STP) on thin-layer chromatograms (121) 165

**Dimethylaminopropylidene-dibenzoxepin hydrochloride**

Quantitative determination of doxepin and desmethyldoxepin in rat plasma by means of GLC-mass fragmentography (130) 354

**Dimethylaminopyridine**

Determination of urinary monohydric and dihydric phenols by GC of the acetate and THMS derivatives. 4-Dimethylaminopyridine as a catalyst for acetylation reactions (121) 41

**Dinitrophenyl-amino acids**

PC behaviour of  $\alpha$ -DNP-lysine in comparison with other DNP-amino acids (130) 390

**Dinoracetylmethadol**

Comparative study on the derivatization of *l*- $\alpha$ -acetylmethadol metabolites for electron capture GLC (129) 329

**Diode array**

Rapid scanning diode array as a multi-wavelength detector in LC (125) 315

**Diosgenin**

HPLC analysis of the benzoate esters of sapogenins isolated from *Agave* (121) 329

**Dioxins**

Preparation of qualitative standard mixtures of polychlorinated dibenzo-*p*-dioxins and dibenzofurans by UV and  $\gamma$ -irradiation of the octachloro compounds (129) 303

**Diphenylhydantoin**

Simultaneous GC analysis for the four commonly used antiepileptic drugs in serum (128) 281

**Diphenylhydantoin**

Assay of the major (4-hydroxylated) metabolite of diphenylhydantoin in human urine by reversed-phase HPLC (130) 422

**Diphosphate anions**

Anomalous behaviour of diphosphate anions in ion-exchange chromatography (128) 212

**Diseases**

Application of glass capillary-column GC-MS to the studies of human diseases (126) 487

**Displacement gas chromatography**

Heater-displacement chromatography (126) 11

**Disposable tubes**

Disposable tubes for acrylamide gel disc electrophoresis (129) 382

**Dithizonates**

Identification of toxic metals after extraction and TLC of their dithizonates. Toxicological applications (in French) (128) 141

**Diuretics**

GLC determination of tienilic acid (SKF 62.698) in human plasma and urine (123) 379

**Dopamine**

Chromatographic separation of catecholamines on a weakly acidic ion-exchange resin using a borate-containing eluent (124) 411

**Dowex 50-X4**

Chromatographic behaviour of alkaloids on thin layers of cation exchangers. II. Alginate acid, Rexion 102, Dowex 50-X4 and CMCNa (123) 175

**Doxepin**

Quantitative determination of doxepin and desmethyldoxepin in rat plasma by means of GLC-mass fragmentography (130) 354

**Drug metabolism**

GC-MS-computer methods in the study of drug metabolism (126) 547

**Drug metabolites**

Ion-pair chromatography of acidic drug metabolites and endogenous compounds (125) 327

**Drugs**

Chromatographic properties of imines formed from dedimethylchlorpromazine and various aldehydes and ketones (121) 88

**Drugs**

Unexpected HPLC separation of Org GC 94 and  $l$ -3,3,4,4- $^2$ H<sub>4</sub>Org GC 94 (121) 96

**Drugs**

Rapid determination of 4-hydroxybutyric acid (Gamma OH) and 2-propylpentanoate (Depakine) in human plasma by means of GLC (121) 150

**Drugs**

Phenacetin estimation from biological samples by HPLC (121) 156

**Drugs**

Direct quantitative analysis of lysergic acid diethylamide (LSD) and 2,5-dimethoxy-4-methylamphetamine (STP) on thin-layer chromatograms (121) 165

**Drugs**

TLC separation of  $^{14}$ C-labelled succinylcholine, succinylmonocholine and choline (121) 170

**Drugs**

Quantitative assay of sulphinpyrazone in plasma and urine by HPLC (121) 227

**Drugs**

Determination of pethidine in plasma by electron capture GC after reaction with trichloroethyl chloroformate (121) 235

**Drugs**

Rapid GC determination of thiamphenicol in plasma and amniotic fluid (121) 243

**Drugs**

Improved theophylline serum analysis by an appropriate internal standard for GC (121) 263

**Drugs**

Minor components of cannabis resin. VI. MS data and GC retention times of components eluted after cannabitol (121) 313

**Drugs**

Bioautography of erythromycin and its esters (121) 390

**Drugs**

Fractionation of tritiated digoxin and dihydrodigoxin with DEAE-Sephadex LH-20 (121) 401

**Drugs**

Applications of HPLC in the pharmaceutical industry (122) 73

**Drugs**

Forensic aspects of HPLC (122) 85

**Drugs**

Ion-pair partition chromatography in the analysis of drugs and biogenic substances in plasma and urine (122) 305

**Drugs**

Identification of drugs using a GC-MS system equipped with electron impact-chemical ionization and electron impact-field ionization-field desorption combination sources (122) 365

**Drugs**

Determination of phenobarbital in human saliva by GC with electron-capture detection (122) 471

**Drugs**

Bioautographic TLC analysis of antibiotics and their metabolites in the whole animal. I. Clindamycin in the rat (123) 33

**Drugs**

Quantitative *in situ* TLC of quinidine and salicylic acid in capillary blood (123) 57

**Drugs**

GLC determination of sulphonamides (123) 167

**Drugs**

Chromatographic behaviour of alkaloids on thin layers of cation exchangers. II. Alginic acid, Rexyn 102, Dowex 50-X4 and CMCNa (123) 175

**Drugs**

Quantitative determination of propranolol, propranolol glycol and N-desisopropylpropranolol in brain tissue by electron capture GC (123) 185

**Drugs**

Determination of the content and purity of ergotamine preparations by means of HPLC (123) 193

**Drugs**

GC analysis of pharmaceuticals based on pyrimidine and purine substances (123) 216

**Drugs**

GLC determination of tienilic acid (SKF 62.698) in human plasma and urine (123) 379

**Drugs**

Identification of a major metabolite of the new hypolipidaemic agent, isopropyl 2-4-(*p*-chlorobenzoyl)phenoxy-2-methylpropionate (procetofene) in humans by GC-MS (123) 463

**Drugs**

Determination of pemoline by HPLC (123) 474

**Drugs**

Reversed-phase HPLC of bleomycin (124) 88

**Drugs**

GLC determination of nanogram amounts of cyclobenzaprine in plasma using a nitrogen detector (124) 164

**Drugs**

Determination of diftalone and its main metabolites in human plasma and synovial fluid by HPLC (124) 169

**Drugs**

TLC studies of methadone salts (124) 172

**Drugs**

GC determination of acenocoumarin in human plasma (124) 331

**Drugs**

HPLC of penimocycline (in French) (124) 343

**Drugs**

Determination of nanogram amounts of aromatic compounds by spectrophotometry on thin-layer chromatograms (124) 351

**Drugs**

Application of HPLC and MS to the identification of xanthenes (in French) (124) 381

**Drugs**

Simultaneous determination of therapeutic levels of amitriptyline and nortriptyline in plasma by GLC (124) 401

**Drugs**

Improved method for the determination of methimazole in plasma by HPLC (124) 405

**Drugs**

Detection and significance of glycols in drug screening (124) 424

**Drugs**

Chromatographic studies of the influence of water and thermal treatment on the activity of silica gel (125) 179

**Drugs**

Anodic coulometric detection with a glassy carbon electrode in combination with reversed-phase HPLC. Determination of blood levels of perphenazine and fluphenazine (125) 275

**Drugs**

Quantitative determination of low levels of daunomycin and daunomycinol in plasma by HPLC (125) 369

**Drugs**

Determination of naloxone and naltrexone as perfluoroalkyl ester derivatives by electron-capture GLC (125) 409

**Drugs**

Simple combination of  $R_F$  value and melting-point determination for the identification of barbiturates (125) 431

**Drugs**

Simultaneous determination of meperidine and normeperidine in biofluids (125) 503

**Drugs**

Determination of hydralazine and its metabolites by GC-MS (126) 517

**Drugs**

Electron capture and multiple ion detection of benzodiazepine esters in pharmacokinetic studies (126) 601

**Drugs**

Chemical ionization MS for rapid assay of drugs in serum (126) 615

**Drugs**

Application of GLC and HPLC to the analysis of trace amounts of salicylic acid, acetylsalicylic anhydride and acetylsalicylsalicylic acid in aspirin samples and aspirin formulations (126) 651

**Drugs**

Analysis of benzoylcegonine in urine by HPLC and GC-MS (126) 717

**Drugs**

Chromatographic analysis of hormone residues in food (Review) (127) 53

**Drugs**

GC determination of diftalone in human plasma by use of an automatic sampler (128) 27

**Drugs**

Quantitative HPLC of diazepam and N-desmethyldiazepam in blood (128) 111

**Drugs**

Rapid GC method for the determination of clonazepam in serum and cerebrospinal fluid (128) 166

**Drugs**

GLC determination of ethambutol in plasma and urine of man and monkey (128) 188

**Drugs**

Sensitive GC method for the estimation of a new antiarrhythmic compound, mexiletine (K01173), in biological fluids (128) 196

**Drugs**

Separation of some tricyclic antidepressants by HPLC (128) 204

**Drugs**

Determination of thiazinamium sulphoxide in urine by means of Amberlite XAD-2 CC and thin-layer densitometry (128) 208

**Drugs**

TLC of some coumarin derivatives (128) 227

**Drugs**

Simplified quantitative method for the simultaneous determination of diazepam and its metabolites in serum by TLC (128) 231

**Drugs**

Determination of  $\beta$ -cetotetrine in plasma and urine using HPLC with electrochemical detection (129) 73

**Drugs**

Separation of chloramphenicol intermediates by HPLC on MicroPak-NH<sub>2</sub> columns (129) 81

**Drugs**

GC analysis of dialkylbarbituric acids (129) 155

**Drugs**

Simultaneous determination of methylated barbiturates and other anticonvulsant drugs by high-resolution GC (129) 171

**Drugs**

Chromatographic characterization of phenothiazine drugs by a reversed-phase thin-layer technique (129) 249

**Drugs**

Comparison of the determination of partition coefficients of 1,4-benzodiazepines by HPLC and TLC (129) 263

**Drugs**

Comparative study on the derivatization of *l*- $\alpha$ -acetylmethadol metabolites for electron capture GLC (129) 329

**Drugs**

Analysis of isomeric impurities in a synthesis of the novel anti-inflammatory drug, benoxaprofen (129) 339

**Drugs**

General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355

**Drugs**

Simultaneous quantification of procainamide and N-acetylprocainamide with HPLC (129) 363

**Drugs**

Influence of the support material and liquid loading on retention indices in GLC (129) 375

**Drugs**

GC method for the analysis of butyrophenones based on the Hofmann degradation reaction (129) 387

**Drugs**

Comparison of reversed-phase and partition HPLC of some digitalis glycosides (130) 169

**Drugs**

TLC procedure for the detection, isolation and identification of basic psychotropic drugs in urine (130) 209

**Drugs**

GC determination of hydrocodone in serum (130) 243

**Drugs**

Quantitative GC analysis of barbiturates and hydantoin with quaternary ammonium hydroxides (130) 342

**Drugs**

Quantitative determination of doxepin and desmethyldoxepin in rat plasma by means of GLC-mass fragmentography (130) 354

**Drugs**

Quantitative determination of sulpyrid in biological samples from rats by GLC and chemical ionization-mass fragmentography (130) 361

**Drugs**

Rapid GC determination of underivatized phenprocoumon in plasma (130) 418

**Drugs, antiepileptic**

Simultaneous GC analysis for the four commonly used antiepileptic drugs in serum (128) 281

**Dry column chromatogram**

Simple technique for the development of a dry column chromatogram (128) 302

**Dual-wavelength detection**

Use of dual-wavelength detection in HPLC for the quantitative determination of unresolved or partially resolved compounds (130) 314

**Dyes**

TLC of disperse dyes (121) 131

**Dyes**

TLC of some cationic dyes commonly used in histology (129) 277

**Dyestuff intermediates**

Soap chromatography: A new HPLC technique for separation of ionizable materials. Dyestuff intermediates (122) 17

**E****Ecdysteroids**

Separation of ecdysterone, inokosterone, makisterone A,  $\alpha$ -ecdysone and ponasterone A by a combination of adsorptive and reversed-phase LC (129) 447

**Efficiency**

Sample loading and efficiency in adsorption, partition and bonded-phase high-speed LC (125) 43

**Elastase**

Fractionation of proteolytic enzymes by affinity chromatography on Sepharose aminocaproyl proflavin (129) 97

**Electron capture detector**

Ions and electrons in the electron capture detector. Quantitative identification by atmospheric pressure ionization MS (122) 397

**Electron capture detector**

Continuous and ultrasensitive apparatus for the measurement of air-borne tracer substances (126) 3

**Electron capture detectors**

Continuous stirred reactor model as basis for optimisation of electron capture detector operation in coulometric and constant current modes (126) 271

**Electrophoretic gel plates**

Storage and densitometry of electrophoretic gel plates in vacuum transparent bags (in German) (130) 444

**Elution behaviour**

Attempt to predict elution behaviour in a LLC model system (128) 199

**Elution gas chromatography-reactor-frontal gas chromatography**

Identification of organic compounds by an elution GC-reactor-frontal GC system (126) 723

**Endogenic compounds**

Ion-pair chromatography of acidic drug metabolites and endogenic compounds (125) 327

**Enzymes**

Separation of chymopapain from papaya latex (*Carica papaya*) on Amberlite IR-120 ( $Hg^{2+}$ ) (121) 65

**Enzymes**

HPLC of proteins (125) 103

**Enzymes**

Fractionation of proteolytic enzymes by



affinity chromatography on Sepharose aminocaproyl proflavin (129) 97

#### **Enzymes**

Separation and detection of lipases using polyacrylamide gel electrophoresis (130) 441

#### **Enzymes**

Enzyme purification by affinity chromatography using a non-covalently bound adsorbent (130) 446

#### **Enzymes**

Hydrophobic chromatography of N-acetyl- $\beta$ -D-hexosaminidase (130) 451

#### **Epinephrine**

Chromatographic separation of catecholamines on a weakly acidic ion-exchange resin using a borate-containing eluent (124) 411

#### **Equilibria**

Application of GC headspace analysis to the characterization of chemical equilibria in solutions (126) 205

#### **Equol**

Specific separation of equol from estrogens by TLC (129) 473

#### **Ergot alkaloids**

Lysergic acids. II. Isolation and separation of lysergic acids (in German) (121) 353

#### **Ergot alkaloids**

Determination of dihydroergotoxine alkaloids by GLC (122) 479

#### **Ergotamine**

Determination of the content and purity of ergotamine preparations by means of HPLC (123) 193

#### **Erythromycin**

Bioautography of erythromycin and its esters (121) 390

#### **Erythromycin stearate**

Simple TLC identification method for erythromycin stearate (125) 447

#### **Estradiol**

Preparation and HPLC of iodinated diethylstilbestrols and some related steroids (130) 129

#### **Estrogens**

Simultaneous separation of estrogens and androgens using TLC (121) 82

#### **Estrogens**

Chromatographic analysis of hormone residues in food (Review) (127) 53

#### **Estrogens**

Specific separation of equol from estrogens by TLC (129) 473

#### **Ethambutol**

GLC determination of ethambutol in plasma and urine of man and monkey (128) 188

#### **Ethanol**

Limitations in the specificity of Porapak Q columns in the GC analysis of ethanol in body fluids (130) 403

#### **Ethyl methylphenylpiperidinecarboxylate**

Determination of pethidine in plasma by electron capture GC after reaction with trichloroethyl chloroformate (121) 235

#### **Ethylbenzylhydroxycoumarin**

Rapid GC determination of underivatized phenprocoumon in plasma (130) 418

#### **Ethylene oxide**

Determination of ethylene oxide in air by GC (121) 147

#### **Ethylpyrrolidinylmethylmethoxysulphamoylbenzamide**

Quantitative determination of sulpyrid in biological samples from rats by GLC and chemical ionization-mass fragmentography (130) 361

#### **Ethylthiourea complexes**

Radiochromatographic study of some ethylthiourea complexes of copper(I), silver(I) and gold(I) (123) 367

# F

## Fatty acid methyl esters

Characterization of fatty acid methyl esters by GC on siloxane liquid phases (121) 118

## Fatty acids

Fatty acids. VIII. GLC properties of all dimethylene interrupted methyl *trans,trans*-octadecadienoates (121) 303

## Fatty acids

Fatty acids. IX. The TLC behaviour of all of the *cis,cis*- and *trans,trans*-dimethylene-interrupted methyl octadecadienoates and methyl octadecadiynoates (124) 147

## Fatty acids

Long-chain acetates as internal standards in the GLC of volatile fatty acids (125) 444

## Fatty acids

Fatty acids. XI. The synthesis of epoxides from methyl octadecadienoates and a study of their chromatographic properties (129) 181

## Fatty acids

Determination of free fatty acids as pentafluorobenzyl esters by electron capture GC (129) 295

## Fatty acids

Quantitative recovery of free and esterified fatty acids from thin-layer plates coated with silica gel (130) 139

## Fatty acids, C<sub>2</sub>-C<sub>5</sub>

GC determination of C<sub>2</sub>-C<sub>5</sub> fatty acids in aqueous media with a Porapak N column (124) 63

## Fatty acids, polyunsaturated

Argentation CC. A new ternary solvent system for the separation of methyl esters of polyunsaturated fatty acids (129) 469

## Fatty acids, short chain

GC-MS of some biologically important short chain acid butyl esters (128) 261

## Ficin

Fractionation of proteolytic enzymes by affinity chromatography on Sepharose aminocaproyl proflavin (129) 97

## Field-flow fractionation

Field-flow fractionation. Extending the molecular weight range of LC to one trillion (10<sup>12</sup>) (125) 3

## Flame ionization detector

Performance of a silicon-doped hydrogen atmosphere flame ionization detector for GC (122) 515

## Flame-ionization detector

Use of carbon disulphide and formamide as the mobile phase and flame-forming agent in the flame-ionization detector (130) 318

## Flame-ionization detectors

Semi-specific flame-ionization detection system (126) 263

## Flame photometric detector

Optimization and response of the Pye flame photometric detector to some insecticides in the phosphorus and sulphur modes (128) 157

## Flavanones

Quantitative analysis of flavanones and 3-hydroxyflavanones by TLC (123) 385

## Flavone

GC separation and analysis of trimethylsilyl derivatives of some naturally occurring non-volatile phenolic compounds and related substances (121) 49

## Flavones

Investigations on the mechanism and selectivity of chromatography on thin layers of polyamide. IV. Chromatography of amino acids and complex phenolic substances (124) 394

## Flavonoids

Chromatographic differentiation of tamarixetin and isorhamnetin by spraying (124) 174

## Flavonoids

HPLC of some anthocyanidins and flavonoids (129) 464

## Flow controller

Flow controller for HPLC and its applications (126) 369

## Flow programming

Flow programming in glass capillary column-electron capture GC by using the valve in the splitter line (123) 101

## Fluorescamine

Derivatization of compounds at the origin of thin-layer plates with fluorescamine (121) 33

## Fluorescamine

Detection of compounds with primary amino groups on thin-layer plates by dipping in a fluorescamine solution (121) 79

## Fluorescamine

Optimal use of fluorescamine for *in situ* TLC quantitation of amino acids (124) 111

## Fluorescamine-amino acids

Characterization of selected fluorescamine-amino acid reaction products by HPLC (124) 376

## Fluorescence

Use of a gaseous electrical discharge to induce fluorescence in organic compounds separated by TLC (126) 457

**Fluorescence enhancement**

Fluorescence enhancement. New selective detection principle for liquid chromatography (126) 317

**Fluorouracil**

GC analysis of pharmaceuticals based on pyrimidine and purine substances (123) 216

**Fluphenazine**

Anodic coulometric detection with a glassy carbon electrode in combination with reversed-phase HPLC. Determination of blood levels of perphenazine and fluphenazine (125) 275

**Folates**

Chromatography of folates on Sephadex G-10 (124) 53

**Folic acid**

Chromatography of folates on Sephadex G-10 (124) 53

**Folic acid derivatives**

Separation of folic acid derivatives by HPLC (121) 100

**Foods**

Chromatographic analysis of hormone residues in food (Review) (127) 53

**Foods**

Comparison of electron-capture and electrolytic-conductivity detection for the GLC analysis of heptafluorobutyl derivatives of some agricultural chemicals (130) 97

**Forensic science**

Forensic aspects of HPLC (122) 85

**Formamide**

Use of carbon disulphide and formamide as the mobile phase and flame-forming agent in the flame-ionization detector (130) 318

**Formic acid**

GC detection of small amounts of formic acid as dimethylformamide (128) 178

**Formulations**

Applications of HPLC in the pharmaceutical industry (122) 73

**Forafur**

GC analysis of pharmaceuticals based on pyrimidine and purine substances (123) 216

**Furans**

Preparation of qualitative standard mixtures of polychlorinated dibenzo-*p*-dioxins and dibenzofurans by UV and  $\gamma$ -irradiation of the octachloro compounds (129) 303

**G****Galactokinase**

Purification of a vegetal galactokinase. Advantages of affinity chromatography (in French) (128) 309

**Gas chromatography**

Column development and technology in GC (122) 107

**Gas-modified solid chromatography**

Gas-modified solid chromatography using organic vapours as carrier gas. II. Mechanism and application for aromatic amines (130) 87

**Gas-solid chromatography**

Influence of the energetic heterogeneity of a column packing on the separation process in GSC (124) 60

**Gaseous electrical discharge**

Use of a gaseous electrical discharge to induce fluorescence in organic compounds separated by TLC (126) 457

**Gasoline**

Identification of gasoline contamination of groundwater by GC (128) 271

**Gel chromatography**

Numerical calculation of the separation parameters in gel chromatography (128) 300

**Gel disc electrophoresis**

Disposable tubes for acrylamide gel disc electrophoresis (129) 382

**Gel electrophoresis**

Mechanism of the molecular-sieve effect in polyacrylamide gel electrophoresis (123) 261

**Gel permeation chromatography**

Theoretical study of chromatographic separations performed with cross-linked organic polymers (121) 173

**Gel permeation chromatography**

Column parameters controlling resolution in high-performance GPC (122) 345

**Gel permeation chromatography**

Effect of column performance on the accuracy of molecular weights obtained from size exclusion chromatography (GPC) (125) 219

**Gel permeation chromatography**

Porous silica microspheres for high-performance size exclusion chromatography (125) 231

**Gels**

Swelling and contraction of polyacrylamide gel slabs in aqueous solutions (124) 219

**Gels**

Solvent dependence of gel swelling in the system of Merckogel OR-2000 and various organic solvents (124) 231

**Geranial**

Chemistry of terpenes. VII. New procedure for the determination of neral and geranial in essential oils (130) 368

**Gibberellins**

Gibberellins. XLIII. Fractionation of gibberellins, gibberellin-conjugates and other phytohormones by DEAE-Sephadex-chromatography (in German) (121) 110

**Glass capillary columns**

New, generally applicable procedure for the preparation of glass capillary columns (125) 471

**Glass surface**

Preparation of glass capillary columns coated with polar phase for high-temperature GC. I. Study of roughening of the glass surface (126) 117

**Glucagon**

Improved technique for the analysis of amino acids and related compounds on thin layers of cellulose. XI. Direct, visual micro-method for investigating the primary structural sequence of collagen and other proteins (129) 211

**Glucose**

Separation of methyl ethers of xylose, glucose and some other sugars by LC (121) 122

**Glucuronides**

Separation of permethylated isomeric glucuronides by GC and analysis of the mass spectra (124) 321

**Glyceryl ethers**

Some additional observations on the analysis of glyceryl ethers and chromatographically related lipids (128) 239

**Glyceryl-CPG**

Residual anionic properties of a covalently substituted controlled-pore glass, Glyceryl-CPG (129) 91

**Glycolipids**

Ascending dry-column chromatography as an aid in the preparative isolation of glycolipids (123) 243

**Glycols**

Detection and significance of glycols in drug screening (124) 424

**Glycoproteins**

Quantitative determination of hexosamines in glycoprotein by ion-exchange chromatography (125) 421

**Glycoproteins**

Simultaneous determination of neutral sugars

and hexosamines in glycoproteins and acid mucopolysaccharides (glycosaminoglycans) by GLC (128) 45

**Glycosaminoglycans**

Simultaneous determination of neutral sugars and hexosamines in glycoproteins and acid mucopolysaccharides (glycosaminoglycans) by GLC (128) 45

**Glycosidases**

Localization of glycosidases on polyacrylamide gel (123) 495

**Glycosides**

Rapid and sensitive high-resolution procedure for digitalis glycoside analysis by derivatization LC (122) 293

**Glycosides**

Low-cost gradient system for HPLC. Quantitation of complex pharmaceutical raw materials (125) 265

**Glycosides**

Comparison of reversed-phase and partition HPLC of some digitalis glycosides (130) 169

**Gradient elution**

Chromatographic reproducibility in HPLC gradient elution (126) 421

**Gradient system**

Low-cost gradient system for HPLC. Quantitation of complex pharmaceutical raw materials (125) 265

# H

## Hall detector

Improved Hall conductivity detection system without solvent interference (124) 364

## Halowax 1051

HPLC analysis of the heptachloronaphthalenes present in Halowax 1051 (129) 451

## Halowaxes

Polychlorinated naphthalenes (Review) (127) 203

## Head-space gas chromatography

Application of an automated head-space procedure for trace analysis by GC (122) 553

## Headspace analysis

Application of GC headspace analysis to the characterization of chemical equilibria in solutions (126) 205

## Heater-displacement chromatography

Heater-displacement chromatography (126) 11

## Hecogenin

HPLC analysis of the benzoate esters of sapogenins isolated from *Agave* (121) 329

## helicenes

Resolution of optical isomers by HPLC, using coated and bonded chiral charge-transfer complexing agents as stationary phases (122) 205

## Henry's constant

Determination of the pre-exponential factor of Henry's constant by gas adsorption chromatography (121) 185

## Heptachloronaphthalenes

HPLC analysis of the heptachloronaphthalenes present in Halowax 1051 (129) 451

## Heptafluorobutyl isobutyl esters

GLC of the N-heptafluorobutyl isobutyl esters of fifty biologically interesting amino acids (130) 151

## Heptanone

Rapid quantitative microanalysis of ketones in urine by GC-mass fragmentography (126) 465

## Herbicides

GC separation of herbicides of major interest in Canada, with electrolytic conductivity detection in the nitrogen and chlorine modes (121) 85

## Herbicides

Separation of bifenox and related compounds by TLC (124) 422

## Herbicides

Chromatographic studies of the influence of water and thermal treatment on the activity of silica gel (125) 179

## Herbicides

LC parameters of groups of herbicidal active substances. I. Urea herbicides (in German) (125) 487

## Herbicides

Use of acetonitrile for the extraction of herbicide residues from soils (129) 309

## Herbicides

Separation of benthocarb and related compounds by TLC (130) 439

## HETP

Effect of column length on HETP in GC (121) 199

## Hexane

Determination of the pre-exponential factor of Henry's constant by gas adsorption chromatography (121) 185

## Hexosamines

Quantitative determination of hexosamines in glycoprotein by ion-exchange chromatography (125) 421

## Hexosamines

Simultaneous determination of neutral sugars and hexosamines in glycoproteins and acid mucopolysaccharides (glycosaminoglycans) by GLC (128) 45

## Hexoses

Separation of isomeric pentoses and hexoses by continuous-flow TLC (130) 431

## High-performance liquid chromatography

Theoretical and experimental study of recycling in HPLC (125) 17

## High-performance liquid chromatography

Adsorbent deactivation in HPLC (125) 163

## High-speed liquid chromatography

Sample loading and efficiency in adsorption, partition and bonded-phase high-speed LC (125) 43

## Histamine

GC separation of histamine and its metabolites (130) 237

## Histamine

Rapid TLC-densitometric determination of histamine in tuna (130) 426

## Histidine metabolism

TLC separation of imidazole compounds and its application to radiotracing studies of brain histidine metabolism (129) 482

## Histidine metabolites

GC profiles of prostaglandins A, B, E and F (series I and II) and histidine metabolites (Summary) (122) 469

**Histone F1**

Identification of histones F2b and F1 in stained gels (128) 244

**Histone F2b**

Identification of histones F2b and F1 in stained gels (128) 244

**Hormonal steroids**

New method for the preparation of highly stable polysiloxane-coated glass open-tubular capillary columns and application to the analysis of hormonal steroids (126) 161

**Hormone residues**

Chromatographic analysis of hormone residues in food (Review) (127) 53

**Hormones**

Chromatography of sex gland hormones on Sephadex LH-20 (in French) (129) 471

**Hormones**

Preparation and HPLC of iodinated diethylstilbestrols and some related steroids (130) 129

**Human diseases**

Application of glass capillary-column GC-MS to the studies of human diseases (126) 487

**Hydantoin**

Assay of the major (4-hydroxylated) metabolite of diphenylhydantoin in human urine by reversed-phase HPLC (130) 422

**Hydantoins**

Quantitative GC analysis of barbiturates and hydantoins with quaternary ammonium hydroxides (130) 342

**Hydralazine**

Determination of hydralazine and its metabolites by GC-MS (126) 517

**Hydrazines**

3,4,5-Trimethoxybenzylhydrazine: An efficient subtraction reagent for aldehydes and ketones in GC (121) 279

**Hydrocarbons**

2,4,7-Trinitrofluorenone-modified graphitized carbon black as stationary phase for the GC separation of aromatic hydrocarbons (121) 370

**Hydrocarbons**

GC analysis of aliphatic and aromatic hydrocarbons with 2,4,5,7-tetranitrofluorenone-modified graphitized carbon black (122) 459

**Hydrocarbons**

Di-*n*-butyl tetrachlorophthalate as a liquid phase in the GC identification of hydrocarbons (123) 327

**Hydrocarbons, aromatic**

Chromatography of aromatic hydrocarbons on macroporous polystyrene gel (130) 195

**Hydrocarbons, polycyclic aromatic**

Separation of N-heteropolycyclic aromatic hydrocarbons from polycyclic aromatic hydrocarbons. Separation by ion-exchange chromatography and fractionation of cigarette smoke condensate (in German) (128) 117

**Hydrocarbons, polycyclic aromatic**

Separation of polycyclic aromatic hydrocarbons by LC on cross-linked polyvinylpyrrolidone (129) 61

**Hydrocarbons, polycyclic aromatic**

Use of polyamide for the separation of different polycyclic aromatic hydrocarbons by TLC (in French) (130) 387

**Hydrocarbons, polynuclear**

Forensic aspects of HPLC (122) 85

**Hydrocarbons, polynuclear aromatic**

Phthalimidopropylsilane: A new chemically bonded stationary phase for the determination of polynuclear aromatic hydrocarbons by HPLC (130) 320

**Hydrocodone**

General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355

**Hydrocodone**

GC determination of hydrocodone in serum (130) 243

**Hydrogen atmosphere flame ionization detector**

Performance of a silicon-doped hydrogen atmosphere flame ionization detector for GC (122) 515

**Hydromorphone**

General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355

**Hydroperoxides**

Determination of trace amounts of hydroperoxides by column liquid chromatography and colorimetric detection (125) 307

**Hydrophobic effects**

Hydrophobic effects in reversed-phase LC (128) 65

**Hydroxybutyric acid**

Rapid determination of 4-hydroxybutyric acid ( $\gamma$  OH) and 2-propylpentanoate (Depakine) in human plasma by means of GLC (121) 150

**Hydroxyflavanones**

Quantitative analysis of flavanones and 3-hydroxyflavanones by TLC (123) 385

**Hydroxynitrosopyrrolidine**

Trace analysis of 3-hydroxy-1-nitrosopyrrolidine, a non-volatile N-nitrosamine, by combined GC-MS method (128) 169

**Hydroxynorleucine**

GC separation of  $\epsilon$ -hydroxynorleucine (in French) (125) 526

**Hydroxyprogesterone**

Sephadex LH-20 multiple-column chromatography for the simultaneous separation of progesterone, deoxycorticosterone and 17 $\alpha$ -hydroxyprogesterone from small plasma samples (123) 293

**I****Imidazoles**

TLC separation of imidazole compounds and its application to radiotracing studies of brain histidine metabolism (129) 482

**Imines**

Chromatographic properties of imines formed from dedimethylchlorpromazine and various aldehydes and ketones (121) 88

**Imino-oxophenylloxazolidine**

Determination of pemoline by HPLC (123) 474

**Immunoglobulin G**

Purification of Fab and Fc fragments from human serum immunoglobulin G by electrophoresis and affinity chromatography (123) 247

**Indane derivatives**

GLC of some *o*-xylene, indane and tetralin derivatives (124) 73

**Indium-113m**

PC of radiopharmaceuticals labelled with indium-113m (124) 145

**Infinite diameter effect**

Interaction of radial and axial dispersion in LC in relation to the "infinite diameter effect" (122) 129

**Inorganic anions**

Adsorption of inorganic anions on Sephadex gels. Part II (129) 407

**Inorganic isomers**

Separation of inorganic isomers by TLC. V. Structural, linkage, geometric, and conformational isomers of various coordination numbers (121) 395

**Insect sex attractants**

HPLC of potential insect sex attractants and other geometrical isomers on a silver-loaded ion exchanger (129) 456

**Insecticides**

Determination of metamidophos and acetamidophos in formulations by reversed-phase HPLC (121) 161

**Insecticides**

GC analysis of heptafluorobutryl derivatives of some carbamate insecticides (123) 287

**Insecticides**

HPLC of organophosphorus insecticides (124) 9

**Insecticides**

Optimization and response of the Pye flame

photometric detector to some insecticides in the phosphorus and sulphur modes (128) 157

#### **Insecticides**

Separation and detection of thiofanox and its metabolites by TLC (129) 426

#### **Insecticides**

Detection and determination of organophosphorus insecticides in tissues by TLC (130) 229

#### **Insulin**

Improved technique for the analysis of amino acids and related compounds on thin layers of cellulose. XI. Direct, visual micro-method for investigating the primary structural sequence of collagen and other proteins (129) 211

#### **Interphase mass transfer**

Theory of capillary chromatography. Effect of coiling and interphase mass transfer (129) 1

#### **Invertase**

Localization of glycosidases on polyacrylamide gel (123) 495

#### **Ion exchangers**

DEAHP-starch and DEAHP-cellulose, new ion exchangers for fractionating polysaccharides and other biopolymers (123) 434

#### **Ion exchangers**

Swelling of cation-exchange resins in aqueous organic solvents (Review) (in French) (127) 29

#### **Ion-exchange complexing chromatography**

Specific factors involved in the spreading of chromatographic zones in ion-exchange complexing chromatography (129) 19

#### **Ionizable materials**

Soap chromatography: A new HPLC technique for separation of ionizable materials. Dyestuff intermediates (122) 17

#### **Isoelectric focusing**

Isoelectric points and molecular weights of proteins. A table (Review) (127) 1

#### **Isoelectric points**

Isoelectric points and molecular weights of proteins. A table (Review) (127) 1

#### **Isoflavandiol**

Specific separation of equol from estrogens by TLC (129) 473

#### **Isoflavone**

GC separation and analysis of trimethylsilyl derivatives of some naturally occurring non-volatile phenolic compounds and related substances (121) 49

#### **Isomers, inorganic**

Separation of inorganic isomers by TLC. VI. Isomers of the non-metals boron, phosphorus and silica (123) 448

#### **Isopentenyl adenosine monophosphate**

Chromatography and electrophoresis techniques for demonstrating the presence of cellular N<sup>6</sup>-(Δ<sup>2</sup>-isopentenyl)-adenosine-3'-monophosphate (123) 490

#### **Isoprenoid acid enantiomers**

Liquid chromatographic separation of some acyclic isoprenoid acid enantiomers via diastereomer derivatization (125) 157

#### **Isopropylchlorobenzoylphenoxymethylpropionate**

Identification of a major metabolite of the new hypolipidaemic agent, isopropyl 2-14'(p-chlorobenzoyl)phenoxy-2-methylpropionate (procetofene) in humans by GC-MS (123) 463

#### **Isoproterenol**

Chromatographic separation of catecholamines on a weakly acidic ion-exchange resin using a borate-containing eluent (124) 411

#### **Isorhamnetin**

Chromatographic differentiation of tamarixetin and isorhamnetin by spraying (124) 174

#### **Isotachophoresis**

Isotachophoretic experiments with a counter flow of electrolyte (123) 139

#### **Isotope separations**

Radiochemical and isotope separations by high-efficiency LLC (125) 203

#### **Isotopes**

GC of <sup>3</sup>H- and <sup>14</sup>C-labelled compounds (Review) (127) 163

#### **Isotopic molecules**

Separation of isotopic molecules by HPLC (122) 287



# K

## **Katharometer response**

Effect of column temperature on the sensitivity of katharometer response (123) 497

## **Ketoglutaric acid**

HPLC determination of pyruvic acid and  $\alpha$ -ketoglutaric acid in serum (130) 281

## **Ketones**

3,4,5-Trimethoxybenzylhydrazine: An efficient subtraction reagent for aldehydes and ketones in GC (121) 279

## **Ketones**

Rapid quantitative microanalysis of ketones in urine by GC-mass fragmentography (126) 465

## **Ketones, alicyclic**

Chromatographic analysis of a mixture of isomeric methylcyclohexanones and methylcyclohexanols (124) 1

## **Ketosteroids**

Selective LC isolation procedure for GC-MS analysis of 3-ketosteroids in biological materials (126) 705

## **Kováts indices**

New perspectives in the prediction of Kováts indices (126) 171

# L

## **Labelled compounds, $^{14}\text{C}$ - and $^3\text{H}$ -**

GC of  $^3\text{H}$ - and  $^{14}\text{C}$ -labelled compounds (Review) (127) 163

## **Laminaribiose**

Preparative approach to mannobiose and laminaribiose (in German) (130) 305

## **Laser radiation**

Possibility of increasing the selectivity of chromatographic separation under the action of laser radiation (126) 257

## **Layers**

Preparation and characterization of chemically bonded TLC plates (124) 257

## **Lead(II)**

Influence of drying temperature on the ion-exchange properties of stannic tungstoarsenate. II. Separation of  $\text{Hg}^{2+}$  and  $\text{Pb}^{2+}$  and of  $\text{Al}^{3+}$  and  $\text{Ca}^{2+}$  (128) 149

## **Lecithin: cholesterol acyltransferase**

Enzyme purification by affinity chromatography using a non-covalently bound adsorbent (130) 446

## **Levorin**

Comparison of candicidin, levorin and trichomycin by means of HPLC (123) 205

## **Lichen**

Standardized two-dimensional TLC method for lichen products (128) 253

## **Lichen acids**

Quantitative analysis of atranorin by TLC (129) 478

## **Ligand isomers**

Separation of inorganic isomers by TLC. IV. Ligand isomers of various coordination numbers (121) 138

## **Lipases**

Separation and detection of lipases using polyacrylamide gel electrophoresis (130) 441

## **Lipids**

Quantitative separation of biological lipids by successive chromatographic runs on juxtaposed thin layers (in French) (121) 295

## **Lipids**

Ascending dry-column chromatography as an aid in the preparative isolation of glycolipids (123) 243

## **Lipids**

Densitometric quantitation of neutral lipids on ammonium sulfate impregnated thin-layer chromatograms (128) 133

**Lipids**

Densitometric analysis of ethanolamine- and serine-containing phosphoglycerides (128) 235

**Lipids**

Some additional observations on the analysis of glyceryl ethers and chromatographically related lipids (128) 239

**Lipids**

Quantitative recovery of free and esterified fatty acids from thin-layer plates coated with silica gel (130) 139

**Lipids**

Chromatographic study of mycolic acid-like substances in lipids of *Listeria monocytogenes* (130) 434

**Lipoamide**

TLC of oxidised and reduced lipoate and lipoamide and their persulfides (123) 479

**Lipoate**

TLC of oxidised and reduced lipoate and lipoamide and their persulfides (123) 479

**Lipoproteins**

Fractionation of serum lipoproteins by preparative electrophoresis in polyacrylamide gel (130) 336

**Liquid chromatographic effluents**

Direct analysis of LC effluents (122) 389

**Liquid chromatography**

Field-flow fractionation. Extending the molecular weight range of LC to one trillion ( $10^{12}$ ) (125) 3

**Liquid chromatography**

Theoretical and experimental study of recycling in HPLC (125) 17

**Liquid chromatography**

Sample loading and efficiency in adsorption, partition and bonded-phase high-speed LC (125) 43

**Liquid chromatography**

Recent developments in the evaluation of chemically bonded silica packings for LC (125) 115

**Liquid chromatography**

Solvophobic interactions in LC with nonpolar stationary phases (125) 129

**Liquid chromatography**

Adsorbent deactivation in HPLC (125) 163

**Liquid chromatography**

Preparative LC using radially compressed columns (126) 439

**Liquid-solid systems**

Solvent composition effects in liquid-solid systems (130) 23

***Listeria monocytogenes***

Chromatographic study of mycolic acid-like

substances in lipids of *Listeria monocytogenes* (130) 434

**Loss of hearing**

Application of glass capillary-column GC-MS to the studies of human diseases (126) 487

**LSD**

Direct quantitative analysis of lysergic acid diethylamide (LSD) and 2,5-dimethoxy-4-methylamphetamine (STP) on thin-layer chromatograms (121) 165

**LSD**

Forensic aspects of HPLC (122) 85

**Lysergic acid diethylamide**

Direct quantitative analysis of lysergic acid diethylamide (LSD) and 2,5-dimethoxy-4-methylamphetamine (STP) on thin-layer chromatograms (121) 165

**Lysergic acids**

Lysergic acids. II. Isolation and separation of lysergic acids (in German) (121) 353

**Lysine**

PC behaviour of  $\alpha$ -DNP-lysine in comparison with other DNP-amino acids (130) 390

# M

## **Malonic acid dinitrile**

GC and TLC investigation of malonic acid dinitrile (in German) (130) 405

## **Maltosaccharides**

GPC of maltosaccharides on polyacrylamide gel (121) 361

## **Mandelic acid derivatives**

Reversed-phase ion-pair partition chromatography of phenylacetic, mandelic and pyridinecarboxylic acid derivatives (122) 269

## **Mannobiose**

Preparative approach to mannobiose and laminaribiose (in German) (130) 305

## **Mannosidase**

Localization of glycosidases on polyacrylamide gel (123) 495

## **Mansyl derivatives**

Separation of amino acids as mansyl derivatives on polyamide layers (123) 212

## **Maple syrup urine disease**

Application of glass capillary-column GC-MS to the studies of human diseases (126) 487

## **Marijuana**

*Cannabis sativa* L. (marijuana). VII. The relative specificity of the RIM test (123) 79

## **Marijuana smoke condensate**

Analysis of the acidic fraction of marijuana smoke condensate by capillary GC-MS (126) 559

## **McReynolds retention indices**

Selection of representative substances by operations research techniques. Application to the selection of functional probes for GLC (122) 535

## **Meperidine**

Determination of pethidine in plasma by electron capture GC after reaction with trichloroethyl chloroformate (121) 235

## **Meperidine**

Simultaneous determination of meperidine and normeperidine in biofluids (125) 503

## **Merckogel OR-2000**

Solvent dependence of gel swelling in the system of Merckogel OR-2000 and various organic solvents (124) 231

## **Mercury(II)**

Influence of drying temperature on the ion-exchange properties of stannic tungstoarsenate. II. Separation of  $Hg^{2+}$  and  $Pb^{2+}$  and of  $Al^{3+}$  and  $Ca^{2+}$  (128) 149

## **Metal ions**

*o*-Vanillin oxime as a chromatographic spray reagent for metal ions (129) 488

## **Metal ions, hydrolysis polymers**

Interactions between hydrolysis polymers of metal ions and other ions in aqueous solution. A gel chromatographic study (129) 412

## **Metals, tetravalent**

Crystalline insoluble acid salts of tetravalent metals. XXIV. Ion-exchange behaviour of fibrous cerium(IV) phosphate (128) 289

## **Metals, toxic**

Identification of toxic metals after extraction and TLC of their dithizonates. Toxicological applications (in French) (128) 141

## **Metamidophos**

Determination of metamidophos and acetamidophos in formulations by reversed-phase HPLC (121) 161

## **Methodol**

Comparative study on the derivatization of *l*- $\alpha$ -acetylmethodol metabolites for electron capture GLC (129) 329

## **Methadone salts**

TLC studies of methadone salts (124) 172

## **Methimazole**

Improved method for the determination of methimazole in plasma by HPLC (124) 405

## **Methionine**

Analysis of methionine in plant materials. Improved GC procedure (130) 399

## **Methyl octadecadienoates**

Fatty acids. VIII. GLC properties of all dimethylene interrupted methyl *trans,trans*-octadecadienoates (121) 303

## **Methyl octadecadienoates**

Fatty acids. IX. The TLC behaviour of all of the *cis,cis*- and *trans,trans*-dimethylene-interrupted methyl octadecadienoates and methyl octadecadienoates (124) 147

## **Methyl octadecadienoates**

Fatty acids. IX. The TLC behaviour of all of the *cis,cis*- and *trans,trans*-dimethylene-interrupted methyl octadecadienoates and methyl octadecadienoates (124) 147

## **Methyl stearate**

Direct analysis of LC effluents (122) 389

## **Methylcyclohexanols**

Chromatographic analysis of a mixture of isomeric methylcyclohexanones and methylcyclohexanols (124) 1

## **Methylcyclohexanones**

Chromatographic analysis of a mixture of isomeric methylcyclohexanones and methylcyclohexanols (124) 1

**Methylcyclopentadiene dimer dissociation**

GC reactor study of the kinetics of methylcyclopentadiene dimer dissociation (122) 487

**Methylsiloxanes**

Correlation of the response factors of thermal-conductivity detector with molecular weight for methylsiloxanes (130) 351

**Metoprolol**

Simplified method for the determination of oxprenolol and other  $\beta$ -receptor blocking agents in biological fluids by GLC (121) 72

**Mexiletine**

Sensitive GC method for the estimation of a new antiarrhythmic compound, mexiletine (Ko1173), in biological fluids (128) 196

**Micropollutants**

Organic micropollutants in air and water. Sampling, GC-MS analysis and computer identification (122) 373

**Microprocessors**

Effect of microprocessors on traditional chromatography instrumentation (122) 355

**Molecular interactions**

Role of molecular interactions in chromatography (122) 35

**Molecular weight range**

Field-flow fractionation. Extending the molecular weight range of LC to one trillion ( $10^{12}$ ) (125) 3

**Molecular weights of proteins**

Isoelectric points and molecular weights of proteins. A table (Review) (127) 1

**Molecular-sieve effect**

Mechanism of the molecular-sieve effect in polyacrylamide gel electrophoresis (123) 261

**Molecular-weight determination**

Effect of column performance on the accuracy of molecular weights obtained from size exclusion chromatography (GPC) (125) 219

**Molecular-weight determination**

Porous silica microspheres for high-performance size exclusion chromatography (125) 231

**Monobenzocryptate**

Exchangers with monobenzocryptate K [2<sub>B</sub>.2.2.] as anchor group (in German) (125) 511

**Monocarbonyls**

Regeneration of monocarbonyls from their 2,4-dinitrophenylhydrazone derivatives (130) 267

**Monosaccharides**

Separation of methyl ethers of xylose, glucose and some other sugars by LC (121) 122

**Mucopolysaccharides**

Identification of acidic mucopolysaccharides by agarose gel electrophoresis (130) 299

**Mycotoxins**

Investigations on the production of mycotoxins and their quantitative analysis. VI. Citreoviridin (in German) (130) 293

**Myocardial depressor protein**

Comparative biochemistry and pharmacology of salivary gland secretions. III. Chromatographic isolation of a myocardial depressor protein (MDP) from the venom of *Crotalus atrox* (124) 303

# N

## Naloxone

Determination of naloxone and naltrexone as perfluoroalkyl ester derivatives by electron-capture GLC (125) 409

## Naloxone

General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355

## Naltrexone

Determination of naloxone and naltrexone as perfluoroalkyl ester derivatives by electron-capture GLC (125) 409

## Naltrexone

General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355

## Naphthalene homologues

Use of a nematic liquid crystal for the GLC separation of naphthalene homologues (122) 451

## Naphthalenes

Polychlorinated naphthalenes (Review) (127) 203

## Naphthalenes

Analysis of polychlorinated naphthalenes by HPLC and TLC (129) 193

## Naphthalenes

HPLC analysis of the heptachloronaphthalenes present in Halowax 1051 (129) 451

## Narcotic agonists

General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355

## Narcotic antagonists

General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355

## Neohesperidin dihydrochalcone

LC of neohesperidin dihydrochalcone (129) 31

## Neral

Chemistry of terpenes. VII. New procedure for

the determination of neral and geranial in essential oils (130) 368

## Nitrates

Microdetermination of nitrates and nitrites in saliva, blood, water, and suspended particulates in air by GC (126) 743

## Nitrites

Microdetermination of nitrates and nitrites in saliva, blood, water, and suspended particulates in air by GC (126) 743

## Nitrogen compounds

Thermionic detectors in GC. Selective detection of phosphorus, nitrogen, and sulphur compounds (123) 396

## Nitrogen-containing compounds

Applications of HPLC in the pharmaceutical industry (122) 73

## Nitrogen-containing organic compounds

Thermionic ionization detector for the analysis of phosphorus- and nitrogen-containing organic compounds (122) 527

## Nitrosamine

Trace analysis of 3-hydroxy-1-nitrosopyrrolidine, a non-volatile N-nitrosamine, by combined GC-MS method (128) 169

## Nitrosamines

Quantitative determination of nitrosamines after separation of their derivatives by HPLC (in German) (121) 93

## Nitrosamines

Detection and determination of N-nitrosamines by TLC using fluorescamine (124) 17

## Nitrosamines

Detection of N-aryl-N-nitrosamines on TLC plates with 2,4-dinitrophenylhydrazine and phosphomolybdic acid (124) 115

## Nitrosamines

Selective detection of N-nitrosamines by GC using a modified microelectrolytic conductivity detector in the pyrolytic mode (124) 247

## Nitrosoamino acids

LC of N-nitrosoamino acids and their *syn* and *anti* conformers (124) 105

## Noracetylmethadol

Comparative study on the derivatization of *l*- $\alpha$ -acetylmethadol metabolites for electron capture GLC (129) 329

## Nordihydrocapsaicin

Quantitative microanalysis of capsaicin, dihydrocapsaicin and nordihydrocapsaicin using mass fragmentography (123) 119

## Norepinephrine

Chromatographic separation of catecholamines on a weakly acidic ion-exchange resin using a borate-containing eluent (124) 411

**Normeperidine**

Simultaneous determination of meperidine and normeperidine in biofluids (125) 503

**Normethadol**

Comparative study on the derivatization of *l*- $\alpha$ -acetylmethadol metabolites for electron capture GLC (129) 329

**Nortriptyline**

Simultaneous determination of therapeutic levels of amitriptyline and nortriptyline in plasma by GLC (124) 401

**Nucleic acid bases**

Two-dimensional combination of the hydrogen and the ammonium forms of a cation-exchange layer for the separation of minor nucleic acid bases (128) 304

**Nucleosides**

Isocratic separation of some purine nucleotide, nucleoside, and base metabolites from biological extracts by HPLC (121) 251

**Nucleosides**

GLC of nucleosides. Derivatization and chromatography (123) 335

**Nucleosides**

Separation of nucleic acid hydrolysis products, purines, pyrimidines, nucleosides, nucleotides, ribonucleic acid hydrolyzates, and mixtures from nucleotide syntheses by CC on Amberlite XAD-4 (123) 347

**Nucleosides**

Chromatography and electrophoresis techniques for demonstrating the presence of cellular N<sup>6</sup>-( $\Delta^2$ -isopentenyl)-adenosine-3'-monophosphate (123) 490

**Nucleosides**

Differential scanning calorimetric-TLC study of 5-halo-2'-deoxynucleosides (124) 388

**Nucleosides**

Evaluation of microparticle chemically bonded reversed-phase packings in the HPLC analysis of nucleosides and their bases (126) 679

**Nucleosides**

GLC of nucleosides. Effect of silylating reagents and solvents (130) 103

**Nucleosides**

Derivatization and chromatography of nucleosides and nucleotides (130) 115

**Nucleotide analyser**

Simplified low-pressure high-resolution nucleotide analyser (124) 187

**Nucleotides**

Isocratic separation of some purine nucleotide, nucleoside, and base metabolites from biological extracts by HPLC (121) 251

**Nucleotides**

Fluorimetric determination of adenine and

adenosine and its nucleotides by HPLC (123) 220

**Nucleotides**

Separation of nucleic acid hydrolysis products, purines, pyrimidines, nucleosides, nucleotides, ribonucleic acid hydrolyzates, and mixtures from nucleotide syntheses by CC on Amberlite XAD-4 (123) 347

**Nucleotides**

Rapid resolution of 5'-mono-, -di-, and -triphosphate ribo- and deoxyribonucleoside mixtures by conventional anion-exchange chromatography (124) 415

**Nucleotides**

Derivatization and chromatography of nucleosides and nucleotides (130) 115

**Nucleotides**

Chromatographic separation of pyridine and adenine nucleotides on thin layers of poly(ethyleneimine) cellulose (130) 145

# O

## Octadecadienoates

Fatty acids. VIII. GLC properties of all dimethylene interrupted methyl *trans,trans*-octadecadienoates (121) 303

## Oligomers

TLC of oligomers (129) 115

## Oligosaccharides

Continuous quantitative TLC of oligosaccharides (129) 420

## Open-tube columns

Investigations into the preparation of glass open-tube GC columns (122) 425

## Open-tubular capillary columns

New method for the preparation of highly stable polysiloxane-coated glass open-tubular capillary columns and application to the analysis of hormonal steroids (126) 161

## Open-tubular columns

Characteristics of non-polar glass support-coated open-tubular columns (121) 1

## Open-tubular columns

Plate height in porous-layer open-tubular columns (124) 359

## Opium alkaloids

Forensic aspects of HPLC (122) 85

## Optical brighteners

Separation of optical brighteners by LSC (121) 153

## Optical isomers

Resolution of optical isomers by LC (123) 400

## Optical isomers

N-Acyl derivatives of chiral amines as novel, readily prepared phases for the separation of optical isomers by GC (126) 97

## Optimisation

Optimisation of LC performance on columns packed with microparticulate silicas (122) 243

## Org GC 94

Unexpected HPLC separation of Org GC 94 and  $1,3,3,4,4\text{-}^2\text{H}_4\text{Org GC 94}$  (121) 96

## Organic acids

TLC method for the identification of organic acids (124) 123

## Organic acids

Analysis of the acidic fraction of marijuana smoke condensate by capillary GC-MS (126) 559

## Organic compounds

Identification of organic compounds by an elution GC-reactor-frontal GC system (126) 723

## Organic compounds, adipose tissue

Application of glass capillary-column GC-MS to the studies of human diseases (126) 487

## Organic pollutants

Evaluation of organic pollutants in the open air and atmospheres in industrial sites using graphitized carbon black traps and GC-MS analysis with specific detectors (126) 757

## Organochlorine pesticides

Column switching techniques in the LC analysis of organochlorine pesticides in milk (122) 259

## Organophosphate pesticides

Fluorogenic labeling of organophosphate pesticides with dansyl chloride. Application to residue analysis by HPLC and TLC (121) 343

## Organophosphorus insecticides

HPLC of organophosphorus insecticides (124) 9

## Organophosphorus insecticides

Detection and determination of organophosphorus insecticides in tissues by TLC (130) 229

## Organophosphorus pesticides

Quantitative determination of organophosphorus pesticides by thin-layer densitometry (124) 127

## Orthene

Determination of metamidophos and acetamidophos in formulations by reversed-phase HPLC (121) 161

## Orthohydrogen

Rapid determination of ortho- and parahydrogen by GSC (in French) (123) 405

## Osmium tetroxide

Osmium tetroxide as specific detection reagent in TLC (in German) (130) 327

## Oximes

Selective LC isolation procedure for GC-MS analysis of 3-ketosteroids in biological materials (126) 705

## Oxine

Partition of chelating agents between a cationic ion exchanger swollen with water and a water-immiscible solvent (in French) (124) 197

## Oxosteroids

TLC separation of corticosteroids from their respective 17-oxo-oxidation products (129) 475

## Oxovanadium tetradentate ketoamine chelates

GC of some oxovanadium(IV) tetradentate  $\beta$ -ketoamine chelates (130) 251

**Oxprenolol**

Simplified method for the determination of oxprenolol and other  $\beta$ -receptor blocking agents in biological fluids by GLC (121) 72

**Oxycodone**

General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355

**Oxymorphone**

General procedure for the isolation and identification of 6- $\alpha$ - and 6- $\beta$ -hydroxy metabolites of narcotic agonists and antagonists with a hydromorphone structure (129) 355

**P****Packings**

Preparation and use of *in situ* chemically bonded small-particle silica as packings in HPLC (121) 13

**Packings**

Importance of macropores in polymer packings for GC (124) 360

**Packings**

Recent developments in the evaluation of chemically bonded silica packings for LC (125) 115

**Packings**

Cellulose in bead form. Properties related to chromatographic uses (125) 455

**Packings**

Evaluation of microparticle chemically bonded reversed-phase packings in the HPLC analysis of nucleosides and their bases (126) 679

**Papain**

Fractionation of proteolytic enzymes by affinity chromatography on Sepharose aminocaproyl proflavin (129) 97

**Papain catalysis**

TLC for detection of peptide cleavage or integrity during reactions of the Z-alanylglycines with aniline or phenylhydrazine under papain catalysis (123) 309

**Parahydrogen**

Rapid determination of ortho- and parahydrogen by GSC (in French) (123) 405

**Particle size**

Particle size, pressure and analysis time in routine HPLC (126) 19

**Pattern recognition techniques**

Analysis of pyrolysis gas chromatograms using pattern recognition techniques (126) 249

**PCBs**

Evaluation of environmental polychlorobiphenyls and DDE in terms of mixtures of commercial preparations from peak heights of packed-column gas chromatograms using a programmable calculator (121) 269

**PCBs**

Flow programming in glass capillary column-electron capture GC by using the valve in the splitter line (123) 101

**PCBs**

GC determination of polychlorinated



biphenyls and some chlorinated pesticides in sewage sludge using a glass capillary column (124) 265

#### **PCBs**

Use of Tenax for the extraction of pesticides and polychlorinated biphenyls from water. II. Tests with artificially polluted and natural waters (125) 399

#### **PCBs**

High-speed LC and TLC of polychlorinated biphenyls (128) 101

#### **PCNs**

Polychlorinated naphthalenes (Review) (127) 203

#### **PCNs**

Analysis of polychlorinated naphthalenes by HPLC and TLC (129) 193

#### **PCNs**

HPLC analysis of the heptachloronaphthalenes present in Halowax 1051 (129) 451

#### **Peak identification system**

Comprehensive interfaced pyrolysis GC peak identification system (126) 225

#### **Pemoline**

Determination of pemoline by HPLC (123) 474

#### **Penicillin**

Identification of antibiotic residues in milk by TLC (124) 37

#### **Penimocycline**

HPLC of penimocycline (in French) (124) 343

#### **Pentoses**

Separation of isomeric pentoses and hexoses by continuous-flow TLC (130) 431

#### **Peptide cleavage**

TLC for detection of peptide cleavage or integrity during reactions of the Z-alanyl-glycines with aniline or phenylhydrazine under papain catalysis (123) 309

#### **Peptide integrity**

TLC for detection of peptide cleavage or integrity during reactions of the Z-alanyl-glycines with aniline or phenylhydrazine under papain catalysis (123) 309

#### **Peptide synthesis**

Preparative HPLC applied to peptide synthesis (129) 287

#### **Peptides**

Derivatization of compounds at the origin of thin-layer plates with fluorescamine (121) 33

#### **Peptides**

Detection of compounds with primary amino groups on thin-layer plates by dipping in a fluorescamine solution (121) 79

#### **Peptides**

GC-MS of permethylated peptides and their reduced and trimethylsilylated derivatives (121) 376

#### **Peptides**

Relatively non-chemical approach to the isolation of peptide materials from plasma (124) 418

#### **Peptides**

Post-column fluorescence derivatization of peptides. Problems and potential in HPLC (126) 665

#### **Peptides**

Advances in separation techniques in sequence analysis of proteins and peptides (Review) (127) 91

#### **Peptides, protected**

Gel filtration of protected peptides on Enzacryl K2 in dimethylformamide and N-methyl-2-pyrrolidone (123) 237

#### **Perphenazine**

Anodic coulometric detection with a glassy carbon electrode in combination with reversed-phase HPLC. Determination of blood levels of perphenazine and fluphenazine (125) 275

#### **Pesticides**

GC separation of herbicides of major interest in Canada, with electrolytic conductivity detection in the nitrogen and chlorine modes (121) 85

#### **Pesticides**

Determination of metamidophos and acetamidophos in formulations by reversed-phase HPLC (121) 161

#### **Pesticides**

Evaluation of environmental polychlorobiphenyls and DDE in terms of mixtures of commercial preparations from peak heights of packed-column gas chromatograms using a programmable calculator (121) 269

#### **Pesticides**

Fluorogenic labeling of organophosphate pesticides with dansyl chloride. Application to residue analysis by HPLC and TLC (121) 343

#### **Pesticides**

Column switching techniques in the LC analysis of organochlorine pesticides in milk (122) 259

#### **Pesticides**

Exploitation of phase-system selectivity by two-column LC. Separation of carbamate pesticides (Summary) (122) 331

#### **Pesticides**

Direct analysis of LC effluents (122) 389

**Pesticides**

Impregnation of silica gel with tetraalkylammonium salts in adsorption chromatography of neutral aromatic compounds (123) 231

**Pesticides**

GC analysis of heptafluorobutyryl derivatives of some carbamate insecticides (123) 287

**Pesticides**

HPLC of organophosphorus insecticides (124) 9

**Pesticides**

Quantitative determination of organophosphorus pesticides by thin-layer densitometry (124) 127

**Pesticides**

GC determination of polychlorinated biphenyls and some chlorinated pesticides in sewage sludge using a glass capillary column (124) 265

**Pesticides**

Separation of bifenoxy and related compounds by TLC (124) 422

**Pesticides**

Chromatographic studies of the influence of water and thermal treatment on the activity of silica gel (125) 179

**Pesticides**

Use of Tenax for the extraction of pesticides and polychlorinated biphenyls from water. II. Tests with artificially polluted and natural waters (125) 399

**Pesticides**

LC parameters of groups of herbicidal active substances. I. Urea herbicides (in German) (125) 487

**Pesticides**

Analysis of sulphur-containing carbamates by formation of derivatives in the gas-liquid chromatograph using trimethylphenylammonium hydroxide (125) 495

**Pesticides**

High-speed LC and TLC of polychlorinated biphenyls (128) 101

**Pesticides**

Optimization and response of the Pye flame photometric detector to some insecticides in the phosphorus and sulphur modes (128) 157

**Pesticides**

Use of acetonitrile for the extraction of herbicide residues from soils (129) 309

**Pesticides**

Separation and detection of thiofanox and its metabolites by TLC (129) 426

**Pesticides**

Determination of *a*-chloralose in rodenticide formulations by GLC (129) 444

**Pesticides**

GC of *N*-methyl and *N*-aryl carbamates by flash-heater reaction with trimethylanilinium hydroxide (130) 55

**Pesticides**

Detection and determination of organophosphorus insecticides in tissues by TLC (130) 229

**Pesticides**

Separation of benthio carb and related compounds by TLC (130) 439

**Pethidine**

Determination of pethidine in plasma by electron capture GC after reaction with trichloroethyl chloroformate (121) 235

**Pharmaceutical raw materials**

Low-cost gradient system for HPLC. Quantitation of complex pharmaceutical raw materials (125) 265

**Pharmaceuticals**

Applications of HPLC in the pharmaceutical industry (122) 73

**Pharmaceuticals**

PC of radiopharmaceuticals labelled with indium-113m (124) 145

**Phase selectivity**

Selectivity of high-temperature liquid phases for GC (126) 113

**Phase system selectivity**

Effect of phase system selectivity in preparative column LC (125) 59

**Phenacetin**

Phenacetin estimation from biological samples by HPLC (121) 156

**Phenobarbital**

Determination of phenobarbital in human saliva by GC with electron-capture detection (122) 471

**Phenobarbital**

Simultaneous GC analysis for the four commonly used antiepileptic drugs in serum (128) 281

**Phenol methyl ethers**

GC separation of phenol and pyrocatechol methyl ethers (in German) (129) 431

**Phenolic acids**

GC of chloromethylsilylated phenolic acids (123) 454

**Phenolic compounds**

GC separation and analysis of trimethylsilyl derivatives of some naturally occurring non-volatile phenolic compounds and related substances (121) 49

**Phenolic compounds**

High-performance reversed-phase liquid

chromatography of naturally occurring phenolic compounds (130) 287

#### **Phenolic substances**

Investigations on the mechanism and selectivity of chromatography on thin layers of polyamide. IV. Chromatography of amino acids and complex phenolic substances (124) 394

#### **Phenols**

Determination of urinary monohydric and dihydric phenols by GC of the acetate and TMS derivatives. 4-Dimethylaminopyridine as a catalyst for acetylation reactions (121) 41

#### **Phenols**

Analysis of the acidic fraction of marijuana smoke condensate by capillary GC-MS (126) 559

#### **Phenols**

Chromatographic behaviour of phenols on thin layers of anion and cation exchangers. III. AG 1-X4 and BD-cellulose (129) 239

#### **Phenothiazine drugs**

Chromatographic characterization of phenothiazine drugs by a reversed-phase thin-layer technique (129) 249

#### **Phenothiazines**

Anodic coulometric detection with a glassy carbon electrode in combination with reversed-phase HPLC. Determination of blood levels of perphenazine and fluphenazine (125) 275

#### **Phenprocoumon**

Rapid GC determination of underivatized phenprocoumon in plasma (130) 418

#### **Phenylacetic acid derivatives**

Reversed-phase ion-pair partition chromatography of phenylacetic, mandelic and pyridinecarboxylic acid derivatives (122) 269

#### **Phenylethylamine**

Procedural difficulties in the GLC assay of the arylalkylamines (123) 45

#### **Phenylethylamine**

Separation and quantitation of some urinary arylalkylamines (123) 51

#### **Phenylphenol**

Microdetermination of *o*-phenylphenol in citrus fruits by GLC (125) 439

#### **Phenylthiohydantoin-amino acids**

Use of *o*-phthalaldehyde for fluorescence detection in conventional amino acid analyzers. Sub-nanomole sensitivity in the analysis of phenylthiohydantoin-amino acids (130) 51

#### **Phorbic acid**

Quantitative determination of phorbic acid by GLC (130) 414

#### **Phosphates**

Anion-exchange chromatographic separation of linear phosphates with eluent containing a chelating agent (130) 384

#### **Phosphoglycerides**

Densitometric analysis of ethanolamine- and serine-containing phosphoglycerides (128) 235

#### **Phosphorus**

Separation of inorganic isomers by TLC. VI. Isomers of the non-metals boron, phosphorus and silica (123) 448

#### **Phosphorus compounds**

Thermionic detectors in GC. Selective detection of phosphorus, nitrogen, and sulphur compounds (123) 396

#### **Phosphorus-containing organic compounds**

Thermionic ionization detector for the analysis of phosphorus- and nitrogen-containing organic compounds (122) 527

#### **Photometer**

Background theory for the design of a photometric instrument for quantitative thin-media chromatography (123) 11

#### **Phthalaldehyde**

Use of *o*-phthalaldehyde for fluorescence detection in conventional amino acid analyzers. Sub-nanomole sensitivity in the analysis of phenylthiohydantoin-amino acids (130) 51

#### **Phthalate esters**

Identification and determination of phthalate esters in river water by HPLC (129) 53

#### **Phthalazinophthalazinedione**

Determination of diftalone and its main metabolites in human plasma and synovial fluid by HPLC (124) 169

#### **Phthalimidopropylsilane**

Phthalimidopropylsilane: A new chemically bonded stationary phase for the determination of polynuclear aromatic hydrocarbons by HPLC (130) 320

#### **Phytohormones**

Gibberellins. XLIII. Fractionation of gibberellins, gibberellin-conjugates and other phytohormones by DEAE-Sephadex-chromatography (in German) (121) 110

#### **Pindolol**

Simplified method for the determination of oxprenolol and other  $\beta$ -receptor blocking agents in biological fluids by GLC (121) 72

#### **Plant phenolics**

LC separation of plant phenolics using polyethylene glycol dimethacrylate gel (129) 466

#### **Plant products**

Droplet counter-current chromatography for the separation of plant products (128) 218

**Plate height**

Plate height in porous-layer open-tubular columns (124) 359

**Plates**

Preparation and characterization of chemically bonded TLC plates (124) 257

**Pollutants in the air**

Analysis of trace pollutants in the air by means of cryogenic GC (121) 285

**Polyacrylamide gel electrophoresis**

Simple apparatus for preparative polyacrylamide gel electrophoresis (130) 331

**Polyacrylamide gel slabs**

Swelling and contraction of polyacrylamide gel slabs in aqueous solutions (124) 219

**Polyamide sheets**

Low-fluorescence polyamide sheets for TLC (124) 120

**Polyamides**

Polyamides in HPLC (in French) (121) 213

**Polyamides**

Investigations on the mechanism and selectivity of chromatography on thin layers of polyamide. IV. Chromatography of amino acids and complex phenolic substances (124) 394

**Polyamines**

Determination of diamines and polyamines in tissues by HPLC (124) 277

**Polychlorinated biphenyls**, see PCBs

**Polychlorinated naphthalenes**, see PCNs

**Polycyclic hydrocarbons**

Improving the efficiency of small GC-MS data systems by means of simple algorithms (123) 271

**Polydispersities**

Simplified numerical method for correction of polydispersities from GPC (125) 428

**Polymer packings**

Importance of macropores in polymer packings for GC (124) 360

**Polymers**

Calibration of separation systems for GPC (121) 23

**Polymers**

Theoretical study of chromatographic separations performed with cross-linked organic polymers (121) 173

**Polymers**

Quantitative pyrolysis studies of styrene, acrylate ester systems, and their  $\alpha$ -methyl-substituted homologs (126) 239

**Polymers**

Analysis of pyrolysis gas chromatograms using pattern recognition techniques (126) 249

**Polyols**

GC study of free polyols and aldoses in cataractous human lens tissue (126) 535

**Polyoxyethylene surfactants**

Application of high-speed LC to the analysis of polyoxyethylene surfactants and their decomposition products in industrial process waters (126) 787

**Polysaccharides**

DEAHP-starch and DEAHP-cellulose, new ion exchangers for fractionating polysaccharides and other biopolymers (123) 434

**Polysaccharides**

Preparation of silica-agarose beads for gel chromatography (128) 125

**Polyvinylpyrrolidone**

Chromatography of aromatic compounds on cross-linked polyvinylpyrrolidone and on anion-exchange resins (123) 355

**Porapak Q**

Limitations in the specificity of Porapak Q columns in the GC analysis of ethanol in body fluids (130) 403

**Porphyrin methyl esters**

Rapid method for the quantitative determination of porphyrin methyl esters by HPLC (123) 414

**Porphyrins**

HPLC analysis of porphyrins in clinical materials (125) 345

**Precision**

Variables affecting precision and accuracy in HPLC (126) 327

**Preparative column liquid chromatography**

Effect of phase system selectivity in preparative column LC (125) 59

**Preparative high-pressure liquid chromatography**

Application of cycling zone separation to preparative HPLC (121) 205

**Preparative high-pressure liquid chromatography**

Use of an 18-mm I.D. column for analytical- and semi-preparative-scale HPLC (122) 317

**Preparative liquid chromatograph**

Computer-controlled preparative liquid chromatograph (122) 277

**Preparative liquid chromatography**

Preparative LC using radially compressed columns (126) 439

**Pressure**

Particle size, pressure and analysis time in routine HPLC (126) 19

**Primidone**

Simultaneous GC analysis for the four

commonly used antiepileptic drugs in serum (128) 281

#### **Probe selection for gas-liquid chromatography**

Selection of representative substances by operations research techniques. Application to the selection of functional probes for GLC (122) 535

#### **Procainamide**

Simultaneous quantification of procainamide and N-acetylprocainamide with HPLC (129) 363

#### **Process stream analyzer**

Totally pneumatic GC process stream analyzer (126) 301

#### **Procetofene**

Identification of a major metabolite of the new hypolipidaemic agent, isopropyl 2-4-(*p*-chlorobenzoyl)phenoxy-2-methylpropionate (procetofene) in humans by GC-MS (123) 463

#### **Progesterone**

Sephadex LH-20 multiple-column chromatography for the simultaneous separation of progesterone, deoxycorticosterone and 17 $\alpha$ -hydroxyprogesterone from small plasma samples (123) 293

#### **Progesterones**

Structure-GC electron capture sensitivity relationships of some substituted 17 $\alpha$ -acetoxyprogesterones (126) 641

#### **Progestogens**

Chromatographic analysis of hormone residues in food (Review) (127) 53

#### **Programmed multiple development**

Extension of the programmed multiple development (PMD) technique (124) 69

#### **Propranolol**

Simplified method for the determination of oxprenolol and other  $\beta$ -receptor blocking agents in biological fluids by GLC (121) 72

#### **Propranolol**

Quantitative determination of propranolol, propranolol glycol and N-desisopropylpropranolol in brain tissue by electron capture GC (123) 185

#### **Propranolol glycol**

Quantitative determination of propranolol, propranolol glycol and N-desisopropylpropranolol in brain tissue by electron capture GC (123) 185

#### **Propylpentanoate**

Rapid determination of 4-hydroxybutyric acid (Gamma OH) and 2-propylpentanoate (Depakine) in human plasma by means of GLC (121) 150

#### **Prostaglandins**

GC profiles of prostaglandins A, B, E and F (series I and II) and histidine metabolites (Summary) (122) 469

#### **Prostaglandins**

Simultaneous separation of individual prostaglandins by TLC on an unmodified support (128) 224

#### **Prostaglandins**

Profiles of prostaglandins A, B, E and F (series I and II) obtained by GC with multiple-ion detection (130) 65

#### **Protein amino acids**

Improved technique for the GLC separation of the N-trifluoroacetyl *n*-butyl derivatives of amino acids (124) 239

#### **Proteinases**

Chromogenic substrates for proteinases. Purification by chromatography on lipophilic Sephadex (123) 429

#### **Proteins**

Comparative biochemistry and pharmacology of salivary gland secretions. III. Chromatographic isolation of a myocardial depressor protein (MDP) from the venom of *Crotalus atrox* (124) 303

#### **Proteins**

HPLC of proteins (125) 103

#### **Proteins**

Isoelectric points and molecular weights of proteins. A table (Review) (127) 1

#### **Proteins**

Advances in separation techniques in sequence analysis of proteins and peptides (Review) (127) 91

#### **Proteins**

Preparation of silica-agarose beads for gel chromatography (128) 125

#### **Proteins**

Purification of a vegetal galactokinase. Advantages of affinity chromatography (in French) (128) 309

#### **Proteins**

Residual anionic properties of a covalently substituted controlled-pore glass, Glyceryl-CPG (129) 91

#### **Proteins**

Improved technique for the analysis of amino acids and related compounds on thin layers of cellulose. XI. Direct, visual micro-method for investigating the primary structural sequence of collagen and other proteins (129) 211

#### **Proteins**

Use of *o*-phthalaldehyde for fluorescence detection in conventional amino acid analyzers. Sub-nanomole sensitivity in the

analysis of phenylthiohydantoin-amino acids (130) 51

#### **Proteins**

Fractionation of serum lipoproteins by preparative electrophoresis in polyacrylamide gel (130) 336

#### **Proteolytic enzymes**

Fractionation of proteolytic enzymes by affinity chromatography on Sepharose aminocaproyl proflavin (129) 97

#### **Psychotropic drugs**

TLC procedure for the detection, isolation and identification of basic psychotropic drugs in urine (130) 209

#### **Purine**

Isocratic separation of some purine nucleotide, nucleoside, and base metabolites from biological extracts by HPLC (121) 251

#### **Purine reutilization pathway components**

Chromatography of the components of the purine reutilization pathway (124) 141

#### **Purines**

Separation of nucleic acid hydrolysis products, purines, pyrimidines, nucleosides, nucleotides, ribonucleic acid hydrolyzates, and mixtures from nucleotide syntheses by CC on Amberlite XAD-4 (123) 347

#### **Purines**

Simple screening method for urinary purines (125) 530

#### **Putrescine**

Determination of diamines and polyamines in tissues by HPLC (124) 277

#### **Pyridinecarboxylic acid derivatives**

Reversed-phase ion-pair partition chromatography of phenylacetic, mandelic and pyridinecarboxylic acid derivatives (122) 269

#### **Pyrimidines**

Separation of nucleic acid hydrolysis products, purines, pyrimidines, nucleosides, nucleotides, ribonucleic acid hydrolyzates, and mixtures from nucleotide syntheses by CC on Amberlite XAD-4 (123) 347

#### **Pyrimidines**

Chromatographic studies of the influence of water and thermal treatment on the activity of silica gel (125) 179

#### **Pyrocatechol methyl ethers**

GC separation of phenol and pyrocatechol methyl ethers (in German) (129) 431

#### **Pyrolysis gas chromatography**

Comprehensive interfaced pyrolysis GC peak identification system (126) 225

#### **Pyrroles**

Autotransfer chromatography in the characterization of pyrroles. Chemistry of multiple-spot phenomena (123) 69

#### **Pyruvic acid**

HPLC determination of pyruvic acid and  $\alpha$ -ketoglutaric acid in serum (130) 281

# Q

## **Quantitative thin-layer chromatography**

Development and practical utilization of a linear spectrodensitometer (123) 23

## **Quantitative thin-media chromatography**

Background theory for the design of a photometric instrument for quantitative thin-media chromatography (123) 11

## **Quinidine**

Quantitative *in situ* TLC of quinidine and salicylic acid in capillary blood (123) 57

## **Quinones**

Separation of quinones and their derivatives by HPLC (130) 189

# R

## **Radial dispersion**

Interaction of radial and axial dispersion in LC in relation to the "infinite diameter effect" (122) 129

## **Radio gas chromatographs**

Some theoretical and practical aspects of the use of radio gas chromatographs (123) 279

## **Radio-gas chromatography**

GC of <sup>3</sup>H- and <sup>14</sup>C-labelled compounds (Review) (127) 163

## **Radiochemical separations**

Radiochemical and isotope separations by high-efficiency LLC (125) 203

## **Radiopharmaceuticals**

PC of radiopharmaceuticals labelled with indium-113m (124) 145

## **Recorder charts**

Contrast improvement in the copying of recorder charts on the Xerox Model 4500 copier (130) 454

## **Recycling**

Theoretical and experimental study of recycling in HPLC (125) 17

## **Retention in chromatography**

Use of the solubility parameter for predicting selectivity and retention in chromatography (122) 185

## **Retention index increments**

Capillary GC of *n*-alkynes. III. Correlation of retention index increments with molecular structure (128) 59

## **Retention indices**

Capillary GC of *n*-alkynes. II. Variation of retention indices with temperature (128) 53

## **Retention indices**

Influence of the support material and liquid loading on retention indices in GLC (129) 375

## **Retention volume**

Determination of the loss of stationary phase in GLC from the change in retention volume (128) 35

## **Retention volume**

Cluster expansion for retention volume in GSC (128) 180

## **Retinol**

Gel chromatographic separation of retinol, retinyl esters and other fat-soluble vitamins (123) 225

**Retinyl esters**

Gel chromatographic separation of retinol, retinyl esters and other fat-soluble vitamins (123) 225

**Reversed phases**

Preparation and properties of reversed phases (122) 3

**Reversed-phase liquid chromatography**

Separation of isotopic molecules by HPLC (122) 287

**Reversed-phase system**

Optimization of reversed-phase separations (122) 171

**Reversed-phase thin-layer chromatography**

Preparation and characterization of chemically bonded TLC plates (124) 257

**Reversed-phase thin-layer chromatography**

Application of  $R_F$  correction in TLC by means of two reference  $R_F$  values. III. Results obtained in reversed-phase TLC (130) 205

**Rexyn 102**

Chromatographic behaviour of alkaloids on thin layers of cation exchangers. II. Alginic acid, Rexyn 102, Dowex 50-X4 and CMCNa (123) 175

 **$R_F$  values**

Application of  $R_F$  correction in TLC by means of two reference  $R_F$  values. III. Results obtained in reversed-phase TLC (130) 205

**Rhenium(VII)**

Behaviour of rhenium(VII) on Sephadex G-10 (in German) (125) 517

**Ribonucleic acid hydrolyzates**

Separation of nucleic acid hydrolysis products, purines, pyrimidines, nucleosides, nucleotides, ribonucleic acid hydrolyzates, and mixtures from nucleotide syntheses by CC on Amberlite XAD-4 (123) 347

**Ribonucleosides**

Rapid resolution of 5'-mono-, -di-, and -triphosphate ribo- and deoxyribonucleoside mixtures by conventional anion-exchange chromatography (124) 415

**RNA**

Fractionation of Sendai virus RNA by polylysine-Kieselguhr column chromatography (130) 396

**Rodenticides**

Determination of  $\alpha$ -chloralose in rodenticide formulations by GLC (129) 444

**Rohrschneider retention indices**

Selection of representative substances by operations research techniques. Application to the selection of functional probes for GLC (122) 535

**Rubidomycin**

Quantitative determination of low levels of daunomycin and daunomycinol in plasma by HPLC (125) 369

**Rutgers identification for marijuana test (RIM-test)**

*Cannabis sativa* L. (marijuana). VII. The relative specificity of the RIM test (123) 79



# S

## Saccharides

GPC of maltosaccharides on polyacrylamide gel (121) 361

## Saccharides

TLC of carbohydrates (Review) (127) 133

## Saccharides

Identification of acidic mucopolysaccharides by agarose gel electrophoresis (130) 299

## Saccharides

Preparative approach to mannobiose and laminaribiose (in German) (130) 305

## Saccharides

Separation of isomeric pentoses and hexoses by continuous-flow TLC (130) 431

## Salicylic acid

Quantitative *in situ* TLC of quinidine and salicylic acid in capillary blood (123) 57

## Salicylic acid

Application of GLC and HPLC to the analysis of trace amounts of salicylic acid, acetylsalicylic anhydride and acetylsalicylsalicylic acid in aspirin samples and aspirin formulations (126) 651

## Salivary gland secretions

Comparative biochemistry and pharmacology of salivary gland secretions. III. Chromatographic isolation of a myocardial depressor protein (MDP) from the venom of *Crotalus atrox* (124) 303

## Sample applicator

Simple, disposable, streaking sample applicator for TLC (129) 379

## Sample loading

Sample loading and efficiency in adsorption, partition and bonded-phase high-speed LC (125) 43

## Sapogenins

HPLC analysis of the benzoate esters of sapogenins isolated from *Agave* (121) 329

## Sarcosine

TLC of sarcosine and its N-lauroyl and N-nitroso derivatives (123) 486

## Sarsasapogenin

HPLC analysis of the benzoate esters of sapogenins isolated from *Agave* (121) 329

## Sawdusts

Forensic examination of sawdusts by TLC and flying spot densitometry (124) 157

## Scanning of thin-layer chromatograms

Significant factors in the preparation and scanning of thin-layer chromatograms, particularly by transmission in the UV (123) 5

## Selectivity

Selectivity of high-temperature liquid phases for GC (126) 113

## Selectivity

Possibility of increasing the selectivity of chromatographic separation under the action of laser radiation (126) 257

## Selectivity in chromatography

Use of the solubility parameter for predicting selectivity and retention in chromatography (122) 185

## Selenohomohypotaurine

Chromatographic separation of selenohypotaurine, selenotaurine, selenohomohypotaurine and selenohomotaurine (129) 369

## Selenohomotaurine

Chromatographic separation of selenohypotaurine, selenotaurine, selenohomohypotaurine and selenohomotaurine (129) 369

## Selenohypotaurine

Chromatographic separation of selenohypotaurine, selenotaurine, selenohomohypotaurine and selenohomotaurine (129) 369

## Selenotaurine

Chromatographic separation of selenohypotaurine, selenotaurine, selenohomohypotaurine and selenohomotaurine (129) 369

## Sendai virus RNA

Fractionation of Sendai virus RNA by polylysine-Kieselguhr column chromatography (130) 396

## Separation parameters

Numerical calculation of the separation parameters in gel chromatography (128) 300

## Sex gland hormones

Chromatography of sex gland hormones on Sephadex LH-20 (in French) (129) 471

## Signals, chromatographic

Effects of digital filters on chromatographic signals (126) 279

## Silica

Preparation and use of *in situ* chemically bonded small-particle silica as packings in HPLC (121) 13

## Silica

Relationship between chromatographic performance and surface structure of silica microspheres (122) 159

**Silica**

Optimisation of LC performance on columns packed with microparticulate silicas (122) 243

**Silica**

Separation of inorganic isomers by TLC. VI. Isomers of the non-metals boron, phosphorus and silica (123) 448

**Silica, bonded phase prepared through reaction with chlorodimethyl [4-(4-chloromethylphenyl)butyl] silane**

Preparation and chromatographic evaluation of chemically bonded ion-exchange stationary phases. II. Weak and strong cation exchangers (123) 109

**Silica, bonded phase prepared through reaction with chlorodimethyl (4-phenylbutyl) silane**

Preparation and chromatographic evaluation of chemically bonded ion-exchange stationary phases. II. Weak and strong cation exchangers (123) 109

**Silica gel**

Impregnation of silica gel with tetraalkylammonium salts in adsorption chromatography of neutral aromatic compounds (123) 231

**Silica gel**

Chromatographic studies of the influence of water and thermal treatment on the activity of silica gel (125) 179

**Silica gel layers**

Impregnation of silica gel layers by formamide in the gas phase (in German) (129) 41

**Silica gels**

Exclusion properties of some commercially available silica gels (125) 251

**Silica microspheres**

Porous silica microspheres for high-performance size exclusion chromatography (125) 231

**Silica packings**

Recent developments in the evaluation of chemically bonded silica packings for LC (125) 115

**Silica particles**

Development and use of carbon adsorbents in high-performance LSC. I. Carbon-coated silica particles (126) 43

**Silica-agarose beads**

Preparation of silica-agarose beads for gel chromatography (128) 125

**Silylating reagents**

GLC of nucleosides. Effect of silylating reagents and solvents (130) 103

**Smoke condensate**

Separation of N-heteropolycyclic aromatic

hydrocarbons from polycyclic aromatic hydrocarbons. Separation by ion-exchange chromatography and fractionation of cigarette smoke condensate (in German) (128) 117

**Soap chromatography**

Soap chromatography: A new HPLC technique for separation of ionizable materials. Dyestuff intermediates (122) 17

**Soap chromatography**

Separation of catecholamines and their metabolites by adsorption, ion-pair and soap chromatography (125) 89

**Solubility factors**

Solubility factors in GLC. Comparison between two approaches and application to some biological studies (126) 625

**Solubility parameter**

Use of the solubility parameter for predicting selectivity and retention in chromatography (122) 185

**Solubility parameter**

Expanded solubility parameter treatment for classification and use of chromatographic solvents and adsorbents. Parameters for dispersion, dipole and hydrogen bonding interactions (125) 71

**Solute identification**

Chromatographic solute identification using peak shape analysis (126) 191

**Solute-solvent interactions**

Interaction between asymmetric solutes and solvents. Diamides derived from L-valine as stationary phases in gas-liquid partition chromatography (123) 149

**Solvents**

Expanded solubility parameter treatment for classification and use of chromatographic solvents and adsorbents. Parameters for dispersion, dipole and hydrogen bonding interactions (125) 71

**Solvophobic interactions**

Solvophobic interactions in LC with nonpolar stationary phases (125) 129

**Sorption dynamics**

Dynamics of sorption with a rectangular isotherm and kinetics limited by particle diffusion (123) 251

**Spectrodensitometer**

Development and practical utilization of a linear spectrodensitometer (123) 23

**Spermidine**

Determination of diamines and polyamines in tissues by HPLC (124) 277

**Spermine**

Determination of diamines and polyamines in tissues by HPLC (124) 277

**Sphingosines**

New derivatives for the analysis of sphingosine long-chain bases by GLC-MS (122) 415

**Spirolactone**

Simple GC method with flame ionization detection for the determination of aldadiene in human urine (123) 460

**Spray reagent**

General spray reagent for the detection of terpene derivatives on thin-layer plates (121) 116

**Stannic tungstoarsenate**

Influence of drying temperature on the ion-exchange properties of stannic tungstoarsenate. II. Separation of  $\text{Hg}^{2+}$  and  $\text{Pb}^{2+}$  and of  $\text{Al}^{3+}$  and  $\text{Ca}^{2+}$  (128) 149

**Starch hydrolysis products**

Comparison of spectrodensitometric and colorimetric methods for quantifying starch hydrolysis products separated by TLC (129) 415

**Stationary phase**

Tailor-made  $\text{C}_{87}$  hydrocarbon as a possible non-polar standard stationary phase for GC (126) 63

**Stationary phase, loss**

Determination of the loss of stationary phase in GLC from the change in retention volume (128) 35

**Stationary phase selectivity**

Selectivity of stationary phases for the resolution of some simple substances (129) 125

**Stationary phases**

Preparation and properties of reversed phases (122) 3

**Stationary phases**

Relationship between chromatographic performance and surface structure of silica microspheres (122) 159

**Stationary phases**

Reversed-phase LSC on modified carbon black (122) 223

**Stationary phases**

Optimisation of LC performance on columns packed with microparticulate silicas (122) 243

**Stationary phases**

Preparation and chromatographic evaluation of chemically bonded ion-exchange stationary phases. II. Weak and strong cation exchangers (123) 109

**Stationary phases**

Interaction between asymmetric solutes and solvents. Diamides derived from L-valine as stationary phases in gas-liquid partition chromatography (123) 149

**Stationary phases**

Solvophobic interactions in LC with nonpolar stationary phases (125) 129

**Stationary phases**

Study of column performances in GC.  $\text{C}_{87}$  hydrocarbon on chemically modified supports (126) 87

**Stationary phases**

N-Acyl derivatives of chiral amines as novel, readily prepared phases for the separation of optical isomers by GC (126) 97

**Steroids**

Simultaneous separation of estrogens and androgens using TLC (121) 82

**Steroids**

Applications of HPLC in the pharmaceutical industry (122) 73

**Steroids**

Sephadex LH-20 multiple-column chromatography for the simultaneous separation of progesterone, deoxycorticosterone and 17 $\alpha$ -hydroxyprogesterone from small plasma samples (123) 293

**Steroids**

Studies on steroids. CXIV. Separation of cardiotonic steroid conjugates by HPLC (124) 79

**Steroids**

HPLC of steroids secreted by human adrenal and testis cells in monolayer culture (125) 357

**Steroids**

New method for the preparation of highly stable polysiloxane-coated glass open-tubular capillary columns and application to the analysis of hormonal steroids (126) 161

**Steroids**

Structure-GC electron capture sensitivity relationships of some substituted 17 $\alpha$ -acetoxyprogesterones (126) 641

**Steroids**

Selective LC isolation procedure for GC-MS analysis of 3-ketosteroids in biological materials (126) 705

**Steroids**

Chromatographic analysis of hormone residues in food (Review) (127) 53

**Steroids**

Allyldimethylsilyl ethers. New derivatives for the analysis of steroids by GC-MS (129) 384

**Steroids**

Separation of ecdysterone, inokosterone, makisterone A,  $\alpha$ -ecdysone and ponasterone A by a combination of adsorptive and reversed-phase LC (129) 447

**Steroids**

Specific separation of equol from estrogens by TLC (129) 473

**Steroids**

TLC separation of corticosteroids from their respective 17-oxo-oxidation products (129) 475

**Steroids**

Preparation and HPLC of iodinated diethylstilbestrols and some related steroids (130) 129

**Stopped-flow gas chromatography, non-equilibrium**

Theory of non-equilibrium stopped-flow GC (130) 3

**STP**

Direct quantitative analysis of lysergic acid diethylamide (LSD) and 2,5-dimethoxy-4-methylamphetamine (STP) on thin-layer chromatograms (121) 165

**Structure of silica microspheres**

Relationship between chromatographic performance and surface structure of silica microspheres (122) 159

**Styrene**

Quantitative pyrolysis studies of styrene, acrylate ester systems, and their *a*-methyl-substituted homologs (126) 239

**Subtraction reagent**

3,4,5-Trimethoxybenzylhydrazine: An efficient subtraction reagent for aldehydes and ketones in GC (121) 279

**Succinylcholine**

TLC separation of <sup>14</sup>C-labelled succinylcholine, succinylmonocholine and choline (121) 170

**Succinylmonocholine**

TLC separation of <sup>14</sup>C-labelled succinylcholine, succinylmonocholine and choline (121) 170

**Sucrose**

TLC of carbohydrates (Review) (127) 133

**Sugars**

Separation of methyl ethers of xylose, glucose and some other sugars by LC (121) 122

**Sugars**

TLC of carbohydrates (Review) (127) 133

**Sugars**

Simultaneous determination of neutral sugars and hexosamines in glycoproteins and acid mucopolysaccharides (glycosaminoglycans) by GLC (128) 45

**Sulphides, cyclic**

Application of methylene-insertion reactions to cyclic sulphides (C<sub>4</sub>H<sub>8</sub>S, C<sub>5</sub>H<sub>10</sub>S and C<sub>6</sub>H<sub>12</sub>S) to produce standard compounds for GC (124) 43

**Sulphinpyrazone**

Quantitative assay of sulphinpyrazone in plasma and urine by HPLC (121) 227

**Sulphinylamines**

GC analysis of aromatic sulphinylamines (124) 76

**Sulphonamides**

GLC determination of sulphonamides (123) 167

**Sulphonamides**

HPLC of some sulphonamides (123) 444

**Sulphonic resins**

Swelling of a sulphonic resin equilibrated with mixtures of water-acetic acid and water-tetrahydrofuran (in French) (121) 104

**Sulphur compounds**

Thermionic detectors in GC. Selective detection of phosphorus, nitrogen, and sulphur compounds (123) 396

**sulphur compounds**

GC separation of some sulphur compounds on glass capillary columns using flame photometric detection (125) 389

**Sulphur-containing compounds**

Applications of HPLC in the pharmaceutical industry (122) 73

**Sulphur-containing substances**

Continuous elemental analysis of sulphur-containing substances by GC (129) 315

**Sulpyrid**

Quantitative determination of sulpyrid in biological samples from rats by GLC and chemical ionization-mass fragmentography (130) 361

**Supports**

Study of column performances in GC. C<sub>87</sub> hydrocarbon on chemically modified supports (126) 87

**Supports**

Residual anionic properties of a covalently substituted controlled-pore glass, Glyceryl-CPG (129) 91

**Surface structure of silica microspheres**

Relationship between chromatographic performance and surface structure of silica microspheres (122) 159

**Suxamethonium**

TLC separation of <sup>14</sup>C-labelled succinylcholine, succinylmonocholine and choline (121) 170

**Sweeteners**

LC of neohesperidin dihydrochalcone (129) 31

**Syringe pumps**

Experimental evaluation of compressibility effects in syringe pumps for LC (130) 29

**Syringe pumps**

Compressibility effects in syringe pumps for LC (130) 458

**T****Tamarixetin**

Chromatographic differentiation of tamarixetin and isorhamnetin by spraying (124) 174

**Tamaron**

Determination of metamidophos and acetamidophos in formulations by reversed-phase HPLC (121) 161

**Tapeworm columns**

Tapeworm columns in GC (122) 443

**Taurine**

Chromatographic separation of selenohypotaurine, selenotaurine, selenohomohypotaurine and selenohomotaurine (129) 369

**Tea constituents**

Reversed-phase HPLC of tea constituents (129) 460

**Temperature gradient**

Device for LC with a dynamic temperature gradient (128) 79

**Tenax**

Use of Tenax for the extraction of pesticides and polychlorinated biphenyls from water. II. Tests with artificially polluted and natural waters (125) 399

**Terpene derivatives**

General spray reagent for the detection of terpene derivatives on thin-layer plates (121) 116

**Terpenes**

Studies on terpenes. III. GC of acyclic monoterpene alcohols (129) 143

**Terpenes**

Chemistry of terpenes. VII. New procedure for the determination of neral and geranial in essential oils (130) 368

**Tetrahydroisoquinolines**

Aldehyde condensation products as derivatives for the vapor phase analysis of biogenic amines (126) 581

**Tetralin derivatives**

GLC of some *o*-xylene, indane and tetralin derivatives (124) 73

**Theophylline**

Improved theophylline serum analysis by an appropriate internal standard for GC (121) 263

**Theoretical plates**

Construction of columns for LC with very

large plate numbers. Theory and practice (122) 147

#### **Thermal-conductivity detector**

Correlation of the response factors of thermal-conductivity detector with molecular weight for methylsiloxanes (130) 351

#### **Thermionic detectors**

Thermionic detectors in GC. Selective detection of phosphorus, nitrogen, and sulphur compounds (123) 396

#### **Thermionic ionization detector**

Thermionic ionization detector for the analysis of phosphorus- and nitrogen-containing organic compounds (122) 527

#### **Thiabendazole**

Determination of thiabendazole by electron-capture GLC after reaction with pentafluorobenzoyl chloride (130) 410

#### **Thiacyclanes**

Application of methylene-insertion reactions to cyclic sulphides ( $C_4H_8S$ ,  $C_5H_{10}S$  and  $C_6H_{12}S$ ) to produce standard compounds for GC (124) 43

#### **Thiamphenicol**

Rapid GC determination of thiamphenicol in plasma and amniotic fluid (121) 243

#### **Thiazinamium sulphoxide**

Determination of thiazinamium sulphoxide in urine by means of Amberlite XAD-2 CC and thin-layer densitometry (128) 208

#### **Thiazine dyes**

Analysis of Romanowsky blood stains by HPLC (124) 287

#### **thiazolinones**

Improved conversion of thiazolinones to phenylthiohydantoin during amino acid sequence analysis (123) 482

#### **Thiazolybenzimidazole**

Determination of thiabendazole by electron-capture GLC after reaction with pentafluorobenzoyl chloride (130) 410

#### **Thin layers**

Impregnation of silica gel layers by formamide in the gas phase (in German) (129) 41

#### **Thin-layer chromatograms**

Significant factors in the preparation and scanning of thin-layer chromatograms, particularly by transmission in the UV (123) 5

#### **Thin-layer chromatography**

Computer-controlled evaluation in TLC. Results and possibilities (126) 449

#### **Thin-layer plates**

Application of cellulose acetate plates as separative layer in chromatography (in German) (123) 439

#### **Thiofanox**

Separation and detection of thiofanox and its metabolites by TLC (129) 426

#### **Thiophosphorus compounds**

TLC behaviour of organic thiophosphorus compounds on silica gel (in German) (130) 437

#### **Thyroid hormones**

Picogram analysis of free triiodothyronine and free thyroxine hormones in serum by equilibrium dialysis and electron capture GC (126) 503

#### **Thyroxine hormones**

Picogram analysis of free triiodothyronine and free thyroxine hormones in serum by equilibrium dialysis and electron capture GC (126) 503

#### **Tienilic acid**

GLC determination of tienilic acid (SKF 62.698) in human plasma and urine (123) 379

#### **Tigogenin**

HPLC analysis of the benzoate esters of sapogenins isolated from *Agave* (121) 329

#### **Tobacco smoke**

GC-MS evaluation of exhaled tobacco smoke (126) 771

#### **Tocopherol**

Fractionation of the oxidation products of  $\alpha$ -tocopherol and their condensation products with L-lysine by combined TLC and gel chromatography (130) 378

#### **Toluene diisocyanate**

Determination of free toluene diisocyanate in polyurethane prepolymers by HPLC (123) 468

#### **Trace analysis**

Application of an automated head-space procedure for trace analysis by GC (122) 553

#### **Tracer substances**

Continuous and ultrasensitive apparatus for the measurement of air-borne tracer substances (126) 3

#### **Trichomycin**

Comparison of candicidin, levorin and trichomycin by means of HPLC (123) 205

#### **Trifluoroacetic acid**

Esterification of trifluoroacetic acid with phenyldiazomethane for quantitative GC analysis. Methods involving separation from biological materials (130) 77

#### **Triiodothyronine hormones**

Picogram analysis of free triiodothyronine and free thyroxine hormones in serum by equilibrium dialysis and electron capture GC (126) 503

#### **Trimethoxybenzylhydrazine**

3,4,5-Trimethoxybenzylhydrazine: An efficient subtraction reagent for aldehydes and ketones in GC (121) 279

**Triterpene pentacyclic alcohols**

GLC separation of oxidation products of triterpene pentacyclic alcohols (129) 440

**Trypsin**

Fractionation of proteolytic enzymes by affinity chromatography on Sepharose aminocaproyl proflavin (129) 97

**Tryptamine**

Separation and quantitation of some urinary arylalkylamines (123) 51

**Tryptamines**

Aldehyde condensation products as derivatives for the vapor phase analysis of biogenic amines (126) 581

**Tryptolines**

Aldehyde condensation products as derivatives for the vapor phase analysis of biogenic amines (126) 581

**Twin-trough developing tank**

Versatile twin-trough developing tank for TLC (123) 65

**Tyramine**

Separation and quantitation of some urinary arylalkylamines (123) 51

**Tyrosine metabolism**

Study of the intestinal tyrosine metabolism using stable isotopes and GC-MS (126) 569

**U****Urea herbicides**

LC parameters of groups of herbicidal active substances. I. Urea herbicides (in German) (125) 487

**Ureas**

LC and TLC of some substituted ureas (125) 435

# V

**Valine, diamide derivatives**

Interaction between asymmetric solutes and solvents. Diamides derived from L-valine as stationary phases in gas-liquid partition chromatography (123) 149

**Vanillin oxime**

*o*-Vanillin oxime as a chromatographic spray reagent for metal ions (129) 488

**Vinyl chloride**

Analysis of vinyl chloride in food simulants at low parts per billion levels by mass fragmentography (128) 183

**Viruses**

Adsorption chromatography of viruses (130) 275

**Vitamin A**

Gel chromatographic separation of retinol, retinyl esters and other fat-soluble vitamins (123) 225

**Vitamins**

Gel chromatographic separation of retinol, retinyl esters and other fat-soluble vitamins (123) 225

**Vitamins**

Separation of quinones and their derivatives by HPLC (130) 189

**Volatile compounds**

Column elution and concentration of volatile compounds in biological fluids (126) 475

**Volatile metabolites**

Profiles of volatile metabolites in body fluids (126) 495

# W

**Warfarin**

Determination of warfarin in animal relicts and feeding stuffs by HPLC with confirmation of identity by MS (121) 335

**Water**

Use of Tenax for the extraction of pesticides and polychlorinated biphenyls from water. II. Tests with artificially polluted and natural waters (125) 399

**Woods**

Forensic examination of sawdusts by TLC and flying spot densitometry (124) 157



**X****Xanthenes**

Application of HPLC and MS to the identification of xanthenes (in French) (124) 381

**Xylene derivatives**

GLC of some *o*-xylene, indane and tetralin derivatives (124) 73

**Xylose**

Separation of methyl ethers of xylose, glucose and some other sugars by LC (121) 122

**Z****Zeolites**

Chromatographic properties of some silica-rich zeolites (130) 13

**Zone spreading**

Specific factors involved in the spreading of chromatographic zones in ion-exchange complexing chromatography (129) 19

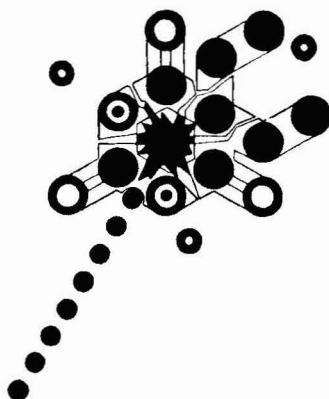
# QUANTITATIVE MASS SPECTROMETRY IN LIFE SCIENCES

Proceedings of the First International Symposium, State University of Ghent, Belgium, 16 - 18 June, 1976.

**A. P. DE LEENHEER and  
R. R. RONCUCCI (Editors)**

This volume reflects the methodological progress made in the field of quantitative mass spectrometry, treating in detail the recent applications of this method in medical, pharmaceutical and biochemical sciences.

The book's rapid publication so soon after the meeting ensures that the material is particularly up-to-date.



**CONTENTS:** PLENARY LECTURES. Quantification of drugs by MS (E. C. Horning et al.). Quantitative MS of endogenous and exogenous steroids in metabolic studies in man (H. Adlercreutz). Techniques for quantitative measurements by MS (C. C. Sweeley et al.). Evaluation by MF of metabolic pathways of endogenous and exogenous compounds in eukaryote cell cultures (P. Padiou et al.). SHORT COMMUNICATIONS. Quantitative MF of unlabeled and deuterium labeled propoxyphene in plasma (H. R. Sullivan et al.). MF of alclufenac and its metabolites in plasma of human beings (M.-J. Simon et al.). Measurement of imipramine and desipramine in plasma, cerebrospinal fluid and saliva of patients with primary affective disorders (M. Claeys et al.). MS of phencyclidine in body fluids of intoxicated patients (D. C. K. Lin et al.). Identification of papaverine metabolites in human urine by MS (M. T. Rosseel et al.). Direct GC-MS of prostaglandins from biological sources (R. W. Kelly). Picomole determination of coenzyme B<sub>12</sub> by MF (B. Zagalak et al.). MF of vitamin D<sub>3</sub> in blood samples (A. P. De Leenheer et al.). Qualitative and quantitative analysis of dopamine by electron impact and field desorption MS (W. D. Lehmann et al.). Quantitative field desorption MS (H.-R. Schulten et al.). Design, operation and application of a low-cost electronic device for the determination of ion-intensity ratios (A. M. Lawson et al.). Theory of stable dilution MS (J. F. Pickup et al.). Comparison between the fluorimetric and MF determination of PAHs of organic particulate matter (G. Broddin et al.). Quantitative evaluation of carbohydrate metabolism at rest and in physical exercise by the use of naturally labeled <sup>13</sup>C-glucose (F. Mosora et al.). MF as a tool for enzyme activity assay (F. Cattabeni et al.). Quantitative determination of piperidine in the rat brain by selected ion monitoring following dinitrophenyl derivatization (I. Matsumoto et al.).

1977 viii + 254 pages US \$30.25/Dfl. 74.00 ISBN 0-444-41557-2



**ELSEVIER**

P.O. Box 211, Amsterdam  
The Netherlands

7002E

# *Analytical Pyrolysis*

Proceedings of the Third International Symposium held in Amsterdam, September 7 - 9, 1976

C. E. ROLAND JONES and CARL A. CRAMERS (*Editors*)

This symposium is particularly noteworthy because of the emphasis given to the newly emergent technique of pyrolysis/mass spectrometry. The large number of papers devoted to this technique at the meeting are an indication of the impetus which this recent development has given to analytical pyrolysis.

These Proceedings provide examples of a diversity of applications of pyrolysis/gas chromatography and pyrolysis/mass spectrometry ranging from geochemical exploration through energy resource studies to the elucidation of biopolymers and complex synthetic resins. The thirty-four papers give perspective to the current state of the fields, as well as reporting on the most recent developments in them. The introductory contributions in the sessions, provided by prominent figures in the particular fields, summarize the position to date before revealing the latest trends in the authors' own work. It could be said that each session was a miniature symposium in itself.

**CONTENTS:** **Automation.** Contributors: G. L. Coulter and W. C. Thompson. **Special Techniques.** Contributors: F. W. McLafferty, H.-R. Schulten and E. Stahl. **Microbiology.** Contributors: H. D. Donoghue, N. D. Fields, M. Marshall, M. Needleman, G. S. Oxborrow, J. R. Puleo, E. Reiner, M. V. Stack, P. Stuchbery and J. E. Tyler. **Forensic Science and Pharmacology.** Contributors: W. J. Irwin, J. P. Schmid, P. P. Schmid, W. Simon, J. A. Slack and B. B. Wheals. **Pyrolysis Mass Spectrometry.** Contributors: D. O. Hummel, I. Lüderwald and H. Urrutia. **Reproducibility and Specificity.** Contributors: W. Eshuis, P. G. Kistemaker and H. L. C. Meuzelaar. **Soil Chemistry and Geochemistry.** Contributors: J. M. Bracewell, J. W. de Leeuw, A. G. Douglas, B. Horsfield, S. R. Larter, F. Martin, W. L. Maters, D. v.d. Meent, H. L. C. Meuzelaar, G. W. Robertson, P. A. Schenck and P. J. W. Schuyf. **Biochemistry.** Contributors: F. L. Bayer, J. J. Hopkins, F. M. Menger and A. C. M. Weijman. **Laser Pyrolysis.** Contributors: J. C. Means, E. G. Perkins and N. E. Vanderborgh. **Reaction Mechanisms.** Contributors: D. C. De Jongh, S. Foti, I. Lüderwald, G. Montaudo, N. M. M. Nibbering, M. A. Posthumus, M. Przybylski, H. Ringsdorf and G. Schaden. **Polymers.** Contributors: M. Blazsó, J. S. Crighton, B. Dickens, J. H. Flynn, D. Gross, G. Guiochon, D. E. Henderson, C. E. R. Jones, J. Kelm, H.-J. Kretschmar, E. J. Levy, R. J. Lloyd, W. J. Pummer, N. Sellier, T. Székely, T. Takeuchi, S. Tsuge and P. C. Uden.

1977 x + 424 pages US \$39.25/Dfl. 96.00 ISBN 0-444-41558-0

*The Dutch guilder price is definitive. The US \$ price is subject to exchange rate fluctuations.*



# ELSEVIER

P.O. Box 211, Amsterdam  
The Netherlands

52 Vanderbilt Ave  
New York, N.Y. 10017  
U.S.A.

7014E

## GENERAL INFORMATION

(A leaflet *Instructions to Authors* can be obtained by application to the publisher.)

**Types of Contributions.** The following types of papers are published in the *Journal of Chromatography* and the section on *Biomedical Applications*: Regular research papers (full-length papers), short communications and notes. Short communications are preliminary announcements of important new developments and will, whenever possible, be published with maximum speed. Notes are usually descriptions of short investigations and reflect the same quality of research as full-length papers, but should preferably not exceed four printed pages. For reviews, see page 2 of cover under Submission of Papers.

**Manuscripts.** Manuscripts should be typed in double spacing on consecutively numbered pages of uniform size. The manuscript should be preceded by a sheet of manuscript paper carrying the title of the paper and the name and full postal address of the person to whom the proofs are to be sent. Authors of papers in French or German are requested to supply an English translation of the title of the paper. As a rule, papers should be divided into sections, headed by a caption (e.g., Summary, Introduction, Experimental, Results, Discussion, etc.). All illustrations, photographs, tables, etc. should be on separate sheets.

**Title.** The title of the paper should be concise and informative. Since titles are widely used in information retrieval systems, care should be taken to include the key words. The title should be followed by the authors' full names, academic or professional affiliations, and the address of the laboratory where the work was carried out. If the present address of an author is different from that mentioned, it should be given in a footnote. Acknowledgements of financial support are *not* to be made in a footnote to the title or name of the author, but should be included in the Acknowledgements at the end of the paper.

**Summary.** Full-length papers and review articles should have a summary of 50–100 words which clearly and briefly indicates what is new, different and significant. In the case of French or German articles an additional summary in English, headed by an English translation of the title, should also be provided. (Short communications and Notes are published without a summary.)

**Illustrations.** The figures should be submitted in a form suitable for reproduction, drawn in Indian ink on drawing or tracing paper. One original and two photocopies are required. Attention should be given to any lettering (which should be kept to a minimum) and to spacing on axes of graphs in order to ensure that numbers etc. remain legible after reduction. Axes of a graph should be clearly labelled. The figures should preferably be of such a size that the same degree of reduction can be applied to all of them. Photographs should have good contrast and intensity. Sharp, glossy photographs are required to obtain good halftones. References to the illustrations should be included in appropriate places in the text using arabic numerals. Each illustration should have a legend, all the legends being typed (with double spacing) together on a separate sheet. If structures are given in the text, the original drawings should be supplied. Coloured illustrations are reproduced at the authors' expense, the cost being determined by the number of pages and by the number of colours needed. The written permission of the author and publisher must be obtained for the use of any figure already published. Its source must be indicated in the legend.

**References.** References should be numbered in the order in which they are cited in the text, and listed in numerical sequence on a separate sheet at the end of the article. The numbers should appear in the text at the appropriate places in square brackets. In the reference list, periodicals [1], books [2], multi-author books [3] and proceedings [4] should be cited in accordance with the following examples:

- 1 A. T. James and A. J. P. Martin, *Biochem. J.*, 50 (1952) 679.
- 2 L. R. Snyder, *Principles of Adsorption Chromatography*, Marcel Dekker, New York, 1968, p. 201.
- 3 H. C. S. Wood and R. Wrigglesworth, in S. Coffey (Editor), *Rodd's Chemistry of Carbon Compounds, Vol. IV, Heterocyclic Compounds, Part B*, Elsevier, Amsterdam, Oxford, New York, 2nd ed., 1977, Ch. 11, p. 201.
- 4 E. C. Horning, J.-P. Thenot and M. G. Horning, in A. P. De Leenheer and R. R. Roncucci (Editors), *Proc. 1st Int. Symp. Quantitative Mass Spectrometry in Life Sciences, Ghent, June 16–18, 1976*, Elsevier, Amsterdam, Oxford, New York, 1977, p. 1.

Abbreviations for the titles of journals should follow the system used by *Chemical Abstracts*. Articles not yet published should be given as "in press", "submitted for publication", "in preparation" or "personal communication". The *Journal of Chromatography*; *Journal of Chromatography, Biomedical Applications* and *Chromatographic Reviews* should be cited as *J. Chromatogr.*

**Proofs.** One set of proofs will be sent to the author to be carefully checked for printer's errors. Corrections must be restricted to instances in which the proof is at variance with the manuscript. "Extra corrections" will be inserted at the author's expense.

**Reprints.** Fifty reprints of Full-length papers, Short communications and Notes will be supplied free of charge. Additional reprints can be ordered by the authors. An order form containing price quotations will be sent to the authors together with the proofs of their article.

**News.** News releases of new products and developments, and information leaflets of meetings should be addressed to: The Editor of the News Section, *Journal of Chromatography*/*Journal of Chromatography, Biomedical Applications*, Elsevier Scientific Publishing Company, P.O. Box 330, Amsterdam, The Netherlands.

**Advertisements.** Advertisement rates are available from the publisher on request. The Editors of the journal accept no responsibility for the contents of the advertisements.

# ANALYTICA CHIMICA ACTA COMPUTER TECHNIQUES AND OPTIMIZATION

EDITOR: J.T. CLERC

Laboratorium für Organische Chemie, Swiss Federal Institute of Technology,  
Universitätstrasse 16, CH-8092 Zürich, Switzerland.

Associate Editor: E. ZIEGLER

Max-Planck-Institut für Kohlenforschung, 4330 Mülheim a.d. Ruhr 1, Postfach 011325,  
GFR

EDITORIAL BOARD:

R.E. Dessy, Blacksburg, Va., U.S.A.; J.W. Frazer, Livermore, Calif., U.S.A.; H. Günzler, Ludwigshafen, G.F.R.; S.R. Heller, Washington, D.C., U.S.A.; J.F.K. Huber, Vienna, Austria, P.C. Jurs, University Park, Pa., U.S.A.; M. Knedel, Munich, G.F.R.; D.L. Massart, Sint Genesius-Rhode, Belgium; H.C. Smit, Amsterdam, The Netherlands.

Analytica Chimica Acta, published monthly, has a well established worldwide reputation as the international scientific journal offering supreme service to authors and the rapid publication of original papers, short communications, and reviews dealing with every possible aspect of modern chemical analysis, both fundamental and applied. Since its inception, in 1947, Analytical Chimica Acta has increased steadily in size from 1 volume to 8 volumes per annum. In 1977, *Analytica Chimica Acta Computer Techniques and Optimization*, a new specialised section, will be introduced in order to encourage developments in this rapidly expanding field by providing rapid publication of manuscripts concerned with non-trivial applications of computers in analytical chemistry. This new section will form an integral part of Analytica Chimica Acta, which will continue under the general editorship of Professor Philip W. West and Dr. A.M.G. Macdonald in association with Dr. D.M.W. Anderson.

The aim of the new section is to publish papers dealing with:

- Computer acquisition, processing and evaluation of data.
- Computer methods for the interpretation of analytical data including chemometrics, cluster analysis and pattern recognition.
- Storage and retrieval systems.
- Optimization procedures and their application.
- Automated analysis for industrial process and quality control.
- Organizational problems.

These contributions will be in the form of: Original papers, short communications, reviews (written by invitation of the editors, who welcome suggestions for subjects), reviews of books within the scope of the journal

Subscribers to Analytica Chimica Acta will receive the new section automatically. Specialists who wish to receive only the new section, may subscribe to it separately.

## Publication Schedule: 1977

One volume in four issues.

Subscribers to Analytica Chimica Acta will receive the new section automatically. Specialists who wish to receive only the new section, may subscribe to it separately.

Free sample copies will be available, on request, from the publishers.

The subscription price for the first volume is: US \$51.75/Dfl. 129.00

## ELSEVIER SCIENTIFIC PUBLISHING COMPANY

P.O. Box 211, Amsterdam, The Netherlands

The Dutch guilder price is definitive. US \$ prices are subject to exchange rate fluctuations.

