

Vol. 70, No. 9/10

# CHROMATOGRAPHIA

An International Journal for Rapid Communication in Chromatography, Electrophoresis, and Associated Techniques



## November 09

CHRGB7 1303–1524 (2009)

### Scientific Editors

- T. A. Berger  
Englewood, FL, USA  
K.-S. Boos  
München, Germany  
H. Lingeman  
Amsterdam, The Netherlands  
G. Massolini  
Pavia, Italy  
R. M. Smith  
Loughborough, UK

### Technical Editors

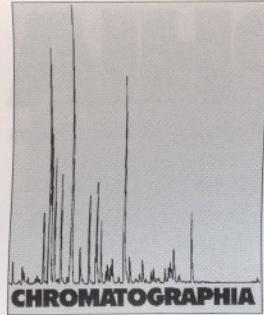
- E. R. Adlard  
Burton, UK  
K. D. Altria  
Harlow, UK  
S. Brandt  
Liverpool, UK  
I. W. Davies  
Cambridge, UK

### Publisher

- R. Birkelbach  
Wiesbaden  
Germany

[www.chromatographia.com](http://www.chromatographia.com)

# CHROMATOGRAPHIA



# Contents

## Vol. 70, 2009, November (No. 9/10)

### Editorial

- 65th Birthday of Professor María Dolores (Lola) Luque de Castro 1303  
C. Cámera, J. L. Luque-García

### Review

- A Review of Microdialysis Sampling Systems 1305  
N. Torto

### Originals

#### Column Liquid Chromatography

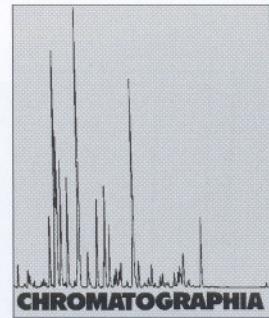
- Duplicating the Retention of Cationic Analytes Obtained with Ammonium Formate Mobile Phases when Switching to UV Transparent Mobile Phase Additives in RP-LC 1311  
E. Loeser, S. Babiaik
- Screening and Identification of Permeable Components of Radix et Rhizoma Rhei Extract by Use of Immobilized Artificial Membrane Chromatography 1321  
Wenping Zhang, Jin Sun, Yongjun Wang, Xiaohong Liu, Yinghua Sun, Rong Lu, Zhonggui He
- Comparative LC Enantioseparation of Novel PPAR Agonists on Cellulose- and Amylose-Based Chiral Stationary Phases 1327  
L. Piemontese, S. Faliti, G. Carbonara, A. Laghezza, P. Tortorella, F. Loiodice
- Enantioselective Analysis of Fluoxetine and Norfluoxetine by LC in Culture Medium for Application in Biotransformation Studies Employing Fungi 1335  
K. B. Borges, L. T. Okano, M. T. Pupo, P. S. Bonato
- Chemometrically Assisted Development and Validation of LC for Simultaneous Determination of Carbamazepine and Its Impurities Iminostilbene and Iminodibenzyl in Solid Dosage Form 1343  
P. Džodić, L. Živanović, A. Protić, M. Zečević, B. Jocić
- LC-MS-MS in MRM Mode for Detection and Structural Identification of Synthetic Hypoglycemic Drugs Added Illegally to 'Natural' Anti-Diabetic Herbal Products 1353  
Wensheng Pang, Huiwan Yang, Zhisheng Wu, Meixia Huang, Juan Hu
- Analysis of Bioactive Saponins in *Fructus Gleditsiae abnormalis* and *Fructus Gleditsiae sinensis* by LC-ELSD 1361  
Yufeng Xia, Zhengzhen Gao, Yue Dai, Qiang Wang
- Quality Evaluation of *Petasites tricholobus* through Simultaneous Determination of Four Bioactive Bakkenolides by LC 1367  
Yu-Liang Wang, Meili Guo, Yan Wang
- High-Throughput Screening of Drugs of Abuse in Urine by Supported Liquid–Liquid Extraction and UHPLC Coupled to Tandem MS 1373  
A. Maquille, D. Guillarme, S. Rudaz, J.-L. Veuthey
- Simultaneous Determination of Anabolic Androgenic Steroids and Their Esters in Hair by LC-MS-MS 1381  
Min Shen, Hui Yan, Ping Xiang, Baohua Shen
- Validity Assessment for the Results of Three Inflammatory Markers in Exhaled Breath Condensate: A Pilot Study 1387  
L. M. Gonzalez-Reche, D. Schaefer, T. Göen, T. Kraus

#### Gas Chromatography

- The Examination of the Degree of Coverage of the Fused Alumina Abrasive by Resol Wetting Agent by Inverse GC 1393  
A. Voelkel, B. Strzemiecka, T. Jasionowski
- GC-MS Determination of Atenolol Plasma Concentration after Derivatization with *N*-Methyl-*N*-(trimethylsilyl)trifluoroacetamide 1399  
B. Yilmaz, S. Arslan
- Improved Method for the Determination of Cyanuric Acid in Animal Feed by GC-MS 1405  
Hubert P. O. Tang, Shirley S. L. Lai, Ashley Y. H. Lai, W. O. Lee

# Contents

Vol. 70, 2009, November (No. 9/10)



## Full Short Communications

### Column Liquid Chromatography

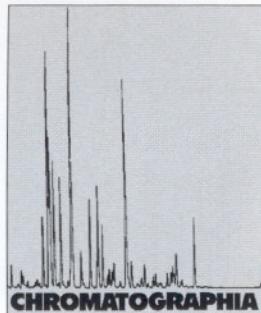
- Stability-Indicating LC-PDA Method for Determination of Idebenone in Nanoparticles Based on Chitosan and *N*-Carboxymethylchitosan  
C. M. de Amorim, D. J. A. Netz, A. G. Couto, R. A. de Freitas, T. M. B. Bresolin 1411
- Simultaneous Determination of Ebastine and Its Active Metabolite (Carebastine) in Human Plasma Using LC-MS-MS  
Sheng Feng, Ji Jiang, Peng Wang, Dongyang Liu, Pei Hu 1417
- Rapid Determination of Meropenem in Biological Fluids by LC: Comparison of Various Methods for Sample Preparation and Investigation of Meropenem Stability  
K. Kipper, K. Anier, I. Leito, J. Karjagin, K. Oselin, K. Herodes 1423
- LC Analysis of Isepamicin in Plasma Samples Post-Inhalation with Fluorescence Detection and Its Application to a Pharmacokinetic Study  
Xiaojuan Chang, Jingdong Peng 1429
- LC-UV Analysis of *N*-(3-(2,4-Dioxo-1,4-dihydro-2*H*-quinazolin-3-yl)propyl)-*N*-[4-(3-(2,4-dioxo-1,4-dihydro-2*H*-quinazolin-3-yl)propyl-amino]butyl]acetamide (SP-8203) in Rat Plasma, Urine, and Gastrointestinal Tract Samples  
Young Hee Choi, Jung Hwa Suh, Joo Hyun Lee, Il Hwan Cho, Chul Kyu Lee, Myung Gull Lee 1435
- Simultaneous Determination of Andrographolide and Dehydroandrographolide in Chicken Plasma for Application to Pharmacokinetic Studies  
Kaiyong Liu, Limin He, Hai Gao, Xianhui Huang, Zhigang Jiang, Zhenling Zeng 1441
- Medium-Pressure Liquid Chromatography Coupled to Electrospray Ionization Mass Spectrometry for Separation and On-Line Characterization of Flavonoids from *Asparagus officinalis*  
Zhiguo Hou, Jianguang Luo, Lingyi Kong 1447
- LC Determination of Five Flavonoid Glycosides in the Tibetan Medicinal Plant *Oxytropis falcata* Bunge  
Huan Yang, Jun Chen, Hao Cai, Huiqin Xu, Li Tong, Baochang Cai 1451
- An LC-DAD Fingerprinting Method for Alkaloids, Flavonoids and Styrylpyrones from *Cryptocarya mandiocana*  
K. F. Bandeira, A. J. Cavalheiro 1455

### Electrophoresis/Electrochromatography

- Determination of Picoxystrobin and Pyraclostrobin by MEKC with On-Line Analyte Concentration  
C. F. de Souza, A. L. M. C. da Cunha, R. Q. Aucélio 1461
- Simultaneous Determination of Dopamine, Epinephrine and 5-Hydroxytryptamine in Toad Venom and Common Yam Rhizome by MEKC  
Shumin Wang, Zhi Luo, Weiping Wang, Xingguo Chen, Zhide Hu 1467
- Optimization and Validation of a Capillary MEKC Method for Determination of Proteins in Urine  
N. K. Glavač, R. Injac, S. Kreft 1473
- Amino Acid Profile Determination in the Urine of Bladder Cancer Patients by CE-MS with On-Line pH-Mediated Stacking and Pattern Recognition  
Shufang Wang, Ping Yang, Xiaoping Zhao 1479

### Gas Chromatography

- Polyunsaturated Fatty Acids in Dried Milk Samples: Validation of a Lipid Separation-Free Method  
D. Gastaldi, C. Medana, R. Aigotti, V. Giancotti, C. Baiocchi 1485
- A Simple and Sensitive Analytical Method for Determination of Naltrexone Level in Plasma by GC-MS  
R. Mehrdad, A. Khosrou, D. Rassoul, V.-G. Sanaz, A. Mohsen 1491
- Determination of T-2 Toxin in Traditional Chinese Herbal Medicines by GC-ECD  
Yan-Tao Yue, Xiao-Fei Zhang, Zhen Ou-Yang, Wei-Wei Gao, Jun Wu, Mei-Hua Yang 1495



# Contents

## Vol. 70, 2009, November (No. 9/10)

### Limited Short Communication

#### Column Liquid Chromatography

- Investigation of Novel Peptide Chiral Selectors Prepared by Solid-Phase Synthesis with a *tert*-Butoxycarbonyl Amino Acid 1501  
K. Ohyama, K. Oyamada, N. Kishikawa, M. Arakawa, Y. Ohba, M. Kamino, M. Wada, K. Nakashima, N. Kuroda
- Quantitative Determination of Busulfan in Human Plasma by UPLC 1505  
Q. A. Xu, R. Kazerooni, J. K. Thapar, B. D. Andersson, T. L. Madden
- Simple and Sensitive Determination of Metformin in Human Plasma Using an Ion-Pair LC Method 1511  
Qing-Feng Liu, Zhong-Dong Li, Xiao-Jin Shi, Zheng Jiao, Ming-Kang Zhong
- Simultaneous LC Analysis of Aloe-Emodin, Rhein, Emodin, and Chrysophanol in Rhizoma Rhei-Type Preparations 1515  
Ping Ren, Feng Qin, Xi Huang, Zhengyan Zhu
- Simultaneous LC Analysis of Food Dyes in Soft Drinks 1519  
M. Serdar, Z. Knežević

#### Book Review

#### Calendar of Events

#### Instructions to Authors

1523

A9

A11

### Purchasing Information. Einkaufsnachweis

**Chromatographs Liquid****Chromatography, HPLC-Systems****Detectors for Liquid**

Wissenschaftlicher Gerätebau  
**Dr.-Ing. H. Knauer GmbH**  
Hegauer Weg 38  
D-14163 Berlin  
Tel. 030 / 809 727-0  
Fax 030 / 801 50 10