

Vol. 72, No. 1/2

# CHROMATOGRAPHIA

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

## July 10

CHRGB7 1-200 (2010)

### Scientific Editors

T. A. Berger  
Englewood, FL, USA

H. Lingeman  
Amsterdam, The Netherlands

G. Massolini  
Pavia, Italy

G. K. E. Scriba  
Jena, Germany

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

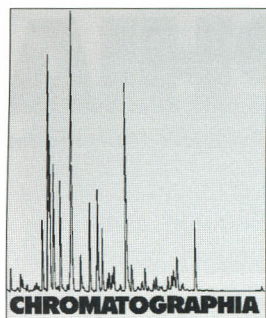
### Publisher

R. Birkelbach  
Wiesbaden  
Germany

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



# CHROMATOGRAPHIA



# Contents

## Vol. 72, 2010, July (No. 1/2)

### Review

- Regulatory Aspects in Development of Stability-Indicating Methods: A Review 1  
R. Schrawat, M. Maithani, R. Singh

### Originals

#### Column Liquid Chromatography

- Direct Dynamic Protein-Affinity Selection Mass-Spectrometry 7  
N. Jonker, H. Lingeman, H. Irth
- Analysis of Basic Drugs: A Comparison of Two Different Strong Cation Exchange-Modified LC Packings 15  
P. E. Morgan, M. Hanna-Brown, R. J. Flanagan
- Selectivity Differences Between ODS and Polar Modified Stationary Phases in RP-LC 23  
Zhuo Xiang, Xiaoli Sun, Peng Liu, Xiaoye Li, Ru Jiang
- Oxidized Multi-Walled Carbon Nanotubes as SPE Sorbent for Determination of Mefenacet and Its Degradation Products Residues in Water Samples by RRLLC-UV-ESI-MS 33  
Zhi-Gang Yu, Wei-Min Ding, Yan-Hui Chen, Jun You, Yu-Yong Liu, Heng Wang, Zhao-Di Yang
- Foam Floatation-SPE for Separation and Concentration of Trace Ginsenosides 39  
Rui Zhang, Hanqi Zhang, Liwei Wu, Jingyan You, Yuping Bai
- A Novel Medium Poly(vinyl acetate-triallyl isocyanurate-divinylbenzene) Coupled with Oligo- $\beta$ -Cyclodextrin for the Isolation of Puerarin from *Pueraria* Flavones 47  
Rong Li, Rui Zhao, Haiyang Zhang, Cong Li, Di Feng, Peiyong Qin, Tianwei Tan
- Simple LC-MS Determination of Citric and Malic Acids in Fruits and Vegetables 55  
R. Fernández-Fernández, J. C. López-Martínez, R. Romero-González, J. L. Martínez-Vidal, M. I. Alarcón Flores, A. Garrido Frenich
- Simultaneous Quantitative Analysis of Shikonin and Deoxyshikonin in Rat Plasma by Rapid LC-ESI-MS-MS 63  
Sui Huang, Lanfang Yu, Peng Shen
- LC-ESI-MS-MS Determination of Rat Plasma Protein Binding of Major Flavonoids of *Flos Lonicerae Japonicae* by Centrifugal Ultrafiltration 71  
Yongdong Luo, Shuisheng Wu, Xiaoyan Li, Ping Li
- UPLC-ESI-MS-MS Determination of Three  $\beta_2$ -Agonists in Pork 79  
Hong Zheng, Li-Gang Deng, Xiao Lu, Shan-Cang Zhao, Chang-Ying Guo, Jiang-Sheng Mao, Yu-Tao Wang, Guo-Sheng Yang, H. Y. Aboul-Enein
- Determination of Carcinogenic and Allergenic Dyestuffs in Toys by LC Coupled to UV/Vis Spectrometry and Tandem Mass Spectrometry 85  
Qiang Ma, Hua Bai, Qing Zhang, Wei Ma, Haiwei Xi, Xin Zhou, Chao Wang
- On-Line Concentration Methods for Analysis of Fat-Soluble Vitamins by MEKC 95  
Qingqing Liu, Li Jia, Chaofan Hu
- Preparation of Molecularly Imprinted Coatings with Ternary Porogen for CEC 101  
Xi Wu, Ze-Hui Wei, Yan-Ping Huang, Zhao-Sheng Liu
- Determination of Milnacipran in Human Plasma Using GC-MS 111  
E. Uçaktürk, C. Şafak

#### Electrophoresis and Electrochromatography

#### Gas Chromatography

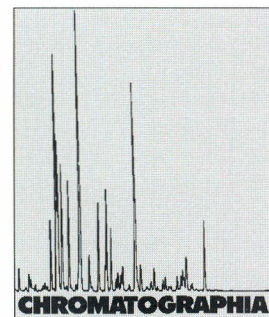
### Full Short Communications

#### Column Liquid Chromatography

- Assessment of Synthetic Protein-A MAbsorbents in Antibody Purification from Tobacco Plant Extract 121  
S. Padilla, T. Alvarez, W. Ferro, Y. Guevara, J. Montero, L. Gómez, D. Gavilán, E. Espinosa, Y. Avila, T. González, R. Somoza, M. LaO, R. Valdés
- Potentiality of IMAC as Sample Pretreatment Tool in Food Analysis for Veterinary Drugs 127  
N. Takeda, T. Matsuoka, M. Gotoh
- The Application of Trichloroacetic Acid as an Ion Pairing Reagent in LC-MS-MS Method Development for Highly Polar Aminoglycoside Compounds 133  
C. Cheng, S. Liu, D. Xiao, S. Hansel
- Determination of Vanadium(IV) and Vanadium(V) in Benfield Samples by IEC with Conductivity Detection 141  
T. S. M. Tengku Azmi, A. R. M. Yusoff, K. J. Abdul Karim
- SEC Assay for Polyvinylsulfonic Impurities in 2-(*N*-Morpholino)ethanesulfonic Acid Using a Charged Aerosol Detector 145  
T. Zhang, D. Hewitt, Y.-H. Kao

# Contents

## Vol. 72, 2010, July (No. 1/2)



	LC-APCI-MS-MS Analysis of Zidovudine in Human Plasma, and Application to a Bioequivalence Study <b>Peng Yu, Zhenkun Gu, Xin Guo, Liling Ran, Hang Cheng, Xingyan Zhang, Zeneng Cheng</b>	151
	LC Determination of Total Cefotiam Concentration in Human Serum: Application of Ultrafiltration to a High Protein-Binding Drug <b>K. Ikeda, K. Ikawa, S. Aoki, N. Morikawa, S. Takahashi, T. Tsukamoto</b>	157
	A UPLC-MS-MS Method for Quantification of Harpagoside and Cinnamic Acid in Rat Plasma and Its Application to a Pharmacokinetic Study after Oral Administration of Yanyan Tablets <b>Zhili Xiong, Yonghui Fu, Jingjing Li, Feng Qin, Famei Li</b>	163
	Determination of Free Fatty Acids from Soil by LC-MS with Fluorescence Detection and Atmospheric Pressure Chemical Ionization Identification <b>Xiangming Chen, Xiuli Dong, Jinmao You</b>	171
<i>Gas Chromatography</i>	SPME-GC Determination of an Inhalation Anesthetic, Isoflurane in Bulk and Nanoemulsion Dosage Form <b>C. L. Krahn, R. Debom, P. Mayorga, S. S. Guterres, R. P. Limberger</b>	177
<b>Limited Short Communications</b>		
<i>Column Liquid Chromatography</i>	Determination of Pancuronium and Its Impurities in Pharmaceutical Preparation by LC with Charged Aerosol Detection <b>A. Błażewicz, Z. Fijałek, K. Sarna, M. Warowna-Grzeškiewicz</b>	183
	Simultaneous Determination of Evodiamine and Rutaecarpine in Rat Plasma by UPLC-MS-MS and Its Application in a Pharmacokinetics Study <b>Juanjuan Zhao, Xiaohui Chen, Chao Wang, Yuanjian Wang, Chao Ma, Wei Li, Kaishun Bi</b>	187
<b>Book Reviews</b>		
	Energy Demand and Climate Change: Issues and Resolutions; F. H. Cocks <b>K. Jones</b>	193
	Energy and Climate: How to Achieve a Successful Energy Transition; A. Rojey <b>E. R. Adlard</b>	195
	Energy and Climate Change: Creating a Sustainable Future; D. A. Coley <b>E. R. Adlard</b>	197
	Production Chemicals for the Oil and Gas Industry; M. A. Kelland <b>E. J. Vase</b>	199
<b>Calendar of Events</b>		A7
<b>Instructions to Authors</b>		A9

### 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