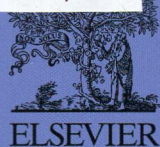


ПЧ,  
A53/3



# ANALYTICA CHIMICA ACTA

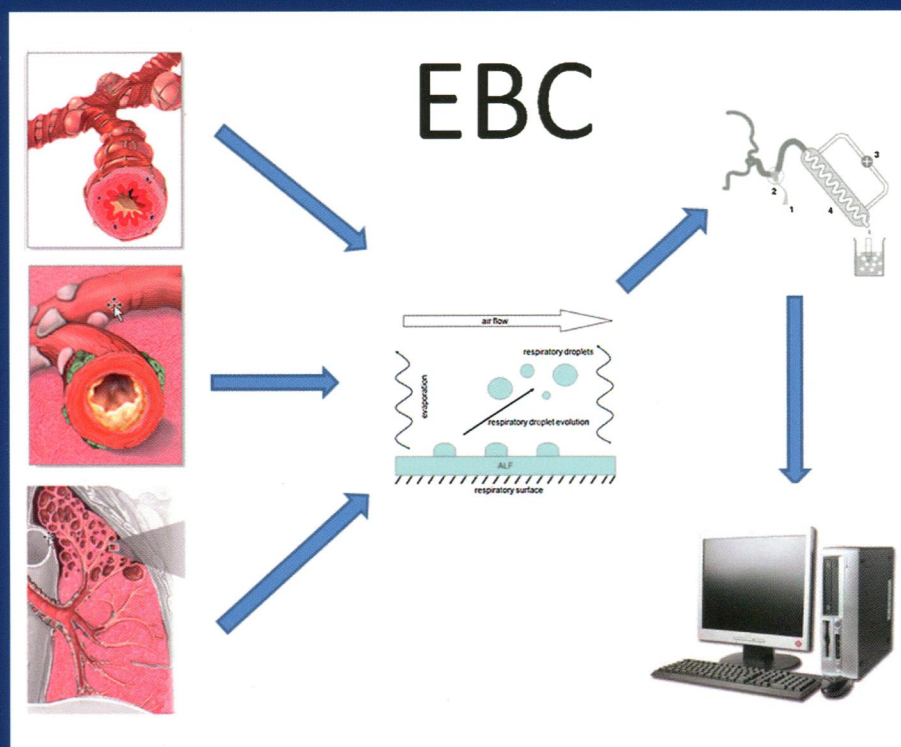
AN INTERNATIONAL JOURNAL DEVOTED TO ALL BRANCHES OF ANALYTICAL CHEMISTRY

## EDITORS:

RICHARD P. BALDWIN  
NEIL W. BARNETT  
WOLFGANG BUCHBERGER  
LUTGARDE BUYDENS  
PUERNENDU K. DASGUPTA  
ULRICH J. KRULL  
JAMES P. LANDERS  
LIANG LI  
JANUSZ PAWLISZYN  
PAUL J. WORSFOLD

## REVIEW EDITOR:

MANUEL MIRÓ



## Review Article

Exhaled breath condensate: Determination of non-volatile compounds and their potential for clinical diagnosis and monitoring. A review

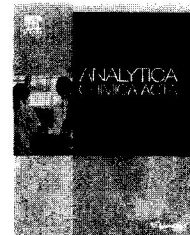
Petr Kubáň and František Foret



ELSEVIER

available at [www.sciencedirect.com](http://www.sciencedirect.com)

ScienceDirect

journal homepage: [www.elsevier.com/locate/aca](http://www.elsevier.com/locate/aca)

## CONTENTS

Abstracted/indexed in: *Aluminium Abstracts*; *Anal. Abstr.*; *Biol. Abstr.*; *BIOSIS*; *Chem. Abstr.*; *Curr. Contents Phys. Chem. Earth Sci.*; *Engineered Materials Abstracts*; *Excerpta Medica*; *Index Med.*; *Life Sci.*; *Mass Spectrum. Bull.*; *Material Business Alerts*; *Metals Abstracts*; *Sci. Citation Index*  
Full texts are incorporated in *CJELSEVIER*, a file in the *Chemical Journals Online database* available on *STN International*. Also covered in the abstract and citation database *SCOPUS*<sup>®</sup>. Full text available on *ScienceDirect*<sup>®</sup>.

### Review articles

- Exhaled breath condensate: Determination of non-volatile compounds and their potential for clinical diagnosis and monitoring. A review  
P. Kubáň and F. Foret (Brno, Czech Republic) ..... 1
- Comparative study of the electrochemical behavior and analytical applications of (bio)sensing platforms based on the use of multi-walled carbon nanotubes dispersed in different polymers  
E.N. Primo, F.A. Gutierrez, G.L. Luque, P.R. Dalmasso, A. Gasnier, Y. Jalit (Córdoba, Argentina), M. Moreno (España), M.V. Bracamonte, M.E. Rubio, M.L. Pedano, M.C. Rodríguez, N.F. Ferreyra, M.D. Rubianes (Córdoba, Argentina), S. Bollo (Santiago, Chile) and G.A. Rivas (Córdoba, Argentina) ..... 19
- Electrochemistry**  
Discrimination and simultaneous determination of hydroquinone and catechol by tunable polymerization of imidazolium-based ionic liquid on multi-walled carbon nanotube surfaces  
X. Feng, W. Gao, S. Zhou, H. Shi, H. Huang and W. Song (Changchun, PR China) ..... 36
- Extraction and Sample Handling**  
Gas purge-microsyringe extraction: A rapid and exhaustive direct microextraction technique of polycyclic aromatic hydrocarbons from plants  
J. Wang, C. Yang, H. Li, X. Piao and D. Li (Yanji City, China) ..... 45
- Solubility parameter used to predict the effectiveness of monolithic in-needle extraction (MINE) device for the direct analysis of liquid samples  
M. Pietrzyńska, K. Adamska, M. Szubert and A. Voelkel (Poznań, Poland) ..... 54
- Capabilities and limitations of dispersive liquid-liquid microextraction with solidification of floating organic drop for the extraction of organic pollutants from water samples  
L.E. Vera-Avila, T. Rojo-Portillo, R. Covarrubias-Herrera and A. Peña-Alvarez (México D.F., Mexico) ..... 60
- Mass Spectrometry**  
Chemical dereplication of marine actinomycetes by liquid chromatography-high resolution mass spectrometry profiling and statistical analysis  
D. Forner, F. Berrué, H. Correa, K. Duncan and R.G. Kerr (Charlottetown, Canada) ..... 70
- Ultra-fast cyclosporin A quantitation in whole blood by Laser Diode Thermal Desorption – Tandem Mass Spectrometry; comparison with High Performance Liquid Chromatography–Tandem Mass Spectrometry  
J.-F. Jourdil (Grenoble, France), P. Picard (Québec, Canada), C. Meunier (Grenoble, France), S. Auger (Québec, Canada) and F. Stanke-Labesque (Grenoble, France) ..... 80
- Molecular Spectrometry**  
A cost-effective and practical polybenzanthrone-based fluorescent sensor for efficient determination of palladium (II) ion and its application in agricultural crops and environment  
G. Zhang, Y. Wen, C. Guo, J. Xu, B. Lu, X. Duan, H. He and J. Yang (Nanchang, China) ..... 87
- Sensors and Bioselective Reagents**  
Bimetallic gold–silver nanoplate array as a highly active SERS substrate for detection of streptavidin/biotin assemblies  
L. Bi, J. Dong, W. Xie, W. Lu, W. Tong, L. Tao and W. Qian (Nanjing, PR China) ..... 95

---

**Separation Methods**

Determination of trace ethylene glycol in industrial solvents and lubricants using phenyl boronic acid derivatization and multidimensional gas chromatography J. Luong (Hobart, Australia and Alberta, Canada), R. Gras (Alberta, Canada), H.J. Cortes (Hobart, Australia and Midland, USA) and R.A. Shellie (Hobart, Australia and Alberta, Canada) .....	101
Quantitative on-line preconcentration-liquid chromatography coupled with tandem mass spectrometry method for the determination of pharmaceutical compounds in water S. Idder (Coulounieix Chamiers, France and Talence, France), L. Ley (Coulounieix Chamiers, France), P. Mazellier and H. Budzinski (Talence, France) .....	107