

# Final Program

## **8<sup>th</sup> BALATON SYMPOSIUM** ON HIGH-PERFORMANCE SEPARATION METHODS and   **15<sup>th</sup> International Symposium on Separation Sciences**



September 2-4, 2009  
Hotel Azúr\*\*\*\*, Siófok, Hungary

## Organizers of the Symposium

### Hungarian Society for Separation Sciences



The Symposium is organized under the auspices of the  
**Central European Group for Separation Sciences**



### Hungarian Academy of Sciences



### European Society for Separation Sciences





**Dear Participants of the 8<sup>th</sup> Balaton Symposium,**

On behalf of the Organizing Committee, it gives me a great pleasure to welcome you at the 8<sup>th</sup> *Balaton Symposium on High-Performance Separation Methods and 15<sup>th</sup> International Symposium on Separation Sciences*.

The series of Balaton Symposia has grown to one of the major events of separation science in Central Europe. Biannually, the Balaton Symposium brings together separation scientists and friends from all over the world. You are going to meet some 340 registered delegates from 20 countries at the 8<sup>th</sup> Balaton Symposium.

The scientific program of the 8<sup>th</sup> Balaton Symposium clearly demonstrates the breadth of separation science; it includes 53 oral lectures from diverse areas. The majority of the scientific results and advances are discussed in the poster sessions with 155 poster presentations. The exhibition includes 22 vendors displaying the latest commercial advances of separation techniques.

Many people need to be thanked for making this Symposium possible. I would like to thank the members of the International Scientific Committee for promoting the Symposium.

I also thank our sponsors and exhibitors for providing generous financial support. Special thanks go to all of the people who submitted excellent abstracts from many areas of separation science.

I wish all participants of the 8<sup>th</sup> Balaton Symposium an intellectually stimulating and rewarding meeting as well as an enjoyable time in Siófok.

A handwritten signature in blue ink, appearing to read "Attila Felinger".

Prof. Attila Felinger  
Symposium Chairman

## **Symposium Chairman**

Attila Felinger, Pécs, Hungary

## **Co-Chairman**

Imre Klebovich, Budapest, Hungary

## **Honorary Chairman**

László Szepesy, Budapest, Hungary

## **International Scientific Committee**

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Virginia Coman\*, Cluj-Napoca, RO  
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Mária Gazdag, Budapest, H  
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Lucija Zupančič -Kralj\*, Ljubljana, SLO  
\*permanent members of CEGSS

## **Organizing Committee**

Mónika Babják, Budapest  
László Drahos, Budapest  
Attila Felinger, Pécs  
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Tamás Janáky, Szeged  
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Imre Klebovich, Budapest  
Róbert Ohmacht, Pécs

The **Halász Medal Award** (founded by the Hungarian Society for Separation Sciences in 1997) as well as the **Csaba Horváth Memorial Award** (founded by the Hungarian Society for Separation Sciences in 2004) will be presented during the Symposium.

**Honored with the Halász Medal Award**

- †Csaba Horváth (1997) Yale University, New Haven, CT, USA
- Heinz Engelhardt (1997) Saarland University, Saarbrücken, Germany
- Antoine Siouffi (1998) Université Paul Cézanne, Marseille, France
- Georges Guiochon (1999) University of Tennessee, Knoxville, TN, USA
- †Ernst Bayer (2001) University of Tübingen, Tübingen, Germany
- Barry L. Karger (2002) Northeastern University, Boston, MA, USA
- Günther Bonn (2003) Leopold-Franzens University, Innsbruck, Austria
- Ervin sz. Kováts (2004) École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
- Uwe D. Neue (2005) Waters Corporation, Milford, MA, USA
- Wolfgang Lindner (2007) University of Vienna, Vienna, Austria

**Honored with the Csaba Horváth Memorial Award**

- John Frenz (2004), GlobeImmune, Louisville, CO, USA
- Imre Molnár (2005) Molnar-Institut, Berlin, Germany
- †Szabolcs Nyiredy (2007, posthumous) Research Institute for Medical Plants, Budakalász, Hungary

**Symposium Secretariat**

**Hungarian Society for Separation Sciences (HSSS)**  
c/o: Chemistry Institute, University of Pécs  
H-7624 Pécs, Ifjúság útja 6., Hungary

e-mail: [info@mett.hu](mailto:info@mett.hu)  
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**The Organizing Committee of the 8<sup>th</sup> Balaton Symposium acknowledges with gratitude the support of the following associations and companies**

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### **Exhibitors**

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## Welcome to the 8<sup>th</sup> Balaton Symposium

Welcome to the 8<sup>th</sup> Balaton Symposium on High-Performance Separation Methods. The Organizing Committee is delighted to welcome you to this international event, in the center of Europe.

Lake Balaton is the largest lake in Central Europe. Since Hungary is landlocked, Balaton is sometimes called the “Hungarian Sea”. The Zala River provides the largest inflow of water to the lake, and the canalized Sió is the only outflow.

Balaton has a surface area of 592 km<sup>2</sup> and a length of 77 km, a width ranging from 4 to 14 km. The lake’s surface is 104 m above sea level, and its depth varies up to 12.2 m (mean depth is 3.2 m).

The Romans called the lake *Lacus Pelso*, that is to say shallow lake in Latin language. Germanic peoples that have been living in the area through the centuries called it Plattensee, with the same meaning as in Latin. The Hungarian name Balaton might derive from these words, but it has no concrete meaning today like in other languages. Slavic peoples living in the area in the early Middle Ages called Balaton ‘muddy lake’ (‘blato’ means ‘mud’).

High tourist season extends from June until the end of August. The average water temperature during the summer is 25°C, which makes bathing and swimming very enjoyable. Other tourist attractions include sailing, fishing and other water sports as well as visiting the countryside and hills; wineries on the north coast and night life on the south. The *Tihany Peninsula* is a historical district.

Although the peak season at the lake is summer, the lovers of Balaton think that it is also worth visiting the huge lake in winter, when you can go fishing in the ice-holes, or if the ice is thick enough, brave visitors can even skate, sledge or ice-sail on the lake.

The distance between the Budapest-Ferihegy International Airport and Siófok is only 130 km on the highway M7.

We hope you will find the 8<sup>th</sup> Balaton Symposium a stimulating opportunity for meeting colleagues and friends, old and new, and that you return home with pleasant memories of Hungary.

## Scope of the Symposium

The focus of the 8<sup>th</sup> Balaton Symposium is on the various analytical, preparative and industrial separation methods and techniques. The Symposium places special emphasis on new developments in pharmaceutical, environmental, biomedical, forensic, and industrial separation methods. Further on, it is also devoted to research papers on different fields of planar chromatography, on all kinds of stationary phases and with various modes of migration of the mobile phase. In this context, the Symposium emphasizes new developments in pharmaceutical, environmental, biomedical, forensic, industrial, and hyphenated techniques (MS, NMR), bioanalytical, radioanalytical, TLC/planar separation methods; sample preparation and new column technology are presented. The discussion forum invites scientists from all over the world to a pleasant atmosphere on the shore of Central Europe’s largest lake.

## General Information

<b>Venue</b>	Hotel Azúr *** Wellness & Conference Centre H-8600 Siófok, Erkel F. u. 2/c, Hungary Phone: +36 84 501 400 / Fax: +36 84 501 427
<b>Website</b>	You will find the latest details on the website <a href="http://balaton.mett.hu">http://balaton.mett.hu</a> .
<b>Registration</b>	In the lobby of Hotel Azúr. Tuesday, September 1, 2009, 2 pm – 7 pm Wednesday, September 2, 2009, 8 am – 6 pm Thursday, September 3, 2009, 8 am – 6 pm Friday, September 4, 2009, 8 am – 1 pm
<b>Badges</b>	A name badge must be worn by each registered participant and accompanying person to attend the scientific sessions, exhibition, and coffee breaks.
<b>Symposium language</b>	The Symposium language will be English. No simultaneous translation will be provided.
<b>Key to lectures &amp; posters</b>	<b>L</b> Lecture presentation <b>ML</b> Manufacturers' lecture <b>VS</b> Vendor's Seminar <b>P</b> Poster <b>MP</b> Manufacturers' posters
<b>Exhibition</b>	The exhibition will be located in the lobby of Hotel Azúr. The exhibition will be open during the whole scientific program.
<b>Meals</b>	Every participant will be served breakfast in the hotel where their accommodation has been booked. Lunches and dinners will be served in Hotel Azúr. Tickets must be presented in order to gain admittance to lunch and dinner.
<b>Cultural programs</b>	<b>Wednesday, September 2:</b> Concert of the Mendelssohn Chamber Orchestra. Please find the Concert Invitation separately.
	<b>Wednesday, September 2:</b> Gala Dinner in the Corinthia Restaurant. Music will be provided by Jenő Esze and his Jazz Band.
	<b>Thursday, September 3:</b> Grill Party in the garden of Hotel Azúr. Music will be provided by the Pilischer Sramli Band.
<b>City bus connection</b>	City bus N° 1, from the Siófok Railway station to Hotel Azúr.
<b>Luggage room:</b>	Hotel check-out time: 10:30 am. A luggage room will be provided for the participants in Hotel Azúr on Friday, September 4.
<b>Internet</b>	A free-of-charge wireless service is available in the lobby area of Hotel Azúr.

## Oral presentations

Oral presentations will last 30 and 20 minutes, while the manufacturers' presentations 15 or 10 minutes, respectively, with 5 minutes discussion included.

Computer projection will be available. Computers running MS Windows will be available with PowerPoint and Acrobat Reader software. You may bring a CD or USB flashstick. CD or flashstick must be delivered to the audiovisual technician or session chair 30 minutes prior to your session at the latest.

It is helpful for the speakers to introduce themselves to the chair persons before the session begins; this reduces delay at the start of the session and makes for a smooth transfer from one speaker to the next.

## **Poster Sessions**

**Poster Session I**      **Wednesday, September 2, 2009, 16:40-18:40**  
**P-1 – P-71**      **Lobby & Hall Toscana II**  
**MP-1 – MP-9**

**Poster Session II**      Thursday, September 3, 2009, 17:00 – 19:00  
P-72 – 146      Lobby & Hall Toscana II  
MP-1 – MP-9

The format of the poster board: 90 cm x 110 cm, portrait.  
The technical accessories are available in the poster hall.

All posters should be mounted on Wednesday morning and removed by Friday noon. Poster authors are requested to be in attendance at their poster board according to the above schedule.

## **Poster Competition**

The Poster Award Committee will evaluate the poster presentations and valuable awards will be conferred at the Poster Award Ceremony preceding the Closing Remarks.

## Symposium Proceedings

All papers presented at the 8<sup>th</sup> Balaton Symposium will be considered for publication – after the regular reviewing process – in a special issue of **Chromatographia** or in the **Journal of Planar Chromatography – Modern TLC (JPC)**, the official journals of the Symposium.

The special issue of **Chromatographia** will be directly available at SpringerLink.com – where the articles may be downloaded or printed without any restriction. The corresponding authors will receive 25 reprints and one copy of the Balaton supplement. The manuscript submission is to be made online to

<http://www.editorialmanager.com/chro/>

Authors should submit their manuscripts online and to follow Chromatographia's 'Instructions for Authors' when preparing their manuscript.

The submission of the manuscripts should be not later than **October 15, 2009**.

Manuscripts intended for publication in **Journal of Planar Chromatography – Modern TLC** are to be submitted online via the web site:

<http://www.edmgr.com/jpc>

not later than **October 15, 2009**.

## Travel information

### By car from Budapest

On motorway M7, take the exit at the 105-kilometer post (Siófok Centrum) and continue toward the center or the sailing boat harbor – going straight at each junction. After you cross the rails, the gate of Hotel Azúr is 200 meters from the corner of Vitorlás and Erkel Ferenc streets.

### Train schedule from Budapest to Siófok

September 1 and 2, 2009

Departure		Arrival	Duration	Train No.
Budapest Keleti	6:05	8:06	2:01	200 Kvarner IC
Budapest Déli	7:03	8:58	1:55	852
Budapest Keleti	10:15	12:18	2:03	5209
Budapest Déli	13:13	15:01	1:48	854
Budapest Keleti	14:00	16:03	2:03	204 Maestral
Budapest Déli	16:13	18:06	1:53	8506
Budapest Keleti	16:30	18:28	1:58	240 Venezia EN
Budapest Déli	19:08	21:00	1:52	858

### Train schedule from Siófok to Budapest

September 4, 2009

Departure		Arrival	Duration	Train No.
7:27	Budapest Déli	9:17	1:50	859
9:00	Budapest Keleti	10:59	1:59	241 Venezia EN
12:20	Budapest Déli	14:22	2:02	855
14:03	Budapest Keleti	16:09	2:06	205 Maestral
15:19	Budapest Keleti	17:34	2:15	5208
16:42	Budapest Déli	18:47	2:05	1853
19:02	Budapest Déli	20:52	1:50	853
19:54	Budapest Keleti	21:59	2:05	201 Kvarner IC

## Accommodation

### **Hotel Azúr\*\*\*\***

**Wellness & Conference Centre**

H-8600 Siófok, Erkel F. u. 2/c

Phone: +36 84 501 400

Fax: +36 84 501 451

e-mail: azur@hotelazur.hu

[www.hotelazur.hu](http://www.hotelazur.hu)

### **Hotel Fortuna\*\*\***

H-8600 Siófok, Erkel F. u. 51

Phone: +36 84 313 933

Fax: +36 84 311 087

[www.hotelfortuna-siofok.hu](http://www.hotelfortuna-siofok.hu)

(distance to the Symposium venue is 350 m;  
reserved for students, accommodation in  
double rooms only)

### **Hotel Yacht Club\*\*\*superior**

H-8600 Siófok, Vitorlás u. 14.

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e-mail: [info@hotel-yachtclub.hu](mailto:info@hotel-yachtclub.hu)

[www.hotel-yachtclub.hu](http://www.hotel-yachtclub.hu)

(distance to the Symposium venue is 100 m;  
reserved for students, accommodation in  
double rooms only)



**Hotel Azúr** **Wellness & Conference Centre**



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# Hotel Yacht Club Hotel Azár





# **SCIENTIFIC PROGRAM**

The background of the page features a faint, semi-transparent watermark of a map. The map shows the outline of Lake Balaton in central Hungary. Overlaid on the map are the words "BALATON SIÓFOK" in a stylized font. "BALATON" is written in blue along the top curve of the lake, and "SIÓFOK" is written in red across the bottom right area.



## Program Overview

Wednesday September 2		Thursday September 3		Friday September 4	
<b>Hall Toscana I</b>		<b>Hall Toscana I</b>		<b>Hall Toscana I</b>	
10:00-10:40 Opening Ceremony	Award Ceremony	8:30-10:40 Parallel Session I	8:30-10:40 Parallel Session II	8:30-10:45 Parallel Session VII	8:30-10:45 Parallel Session VIII
10:40-12:40 Plenary Session I					
12:40-14:10 Lunch & Exhibition	Corinthos Restaurant & Lobby	10:40-11:10 Coffee Break & Exhibition	10:45-11:15 Coffee Break & Exhibition		
14:10-16:10 Plenary Session II		11:10-12:55 Parallel Session III	11:10-12:55 Parallel Session IV	11:15-12:45 Plenary Session I	
16:10-16:40 Coffee Break & Exhibition	Lobby	12:55-14:30 Lunch & Exhibition	12:45-12:55 Corinthos Restaurant & Lobby	12:45-12:55 Poster Award Ceremony	
16:40-17:00 Vendor's Seminar		14:30-16:30 Parallel Session V	14:30-16:30 Parallel Session VI	12:55-13:05 Closing Remarks	
16:40-18:40 Poster Session I	Lobby & Hall Toscana II	16:30-17:00 Coffee Break & Exhibition	16:30-17:00 Coffee Break & Exhibition	13:05 Lunch	Corinthos Restaurant
19:00-20:00 Concert				17:00-19:00 Poster Session II	
20:00-24:00 Gala Dinner	Corinthos Restaurant			17:00-19:00 Poster Session II	
				20:00-24:00 Garden Party	
				20:00-24:00 Hotel Garden	

**10:00-10:30      Opening Ceremony  
Halász Medal Award Ceremony  
Csaba Horváth Memorial Award Ceremony**

**Felinger, A.**

President of the Hungarian Society for Separation Sciences, Pécs,  
Hungary

**Klebovich, I.**

President of the Central European Group for Separation Sciences,  
Budapest, Hungary

**Görög, S.**

Former President of the Section of Chemical Sciences, Hungarian  
Academy of Sciences, Budapest, Hungary

**Frank, H.**

President of the European Society for Separation Science, Bayreuth,  
Germany

**Szepesy, L.**

Honorary President of the Hungarian Society for Separation  
Sciences, Budapest, Hungary

**Strothmann, V.**

Representative of the Halász Family, Saarbrücken, Germany

**Horváth, T.**

Representative of the Horváth Family, Budapest, Hungary

**10:30-10:40      CEGSS Award Presentation**

## Plenary Session I

**Chairs: Felinger, A., Klebovich, I.**

- 10:40-11:10    **Small Steps in the World of Separation Science**  
L-01            **Szepesy, L.**  
                    Budapest University of Technology and Economics, Budapest,  
                    Hungary
- 11:10-11:40    **Electrolyte Solutions Tailored for Capillary Electrophoresis of  
Peptides and Proteins**  
L-02            **Corradini, D., De Rossi, A., Nicoletti, I.**  
                    Institute of Chemical Methodologies of the Italian Research  
                    Council, Rome, Italy
- 11:40-12:10    **Modern Monolithic Stationary Phase Technology for HPLC**  
L-03            **Bonn, G. K.**  
                    Leopold-Franzens University, Innsbruck, Austria
- 12:10-12:40    **Synthesis and Applications of Polymer Monoliths for Ion-  
exchange and Mixed-mode Separations of Small Molecules**  
L-04            **Haddad, P. R.<sup>1</sup>, Hilder, E. F.<sup>1</sup>, Schaller, D.<sup>1</sup>, Pohl, C.<sup>2</sup>, Evenhuis,  
C. J.<sup>1</sup>, Ghanem, A.<sup>1</sup>, Hon, W. B.<sup>1</sup>, Saunders, K.<sup>3</sup>**  
<sup>1</sup>University of Tasmania, Hobart, Australia  
<sup>2</sup>Dionex, Sunnyvale, USA  
<sup>3</sup>Pfizer Global Research and Development, Sandwich UK
- 12:40-14:10    **Lunch & Exhibition**

## **Plenary Session II**

**Chairs:** Bonn, G., Kremmer, T.

- |                     |  |
|---------------------|--|
| 14:10-14:40<br>L-05 | <b>Affinity Chromatography for the Purification of Therapeutic Monoclonal Antibodies Exemplified by a Case Study</b><br><b>Lindner, W.<sup>1</sup>, Horak, J.<sup>1</sup>, Hofer, S.<sup>1</sup>, Williams, S.<sup>2</sup>, Burton, S.<sup>2</sup></b><br><sup>1</sup> University of Vienna, Vienna, Austria<br><sup>2</sup> Prometic BioSciences, Cambridge, UK |
| 14:40-15:10<br>L-06 | <b>New Sampling/Sample Preparation Approaches for On-Site Investigations</b><br><b>Pawliszyn, J.</b><br>Department of Chemistry, University of Waterloo, Waterloo, Canada  |
| 15:10-15:40<br>L-07 | <b>The Use of Electrokinetic Transport Phenomena in Sample Preparation</b><br><b>Welsch, T., Schmidkunz, Ch.</b><br>University of Ulm, Ulm, Germany  |
| 15:40-16:10<br>L-8  | <b>Hyphenation of Liquid Phase Separations and Mass Spectrometry beyond Electrospray Ionization</b><br><b>Buchberger, W.</b><br>Johannes-Kepler-University, Linz, Austria  |
| 16:10-16:40         | <b>Coffee Break &amp; Exhibition</b>   |

## **Agilent Vendor's Seminar**

- 16:40-17:00 VS-1 Next Generation Enabling Technologies for UHPLC and What it Can Mean for Your Laboratory Wittek, U. Agilent Technologies, Waldbronn, Germany

## Poster Session I

**Chair: Harangi, J.**

16:40-18:40

- P-1 – P-25 Fundamentals and stationary phases  
P-26 – P-31 Chiral separations  
P-32 – P-44 Electrophoresis  
P-45 – P-71 Bioanalysis  
MP-1 – MP-9 Manufacturers' Poster

**P-1 The Role of Temperature in Enantioseparation of Norgestrel with Native Cyclodextrins: a Combined HPLC and NMR Study**  
**Berta, R., Szakács, Z., Babják, M., Gazdag, M.**  
Gedeon Richter Plc., Budapest, Hungary

**P-2 Assessment of an HPLC Column's Suitability and Fitness for Purpose**  
**McCrossen, S., Mutton, I., Myers, P., Bevan, C.**  
IEXA100 Consulting , Crawley, UK

**P-3 Geometry of Stationary Bonded Phases in RP HPLC**  
**Bocian, Sz.<sup>1</sup>, Vajda, P.<sup>2</sup>, Felinger, A.<sup>2</sup>, Buszewski, B.<sup>1</sup>**  
<sup>1</sup> Nicolaus Copernicus University, Toruń, Poland  
<sup>2</sup> University of Pécs, Pécs, Hungary

**P-4 Characterization of New Types of Stationary Phases for Fast Liquid Chromatographic Applications**  
**Fekete, Sz.<sup>1</sup>, Ganzler, K.<sup>1</sup>, Fekete, J.<sup>2</sup>**  
<sup>1</sup> Gedeon Richter Plc., Budapest, Hungary  
<sup>2</sup> Budapest University of Technology and Economics,  
Budapest, Hungary

**P-5 Preparation and Testing of Packed Capillary Columns**  
**Franc, M., Coufal, P., Bosáková, Z., Tesařová, E.**  
Charles University in Prague, Prague 2, Czech Republic

**P-6 Measure the Difference between Multicomponent Samples by their Chromatographic Fingerprint**  
**Harangi, J.**  
Research Laboratory for Chromatography, Debrecen, Hungary

- P-7 **Temperature and Flow Programmed Solvent Gradient HPLC in Practice**  
Makuta, M.<sup>1</sup>, Gulyás, Zs.<sup>1</sup>, Hajdú, I.<sup>1</sup>, Harangi, J.<sup>2</sup>  
<sup>1</sup> University of Debrecen, Debrecen, Hungary  
<sup>2</sup> Research Laboratory for Chromatography, Debrecen, Hungary
- P-8 **Separation Efficiency of HPLC-Microchips with Different Cross-Sectional Geometries**  
Jung, S.<sup>1</sup>, Ehlert, S.<sup>1</sup>, Höltzel, A.<sup>1</sup>, Kraiczek, K.<sup>2</sup>, Mora, J.-A.<sup>2</sup>, Dittmann, M.<sup>2</sup>, Rozing, G. P.<sup>2</sup>, Tallarek, U.<sup>1</sup>  
<sup>1</sup> Philipps-Universität Marburg, Marburg, Germany  
<sup>2</sup> Agilent Technologies, Waldbronn, Germany
- P-9 **Application of Specific Properties of Subcritical Water: Aqueous Solubility Measurements and Construction of Prediction Model for Sparingly Soluble Compounds**  
Karásek, P., Roth, M., Planeta, J., Hohnová, B.  
Institute of Analytical Chemistry of the ASCR, Brno, Czech Republic
- P-10 **The Examination of the Mass Transfer Coefficients on Stationary Phases of Different Geometry in Reversed Phase Liquid Chromatography**  
Kiss, I., Bacsikay, I., Kilár, F., Felinger, A.  
University of Pécs, Pécs, Hungary
- P-11 **Structure-retention Relationships on Different 5% Phenyl Equivalent GC Phases**  
Hibbert, R.<sup>1</sup>, Marriott, P.<sup>2</sup>, Lahoutifard, N.<sup>3</sup>, Wynne, P.<sup>1</sup>,  
<sup>1</sup> SGE Analytical Science, Ringwood, Australia  
<sup>2</sup> RMIT University, Melbourne, Australia  
<sup>3</sup> SGE Europe, Courtaboeuf, France
- P-12 **Role of Monolithic Coloumn in Fast Chromatography**  
Oláh, E.<sup>1</sup>, Kiss, K.<sup>1</sup>, Fekete, Sz.<sup>2</sup>, Fekete, J.<sup>1</sup>, Ganzler, K.<sup>2</sup>  
<sup>1</sup> Budapest University of Technology and Economics  
Budapest, Hungary  
<sup>2</sup> Gedeon Richter Plc., Budapest, Hungary
- P-13 **Reduction of Silanophilic Interactions in HPLC with Use of Ionic Liquids**  
Petruczynik, A., Poniewaz, A., Waksmundzka-Hajnos, M.  
Medical University of Lublin, Lublin, Poland

- P-14 **Monolithic Silica Columns: Effect of Preparation Temperature on Efficiency**  
**Planeta, J.**, Roth, M., Karásek, P., Moravcová, D.  
Institute of Analytical Chemistry of the ASCR, Brno, Czech Republic
- P-15 **Results of Experiments Confirmed Particular Advantages of Application of the Eluent Back Flush (EBF) in the Elution Column Liquid Chromatography**  
**Romanik, G.**, Trznadel, M., Skrzypczak, A., Kamiński, M.  
Politechnika Gdańsk, Gdańsk, Poland
- P-16 **Advantages of Monolith Columns as We See...**  
**Szabó, L.**, Vigh, I.  
EGIS Pharmaceutical Plc., Budapest, Hungary
- P-17 **Dependence of the Cone-Jet Stability Island in Microchip-ESI-MS on Physico-Chemical Properties of the Mobile Phase: Experiments and Simulations**  
Reinsberg, K.-G.<sup>1</sup>, Effelsberg, U.<sup>2</sup>, **Tallarek, U.**<sup>1</sup>  
<sup>1</sup> Philipps-Universität Marburg, Marburg, Germany  
<sup>2</sup> Agilent Technologies, Waldbronn, Germany
- P-18 **Structure-Transport Analysis in Chromatographic Beds: Influence of the Wall and Confining Geometry**  
Khirevich, S.<sup>1</sup>, Höltzel, A.<sup>1</sup>, Hlushkou, D.<sup>1</sup>, Seidel-Morgenstern, A.<sup>2</sup>, **Tallarek, U.**<sup>1</sup>  
<sup>1</sup> Philipps-Universität Marburg, Marburg, Germany  
<sup>2</sup> Max-Planck-Institut für Dynamik komplexer technischer Systeme, Magdeburg, Germany
- P-19 **Effect of the End-Capping on the Retention of Organic Modifiers in RPLC**  
**Vajda, P.**<sup>1</sup>, Bocian, Sz.<sup>2</sup>, Buszewski, B.<sup>2</sup>, Felinger, A.<sup>1</sup>  
<sup>1</sup> University of Pécs, Pécs, Hungary  
<sup>2</sup> Nicolaus Copernicus University, Toruń, Poland
- P-20 **Correlation between Analytical Signal and Molecular Structure in Mass Spectrometry**  
**Göröcs, N.**, Mátyási, J., Balla, J.  
Budapest University of Technology and Economics and B&B Fundation, Budapest, Hungary

- P-21 **Dual Retention Mechanism on Columns with the Bonded (Poly)Oxyethylene and Diol Stationary Phases for Phenolic and Flavone Natural Antioxidants**  
**Hajek, T., Jandera, P.**  
University of Pardubice, Pardubice, Czech Republic
- P-22 **Characterization and Application of Zirconia-based Stationary Phases**  
**Janečková, L., Tesařová, E., Bosáková, Z.**  
Charles University in Prague, Prague, Czech Republic
- P-23 **Dextransulfate and Heparin as Modifiers of Polypyrrole-Coated Capillaries**  
**Knob, R., Maier, V., Znaleziona, J., Megová, M., Ševčík, J.**  
Palacký University, Olomouc, Czech Republic
- P-24 **Preparation of New Capillary Monolithic Columns for HILIC**  
**Škeříková, V., Urban, J., Jandera, P. Kubíčková, R.**  
University of Pardubice, Pardubice, Czech Republic
- P-25 **Preparation and Characterization of Poly(styrene-co-divinyl-benzene-co-methacrylic acid) Capillary Monolithic Columns**  
**Svobodová, A.<sup>1</sup>, Křížek, T.<sup>1</sup>, Širc, J.<sup>1,2</sup>, Coufal, P.<sup>1</sup>, Tesařová, E.<sup>1</sup>**  
<sup>1</sup> Charles University in Prague, Prague, Czech Republic  
<sup>2</sup> Institute of Macromolecular Chemistry, ASCR, Prague, Czech Republic
- P-26 **A Novel Derivatization Procedure and Chiral GC Method for the Enantiomeric Determination of L- and D-Carnitine**  
**Albreht, A., Zupančič, B., Križman, M., Vovk, I., Simonovska, B.**  
National Institute of Chemistry, Ljubljana, Slovenia
- P-27 **High-Performance Liquid Chromatographic Enantioseparation of  $\gamma$ -Amino Acid Stereoisomers on Macroyclic Glycopeptide-Based Columns**  
**Pataj, Z., Ilisz, I., Forró, E., Fülöp, F., Péter, A.**  
University of Szeged, Szeged, Hungary
- P-28 **HPLC enantioseparation of  $\beta$ -lactams**  
**Péter, A., Pataj, Z., Ilisz, I., Forró, E., Fülöp, F.**  
University of Szeged, Szeged, Hungary

- P-29 **HPLC Enantioseparation of  $\beta$ -Lactam Stereoisomers Using Cyclodextrin-Based Chiral Stationary Phases**  
Fodor, G.<sup>1</sup>, Ilisz, I.<sup>1</sup>, Szemán, J.<sup>2</sup>, Csabai, K.<sup>2</sup>, Szente, L.<sup>2</sup>,  
Varga, G.<sup>3</sup>, Forró, E.<sup>1</sup>, Fülöp, F.<sup>1</sup>, Péter, A.<sup>1</sup>  
<sup>1</sup> University of Szeged, Szeged, Hungary  
<sup>2</sup> CycloLab R&D Ltd., Budapest, Hungary  
<sup>3</sup> ChiroQuest Ltd., Budapest, Hungary
- P-30 **Enantioseparation on Novel Cyclodextrin-Based Chiral Stationary Phases**  
Szemán, J.<sup>1</sup>, Varga, G.<sup>2</sup>, Visy, J.<sup>3</sup>, Csabai, K.<sup>1</sup>, Hazai, E.<sup>4</sup>,  
Bikádi, Zs.<sup>4</sup>, Hári, P.<sup>5</sup>, Szente, L.<sup>1</sup>, Simonyi, M.<sup>3</sup>  
<sup>1</sup> CycloLab R&D Ltd., Budapest, Hungary  
<sup>2</sup> ChiroQuest Ltd., Budapest, Hungary  
<sup>3</sup> Chemical Research Center, Hungarian Academy of Sciences,  
Budapest, Hungary  
<sup>4</sup> VirtuaDrug Ltd., Budapest, Hungary  
<sup>5</sup> Delta Informatika Zrt., Budapest, Hungary
- P-31 **Chiral Separation of Vinca Alkaloid Enantiomers by Capillary Electrophoresis Applying Cyclodextrin Derivatives and Characterization of their Cyclodextrin Complexes by Nuclear Magnetic Resonance Spectroscopy**  
Varga, E.<sup>1</sup>, Iványi, R.<sup>1</sup>, Fejős, I.<sup>2</sup>, Sohajda, T.<sup>2</sup>, Béni, Sz.<sup>2</sup>,  
Varga, G.<sup>3</sup>, Szente, L.<sup>1</sup>, Noszál, B.<sup>2</sup>  
<sup>1</sup> Cyclolab R&D Ltd., Budapest, Hungary  
<sup>2</sup> Semmelweis University, Budapest, Hungary  
<sup>3</sup> ChiroQuest Ltd., Budapest, Hungary
- P-32 **On-line Preconcentration and Separation of Phenolic and Flavone Natural Antioxidants by Micellar Electrokinetic Chromatography**  
Cesla, P., Fischer, J., Jandera, P.  
University of Pardubice, Pardubice, Czech Republic
- P-33 **Determination of tert-butyl Esters of DOTA-like Derivatives by HPLC and Nonaqueous CZE**  
Hamplová, A., Coufal, P., Křížek, T., Bosáková, Z.  
Charles University in Prague, Prague, Czech Republic
- P-34 **Capillary Electrophoretic Enantioseparation of Betti Bases with Cyclodextrins and a Crown Ether as Chiral Selectors**  
Ilisz, I.<sup>1</sup>, Kupai, J.<sup>2</sup>, Huszthy, P.<sup>2</sup>, Iványi, R.<sup>3</sup>, Pataj, Z.<sup>1</sup>,  
Szatmári, I.<sup>1</sup>, Fülöp, F.<sup>1</sup>, Péter, A.<sup>1</sup>  
<sup>1</sup> University of Szeged, Szeged, Hungary  
<sup>2</sup> Budapest University of Technology and Economics,  
Budapest, Hungary  
<sup>3</sup> CycloLab R&D Ltd., Budapest, Hungary

- P-35 **Determination of Artificial Sweetener by Capillary Electrophoresis with Mass Spectrometry**  
Maier, V., Ranc, V., Znaleziona, J., Megová, M., Knob, R., Ševčík, J.  
Palacký University in Olomouc, Olomouc, Czech Republic
- P-36 **Cell Electrophoresis**  
Kilár, F., Szabó, D., Buzási, P., Farkas, K., König, A., Kocsis, B.  
University of Pécs, Pécs, Hungary
- P-37 **Comparison of Some Natural and Synthetic Entangled Polymers as Separation Media for Peptides and Proteins in Capillary Gel Electrophoresis**  
Křížek, T., Coufal, P., Tesařová, E., Bosáková, Z., Pacáková, V.  
Charles University in Prague, Prague, Czech Republic
- P-38 **Separation of Attogram Terpenes by CZE with Fluorometric Detection**  
Kubesová, A.<sup>1,2</sup>, Horká, M.<sup>1</sup>, Růžička, F.<sup>2</sup>, Beran, M.<sup>1</sup>, Šlais, K.<sup>1</sup>  
<sup>1</sup> Institute of Analytical Chemistry of the ASCR, Brno, Czech Republic  
<sup>2</sup> Masaryk University Brno, Brno, Czech Republic
- P-39 **On-line Preconcentration and Determination of Brominated Phenols in Water by Micellar Electrokinetic Chromatography**  
Maier, V., Ginterová, P., Znaleziona, J., Megová, M., Knob, R., Ševčík, J.  
Palacký University in Olomouc, Olomouc, Czech Republic
- P-40 **Separation of β-Lactam Enantiomers by Capillary Electrophoresis Using Cyclodextrin Derivatives**  
Németh, K.<sup>1</sup>, Visy, J.<sup>1</sup>, Iványi, R.<sup>2</sup>, Szemán, J.<sup>2</sup>, Szente, L.<sup>2</sup>,  
Forró, E.<sup>3</sup>, Fülöp, F.<sup>3</sup>, Péter, A.<sup>3</sup>, Simonyi, M.<sup>1</sup>  
<sup>1</sup> Chemical Research Center, Hungarian Academy of Sciences, Budapest, Hungary  
<sup>2</sup> Cyclolab R&D Ltd., Budapest, Hungary  
<sup>3</sup> University of Szeged, Szeged, Hungary
- P-41 **Possibilities of Modification of Sandwich Injection Set-up in CIEF Analysis with MS detection**  
Páger, Cs., Kilár, F.  
University of Pécs, Pécs, Hungary

- P-42 **Electrophoretic Systems with Complex System Mobilities - Oscillating Electrolytes**  
**Riesová, M., Hruška, V., Gaš, B.**  
Charles University in Prague, Prague, Czech Republic
- P-43 **Separation and Characterization of Modified Pregabalins in terms of Cyclodextrin Complexation, Using Capillary Electrophoresis and Nuclear Magnetic Resonance**  
**Béni, Sz.<sup>1</sup>, Sohajda, T.<sup>1</sup>, Neumajer, G.<sup>1</sup>, Iványi, R.<sup>2</sup>, Szente, L.<sup>2</sup>, Noszál, B.<sup>1</sup>**  
<sup>1</sup> Semmelweis University, Budapest, Hungary  
<sup>2</sup> Cyclolab R&D Ltd., Budapest, Hungary
- P-44 **Capillary Electrophoresis in Service for Pharmaceutical Industry. Separations of Antiandrogens**  
**Znaleziona, J., Maier, V., Ranc, V., Knob, R., Megová, M., Petr, J., Ševčík, J.**  
Palacký University, Olomouc, Czech Republic
- P-45 **Detection and Characterization of New Fumonisins Mycotoxin Isomers by Reversed-Phase High-Performance Liquid Chromatography/Electrospray Ionization Time-of-Flight and Ion Trap Mass Spectrometry**  
**Bartók, T.<sup>1,2</sup>, Szekeres, A.<sup>2</sup>, Tölgyesi, L.<sup>3,4</sup>, Varga, M.<sup>1</sup>, Bartha, R.<sup>4</sup>, Szécsi, Á.<sup>5</sup>, Németh, L.<sup>6</sup>, Mesterházy, Á.<sup>1</sup>**  
<sup>1</sup> Cereal Research Non-Profit Ltd. Co., Szeged, Hungary  
<sup>2</sup> FumoPrep Ltd., Mórahalom, Hungary  
<sup>3</sup> Eötvös Loránd University, Joint Research and Training Laboratory on Separation Techniques, Budapest, Hungary  
<sup>4</sup> Kromat Ltd., Budapest, Hungary  
<sup>5</sup> Plant Protection Institute of the Hungarian Academy of Sciences, Budapest, Hungary  
<sup>6</sup> Edison House Holding Zrt., Dabas, Hungary
- P-46 **Qualitative Analysis and Simultaneous Determination of Filipendula Salicylates by LC-MS**  
**Blazics, B., Papp, I., Kéry, Á.**  
Semmelweis University, Budapest, Hungary
- P-47 **Enrichment of Amadori Products Derived from the Non-enzymatic Glycation of Human Serum Albumin (HSA) using Microscale Boronate Affinity Chromatography**  
**Böddi, K., Szabó, Z., Takátsy, A., Markó, L., Wittmann, I., Ohmacht, R.**  
University of Pécs, Pécs, Hungary

- P-48 **Application of Mass Spectrometry to the Characterization of Bacterial Lipopolysaccharides**  
**Dörnyei, Á.**, Kilár, A., Kocsis, B., Kilár, F.  
University of Pécs, Pécs, Hungary
- P-49 **Binding of Chiral Antimalarial Drugs on Calmodulin-Sepharose**  
**Fitos, I.**, Visy, J.  
Chemical Research Center, Hungarian Academy of Sciences, Budapest, Hungary
- P-50 **Monolithic 1D LC/MALDI- MS Analysis of Intact Barley Proteins**  
**Flodrová, D.**, Petry-Podgórska, I., Bobál'ová, J.  
Institute of Analytical Chemistry of the ASCR, Brno, Czech Republic
- P-51 **Column-Switching Chromatography Analysis and Characterization of Humic Substances**  
**Góra, R.**, Rohárik, P., Hutta, M.  
Comenius University in Bratislava, Bratislava, Slovakia
- P-52 **Tyrosol is Autoinducer Molecule of *Saccharomyces Cerevisiae***  
**Péter, A.**, Dergez, T., Farkas, N., Kilár, F., Kocsis, B.  
University of Pécs, Pécs, Hungary
- P-53 **Fast and Extremely Sensitive Detection of Bacterial Endotoxins in Microchip Electrophoresis**  
**Makszin, L.**, Kilár, A., Kocsis, B., Kilár, F.  
University of Pécs, Pécs, Hungary
- P-54 **Determination of EDTA in Biological Samples**  
**Mészáros, Á.**<sup>1</sup>, Fekete, J.<sup>1</sup>, Tóth, F.<sup>2</sup>  
<sup>1</sup> Budapest University of Technology and Economics, Budapest, Hungary  
<sup>2</sup> Agricultural Office of County Fejér Plant Protection and Soil Conservation Directorate, Velence, Hungary
- P-55 **Influence of Culture Parameters on Phenol Biosorption by White-Rot Fungus *Phanerochaete Chrysosporium***  
**Pernyeszi, T.**<sup>1</sup>, Boros, B.<sup>1</sup>, Honfai, K.<sup>1</sup>, Tálos, K.<sup>1</sup>, Majdik, C.<sup>2</sup>, Kilár, F.<sup>1</sup>  
<sup>1</sup> University of Pécs, Pécs, Hungary  
<sup>2</sup> University Babeş-Bolyai, Cluj-Napoca, Romania

- P-56 **Determination of Clopidogrel in Human Plasma Using APCI-Source HPLC-MS/MS After Manual Liquid-Liquid Extraction**  
Juhász, Z., Nagy, Z. **Ratskó, P.**, Pánczél, J., Kapás, M.  
Gedeon Richter Plc., Budapest, Hungary
- P-57 **Efficiency Comparison of Selected Extraction/Leaching Techniques of Metabolites Contained in Plants of the Dionaea Muscipula Species**  
**Skrzypczak, A.**<sup>1</sup>, Szpitter, A.<sup>2</sup>, Królicka, A.<sup>2</sup>, Łojkowska, E.<sup>2</sup>, Kamiński, M.<sup>1</sup>  
<sup>1</sup> Gdańsk University of Technology, Gdańsk, Poland  
<sup>2</sup> Gdańsk University of Medicine, Gdańsk, Poland
- P-58 **Purification of Fumonisins Mycotoxins with CPC Technique. Pilot Study**  
**Szekeres, A.**<sup>1</sup>, Vékes, E.<sup>2</sup>, Németh, L.<sup>2</sup>, Bartók, T.<sup>3</sup>  
<sup>1</sup> FumoPrep Ltd., Mórahalom, Hungary  
<sup>2</sup> Edison House Holding Zrt., Újlengyel, Hungary  
<sup>3</sup> Cereal Research Non-Profit Company, Szeged, Hungary
- P-59 **Determination of the Main Metabolite of Propineb, Propylenethiourea, in Foods of Plant Origin by High Performance Hydrophilic Interaction Liquid Chromatography Tandem Mass Spectrometry**  
**Tölgysi, L.**  
Eötvös Loránd University, Joint Research and Training Laboratory on Separation Techniques, Budapest, Hungary
- P-60 **Metabolic Profiling, by HPLC and HPLC-MS, of Hungarian Potatoes under Integrated and Organic Farming.**  
**Tömösközi-Farkas, R.**<sup>1</sup>, Horváth, V.<sup>2</sup>, Nagy-Gasztonyi, M.<sup>1</sup>, Tóth, B.<sup>2</sup>, Polgár, Zs.<sup>3</sup>, Daood, H.G.<sup>1</sup>  
<sup>1</sup> Central Food Research Institute, Budapest, Hungary  
<sup>2</sup> Technical University of Budapest, Hungary  
<sup>3</sup> Pannon University, Keszthely, Hungary
- P-61 **Metabolite Profiling of Wheat Ovule by GC/MS and LC/MS**  
**Varga, M.**<sup>1</sup>, Bartók, T.<sup>1</sup>, Sági, L.<sup>2</sup>, Tölgysi, L.<sup>3</sup>, Bartha, R.<sup>4</sup>, Jäger, K.<sup>2</sup>, Barnabás, B.<sup>2</sup>, Mesterházy, Á.<sup>1</sup>  
<sup>1</sup> Cereal Research Non-Profit Ltd., Szeged, Hungary  
<sup>2</sup> Agricultural Research Institute of the Hungarian Academy of Sciences, Martonvásár, Hungary  
<sup>3</sup> Eötvös Loránd University, Joint Research and Training Laboratory on Separation Techniques, Budapest, Hungary  
<sup>4</sup> Kromat Ltd., Budapest, Hungary

- P-62 **SPE-LC-MS/MS Method for the Determination of Cardiovascular- and Anti-ulcer Agents from Surface Water**  
**Varga, R.**, Tölgyesi, L., Eke, Zs., Torkos, K.  
Eötvös Loránd University, Joint Research and Training Laboratory on Separation Techniques, Budapest, Hungary
- P-63 **Urinary Steroid Profiling of Early Pregnancy after in Vitro Fertilization (IVF)**  
**Bíró, I.**, Bufa, A., Wilhelm, F., Mánfai, Z., Gőcze, P. M., Kilár, F.  
University of Pécs, Pécs, Hungary
- P-64 **Determination of Anabolic Androgen Steroids in Urine by Gas Chromatography Tandem Mass Spectrometry**  
**Csernyák, I.**<sup>1</sup>, Eke, Zs.<sup>1</sup>, Torkos, K.<sup>1</sup>, Horváthné Soós, E.<sup>1</sup>  
<sup>1</sup> Eötvös Loránd University, Joint Research and Training Laboratory on Separation Techniques, Budapest, Hungary  
<sup>2</sup> WESSLING Hungary Ltd., Doping Control Laboratory, Budapest, Hungary
- P-65 **Genome and Proteome Analysis of Red Yasts**  
**Dvorakova, T.**<sup>1</sup>, Marova, I.<sup>1</sup>, Halienova, A.<sup>1</sup>, Muller, L.<sup>1</sup>, Zdrahal, Z.<sup>2</sup>, Carnecka, M.<sup>1</sup>  
<sup>1</sup> Brno University of Technology, Brno, Czech Republic  
<sup>2</sup> Masaryk University of Brno, Brno, Czech Republic
- P-66 **Charge Affection of Liposomes Prepared by Spontaneous Revesiculation**  
**Megová, M.**, Müller, L., Barták, P., Součková, J., Maier, V., Znaleziona, J., Knob, R., Ševčík, J.  
Palacky University, Olomouc, Czech Republic
- P-67 **Metabolite Profiling of Plants and Food Products by HPLC-DAD-MS as a Tool to Trace Quality, Origin and Technological Processes**  
**Nicoletti, I.**, De Rossi, A., Corradini, D.  
Institute of Chemical Methodologies of the Italian Research Council, Rome, Italy
- P-68 **The Influence of Different Type of Exogenous Stress to Production of Extracellular Polysaccharide Pullulan by Yeast Strain *Aureobasidium pullulans***  
**Ondruška, V.**, Matoušková, P., Márová, I., Obruča, S.  
Brno University of Technology, Brno, Czech Republic

- P-69 **Comparison of VOCs Present in Breath and Released by Helicobacter pylori Cultures**  
**Ulanowska, A.**, Rudnicka, J., Ligor, T., Hrynkiewicz, K., Trawińska, E., Buszewski, B.  
Nicolaus Copernicus University, Toruń, Poland
- P-70 **LC-MS Analysis of Pituitary Adenylate Cyclase Activating Polypeptide (PACAP) in Human body Fluids**  
**Váczy, A.**, Reglodi, D., Márk, L.  
University of Pécs, Pécs, Hungary
- P-71 **Purine Derivatives Determinated by Chromatographic Methods with Application on Urine of Ruminants**  
**Vlassa, M.**, Filip, M., Pașcalău, V., Oniță, F., Coman, V.  
Babes-Bolyai University, Cluj-Napoca, Romania
- MP-1 **Increased Sensitivity, Improved Resolution and Faster Analysis for Drug Impurity and Related Substances Applications Using a New Core-Shell HPLC/UHPLC Column Technology**  
Layne, J., Koerner, P.  
Phenomenex, Inc. Torance, CA, USA
- MP-2 **Measurement of Fumonisin B1, B2 and B3 Mycotoxins by High-Performance Liquid Chromatography Coupled with Corona Charged Aerosol Detector (HPLC-CAD)**  
**Budai, A.**<sup>1</sup>, Vékes, E.<sup>2</sup>, Németh, L.<sup>1</sup>, Szekeres, A.<sup>2</sup>, Bartók, T.<sup>3</sup>  
<sup>1</sup> Edison House Holding Ltd., Újlengyel, Hungary  
<sup>2</sup> FumoPrep Ltd., Mórahalom, Hungary  
<sup>3</sup> Cereal Research Non-Profit Company, Szeged, Hungary
- MP-3 **Liquid-Liquid Chromatography; Basis and Applications**  
Audo, G.<sup>1</sup>, Szekeres, A.<sup>2</sup>, Németh, L.<sup>3</sup>  
<sup>1</sup> Armen Instrument, France,  
<sup>2</sup> FumoPrep Ltd., Mórahalom, Hungary,  
<sup>3</sup> Edison House Holding Ltd., Újlengyel, Hungary
- MP-4 **Method Optimization using Alternative Selectivities in Fused-Core™**  
Aurand, C. R., Brandes, H., Bell, D. S., Wallworth, D.  
Buckendahl, K.  
Sigma-Aldrich Ltd., Budapest, Hungary
- MP-5 **Selective Depletion of Phospholipid Interferences Utilizing HybridSPE Technology**  
Aurand, C. R., Brandes, H., Bell, D. S., Wallworth, D.  
Buckendahl, K.  
Sigma-Aldrich Ltd., Budapest, Hungary

- MP-6 **Application of a Zwitterionic Stationary Phase for Preparative Hydrophilic Interaction Liquid Chromatography (HILIC) Separations**  
Appelblad, P.  
Merck SeQuant AB, Umeå, Sweden
- MP-7 **The Rapid Identification of the Impurities of Simvastatin Using UPLC® / Q-TOF™ Technology and an Intelligent Data Mining Approach**  
Potts III, W., Plumb, R., Jones, M. D.  
Waters Corporation, Milford, MA, USA
- MP-8 B&K 2002 Kft., Budapest, Hungary
- MP-9 B&K 2002 Kft., Budapest, Hungary

17:00-18:00 **Meeting of CEGSS representatives – Room Thalassa**

19:00-20:00 **Concert – Hall Toscana I**  
**Mendelssohn Chamber Orchestra**

20:00 **Gala Dinner – Corinthos Restaurant**  
**Music: Jenő Esze and his Jazz Band**



## Parallel Session I

**Chairs:** Buchberger, W., Lindner, W.

- 8:30-9:00    **Perspective on Similar Biotherapeutic Products**  
L-09        **Beaver, L. A.**  
              LAB Enterprises, Rockville, USA
- 9:00-9:30    **Intrinsically Disordered Proteins: Their Identification, Structure and Function**  
L-10        **Tompa, P.**  
              Biological Research Center, Hungarian Academy of Sciences, Budapest, Hungary
- 9:30-9:50    **A Quality by Design (QbD) Approach to HPLC Method Development**  
L-11        **Molnár, I.**, Rieger, H. J., Monks, K.  
              Molnár-Institute, Berlin, Germany
- 9:50-10:20    **Methodology and Way of Thinking in (Bio)Analytics**  
L-12        **Urbányi, Z.**  
              Gedeon Richter Plc., Budapest, Hungary
- 10:20-10:40    **New Endeavours in Glycoproteome Analysis: High Throughput N-glycan Profiling by Capillary Gel Electrophoresis**  
L-13        **Olajos, M.<sup>1</sup>**, Mittermayr, S.<sup>2</sup>, Hajós, P.<sup>1</sup>, Guttman, A.<sup>2</sup>  
<sup>1</sup> University of Pannonia, Veszprém, Hungary  
<sup>2</sup> Horváth Laboratory of Bioseparation Sciences, University of Debrecen, Debrecen, Hungary
- 10:40-11:10    **Coffee Break & Exhibition**

## Parallel Session II

**Chairs: Gertsiuk, M., Tyihák, E.**

- |                     |   |
|---------------------|---|
| 8:30-9:00<br>L-14   | <b>Drastic Reduction of the Structure Error in Quantitative Planar Chromatography</b><br><b>Kaiser, R. E.</b><br>Institute for Chromatography, Bad Dürkheim, Germany  |
| 9:00-9:30<br>L-15   | <b>On the Mechanisms of Enantioseparation in the Chiral Thin-Layer Chromatography Mode with the Silica Gel Solid Bed and Densitometric Detection</b><br><b>Kowalska, T., Sajewicz, M., Gontarska, M., Kronenbach, D.</b><br>Silesian University, Katowice, Poland   |
| 9:30-9:50<br>L-16   | <b>Increasing of Detection Sensitivity of Fully Off-Line OPLC Separation by Bilateral Band Compression</b><br><b>Minesovics, E.</b><br>OPLC-NIT Ltd., Budapest, Hungary<br>Corvinus University, Budapest, Hungary   |
| 9:50-10:20<br>L-17  | <b>Analytical and Biological Studies on Food Colorants from Beverages</b><br><b>Coman V.<sup>1</sup>, Filip M.<sup>1</sup>, Grecu R.<sup>1</sup>, Vlassa M.<sup>1</sup>, Mircean M.<sup>2</sup>, Miclăuș V.<sup>2</sup></b><br><sup>1</sup> Babeș-Bolyai University, Cluj-Napoca, Romania<br><sup>2</sup> University of Agricultural Sciences and Veterinary Medicine, Cluj-Napoca, Romania |
| 10:20-10:40<br>L-18 | <b>HPLC-NMR Study of Association Complexes</b><br><b>Skubak, J., Liptaj, T., Lehota, J.</b><br>Slovak University of Technology, Bratislava, Slovakia  |
| 10:40-11:10         | <b>Coffe Break &amp; Exhibition</b>   |

## Parallel Session III

**Chairs: Dondi, F., Jandera, P.**

**11:10-11:40    Electrokinetic Transport and Separations in Nanofluidic Devices**

L-19

**Jacobson, S. C., Perry, J. M., Zhou, K., Kovarik, M. L.**  
Indiana University, Bloomington, USA

**11:40-12:00    High Performance Computing for High Performance Separation**

L-20

**Khirevich, S.<sup>1</sup>, Höltzel, A.<sup>1</sup>, Seidel-Morgenstern, A.<sup>2</sup>;**  
**Tallarek, U.<sup>1</sup>**

<sup>1</sup> Philipps-Universität Marburg, Marburg, Germany

<sup>2</sup> Max-Planck-Institut für Dynamik Komplexer Technischer Systeme, Magdeburg, Germany

**12:00-12:20    Binding of Dipeptides and Amino Acids to Teicoplanin Chiral Stationary Phase Apparent Homogeneity of Some Heterogeneous Systems**

L-21

**Cavazzini, A.<sup>1</sup>, Dondi, F.<sup>1</sup>, Pasti, L.<sup>1</sup>, Gasparini, F.<sup>2</sup>**

<sup>1</sup> University of Ferrara, Ferrara, Italy.

<sup>2</sup> Università degli Studi di Roma, Roma, Italy

**12:20-12:40    Combining Theory and Practice for a Deeper Understanding of the Separation Process – The Impact of the Additive on the Peak Shapes**

L-22

**Fornstedt, T.**

Uppsala University, Uppsala, Sweden

**12:40-12:55    Cell Type Specific Metabolic Profiling, in Plant Root Epidermis Cell Layer, Using Cell Sorting, UPLC separation, Accurate Mass and Ion Mobility**

ML-1

**Aharoni, A., Bendikov, M., Tishbee, A.**

The Weizmann Institute of Science, Rehovot, Israel

**12:55-14:30    Lunch & Exhibition**

## Parallel Session IV

**Chairs: Kaiser, R. E., Kowalska, T.**

- 11:10-11:40    **Aflatoxines in figs. An analytical problem?**  
L-23            **Spangenberg, B.**, Welle, Ch., Broszat, M., Wojnowski, M.  
University of Applied Sciences, Offenburg, Germany
- 11:40-12:00    **The Frustrated Reviewer – Recurrent Failures in Manuscripts Describing Validation of Quantitative TLC/HPTLC Procedures for Analysing Pharmaceuticals**  
L-24            Ferenczi-Fodor, K.<sup>1</sup>, Renger, B.<sup>2</sup>, Végh, Z.<sup>1</sup>  
<sup>1</sup> Gedeon Richter Plc., Budapest, Hungary  
<sup>2</sup> Vetter Pharma-Fertigung GmbH, Ravensburg, Germany
- 12:00-12:20    **Progress in Separation of Multicomponent Mixtures by Combination of Different Modes of Multidimensional Planar Chromatography (MDPC)**  
L-25            Tuzimski, T.  
Medical University of Lublin, Lublin, Poland
- 12:20-12:40    **Usefulness of Transgenic Luminescent Bacteria in Bioautography and for Investigation of Action Mechanism of Antibacterial-Toxic Compounds by BioArena**  
L-26            Móricz, Á. M.<sup>1</sup>, Molnár, V.<sup>2</sup>, Tyihák, E.<sup>1</sup>, Ott, P. G.<sup>1</sup>  
<sup>1</sup> Plant Protection Institute, Hungarian Academy of Sciences, Budapest, Hungary.  
<sup>2</sup> University of Technology and Economics, Budapest, Hungary
- 12:40-12:55    **The use of Micro-channel Technology in Gas Chromatography.**  
ML-2            Bisi, A.  
PerkinElmer Italia, Monza, Italy
- 12:55-14:30    **Lunch & Exhibition**

## Parallel Session V

**Chairs: Berek, D., Molnár I.**

- 14:30-15:00    **NP-RP or RP-RP Two-Dimensional HPLC? Advantages and Limitations**  
L-27              **Jandera, P., Hájek, T., Česla, P., Fischer, J.**  
University of Pardubice, Pardubice, Czech Republic
- 15:00-15:30    **Conventional Indexes of Multicomponent Chromatograms from Correlation Analysis**  
L-28              **Dondi, F., Bacco, D., Mercuriali, M., Pasti, L., Pietrogrande, M. C.**  
University of Ferrara, Ferrara, Italy
- 15:30-16:00    **Packing of Supramolecular Interaction for Determination of Compounds With Biological Activity**  
L-29              **Buszewski, B.<sup>1</sup>, Gadzała-Kopciuch, R.<sup>1</sup>, Ričanyová, J.<sup>1,2</sup>**  
<sup>1</sup> Nicolaus Copernicus University, Toruń, Poland  
<sup>2</sup> P.J. Šafárik University, Košice, Slovakia
- 16:00-16:20    **High-Throughput Separation and Analysis of the Endocrine Metabolome**  
L-30              **Márk, L., Montskó, G., Váczy, A., Ohmacht, R.**  
University of Pécs, Pécs, Hungary
- 16:20-16:30    **Group-Type Analysis for Petrochemical Samples by Comprehensive Two-Dimensional Gas Chromatography**  
ML-3              **Korman, M.**  
Thermo Scientific, Vienna, Austria
- 16:30-17:00    **Coffee Break & Exhibition**

## Parallel Session VI

**Chairs: Coman, V., Lehotay, J.**

- 14:30-15:00    **Separation of Metal Ions by Mesoporous Materials: Effect of the Morphology and Functional Groups on their Performance**  
L-31              Sarzanini, C., Bruzzoniti, M. C.  
                    University of Torino, Torino, Italy

- 15:00-15:30    **On-line Process Analysers and Analysis in Oil Refineries**  
L-32              Šegudović, N.  
                    INA-Industrija nafte d.d. Refineries Modernisation Investment Centre, Zagreb, Croatia

- 15:30-16:00    **Analysis of Filtrate from the Kyiv Ground of Household Wastes**  
L-33              Gertsuik, M.<sup>1</sup>, Koval'chuk, T.<sup>2</sup>, Kapral, K.<sup>2</sup>, Lysychenko, G.<sup>1</sup>  
<sup>1</sup> Institute of Geochemistry of Environment NAS of Ukraine, Kyiv, Ukraine  
<sup>2</sup> LECO Instrumente Plzen s.r.o., Plzen, Czech Republic

- 16:00-16:20    **Centrifugal Partition Chromatograph (CPC) in Pharmaceutical Applications**  
L-34              Szekeres, A.<sup>1</sup>, Vékes, E.<sup>2</sup>, Németh, L.<sup>2</sup>  
<sup>1</sup> FumoPrep Ltd., Mórahalom, Hungary  
<sup>2</sup> Edison House Holding Co Ltd., Újlengyel, Hungary

- 16:20-16:30    **Miniaturization in LC**  
ML-3              Ohmacht, R.  
                    University of Pécs, Pécs, Hungary  
                    CP-Analitika Ltd., Budapest, Hungary

- 16:30-17:00    **Coffee Break & Exhibition**

## Poster Session II

**Chair: Harangi, J.**

17:00-19:00

- P-72 – P-78 Environmental analysis  
P-79 – P-88 Gas chromatography  
P-89 – P-100 Pharmaceutical analysis  
P-101 – P-133 Food and plant analysis  
P-134 – P-135 Sample preparation  
P-136 – P-146 Planar chromatography  
MP-1 – MP-9 Manufacturers' Poster

- P-72 Simultaneous Determination of Residual Polychlorinated Biphenyls and Organochlorine Pesticides in Low-Fat Food Matrices by Gas Chromatography–Electron Capture Detection**  
**Beyer, A.** Biziuk, M.  
Gdansk University of Technology, Gdańsk, Poland
- P-73 An Improvement of European Standard Methods for the Determination of PCBs in Oil Samples**  
**Cencič Kodba, Z.**<sup>1</sup>, Brodnjak Vončina, D.<sup>2</sup>  
<sup>1</sup> Institute of Public Health Maribor, Environmental Protection Institute, Maribor, Slovenia  
<sup>2</sup> University of Maribor, Maribor, Slovenia
- P-74 Analysis of Nonylphenols in Water by Solid-Phase Micro-Extraction and Micro-Liquid-Liquid Extraction**  
**Janda, V.**, Kucerka, O., Tothova, I., Viden, I.  
Institute of Chemical Technology, Prague, Czech Republic
- P-75 Determination of 1,4-Dichlorobenzene in Different Environmental Matrices**  
**Juvancz, Z.**<sup>1</sup>, Bodáné-Kendrovics, R.<sup>1</sup>, Beleznay, P.<sup>2</sup>  
<sup>1</sup> Budapest Tech, Environmental Engineering Institute, Budapest, Hungary  
<sup>2</sup> Bálint Analytics Ltd., Budapest, Hungary

- P-76 **Determination of Polychlorinated Biphenyls by Ultra Performance Liquid Chromatography on Reversed Phase Columns**  
**Olsovská, J.**, Kresinova, Z., Flieger, M., Cajthaml, T.  
Institute of Microbiology, Prague, Czech Republic
- P-77 **Comparative Study of Cadmium Adsorption on Saccharomyces Cerevisiae Biomass of Different Origin**  
**Tálos, K.**<sup>1</sup>, Majdik, C.<sup>2</sup>, Kilár, F.<sup>1</sup>, Pernyeszi, T.<sup>1</sup>  
<sup>1</sup> University of Pécs, Pécs, Hungary  
<sup>2</sup> University Babeş-Bolyai, Cluj-Napoca, Romania
- P-78 **The Role of Gas Chromatography-Tandem Mass Spectrometry Acquisition Method in the Analysis of Organic Micropollutants in Danube River**  
Helenkár, A., Záray, Gy., Molnár-Perl, I., **Vasanits-Zsigrai, A.**  
L. Eötvös University, Budapest, Hungary
- P-79 **Reformulated Gas Analysis with a New Designed Capillary Gas chromatograph**  
**Benesóczki, D.**<sup>1</sup>, Angyal, V.<sup>1</sup>, Vasanits-Zsigrai, A.<sup>1</sup>, Pál, R.<sup>2</sup>  
<sup>1</sup> Eötvös University, Budapest, Hungary  
<sup>2</sup> Today Science Ltd., Solymár, Hungary
- P-80 **HS-SPME/GC-FID Determination of Fatty Acid Ethyl Esters in Raw Spirits Samples**  
**Biernacka, P.**, Wardencki, W.  
Gdańsk University of Technology, Gdańsk, Poland
- P-81 **The Possibility and Limits of Gas Chromatographic Analysis of Conjugated Linolic Acids**  
Varga-Visi, É., Lóki, K., **Csapó, J.**  
Kaposvár University, Kaposvár, Hungary
- P-82 **Fast Derivatization Method for Analysis of Perfluorinated Organic Acids by GC**  
**Dufkova, V.**, Cabala, R.  
Charles University in Prague, Prague, Czech Republic
- P-83 **Application of Headspace Solid-Phase Microextraction Gas Chromatography for Assessment of Edible Oils Stability**  
**Gromadzka J.**, Wardencki W.  
Gdansk University of Technology, Gdansk, Poland

- P-84 **Efficiency of Fast GC**  
**Mátyási, J., Göröcs, N., Balla, J.,**  
Budapest University of Technology and Economics and B&B  
Analytics Ltd., Budapest, Hungary
- P-85 **GC-MS Separation and Identification of Two Novel Impurities Formed During the Early Part of Beraprost Synthesis**  
**Ritz, I., Kádár, M., Harsányi, R., Borkó, Á., Rozsumberszki, I.,**  
Hortobágyi, I., Havasi, G., Kardos Zs.  
Chinoin Pharmaceutical and Chemical Works Ltd., Sanofi-  
Aventis Group, Budapest, Hungary
- P-86 **Column Combinations for Comprehensive GCxGC**  
**Knapp, E.<sup>1</sup>, Benesóczki, D.<sup>2</sup>, Pál, R.<sup>3</sup>**  
<sup>1</sup> MOL Hungarian Oil and Gas Plc., Budapest, Hungary  
<sup>2</sup> Eötvös University, Budapest, Hungary  
<sup>3</sup> Today Science Ltd., Solymár, Hungary
- P-87 **Application of GC-MS for the Hairy Root Clone Selection of Tagetes patula L.**  
**Szarka, Sz.<sup>1</sup>, Héthelyi, B. É.<sup>1</sup>, Kuzovkina, I. N.<sup>2</sup>,**  
Lemberkovics, É.<sup>1</sup>, Szőke, É.  
<sup>1</sup> Semmelweis University, Budapest, Hungary  
<sup>2</sup> Timiryazev Institute of Plant Physiology, Russian Academy  
of Sciences, Moscow, Russia
- P-88 **Practical Aspects of Flow Modulated GCxGC Method Development**  
**Szekeres, Z.<sup>1</sup>, Eke, Zs.<sup>1,2</sup>, Torkos, K.<sup>1</sup>**  
<sup>1</sup> Eötvös Loránd University, Joint Research and Training  
Laboratory, Budapest, Hungary  
<sup>2</sup> Wessling International Research and Educational Center,  
Budapest, Hungary
- P-89 **Role of Mass Spectrometry for Determination of Unknown Impurities and Degradation Products of Drugs**  
**Dékány, M., Háda, V., Kótí, J.**  
Gedeon Richter Plc., Budapest, Hungary
- P-90 **Determination of Various Antibiotics by Ultra High-Performance Liquid Chromatography–Nano Quantity Analyte Detector Technique**  
**Kameník, Z., Olšovská, J. Cajthaml, T.**  
Institute of Microbiology of the ASCR, Prague, Czech  
Republic

- P-91 **The Fourier Transform Mass Spectrometry of Atorvastatin: the Fragmentation of a Molecule as we have Never Seen Before**  
**Kóti, J.**  
Gedeon Richter Plc., Budapest, Hungary
- P-92 **HPLC-ESI-MS-MS Screening of Piperidine Alkaloids from Lobelia inflata L.**  
**Kursinszki, L., Szóke, É.**  
Semmelweis University, Budapest, Hungary
- P-93 **Determination of Ciprofloxacin, Gentamicin and Vancomycin in Drug Carrier Systems**  
**Laki, M., Hajdú, M., Pápai, K., Zahár, Á., Szendrői, M., Klebovich, I., Antal, I.**  
Semmelweis University, Budapest, Hungary
- P-94 **Chemical and Microbiological Aspects of the Quantitative Analysis of Amphotericin B (Is HPLC in itself Enough for Quantification?)**  
**Matus, Z., Fittler, A., Kocsis, B., Botz, L.**  
University of Pécs, Pécs, Hungary
- P-95 **Quantification of Immunosuppressive Drugs by Liquid Chromatography-Isotope-Dilution Mass Spectrometry (LC-IDMS/MS) with Cs<sup>+</sup> Adducts**  
**Molnár, P. M.<sup>1</sup>, Kaiser, P.<sup>2</sup>, Dux, L.<sup>1</sup>, Reinauer, H.<sup>2</sup>**  
<sup>1</sup> University of Szeged, Szeged, Hungary  
<sup>2</sup> INSTAND e.V. Reference Laboratory, Düsseldorf, Germany
- P-96 **The Effect of Chromatographic Conditions on the Separation of Selected Alkaloids on Different Adsorbent by HPLC Method**  
**Petruczynik, A.**  
Medical University of Lublin, Lublin, Poland
- P-97 **HPLC-UV Assay of Tolperisone HCl from Modified Release Matrix Tablets**  
**Stiedl, B.<sup>1,2</sup>, Kiss, D.<sup>2</sup>, Ludányi, K.<sup>1</sup>, Bódis, A.<sup>2</sup>, Klebovich, I.<sup>1</sup>, Antal, I.<sup>1</sup>**  
<sup>1</sup> Semmelweis University, Budapest, Hungary  
<sup>2</sup> Gedeon Richter Plc., Budapest, Hungary

- P-98 **Method Development for Studying the Hydrolysis of Pectin (Polygalacturonic Acid Chain) by HPLC**  
**Fodor, J.<sup>1</sup>, Eszterle, M.<sup>2</sup>, Fekete, J.<sup>3</sup>, Mészáros, Á.<sup>3</sup>,  
Szentmihályi, K.<sup>1</sup>**  
<sup>1</sup> Chemical Research Center, Budapest, Hungary  
<sup>2</sup> Research Institute of Hungarian Sugar Industry, Hungary  
<sup>3</sup> Budapest University of Technology and Economics,  
Budapest, Hungary
- P-99 **Quantitative Determination of Triethyl-Amine in a Prostaglandine Product**  
**Trauer, R.**  
Sanofi-Aventis/ Chinoim, Budapest, Hungary
- P-100 **High-throughput of Tetracycline Antibiotics and its Epimers in Liquid Hog Manure Using Ultra Performance Liquid Chromatography with UV**  
**Tylová, T., Olšovská, J., Novák, P., Flieger, M.**  
Institute of Microbiology of the ASCR, Prague, Czech Republic
- P-101 **Phytochemical Analysis of Nepeta Pannonica by GC-MS and LC-MS**  
**Alberti, Á., Blazics, B., Héthelyi, É., Kéry, Á.**  
Semmelweis University, Budapest, Hungary
- P-102 **Direct Measurement of Emission of Ozone from Plants**  
**Balla, J.<sup>1</sup>, Tyihák, E<sup>2</sup>**  
<sup>1</sup> B&B Analytics Ltd. Budapest, Hungary  
<sup>2</sup> Plant Protection Institute, Hungarian Academy of Sciences, Budapest, Hungary
- P-103 **LC and LC-MS Studies on Genetically Transformed Cultures of Rubia tinctorum**  
**Bányai, P.<sup>1</sup>, Kuzovkina, I.<sup>2</sup>, Kertesy, D.<sup>1</sup>, Szarka, Sz.<sup>1</sup>,  
Blazics, B.<sup>1</sup>, Szőke, É.<sup>1</sup>**  
<sup>1</sup> Semmelweis University, Budapest, Hungary  
<sup>2</sup> Timiryazev Institute of Plant Physiology, Russian Academy of Sciences, Moscow, Russia
- P-104 **Datura Floral Nectar as a Potential Source of Intoxication: Quantitative Determination of Atropine and Scopolamine by LC-MS**  
**Boros, B., Bacsikay, I., Farkas, Á., Kilár, F., Felinger, A.**  
University of Pécs, Pécs, Hungary

- P-105 **HPLC Separation of Different Phenols from Sour Cherry on Different Reversed-Phase Columns**  
**Daood, H.G.**<sup>1</sup>, Bánáti, D.<sup>1</sup>, Sass-Kiss, Á.<sup>1</sup>, Bencze, Gy.<sup>2</sup>,  
Nyéki, J.<sup>3</sup>, Szabó, Z.<sup>3</sup>  
<sup>1</sup> Central Food Research Institute, Budapest , Hungary  
<sup>2</sup> Vichem Ltd., Budapest, Hungary  
<sup>3</sup> University of Debrecen, Debrecen, Hungary
- P-106 **Analysis of Flavonoids in Honey of Different Origin by LC/MS/ESI**  
**Duronova, K.**, Marova, I., Lichnova, A.  
Brno University of Technology, Brno, Czech Republic
- P-107 **Separation of Flavonoidic Compounds Using Liquid Chromatography with Capillary Microcolumns**  
**Fischer, J.**, Cesla, P., Zidek, R., Jandera, P.  
University of Pardubice, Pardubice, Czech Republic
- P-108 **Comparison of TLC and HPLC Methods for Determination of (-)-Epicatechin and Procyanthin B2 in Chocolate**  
**Glavnik, V.**, Simonovska, B., Vovk, I.  
National Institute of Chemistry, Ljubljana, Slovenia
- P-109 **Alteration of Iridoid Content in Plantago lanceolata L. Leaves during Improper Storage**  
**Gonda, S.**, Tóth, L., Braun, M., Vasas, G.  
University of Debrecen, Debrecen, Hungary
- P-110 **Validation of HPLC Method for Determination of Nitrates in Plant Material**  
Hegedűs, O.<sup>1</sup>, Hegedűsová, A.<sup>2</sup>, **Jakabová, S.**<sup>2</sup>, Vargová, A.<sup>2</sup>  
<sup>1</sup> Regional Authority of Public Health, Nitra, Slovakia  
<sup>2</sup> Constantine the Philosopher University in Nitra, Nitra, Slovakia
- P-111 **Extraction and Determination of Selected Flavonoids from Plant Materials by Pressurized Solvents and HPLC – Methanol versus Water**  
**Hohnová, B.**<sup>1,2</sup>, Šťavíková, L.<sup>2</sup>, Vespalcová, M.<sup>2</sup>, Karásek, P.<sup>1</sup>  
<sup>1</sup> Institute of Analytical Chemistry, ASCR, Brno, Czech Republic  
<sup>2</sup> Brno University of Technology, Brno, Czech Republic

- P-112 **HPLC-MS and Spectrophotometric Assay of the Phenolic Content of Macedonian Red and White Grape Varieties**  
**Ivanova, V.<sup>1</sup>, Dörnyei, Á.<sup>2</sup>, Kilár, F.<sup>2</sup>, Márk, L.<sup>2</sup>, Stefova, M.<sup>1</sup>, Vojnoski, B.<sup>1</sup>, Boros, B.<sup>2</sup>, Stafilov, T.<sup>1</sup>, Beleski, K.<sup>1</sup>**  
<sup>1</sup> Sts Cyril and Methodius University, Skopje, R. Macedonia  
<sup>2</sup> University of Pécs, Pécs, Hungary
- P-113 **Aroma profile of Macedonian and Hungarian Wines Assessed by GC-MS**  
**Ivanova, V.<sup>1</sup>, Kilár, F.<sup>2</sup>, Bíró, I.<sup>2</sup>, Bufa, A.<sup>2</sup>, Kostadinovik, S.<sup>1</sup>, Felinger, A.<sup>2</sup>, Vojnoski, B.<sup>1</sup>, Stefova, M.<sup>1</sup>, Mukaetov, D.<sup>1</sup>, Stafilov, T.<sup>1</sup>**  
<sup>1</sup> Sts Cyril and Methodius University, Skopje, R. Macedonia  
<sup>2</sup> University of Pécs, Pécs, Hungary
- P-114 **LC-MS Analysis of Green Tea Polyphenols**  
**Jámbor, É., Marics, B., Armbruszt, S., Montskó, G., Márk, L., Ohmacht, R.**  
University of Pécs, Pécs, Hungary
- P-115 **GC, GC/MS, HPLC, HPLC/MS Analysis of Substituted Pyrrolines and their Nitroxide Free Radical Analogues**  
**Jekő, J.<sup>1</sup>, Kálai, T.<sup>2</sup>, Sár, C.<sup>2</sup>, Hideg, K.<sup>2</sup>**  
<sup>1</sup> College of Nyíregyháza, Nyíregyháza, Hungary  
<sup>2</sup> University of Pécs, Pécs, Hungary
- P-116 **Chemical and Antioxidant Characterization of Plant Extracts with Peroxynitrite Scavenging Activity**  
**Könczöl, Á.<sup>1</sup>, Balogh, Gy. T.<sup>1</sup>, Keserű, G. M.<sup>1</sup>, Kéry, Á.<sup>2</sup>**  
<sup>1</sup> Gedeon Richter Plc., Budapest, Hungary  
<sup>2</sup> Semmelweis University, Budapest, Hungary
- P-117 **Separation of Carotenoids on Ultra-Performance Liquid Chromatographic Adsorbent with Cross-linked End-capping**  
**Daood, H. G.<sup>1</sup>, Lukács, L.<sup>2</sup>, Sólyom, K.<sup>2</sup>, Iványi, L.<sup>3</sup>**  
<sup>1</sup> Central Food Research Institute, Budapest, Hungary  
<sup>2</sup> Corvinus University-Budapest, Budapest, Hungary  
<sup>3</sup> Symetron Ltd., Budapest, Hungary
- P-118 **Various Chromatographic Techniques Combined with Different Detectors Give Exceedingly Different Total Phytosterol Concentrations in Fatty Nutrition**  
**Martelanc, M., Kržman, M., Vovk, I., Simonovska, B.**  
National Institute of Chemistry, Ljubljana, Slovenia

- P-119 **Determination of Indole-3-Acetic Acid in Must and Wine**  
**Maslov, L., Karoglan, M., Jeromel, A., Herjavec, S.,**  
**Mihaljević, M., Kozina, B.**  
University of Zagreb, Zagreb, Croatia
- P-120 **Solid Phase Extraction of Polyphenolics from Propolis**  
**Medić-Šarić, M., Pucl, M., Bojić, M.**  
University of Zagreb, Zagreb, Croatia
- P-121 **Separation and Identification of Carotenoids from a Novel Trebouxiophycean Picoalgal Strain**  
Horváth, Gy.<sup>1</sup>, Turcsin, E. I., Szabó, I.<sup>1</sup>, Molnár, P.<sup>1</sup>, Szabó, L. Gy.<sup>1</sup>,  
Deli, J.<sup>1</sup>, Somogyi, B.<sup>2</sup>, Felföldi, T.<sup>3</sup>, Solymosi, K.<sup>3</sup>, Vörös, L.<sup>2</sup>  
<sup>1</sup> University of Pécs, Pécs, Hungary  
<sup>2</sup> Balaton Limnological Research Institute of the Hungarian Academy of Sciences, Tihany, Hungary  
<sup>3</sup> Eötvös L. University, Budapest, Hungary
- P-122 **Trans-Resveratrol and Trans-Piceid Content of Hungarian Wines.**  
**Montskó, G., Jámbor, É., Ohmacht, R., Márk, L.**  
University of Pécs, Pécs, Hungary
- P-123 **Investigation of Origanum Onites Essential Oil by Overpressured Layer Chromatography, Bioautography and Phytotoxic Activity**  
Tabanca, N.<sup>1</sup>, Móricz, Á. M.<sup>2</sup>, Demirci, B.<sup>3</sup>, Baser, K. H. C.<sup>3</sup>,  
Mincsovics, E.<sup>4</sup>, Ott, P. G.<sup>2</sup>, Duke, S. O.<sup>1</sup>, Wedge, D. E.<sup>1</sup>,  
Tyihák, E.<sup>2</sup>  
<sup>1</sup> USDA, University of Mississippi, University, MS, USA  
<sup>2</sup> Plant Protection Institute, Hungarian Academy of Sciences, Budapest, Hungary  
<sup>3</sup> Anadolu University, Eskisehir, Turkey  
<sup>4</sup> OPLC-NIT, Ltd., Budapest, Hungary
- P-124 **Simultaneous Carbohydrate Chromatography and Unsuppressed Ion Chromatography in Detecting Fruit Juices Adulteration**  
**Muntean, E.**  
University of Agricultural Sciences and Veterinary Medicine, Cluj Napoca, Romania

- P-125 **Carotenoids in *Botryococcus Braunii* Strains Originating from Transylvania**  
**Muntean, E.<sup>1</sup>, Bercea, V.<sup>2</sup>, Dragoş, N<sup>3</sup>**  
<sup>1</sup> University of Agricultural Sciences and Veterinary Medicine, Cluj Napoca, Romania  
<sup>2</sup> Institute of Biological Research, Cluj Napoca, Romania  
<sup>3</sup> Babes-Bolyai University Cluj Napoca, Romania
- P-126 **Liquid Chromatographic Determination of Phenolic Compounds in Organic and Integrated Cherries and Wheats**  
**Nagy-Gasztonyi, M., Sass-Kiss, Á., Tömösközi-Farkas, R., Bánáti, D., Daood, H. G., Petróczy, I.**  
Central Food Research Institute, Budapest, Hungary
- P-127 **Analysis of Active Substances in “Czech beer”**  
**Obruca, S.<sup>1</sup>, Marova, I.<sup>1</sup>, Parilova, K.<sup>1</sup>, Muller, L.<sup>1</sup>, Zdrahal, Z.<sup>2</sup>, Miklikova, R.<sup>3</sup>**  
<sup>1</sup> Brno University of Technology, Brno, Czech Republic  
<sup>2</sup> Masaryk University of Brno, Brno, Czech Republic  
<sup>3</sup> Institute of Beer Research, Brno, Czech Republic
- P-128 **High Performance Chromatographic Assessment of Thermally Modified Wood**  
**Hofmann, T.<sup>1</sup>, Rétfalvi, T.<sup>1</sup>, Albert, L.<sup>1</sup>, Niemz, P.<sup>2</sup>**  
<sup>1</sup> University of West Hungary, Sopron, Hungary  
<sup>2</sup> ETH Zürich, Zürich, Switzerland
- P-129 **Chromatographic Identification of the Taxodiaceae Fossil Trees in the Bükkalja Lignite Formation, Bükkábrány Open Cast Mine, Hungary**  
**Albert, L.<sup>1</sup>, Rétfalvi, T.<sup>1</sup>, Hofmann, T.<sup>1</sup>, Hámor-Vidó, M.<sup>2</sup>**  
<sup>1</sup> University of West Hungary, Sopron, Hungary  
<sup>2</sup> Eötvös Loránd Geophysical Institute of Hungary, Budapest, Hungary
- P-130 **Comparison of Different Stationary Phases for the Analysis of Technologically Important Barley Proteins**  
**Šalplachta, J., Flodrová, D., Moravcová, D., Vykydalová, M., Bobál'ová, J.**  
Institute of Analytical Chemistry of the ASCR, Brno, Czech Republic
- P-131 **Use of the New SLB-IL 100 Capillary Column for the Determination of Fatty Acids in Barley and Malt**  
**Svoboda, Z., Mikulíková, R., Běláková, S., Benešová, K.**  
Research Institute of Brewing and Malting, Plc., Brno, Czech Republic

- P-132 **PEG Chromatographic Analysis in Waterlogged Wood Artifacts with GPC Technique**  
**Trznadel, M.\***, Romanik, G., Kamiński, M.  
Gdansk University of Technology, Gdansk, Poland
- P-133 **Investigation of the Carotenoid Composition of „Mamey” (Pouteria sapota)**  
**Turcsí, E.<sup>1</sup>**, Szabó, I.<sup>1</sup>, Murillo, E.<sup>2</sup>, Mosquera, Y.<sup>2</sup>, Deli, J.<sup>1</sup>  
<sup>1</sup> University of Pécs, Pécs, Hungary  
<sup>2</sup> University of Panama, Panama City, Panama
- P-134 **Argentination Based Microextraction by Packed Sorbent (MEPS) for the Analysis of FAMES by GCMS**  
**Hibbert, R.<sup>1</sup>**, **Lahoutifard, N.<sup>2</sup>**, Wynne, P.<sup>1</sup>  
<sup>1</sup> SGE Analytical Science, Ringwood, Australia  
<sup>2</sup> SGE Europe Ltd., Courtaboeuf, France
- P-135 **MEPS: A New Technique for the Analysis of Small Brominated and Chlorinated Aromatic Compounds in Wine**  
**Jönsson, S.<sup>1</sup>**, Hagberg, J.<sup>1</sup>, **Lahoutifard, N.<sup>2</sup>**, Wynne, P.<sup>3</sup>,  
Van Bavel, B.<sup>1</sup>  
<sup>1</sup> Örebro University, Örebro, Sweden  
<sup>2</sup> SGE Europe Ltd., Courtaboeuf, France  
<sup>3</sup> SGE Analytical Science, Ringwood, Australia
- P-136 **Chromatographic Evaluation of Hydrophobicity Using Micellar TLC and OPLC**  
**Janicka, M.**, Pietras-Ozga, D.  
Maria Curie-Skłodowska University, Lublin, Poland
- P-137 **Chromatographic Evaluation of Hydrophobicity – the Effect of Stationary Phase**  
**Janicka, M.**  
Maria Curie-Skłodowska University, Lublin, Poland
- P-138 **A Study on the Impact of the Different Carbon Atom Chain Lengths with Chiral Aliphatic Carboxylic Acids on the Course of Spontaneous Oscillatory Steric Conversion Running In-Vitro**  
Sajewicz, M., Gontarska, M., Kronenbach, D., Wróbel, M.,  
**Kowalska, T.**  
Silesian University, Katowice, Poland

- P-139 **A Study on the Impact of the Different Positions of the Asymmetry Centre in Carbon Chain with Chiral Aliphatic Carboxylic Acids on the Course of Spontaneous Oscillatory Steric Conversion Running In-Vitro**  
Sajewicz, M., Kronenbach, D., Gontarska, M., **Kowalska, T.**  
Silesian University, Katowice, Poland
- P-140 **Chemotaxonomic Analysis of the Essential Oil Composition with Two Different Essential-Oil Rich Sage Species (*Salvia lavandulifolia* L. and *Salvia triloba* L.) Using Different Sample Preparation Methods**  
Sajewicz, M.<sup>1</sup>, Rzepa, J.<sup>1</sup>, Wojtal, Ł.<sup>1</sup>, Staszek, D.<sup>1</sup>, Hajnos, M.<sup>2</sup>, **Kowalska, T.**<sup>1</sup>, Waksundzka-Hajnos, M.<sup>2</sup>  
<sup>1</sup> Silesian University, Katowice, Poland  
<sup>2</sup> Medical University of Lublin, Lublin, Poland
- P-141 **One- and Multidimensional Thin-Layer Chromatography for the Analysis of Phenolic Acids and Flavonoids from the Different *Salvia* Species**  
Sajewicz, M.<sup>1</sup>, Cieśla, Ł.<sup>2</sup>, Staszek, D.<sup>1</sup>, Wojtal, Ł.<sup>1</sup>, Waksundzka-Hajnos, M.<sup>2</sup>, **Kowalska, T.**<sup>1</sup>  
<sup>1</sup> Silesian University, Katowice, Poland  
<sup>2</sup> Medical University of Lublin, Lublin, Poland
- P-142 **TLC in Strong Magnetic Fields**  
**Malinowska, I.**<sup>1</sup>, Malinowski, H.<sup>2</sup>, Studziński, M.<sup>1,2</sup>, Niewiadomy, A.<sup>3</sup>, Matysiak, J.<sup>3</sup>  
<sup>1</sup> Maria Curie-Skłodowska University, Lublin, Poland  
<sup>2</sup> Veksler and Baldin Laboratory of High Energy Physics, of Joint Institute for Nuclear Research Dubna, Russia  
<sup>3</sup> Agricultural University in Lublin Lublin, Poland
- P-143 **The Influence of the Electric Field on the Retention and Hydrophobicity of some PAH**  
Niezabitowska, K., **Malinowska, I.**, Cichosz-Pośladek, I.  
Maria-Curie-Skłodowska University, Lublin, Poland
- P-144 **Comparison of MEKC, HPLC and TLC Methods for Separation of Anthraquinone Dyes**  
**Svobodová, E.**, Vaníková, J., Bosáková Z., Pacáková, V.  
Charles University in Prague, Prague, Czech Republic

P-145      **A New Procedure for Separation of Complex Mixtures by Multidimensional Planar Chromatography in Combination with Diode Array Scanning Densitometry (MDPC-DAD) and High Performance Liquid Chromatography Coupled with DAD Detector (HPLC-DAD)**

**Tuzimski, T.**

University of Lublin, Lublin, Poland

P-146      **Application of SPE-HPLC-DAD and SPE-TLC-DAD to the Determination of Pesticides in Water Samples from Zemborzycki Reservoir (Lublin, southeastern Poland)**

**Tuzimski, T.**

Medical University of Lublin, Lublin, Poland

MP-1–MP-9    **See Poster Section I**

17:30-18:30    **Meeting of EuSSS representatives – Room Thalassa**

20:00            **Grill Party – Garden of Hotel Azúr**

Music: Pilischer Sramli Band

## Parallel Session VII

**Chairs: Buszewski, B., Haddad, P. R.**

- 8:30-9:00    **Column Length as an Optimization Factor to Speed Up HPLC Separations and Method Development**  
L-35           Cabooter, D.<sup>1</sup>, Eeltink, S.<sup>2</sup>, Swart, R.<sup>2</sup>, Desmet, G.<sup>1</sup>  
<sup>1</sup> Vrije Universiteit Brussel, Brussels, Belgium  
<sup>2</sup> Dionex, Amsterdam, The Netherlands
- 9:00-9:30    **Advanced Mass Spectrometric Approaches for the Analysis of Analytes on Planar Separation Media**  
L-36           Kertész, V., Van Berkel, G. J.  
Oak Ridge National Laboratory, Oak Ridge, USA
- 9:30-9:50    **Multiresidue Analysis of Pollutants as Their Trimethylsilyl Derivatives, by Gas Chromatography- Mass spectrometry**  
L-37           Sebők, Á., Vasanits-Zsigrai, A., Helenkár, A., Záray, Gy., Molnár-Perl, I.  
L. Eötvös University, Budapest, Hungary
- 9:50-10:10    **Towards a Solution for Viscous Heating in Ultra-High Pressure Liquid Chromatography**  
L-38           Broeckhoven, K.<sup>1</sup>, Billen, J.<sup>1</sup>, Verstraeten M.<sup>1</sup>, Choikhet K.<sup>2</sup>, Dittmann, M.<sup>2</sup>, Rozing, G.<sup>2</sup>, Desmet, G.<sup>1</sup>  
<sup>1</sup> Vrije Universiteit Brussel, Brussels, Belgium  
<sup>2</sup> Agilent Technologies, Waldbronn, Germany
- 10:10-10:30    **UHPLC; Does the Practice always Meet the Theory?**  
L-39           Fekete, Sz.<sup>1</sup>, Ganzler, K.<sup>1</sup>, Fekete, J.<sup>2</sup>  
<sup>1</sup> Gedeon Richter Plc., Budapest, Hungary  
<sup>2</sup> Budapest University of Technology and Economics, Budapest, Hungary
- 10:30-10:45    **HPLC-Chip/MS Technology as a Highly Sensitive and Flexible Separation Platform in Bioanalytical Workflows**  
ML-5           Trojer, L.  
Agilent Technologies, Waldbronn, Germany
- 10:45-11:15    **Coffee Break & Exhibition**

## Parallel Session VIII

**Chairs:** Sarzanini, C., Šegudović, N.

- |                     |  |
|---------------------|--|
| 8:30-9:00<br>L-40   | <b>New Polysaccharide-based Chiral Materials for Liquid Phase Enantioseparation Techniques</b><br><b>Chankvetadze, B.</b><br>Tbilisi State University, Tbilisi, Georgia  |
| 9:00-9:30<br>L-41   | <b>Using of Chiral Stationary Phases in HPLC</b><br><b>Lehotay, J., Škubák, J.</b><br>Slovak University of Technology, Bratislava, Slovakia  |
| 9:30-9:50<br>L-42   | <b>Molecular Modeling of Enantioseparation of Phenylazetidin Derivatives by Cyclodextrins</b><br><b>Hazai, I.<sup>1</sup>, Varga, G.<sup>2</sup>, Szemán, J.<sup>3</sup>, Szente, L.<sup>3</sup>, Hári, P.<sup>4</sup>, Hazai, E.<sup>1</sup>, Bikádi, Zs.<sup>1</sup></b><br><sup>1</sup> VirtuaDrug Ltd, Budapest, Hungary<br><sup>2</sup> ChiroQuest Ltd, Budapest, Hungary<br><sup>3</sup> CycloLab R&D Ltd, Budapest, Hungary<br><sup>4</sup> Delta Informatika Zrt., Budapest, Hungary |
| 9:50-10:10<br>L-43  | <b>Application of Model-Based Approaches to Predict Peptide Mobilities in CZE</b><br><b>Mittermayr, S.<sup>1,2</sup>, Olajos, M.<sup>3</sup>, Chován, T.<sup>3</sup>, Guttman, A.<sup>1,2</sup></b><br><sup>1</sup> Horváth Laboratory of Bioseparation Sciences, University of Debrecen, Hungary<br><sup>2</sup> University of Innsbruck, Austria<br><sup>3</sup> University of Pannonia, Veszprém, Hungary   |
| 10:10-10:30<br>L-44 | <b>Application of the Eluent Back Flush in Column Liquid Chromatography</b><br><b>Kamiński, M., Romanik, G., Trznadel, M., Skrzypczak, A.</b><br>Politechnika Gdańsk, Gdańsk, Poland   |
| 10:30-10:45<br>ML-6 | <b>LCMS Technology for Identification and a Quantification of Biotoxines</b><br><b>Oros, R.</b><br>Shimadzu Austria GmbH., Korneuburg, Austria   |
| 10:45-11:15         | <b>Coffee Break &amp; Exhibition</b>   |

## **Plenary Session III**

**Chairs:** Corradini, D., Szepesy, L.

- 11:15-11:45 L-47 **Performance of HPLC Columns Packed with Very Fine Particles. Consequences of the Heat Effect**  
Gritti, F., Kaczmarski, K., **Guiochon, G.**  
University of Tennessee, Knoxville, USA

11:45-12:15 L-46 **Chromatography of Polymers: Not by Size Alone**  
**Schoenmakers, P.**  
University of Amsterdam, Amsterdam, The Netherlands

12:15-12:45 L-45 **Multidimensional Capillary GC with MS and NMR Spectroscopy: Tools of the Chemical Characterisation Trade**  
**Marriott, P.**  
RMIT University, Melbourne, Australia

12:45-12:55 **Poster Award Ceremony**

12:55-13:05 **Closing Remarks**

13:05 **Lunch**