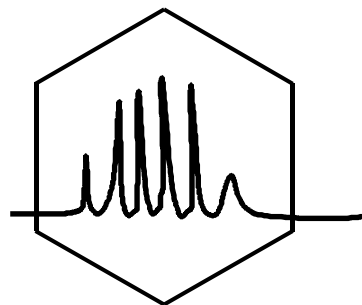


**INSTITUTE OF CHEMISTRY, UNIVERSITY OF SILESIA,  
KATOWICE, POLAND**



**THE XXXV<sup>th</sup>  
SYMPOSIUM**

**CHROMATOGRAPHIC METHODS  
OF INVESTIGATING THE ORGANIC COMPOUNDS**

**MAY 30<sup>th</sup> – JUNE 1<sup>th</sup>, 2012**

**KATOWICE – SZCZYRK**

**POLAND**

**PROGRAM**

## **SCIENTIFIC COMMITTEE OF THE SYMPOSIUM**

Teresa Kowalska (Katowice, Poland)  
Jarosław Polański (Katowice, Poland)  
Danica Agbaba (Belgrade, Serbia)  
Bezhan Chankvetadze (Tbilisi, Georgia)  
Josef Jampilek (Brno, Czech Republic)  
Huba Kalasz (Budapest, Hungary)  
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Hubert Paelinck (Ghent, Belgium)  
Kornelia Tekes (Budapest, Hungary)  
Živoslav Tešić (Belgrade, Serbia)  
Yvan Vander Heyden (Brussels, Belgium)  
Adam Voelkel (Poznań, Poland)  
Monika Waksmundzka-Hajnos (Lublin, Poland)  
Irena Vovk (Ljubljana, Slovenia)

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Violetta Kozik (Katowice, Poland)  
Marcin Rojkiewicz (Katowice, Poland)  
Dorota Staszek (Katowice, Poland)  
Grzegorz Zięba (Katowice, Poland)

**SESSION I WEDNESDAY, MAY 30<sup>th</sup>, 2012**

**CHAIRPERSONS:** D. Agbaba and B. Chankvetadze

**9.25 – 9.30 am OPENING ADDRESS**

**9.30 – 10.00 am**

**1.** QSAR, QSPR and QSRR in terms of 3-D-MoRSE descriptors for *in silico* screening of clofibric acid analogues

R. Kaliszan

**10.00 – 10.30 am**

**2.** A novel Flowing Atmospheric Pressure Afterglow (FAPA) ion source for direct analysis of organic compounds

J. Silberring

**10.30 -11.00 am**

**3.** Chemometrics LCMS/MS of the absorption, metabolism and biochemical effects of soy phytoestrogens

O. L. Ogegbo

**11.00 – 11.30 am**

**4.** The liquid chromatographic guide to the galaxy of organic impurities

A. Malenović

**1.00 pm LUNCH**

**SESSION II WEDNESDAY, MAY 30<sup>th</sup>, 2012**

**CHAIRPERSONS:** R. Kaliszan and Ž. Tešić

**2.00 – 2.30 pm**

**5.** Advances in investigation of hydrophilic and lipophilic properties of drugs

J. Jampilek

**2.30 – 3.00 pm**

**6.** Inverse Gas Chromatographic examination of potential fillers in abrasive industry

A. Voelkel

**3.00 – 3.30 pm**

**7.** A closer look on the meaning of “extrapolated retention” and “average retention” concepts

Ł. Komsta

**3.30 – 4.00 pm**

**8.** UHPLC as a tool for purity analysis and quality control of environmental samples and polycyclic aromatic hydrocarbons

A. S. Swinarew

**POSTER SESSION I WEDNESDAY, MAY 30<sup>th</sup>, 2012**

**CHAIRPERSONS:** Ł. Komsta and O. L. Ogegbo

**4.00 – 5.00 pm (COFFEE BREAK)**

**6.00 pm BONFIRE**

**SESSION III THURSDAY, MAY 31<sup>th</sup>, 2012**

**CHAIRPERSONS** I. Vovk and J. Jampilek

**9.30 – 10.00 am**

**9.** Recent studies on enantiomer separation mechanisms in aqueous and non-aqueous capillary electrophoresis

B. Chankvetadze

**10.00 – 10.30 am**

**10.** Separation strategies in HPLC for the enantiomeric separation of pharmaceuticals on polysaccharide-based chiral stationary phases

A. A. Younes

**10.30 – 11.00 am**

**11.** Update of a generic chiral screening step on polysaccharide-based chiral stationary phases in supercritical fluid chromatography

D. Mangelings

**11.00 – 11.30 am**

**12.** Oligopeptidization oscillations of binary amino acid mixtures in solution

T. Kowalska

**1.00 pm LUNCH**

**SESSION IV THURSDAY, MAY 31<sup>th</sup>, 2012**

**CHAIRPERSONS:** D. Milijković-Opsenica and Y. Vander Heyden

**2.00 - 2.30 pm**

**13.** Chromatography of the major dietary carotenoids

I. Vovk

**2.30 – 3.00 pm**

**14.** TLC in biochemical and pharmaceutical research

M. Waksmundzka-Hajnos

**3.00 – 3.30 pm**

**15.** TLC coupled with biodetection for studying antioxidant structure-activity relationships of polyphenols

Ł. Cieśla

**3.30 - 4.00 pm**

**16.** Screening of polyphenolic profile of Serbian propolis by UPLC-LTQ-Orbitrap Mass Spectrometry

F. Andrić

**POSTER SESSION II THURSDAY, MAY 31<sup>th</sup>, 2012**

**CHAIRPERSONS:** A. Malenović and Ł. Cieśla

**4.00 – 6.00 pm (COFFEE BREAK)**

**6.00 pm DINNER**

**SESSION V FRIDAY, JUNE 1<sup>th</sup>, 2012**

**CHAIRPERSONS:** M. Waksmundzka-Hajnos and A. Voelkel

**10.00 – 10.30 am**

**17.** HPLC analysis of pyridinium aldoximes

H. Kalasz

**10.30 – 11.00 am**

**18.** Molecular modelling of a template substitute and monomers used in molecular imprinting for aflatoxin B1 micro-HPLC analysis

M. Wyszomirski

**11.00 – 11.30 am**

**19.** Application of Inverse Gas Chromatography in the characterization of pharmaceutical hybrid materials

J. Kołodziejek

**11.30 am            CLOSING REMARKS**

**12.00 am    LUNCH**

## POSTER SESSION I

1.

Determination of the critical factors in chiral supercritical fluid chromatography by use of a Plackett-Burman design

K. De Klerck, D. Mangelings, Y. Vander Heyden

2.

Fused-core stationary phases for fingerprint development of *Phyllanthus* and *Mallotus* species

G. Parewyck, Ch. Tistaert, B. Dejaegher, D. Mangelings, Y. Vander Heyden

3.

Pharmacophore-based database mining for probing fragmental drug-likeness of diketo acid analogues

A. Bąk, K. Jarzembek, V. Kozik, T. Magdziarz, J. Polanski

4.

Thin layer chromatography data in QSAR study of compounds with affinity for serotonin receptors

G. Żydek, E. Brzezińska

5.

HPLC analysis of aripiprazole and its impurities

N. Djordjevic Filijovic, B. Maricic, K. Nikolic, D. Agbaba



6.

Terpenes as biologically active constituents of medicinal plants

W. Jesionek, I. Choma, B. Majer-Dziedzic, E. Fornal

7.

A GC/MS and TLC study of the volatile fraction contained in creeping thyme (*Thymus serpyllum* L.) and common thyme (*Thymus vulgaris* L.)

M. Sajewicz, J. Rzepa, D. Staszek, K. Klauza, A. Waligóra, M. Waksmundzka-Hajnos, T. Kowalska

8.

A GC/MS and TLC study of the volatile fraction contained in rosemary (*Rosmarinus officinalis* L.), narrow-leaved lavender (*Lavandula angustifolia*), anise (*Pimpinella anisum* L.), and the fruit of clove tree (*Eugenia caryophyllata* Thunb.)

J. Rzepa, M. Sajewicz, D. Staszek, K. Dolibog, P. Marzec, M. Waksmundzka-Hajnos, T. Kowalska

9.

A TLC, HPLC/DAD, and HPLC/ELSD study of the phenolics contained in two sage species (*Salvia triloba* and *Salvia staminea*), and in two thyme species (*Thymus serpyllum* L. and *Thymus vulgaris* L.)

M. Sajewicz, D. Staszek, M. Cieřlik, A. Kołaczkiwicz, M. Waksmundzka-Hajnos, T. Kowalska

10.

A TLC, HPLC/DAD, and HPLC/ELSD study of the phenolics contained in two dragon's head (*Dracocephalum moldavica* L.) varieties

M. Sajewicz, D. Staszek, S. Kwiatkowski, A. Perek, M. Waksmundzka-Hajnos, T. Kowalska

11.

Simultaneous multiple development HPTLC quantification of water- and oil soluble sunscreens

A.W. Sobańska, J. Pyzowski

12.

Quantification of sunscreen 2-phenylbenzimidazole-5-sulfonic acid in bathing water samples by TLC/densitometry with fluorescent detection

A.W. Sobańska, K. Derecka, J. Pyzowski

13.

Quantification of sunscreen benzophenone-4 in shampoo samples by Normal-Phase Thin Layer Chromatography/densitometry

A.W. Sobańska, K. Kałębasiak, J. Pyzowski

## POSTER SESSION II

14.

Complex-numbers representation of the retention in two-dimensional TLC

Ł. Komsta

15.

Assessment of  $\beta$ -lactams retention in hydrophilic interaction chromatography applying Box – Behnken design

M. Jovanović, T. Rakić, B. Jančić Stojanović, A. Malenović

16.

The study of azole antifungals retention behavior by experimental design and artificial neural networks

A. Vemić, T. Rakić, N. Kostić, B. Jančić Stojanović, A. Malenović

17.

Determination of hyaluronidase activity by new HPCE method.

J. Matysiak, P. Dereziński, B. Urbaniak, A. Klupczyńska, Z.J. Kokot

18.

RPTLC determination of lipophilicity parameters of polydentate Schiff bases obtained from *o*-hydroxyaryl aldehydes and ketones with aromatic diamines

N. Stevanović, A. Blagus, A. Lolić, M. Natić, Ž. Tešić, R. Baošić

19.

Utilization of charge-transfer gas chromatography for analysis of formation water

P. Bielecki, D. Skraburska, W. Wasiak

20.

Rapid liquid chromatography-hybrid OrbiTrap mass spectrometry studies of polyphenols in Serbian honey

S. Kečkeš, U.M. Gašić, D.Č. Dabić, D.M. Milojković-Opsenica, M.M. Natić, Ž.Lj. Tešić

21.

consequences of cadaverine and piperidine during the production of dry fermented sausages for the formation of *N*-nitrosopiperidine

E. De Mey, H. D. Maere, L. Dewulf, T. Kowalska, M-C. Peeters, G. Derdelinckx, H. Paelinck

22.

TLC and magneto-TLC as a method for investigation on selected d- and f-electron ion element complexes with organic ligands

A. Wronka, W. Ferenc and I. Malinowska

23.

2-Phenylpropionic acid as molecular rotor in thin-layer chromatography systems

M. Knaś, M. Sajewicz, T. Kowalska, J. Polański

24.

Polarimetric detection in high-performance liquid chromatography and its intrinsic weakness

M. Knaś, M. Sajewicz, J. Polański, T. Kowalska

25.

Achiral HPLC/DAD and HPLC/ELSD applied to investigation of the oscillatory peptidization with *L*-Pro, *L*-Hyp, and *L*-Pro-*L*-Hyp

M. Sajewicz, M. Sławacka, G. Sztafińska, T. Kowalska

26.

Application of the chiral TLC to enantioseparation of *DL*-proline

M. Sajewicz, M. Matlengiewicz, M. Juziuk, M. Penkala, M. Weloe, T. Kowalska

27.

Better or faster? That is a question! Analysis of PAHs (polycyclic aromatic hydrocarbons) by UHPLC utilizing multiple detection methods

S. Golba, A.S. Swinarew, J. Gabor, Z. Grobelny, B. Swinarew, M. Szklarska