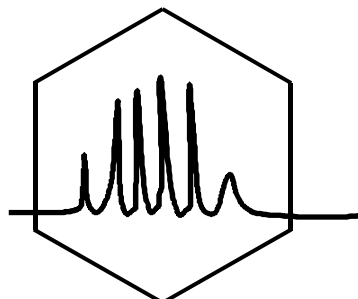


**INSTITUTE OF CHEMISTRY, UNIVERSITY OF SILESIA,
KATOWICE, POLAND**



**THE XXXIIIrd
SYMPOSIUM**

**CHROMATOGRAPHIC METHODS
OF INVESTIGATING THE ORGANIC COMPOUNDS**

MAY 25th – 27th, 2010

KATOWICE – SZCZYRK

POLAND

PROGRAM

SCIENTIFIC COMMITTEE OF THE SYMPOSIUM

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Jarosław Polański (Katowice, Poland)
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Bezhan Chankvetadze (Tbilisi, Georgia)
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Yvan Vander Heyden (Brussels, Belgium)
Werner Verschelde (Ghent, Belgium)
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Dorota Staszek (Katowice, Poland)
Łukasz Wojtal (Katowice, Poland)
Grzegorz Zięba (Katowice, Poland)

SESSION I TUESDAY, MAY 25th, 2010

CHAIRPERSONS: F. Geiss and Y. Vander Heyden

9.25 – 9.30 am OPENING ADDRESS

9.30 – 10.00 am

1. Application of cyclodextrins as chiral selectors in capillary electrophoresis:
Recent studies on enantioseparation and chiral recognition mechanisms
B. Chankvetadze

10.00 – 10.30 am

2. Use of chlorinated polysaccharide-based chiral stationary phases to update generic separation strategies for capillary electrochromatography
A. Hendrickx, D. Mangelings, B. Chankvetadze, Y. Vander Heyden

10.30 -11.00 am

3. Comparison of different chromatographic supports for liquid chromatography applied to the separation of josamycin and erythromycin
L. Van den Bossche, A. Van Schepdael, J. Hoogmartens, E. Adams

11.00 – 11.30 am

4. Separation of high polar glycosidic compounds from *Verbascum* sp. flower extracts by means of hydrophilic interaction thin-layer chromatography
Ł. Cieśla, M. Ł. Hajnos, M. Waksmundzka-Hajnos

11.30 – 12.00 am COFFEE BREAK

SESSION II TUESDAY, MAY 25th, 2010

CHAIRPERSONS: B. Chankvetadze and J. Polański

12.00 – 12.30 am

5. Drug impurity profiling. A methodology for method development

Y. Vander Heyden

12.30 – 1.00 pm

6. Thin-layer chromatography for fingerprinting and screening the biological activity of plant extracts

M. Waksmundzka-Hajnos, Ł. Cieśla

1.00 – 1.30 pm

7. On alternative fingerprinting solutions in phytochemical research

T. Kowalska, M. Waksmundzka-Hajnos, M. Sajewicz

1.30 – 2.00 pm

8. Approaching the quality assurance of artesunate

A. Koch

2.00 pm LUNCH

POSTER SESSION I TUESDAY, MAY 25th, 2010

CHAIRPERSONS: W. Verschelde and Ł. Komsta

3.30 – 5.30 pm

6.00 pm BONFIRE

SESSION III WEDNESDAY, MAY 26th, 2010

CHAIRPERSONS: D. Agbaba and M. Waksmundzka-Hajnos

9.00 – 9.30 am

9. Teaching computers chemistry: on-line technologies in chemoinformatics

J. Polański

9.30 – 10.00 am

10. The renaissance of additive schemes for evaluation of retention indices in gas chromatography

I. G. Zenkevich

10.00 – 10.30 am

11. Hansen solubility parameters – their determination by IGC and Applications

A. Voelkel, K. Adamska, B. Strzemiecka

10.30 – 11.00 am

12. Modeling of the chromatographic retention from organic modifier content by different equations- theoretical comparison and practical aspects

Ł. Komsta

11.00 -11.30 am COFFEE BREAK

SESSION IV WEDNESDAY, MAY 26th, 2010

CHAIRPERSONS: I. Zenkevich and A. Voelkel

11.30 -12.00 am

13. Mapping drug architecture by MoStBioDat - rapid screening of catechol motifs

A. Bąk, T. Magdziarz, A.Kurczyk, J. Polański

12.00 -0.30 pm

14. Drug metabolism development concepts and its bioanalytical technics

I. Klebovich

0.30 – 1.00 pm

15. Evaluation of methacrylate-based monolithic stationary phases for the analysis of drug molecules in the capillary format

I. Tanret, D. Mangelings, Y. Vander Heyden

1.00 – 1.30 pm

16. Multidimensional SHIMADZU chromatography

M. Szklarczyk

2.00 pm LUNCH

POSTER SESSION II WEDNESDAY, MAY 26th, 2010

CHAIRPERSONS: D. Mangelings and L. Vanden Bossche

3.30 – 5.30 pm (COFFEE BREAK)

6.00 pm DINNER

SESSION V THURSDAY, MAY 27th, 2010

CHAIRPERSONS: D. Mangelings and Z. Tesić

9.30 – 10.00 am

17. A comparative study of lipid composition of the brain of chicken and rat during myelination; A chromatographic-densitometric analysis

F. Helmy, A. Morris

10.00 – 10.30 am

18. Two dimensional separation of amino acids with thin-layer chromatography and pressurized planar electrochromatography in normal and reversed phase systems

A. Chomiccki, K. Kloc, E. Materna-Witkowska, T. H. Dzido

10.30 – 11.00 am

19. The use of technology in-needle extraction in the determination of organic compounds

M. Pietrzyńska, K. Bielicka-Daszkiewicz, A. Voelkel

11.00 – 11.30 am

20. Chosen strategy of basic drugs analysis in RP-HPLC systems

J. Flieger

11.30 – 12.00 am

21. The LC/MS/MS analysis of the nucleation precursors in the formation of secondary organic aerosols (SOA)

B. Witkowski, T. Gierczak

12.00 am CLOSING REMARKS

12.00 -12.30 am COFFEE BREAK

12.30 pm LUNCH

POSTER SESSION I

1.

Effect of mobile phase composition on the overall elution process in thin-layer chromatography

W. Prus, K. Kaczmariski

2.

Study of porous materials by IGC/flash thermodesorption

M. Kasperkowiak, B. Strzemiecka, A. Voelkel

3.

Increasing the reproducibility of GC retention indices by modifying their measurements

E.S. Ivleva, I.G. Zenkevich

4.

Hydrophilic interaction planar chromatography of geometrical isomers of some Co(III) complexes

K. Salem A. M. Shweshein, P. Ristivojević, A. Radoičić, F. Andrić, Ž. Tešić, D.M. Milojković-Opsenica

5.

Comparison of chromatographic retention parameters of several basic compounds obtained on different stationary phases, i.e. C18 and phenyl bonded silica and various ionic liquids added to organic aqueous eluent systems

J. Flieger, A. Kieszko

6.

On spontaneous oscillatory condensation of phenylacetic acids in aqueous ethanol

M. Sajewicz, M. Leda, M. Gontarska, D. Kronenbach, E. Berry, I.R. Epstein, T. Kowalska

7.

On spontaneous oscillatory condensation of *S*-(+)-ketoprofen in acetonitrile

M. Sajewicz, M. Leda, M. Gontarska, D. Kronenbach, E. Berry, I.R. Epstein, T. Kowalska

8.

Chromatographic behavior of chosen basic drugs on cyanopropyl bonded silica gel eluted with organic aqueous eluent systems modified with ionic liquids

J. Flieger, S. Sas

9.

Application of micellar TLC in studying lipophylic properties of organic compounds

K. Stępnik, M. Janicka

10.

Revealing the structures of isomeric alkyl arenes using additive evaluation of gas chromatographic retention indices

A.I. Ukolov, I.G. Zenkevich

11.

Automatic interpretation of GC-MS data in toxicological screening

A.I. Ukolov, S.V. Vasilevsky, A.I. Tiunov, N.S. Khlebnikova, A.S. Radilov,
E.I. Savelieva

12.

Application of gas chromatography in a comparative study of biomass,
lignite and hard coal steam gasification

A. Smoliński, N. Howaniec

13.

TLC densitometric investigation of the degradation of 4-chlorophenol using
advanced oxidation processes (AOPs)

M. Natić, J. Veljkovic, D. Dabić, D. Milojković-Opsenica, B. Dojčinović, G.
Roglić, D. Manojlović, Ž. Tešić

14.

Determination of ethyl 2-cyanoacrylate in workplace air

J. Kowalska

15.

GC/MS analysis of some dialkyl esters of 1,2-cyclohexanedicarboxylic acid

E. Dziwiński, A. Tasarska, J. Lach

16.

Determination of aziridine in workplace air by HPLC method

A. Jeżewska

17.

BioArena – non analytical application of planar chromatography

M. Janicka, E. Tyihák, B. Ościk-Mendyk, K. Stępnik

18.

A comparison of the essential oil fingerprints derived from selected sage (*Salvia*) species with use of thin-layer chromatography directly and indirectly coupled with mass spectrometry

M. Sajewicz, Ł. Wojtal¹, M. Natić, M. Waksmundzka-Hajnos, T. Kowalska

19.

A comparison of the phenolic compound fingerprints derived from selected sage (*Salvia*) species with use of thin-layer chromatography directly and indirectly coupled with mass spectrometry

M. Sajewicz, D. Staszek, M. Natić, M. Waksmundzka-Hajnos, T. Kowalska

POSTER SESSION II

1.

Role of biogenic amines in the formation of *N*-nitrosamines during meat processing

G. Drabik-Markiewicz, E. De Mey, S. Impens, W. Verschelde, T. Kowalska, Y. Vander Heyden, H. Paelinck

2.

Development of the method for determination of ziprasidone and its impurities

M. Pavlović, M. Malešević, K. Nikolić, D. Agbaba

3.

Spirocyclopropane-type sesquiterpene hydrocarbons from *Schinus terebinthifolius* Raddi

R. Richter, S. H. von Reuß

4.

Spectrophotometric determination of the sum of flavonoids contained in twenty different sage (*Salvia* L.) species and the analysis of the sage extracts by means of HPLC-DAD and HPLC-ELSD

M. Sajewicz, D. Staszek, M. Waksmundzka-Hajnos, T. Kowalska

5.

Chromatographic and spectroscopic analysis of essential oils from *Salvia lavandulifolia* L. and *Salvia triloba* L.

M. Sajewicz, M. Matlengiewicz, J. Rzepa, Ł. Wojtal, M. Hajnos, M. Waksmundzka-Hajnos, T. Kowalska

6.

Determination of lipophilicity by TLC revisited - a comparative study on several techniques with simple molecule model solute set

Ł. Komsta, R. Skibiński, A. Gumieniczek, A. Berecka, B. Radkiewicz, M. Radoń

7.

HPLC method determination of formaldehyde released from chosen root canal sealers

M. Kantor Boruta, A. Jończyk, M. Lisowska-Kuźmich, W. Bojar

8.

Selective extraction of polar organic compounds as the key stage of chemical warfare metabolites identification in biomedical samples

E.S Ivleva., N.L Koryagina., N.S Khlebnikova, E.I.Savelieva

9.

GC/MS analysis of the urine for metabonomic research of autistic children

J. Kałużna-Czaplińska, E. Socha, A. Sokołowska, J. Rynkowski

10.

Urinary dicarboxylic acids in autism

J. Kałużna-Czaplińska, E. Socha, A. Sokołowska, J. Rynkowski

11.

Determination of the level of *D*-arabinitol and *D-/L*-arabinitol ratio in urine of autistic children using gas chromatography/electrone capture detection

W. Gryś, J. Kałużna-Czaplińska, J. Rynkowski

12.

Determination of the level of fumaric acid in urine of autistic children using SPE-HPLC

W. Gryś, J. Kałużna-Czaplińska, J. Rynkowski

13.

Urinary level of cysteine and mercury in autistic children

J. Kałużna-Czaplińska, M. Michalska, J. Rynkowski

14.

Determination of the level of homocysteine in urine of autistic children before and after a diet using gas chromatography/mass spectrometry

J. Kałużna-Czaplińska, M. Michalska, J. Rynkowski

15.

Methods of determination selected priority substances in water samples

I. Fulara, J. Wypych

16.

Determination of nicotine in hair by GC-NPD

K. Tyrpień and C. Dobosz

17.

Determination of lipophilicity of tritolyldipyrromethane derivatives using TLC

G. Zięba, M. Rojkiewicz, K. Jarzembek, V. Kozik, A. Jarczyk, M. Łannik,

P Kuś

18.

Lipophilicity of new potential photodynamic therapy agents

M. Rojkiewicz, G. Zięba, V. Kozik, K. Jarzembek, A. Jarczyk, P. Kuś

19.

Size exclusion chromatography in the study of anionic polymerization of selected oxirane and thirane monomers

A. S. Swinaew, J. Jurek, M. Szklarska, B. Nowakowski, P. Płatek, B.

Swinarew, A. Stolarzewicz