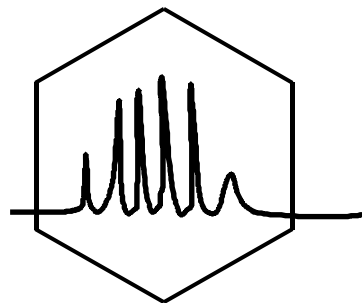


**INSTITUTE OF CHEMISTRY, UNIVERSITY OF SILESIA,
KATOWICE, POLAND**



**THE XXXVIIIth
SYMPOSIUM**

**CHROMATOGRAPHIC METHODS
OF INVESTIGATING THE ORGANIC COMPOUNDS**

MAY 27th-29th, 2015

**KATOWICE – SZCZYRK
POLAND**

PROGRAM

SCIENTIFIC COMMITTEE OF THE SYMPOSIUM

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SESSION I WEDNESDAY, MAY 27th, 2015

CHAIRPERSONS: Danica Agbaba and Monika Waksmundzka-Hajnos

9.25 – 9.30 am **OPENING ADDRESS** (T. Kowalska; in memory of Dr. habil. Friedrich Geiss)

9.30 – 10.00 am

1. Characterization and classification of stationary phases in SFC (and HPLC)

Ch. Galea, D. Mangelings, Y. Vander Heyden

10.00 – 10.20 am

2. Method development for impurity profiling in supercritical fluid chromatography: The selection of a dissimilar set of stationary phases

Ch. Galea, D. Mangelings, Y. Vander Heyden

10.20 -10.40 am

3. Retention behavior of model compounds in thin layer chromatography with novel green mobile phases

Ł. Komsta, R. Skibiński, K. Modelska, A. Mularczyk, E. Piękoś

10.40 – 11.10 am

4. Chromatographic columns for HPLC: An overview of today's columns technology and their applications for analysis of some pharmaceutical products in drug quality control laboratories

M. Khalifa, O. El- Sayed Omar

11.10 – 11.40 am

5. TNF- α analysis and characteristic by the use of combined chromatography and mass spectrometry generated under influence of various genospecies of *Borrelia burgdorferi* sensu lato

A. Swinarew

11.40 – 12.00 am

6. Multi-dimentional chromatographic systems coupled with mass spectrometry

P. Stalica (Shim-Pol A. Borzymowski)

1.00 pm LUNCH

SESSION II WEDNESDAY, MAY 27th, 2015

CHAIRPERSONS: Huba Kalasz and Ivan Vander Heyden

2.00 – 2.30 pm

7. Chemical changes in resins and relations with the mechanical properties of abrasive articles

A. Voelkel, B. Strzemiecka, J. Zięba-Palus, T. Lachowicz

2.30 – 3.00 pm

8. Impact of gas sampling in polymeric bags on the quality of quantitative VOC measurements: a critical evaluation

J. Van Durme

3.00 – 3.30 pm

9. Non-chromatographic applications of porous monolithic materials

M. Pietrzyńska, A. Voelkel

POSTER SESSION I WEDNESDAY, MAY 27th, 2015

CHAIRPERSONS: Josef Jampilek and Jim Van Durme

4.00 – 5.30 pm

4.00 – 5.30 pm COFFEE BREAK

6.00 pm BONFIRE

SESSION III THURSDAY, MAY 28th, 2015

CHAIRPERSONS: Kornelia Tekes and Hubert Paelinck

9.30 – 10.00 am

10. Thin-layer chromatography with biological detection as a method for screening drugs candidates in natural mixtures

M. Waksmundzka-Hajnos

10.00 – 10.30 am

11. Analysis of food supplements by planar chromatography

I. Vovk, V. Glavnik, A. Albreht, B. Simonovska

10.30 – 11.00 am

12. Detection and characterization of antibacterial components of *Onopordum acanthium*

Á. M. Móricz, Á. Alberti, A. Böszörményi, Sz. Béni, P. G. Ott

11.00 – 11.30 am

13. Natural products from seagrasses

Ch. Zidorn

11.30 -11.50 am

14. Hyphenated techniques in phenolic profiling of wild fruits grown in Serbia

D. Dabić, Ž. Tešić, V. Glavnik, I. Vovk, M. Fotirić, M. Natić

11.50 – 12.10 pm

15. Innovative sample introduction, extraction and separation technology for analytical systems such as HPLC, MS, GC and NMR

E. Cybulska (Donau Lab Sp.z o.o.)

1.00 pm LUNCH

SESSION IV THURSDAY, MAY 28th, 2015

CHAIRPERSONS: Irena Vovk and Łukasz Komsta

2.00 - 2.30 pm

16. Update of a chiral separation strategy in capillary electrochromatography using chlorinated and non-chlorinated polysaccharide-based selectors

D. Mangelings, A. Hendrickx, D. Albals, B. Chankvetadze, Y. Vander Heyden

2.30 – 3.00 pm

17. Molecular lipophilicity profile in drug discovery: A comparative study for a set of the terephthalamides derivatives

A. Bąk , V. Kozik

3.00 – 3.20 pm

18. Testing of complementarity of PDA and MS detectors using chromatographic fingerprinting of genuine and counterfeit Viagra®

D. Custers, B. Krakowska, P. Courselle, M. Daszykowski, S. Apers, E. Deconinck

3.20 - 3.40 pm

19. Characterizations of *Ipomoea reptans* extracts through HPLC and HPTLC fingerprint development, phytochemical profiling and in vitro cytotoxicity and antioxidant activity determination

M. Hefny Gad, N. Elsawi, E. Elmewafy, S. Younes, Y. Vander Heyden, K. Demeyer, D. Mangelings

POSTER SESSION II THURSDAY, MAY 28th, 2015

CHAIRPERSONS: Andrzej Bąk and Andrzej Swinarew

4.30 – 6.30 pm

4.30 – 6.30 pm COFFEE BREAK

POSTGRADUATE STUDENT SECTION THURSDAY, MAY 28th, 2015

CHAIRPERSONS: Maja Natić and Adam Voelkel

4.00 – 4.20 pm

20. How to read and to write scientific publications: A personal view on an important piece of our individual scientific lives

H. Kalász

4.20 – 4.35 pm

21. Inverse liquid chromatography as a tool for biomaterials surface characterization

K. Adamska, K. Kadlec, A. Voelkel

4.35 – 4.50 pm

22. Determination of pesticides in herbs by gas chromatography

P. Marczevska, D. Szeremeta, M. Mucha, J. Rzepa, M. Sajewicz

4.50 – 5.05 pm

23. Investigation of the peptide nanofibers and nanospheres formation by chromatographic and microscopic techniques

A. Godziek, A. Maciejowska, E. Talik, T. Kowalska, M. Sajewicz

5.05 – 5.20 pm

24. Investigation of peptide structures resulting from spontaneous oscillatory reactions of biogenic amino acids

A. Maciejowska, A. Godziek, E. Talik, M. Sajewicz, T. Kowalska

5.20 – 5.35 pm

25. The GC-MS investigation of hydrogen–deuterium exchange among selected 1,10-phenanthroline-4,7-dione

Marcin Szala, Karolina Czyż, Jacek E. Nycz

6.30 pm DINNER

SESSION V FRIDAY, MAY 29th, 2015

CHAIRPERSONS: Debby Mangelings and Agnes Moricz

10.00 – 10.30 am

26. Distribution of selegiline in the rats and rabbits

K. Tekes, H. Kalász

10.30 – 11.00 am

27. Determination of drugs loaded to silica nanoparticles in brain tissue

M. Oravec, J. Jampílek

11.00 – 11.30 am

28. Determination of interactions of drug and alcohol, caffeine, smoking and their clinical relevance with different bioanalytical technics

I. Klebovich

11.30 am CLOSING REMARKS

12.00 am LUNCH

POSTER SESSION I

1.

Synthesis of 1,10-phenantroline derivatives; the GC-MS investigation

K. Czyż, M. Szala, J.E. Nycz

2.

Analysis of vitamin C (ascorbic acid) in raw, pasteurized and ultra high temperature cow's milk using HPLC–PDA–ESI (+)-MS as a highly sensitive and highly confirmatory analytical tool

W. A. S. Gafour, A. F. Zayn, O. Al Sayed Omar

3.

The preliminary studies of the selected aqueous mosses using HPLC and TLC fingerprint methods

A. Hawrył, M. Hawrył, A. Turula, R. Świeboda, G. Józwiak

4.

The fingerprint analysis of selected *Cirsium* species using the HPLC and TLC methods

A. Hawrył, M. Hawrył, A. Ziobro, R. Świeboda, M. Waksmundzka-Hajnos

5.

TLC isolation of biologically active compounds from extracts obtained from different *Potentilla* species

G. Józwiak, M. Waksmundzka-Hajnos, W. Zieliński

6.

Searching for urine biomarkers of prostate cancer using LC-MS and GC-MS metabolomics approach

M. Kordalewska, W. Struck-Lewicka, R. Bujak, A. Yumba Mpanga,
M. Markuszewski, J. Jacyna, M. Matuszewski, R. Kaliszan, M. J.
Markuszewski

7.

Identification of tributyltin in environmental water samples supported by means of discriminant models

B. Krakowska, M. Daszykowski, K. Fabiańczyk, M. Korzeń

8.

The encounter of macrofungi research and direct bioautography

D. Kruszelyi, J. Vetter, P. G. Ott, A. M. Moricz

9.

Optimization of the extraction of total heme from meat for determination by HPLC

H. De Maere, E. De Mey, M. Baca, M. Sajewicz, T. Kowalska, I. Fraeye, H.
Paelinck

10.

Detection of ovarian cancer based on metabolomic data obtained from liquid chromatography coupled with mass spectrometry

P. Matuszewski, M. Daszykowski

11.

Between batch differentiation of stamping inks from the same manufacturer by means of thin layer chromatography

A. Menżyk, M. Sajewicz, G. Zadora

12.

Optimization of chromatographic condition for separation of ziprasidone and its impurities by TLC

D. Obradović, S. Filipić, K. Nikolić, M. Čarapić, D. Agbaba

13.

Bioautography as a method of determination of antibacterial properties with selected thyme species

M. Orłowska, W. Jesionek, B. Majer-Dziedzic, I.M. Choma, G. Szymczak, M. Waksmundzka – Hajnos, T. Kowalska, M. Sajewicz

14.

Qualitative evaluation of excise duty marker Solvent Yellow 124 in diesel oil samples

J. Orzeł, M. Daszykowski

15.

Determination of acrylamide in coffee samples using the fluorescence spectroscopy extended with chemometric modeling approaches as a simple and cost-effective alternative to separation-based methods

A. Psiuk, J. Orzeł, M. Daszykowski

16.

Identification and separation of TNF- α after infection of three genospecies of *Borrelia burgdorferi* sensu lato by the use of chromatographic techniques.

Preliminary results

B. Rozwadowska, J. Gabor, M. Łęźniak, T. Flak, H. Okła, D. Wcisło-Dziadecka, U. Mazurek, K. Jasik, A.S. Swinarew

17.

Determination of resveratrol in fruit juices and herbal infusions

M. Skorek, K. Pytlakowska, K. Kocot, T. Kowalska, M. Sajewicz

18.

Determination of hexachlorocyclohexane (HCH) isomers and their biodegradation products in environment samples by GC

D. Szeremeta, P. Marczevska, M. Knaś, J. Rzepa, M. Sajewicz

19.

Application of smoke condensates in smoking process

A. Włosowicz; O. Goemaere, A. De Winne, J. Van Durme

20.

LC-MS and GC-MS based untargeted metabolomics to study urogenital tract cancer heterogeneity

A.Yumba Mpanga, W. Struck-Lewicka, R. Bujak, M. Markuszewski, M. Roslan, M. J. Markuszewski, R. Kaliszan

21.

Analysis of insect signalling using ion-trap mass spectrometry a case of
dendrolimus pini

D. Staszek, K. J. Rudzinski, M. Asztemborska, M. Cieślak, J. Raczko,
R. Szmigielski

POSTER SESSION II

1.

Synthesis and physicochemical properties of terephthalamides

R. Biegun, K. Bochenek, A. Jędrzejowska, V. Kozik

2.

Top 100 drug bestsellers are getting older

J. Bogocz, A. Tkocz, J. Polanski

3.

Synthesis of a new nanographene model containing seven-membered ring

P. Dybał, I. Rodríguez Márquez, A. González Campaña, J. Manuel Cuerva Carvajal, V. Kozik

4.

Mercapto-modified graphene oxide for determination of divalent metal ions and arsenic species

P. Janik, B. Zawisza, E. Talik, E. Margli, I. Queralt, R. Sitko

5.

Synthesis, properties and applications of thioterephthalamides

A. Jędrzejowska, M. Matussek, V. Kozik, A. Bąk, Ł. Pieszczyk, P. Kuś

6.

Investigation of alcohols and polyols oxidation products over Au_{NPs} and Pd_{NPs} catalysts using ¹H, ¹³C NMR and 2D techniques

M. Kapkowski, M. Słota, J. Polański

7.

Application of microextraction procedures of determination of trace elements by spectroscopy techniques

K. Kocot, R. Sitko

8.

Synthesis of building blocks in the quasi-heterogeneous reactions with nano-Pd/Cu catalyst - monitoring the progress of reaction by TLC

M. Korzec, R. Rzycka, S. Senkała, J. Polański

9.

Investigation of antioxidant activity of pomegranate juices by means of electron paramagnetic resonance (EPR) spectroscopy and UV-VIS spectrophotometry

V. Kozik, A. Bąk, K. Jarzembek, M. Rotkiewicz, A. Jędrzejowska, P. Dybał, K. Pytlakowska, J. Polak, M. Bartoszek, S. Oślizłok, M. Przybyszewska, A. Stasiuka, N. Niestrój, A. Kurpanik, K. Nowosińska

10.

Bio-corrosion in biopurification of air from VOC's mixture

V. Kozik, A. Bąk, D. Kasperczyk, S. Kuś, K. Barbusiński

11.

Synthesis of phthalimides and isophthalamides obtained from methyl esters of selected amino acids

A. Kruk, P. Sobota, K. Jarzembek, P. Kuś

12.

Chromatographic and spectroscopic methods for the identification of two new psychoactive substances contained I “designer drugs”

M. Majchrzak, M. Rojkiewicz, A. Mazurkiewicz, R. Celiński, M. Sajewicz

13.

Differences in polyphenolic and elemental composition of red and white Serbian wines

M. Natić, M. Pantelić, J. Mutić, Ž. Tešić

14.

Elemental composition and antioxidant activity of selected juices

K. Pala, K. Pytlakowska, M. Skorek, V. Kozik, R. Sitko

15.

Analytical techniques used in the synthesis of novel thiosemicarbazones based on 5-bromosalicylaldehyde

M. Rejmund , J. Polański

16.

One-pot synthesis of 1,4-disubstituted-1,2,3-triazoles using nano-Pd/Cu catalyst

R. Rzycka, S. Senkała, M. Korzec, J. Mularski, J. Polański

17.

Studies on the Cadot - Chodkiewicz coupling reaction in heterogeneous system using chromatographic techniques

S. Senkała, R. Rzycka, M. Korzec, J. Polański

18.

Determination of lipid concentration in liposomal drug formulation

J. Procek, M. Langer, M. Przybyło

19.

An analysis of fragmental drug-likeness topology

A. Tkocz, J. Bogocz, J. Polanski

20.

Application of high-performance counter-current chromatography for the isolation of coumarins from the non-polar extract of *Mutellina purpurea* L

M. Walasek, K. Skalicka-Woźniak, T. Mroczek

21.

A new similarity measure for comparative analysis of two-way chromatographic fingerprints

K. Drab, M. Daszykowski

22.

Chromatographic separation of products of 4-bromotoluene nitration

J. Bełłot, J. Polański