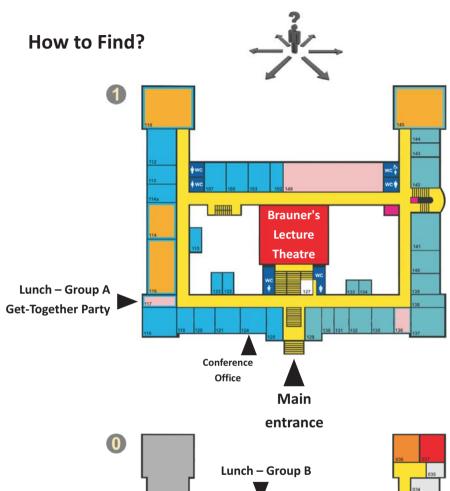
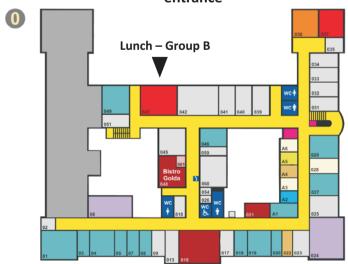
Programme of the 12th International Students Conference "Modern Analytical Chemistry"

Prague, 22—23 September 2016





General Information

The **conference is held** at the Institute of Chemistry, Faculty of Science, Charles University in Prague (Hlavova 8, 128 43 Prague 2) in the main lecture hall (Brauner's Lecture Theatre).

The **registration** is located at the landing of main staircase, across the entrance to the building. It will be open on Thursday, September 22 from 8.30 to 9.00. Later, please, contact organizers in advance.

Oral presentations are fifteen minutes including discussion and speakers are asked to download their Power Point presentation on the local computer in the lecture hall before the start of the session. The letter "P" and following number denotes the page of respective contribution in the Proceedings.

The **coffee breaks** are held in the lecture hall.

The **lunches** are served in rooms number 117 or 047 (please, see details at page 10).

The **get-together party** will be held in room 117, on Thursday, September 22 from 16:15.

Programme

Thursday, September 22, 2016

8:30-9:00	Registration of participants
9:00-9:15	Opening ceremony, welcoming address
9:15-9:30	Session 1 • chairperson: David Kaliba Gajdár J. (Charles University in Prague, Czech Republic): Voltammetric determination of 1-hydroxy-N-(4-nitro- phenyl)naphthalene-2-carboxamide by voltammetry at a glassy carbon electrode in microvolumes of dimethyl sulfoxide (P-23)
9:30-9.45	Nalazek K. (Gdańsk Univeristy of Technology, Poland): Determination of biogenic amines in beers by LC-MS/MS (P-95)
9:45-10:00	Krmela A. (University of Chemistry and Technology Prague, Czech Republic): Galactolipids in rose hips and other plant matrices
10:00-10:15	Svitková V. (Slovak University of Technology, Slovakia): Biosensors with protective membranes for an electro- chemical study of the interactions of DNA intercalators in biological matrix (P–86)
10:15-10:30	Byliński H. (Gdańsk Univeristy of Technology, Poland): Identification of aromatic compounds in odours mixture by gas chromatography and field olfactometry techniques (P-108)
10:30-10:45	Coffee Break
10:45–11:00	Session 2 • chairperson: Anastasiia E. Mikheenkova Kaliba D. (Charles University in Prague, Czech Republic): Determination of rhenium complexes with 1,2-dihydroxy- benzene and 1,2,3-trihydroxybenzene by CZE compared
11:00-11:15	with HPLC-UV/MS (P-73) Schmidberger A. (University of Regensburg, Germany): Characterization of a laboratory-constructed miniaturized device for fast CF-MS measurements (P-172)

14:30-14:45

Coffee Break

11:30-11:45 Horáková E. (Charles University in Prague, Czech Republic): Study of the interaction between DNA and 4-nitrobiphenyl using voltammetry at a hanging mercury drop electrode (P-134)11.45-12.00 Majchrzak T. (Gdańsk University of Technology, Poland): The impact of addition of olive oil on thermal degradation of refined rapeseed oil (P-113) 12:00-12:15 Dabrowski D. (Warsaw University of Technology, Poland): Identification of resin based dyes using HPLC-UV-Vis ESI MS/MS 12:15-13:00 Lunch Session 3 • chairperson: Július Gajdár 13:00-13:15 Hrdlička V. (Charles University in Prague, Czech Republic): Voltammetric determination of homovanillic acid at boron doped diamond electrode for hollow fibre microextraction (P-206)13:15-13:30 Jaszczak E. (Gdańsk University of Technology, Poland): Determination of cyanide ion in urine samples using ion chromatography with pulsed amperometric detection (P-1) 13:30-13:45 Klusáčková M.: (Charles University in Prague, Czech Republic): Effect of substrate hydrophobicity on the electrocatalytic behaviour of phthalocyanine (P-122) 13:45-14:00 Lobanova M.S. (Samara University, Russia): Developing of analytical micro concentrating systems for biomarker quantitative determination in exhaled air (P–37) 14:00-14:15 Linhart O. (Charles University in Prague, Czech Republic): Determination of As(III) using UV-photochemical generation of its volatile compounds and OF-AAS in flow injection mode employing Sb(III) as reaction modifier (P-155) 14:15-14:30 Jírů M. (University of Chemistry and Technology Prague, Czech Republic): Utilization of high resolution tandem mass spectrometry for determination of 59 analogues of 5-PDE inhibitors in food supplements.

Session 4 • chairperson: Štěpánka Skalová

- 14:45–15:00 Mikheenkova A.E. (Samara University, Russia):

 Chromato-desorption microsystems for the aliphatic hydrocarbons quantitative determination in conducting ecological and analytical control of the air indoor (P–42)
- 15:00–15:15 Świt P.Z. (Jagiellonian University in Kraków, Poland):

 Coupling generalized calibration strategy and H-point standard addition method for accuracy improvement.

 Theory and practice.
- 15:15–15:30 Mika J. (Charles University in Prague, Czech Republic):

 Applications of flow-through coulometric detector with renewable working material based on carbon spherical microparticles (P–189)
- 15:30–15:45 Kopuncová M. (Comenius University, Slovakia):

 Analysis of perchlorate in baby food with high fat content
 (P-80)
- 15:45–16:00 Legat J. (Warsaw University of Technology, Poland):

 CE-ICP-MS as a tool for studying interactions between gold
 nanorods and human serum proteins
- 16:00–16:15 Jakubczak W.Ł. (Warsaw University of Technology, Poland):

 Identify the differences in interaction of gold and platinum compounds with cancer and normal cells by CE-ICP MS

16:15 **Get-Together Party**

Friday, September 23, 2016

9:00-9:15	Session 5 • chairperson: Vojtěch Hrdlička Hložek T. (Charles University in Prague, Czech Republic): Quantification of ethosuximide in human serum by GC-MS
9:15-9:30	after butyl chloroformate derivatization (P-17) Skalová Š. (Charles University in Prague, Czech Republic): Electrochemical determination of 2-nitrofluorene and investigation of its interaction with DNA (P-149)
9:30-9.45	Synakiewicz M. (Gdańsk University of Technology, Poland): Identification of pollutants at the adjacent areas to the
9:45-10:00	landfill site using two dimensional gas chromatography with mass spectrometry technique (P-161) Kalužíková A. (Charles University in Prague, Czech Repu- blic): Analysis of a new lipid class of diesters in vernix caseosa by
10:00-10:15	high-performance liquid chromatography atmospheric pressure chemical ionization mass spectrometry Zlámalová M. (Charles University in Prague, Czech Repu-
	blic): Poly(methylene blue) modified carbon based electrodes for the determination of sulfhydryl-containing compounds (P-183)
10:15-10:30	Ferenczy V. (Comenius University in Bratislava, Slovakia): Gas chromatography mass spectrometry analysis of saliva samples (P–177)
10:30-10:45	Coffee Break
10:45-11:00	Session 6 • chairperson: Lukáš Taraba Pavlačka M. (University of Pardubice, Czech Republic): A rapid differentiation of ephedrine and pseudoephedrine by differential mobility spectrometry (P-12)
11:00-11:15	Narkowicz S. (Gdańsk University of Technology, Poland): Application of analytical procedure based on accelerated solvent extraction and ion chromatography technique for determination of thiocyanate and other inorganic ions in human placenta samples (P–6)

11:15–11:30 Rombaldová M. (Charles University in Prague, Czech Republic):

Analysis of novel members of FAHFA lipid class derived from omega 3-PUFA by LC-MS/MS and LC-MS/MS/MS (P-103)

11:30–11:45 Kotasová M. (Charles University in Prague, Czech Republic):

Voltammetric determination of pyruvic acid after its derivatization with o phenylenediamine (P–200)

- 11:45–12:00 Wojnowski W. (Gdańsk University of Technology, Poland): Meat freshness classification using ultra-fast gas chromatography (P–118)
- 12:00–12:15 Korban A., Makhomet A. (Belarusian State University, Belarus):

 Expansion of the new method "Ethanol as Internal Standard" for direct determination of volatile compounds in the spirit products (P–49)

12:15-13:00 Lunch

Session 7 • chairperson: Martin Pavlačka

13:00–13:15 Marschner K. (Charles University in Prague, Czech Republic):

Arsenic speciation by hydride generation coupled with atomic fluorescence spectrometry (P-31)

- 13:15-13:30 Garwolińska D. (Gdańsk University of Technology, Poland):
 - Development of chromatographic and mass spectrometry conditions for untargeted lipidomic analysis of human breast milk (P-89)
- 13:30–13:45 Makrlíková A. (Charles University in Prague, Czech Republic):

 Voltammetric determination of cancer biomarker 5-hydroxyindole-3-acetic acid at screen-printed carbon electrodes
 (P–140)
- 13:45–14:00 Śmiełowska M. (Gdańsk University of Technology, Poland):

 The difficulties in polybrominated diphenyl ethers (PBDEs)
 identification by GC-EI-MS technique (P-67)

Czech Republic):

14:00-14:15

14:15-14:30	Metabolomics as an effective tool for assesment of lingonberries (Vaccinium vitis-idaea) authenticity Szabóová Ž. (Comenius University, Slovakia): Age determination of fingerprints by GC-MS (P–56)
14:30-14:45	Coffee Break
14:45-15:00	Session 8 • chairperson: Karel Marschner Urbancová K. (University of Chemical Technology in Prague, Czech Republic): Critical assessment of 11 polycyclic aromatic hydrocarbon
15:00-15:15	metabolites in urine of Czech mothers and newborns Zwolak K. (Gdańsk University of Technology, Poland): Comprehensive two dimensional gas chromatography coupled with mass spectrometry as tool for characterization of the main pollutants present in atmospheric air in Gdansk
15:15-15:30	(P–166) Vosáhlová J. (Charles University in Prague, Czech Republic): Voltammetric studies of oxidation of p-cresol at boron doped diamond electrode (P–144)
15:30-15:45	Harvanová M. (P. J. Šafárik University, Slovakia): LC enantioseparation of selected enantiomers using novel chiral selectors (P–28)
15:45-16:00	Galbavá P (Comenius University, Slovakia): The analysis of non-polar compounds in cigarette ashes by GC-MS (P-62)
16:00-16:15	Taraba L. (Charles University in Prague, Czech Republic): Investigation of polyaniline-coated silica gel as a stationary phase for separations in different modes of capillary liquid chromatography (P–127)

Hůrková K. (University of Chemical Technology in Prague,

16:15 **Closing Ceremony**

Groups for Lunch

The **lunches** are served in rooms number 117 or 047. Please, respect the division of participants:

Group A (room 117)

Byliński Hubert Dąbrowski Damian Garwolińska Dorota Iza Jakubczak Wioletta Łucja

Jaszczak Ewa

Korban Anton Leonidovich

Legat Joanna

Lobanova Marina Sergeevna

Majchrzak Tomasz

Makhomet Andrey Andreevich Mikheenkova Anastasiia Eduardovna

Nalazek Katarzyna Narkowicz Sylwia

Schmidberger Andreas (vegetarian)

Śmiełowska Monika Barbara

Świt Paweł Zdzisław Synakiewicz Monika

Taraba Lukáš Wojnowski Wojciech Karol

Zwolak Katarzyna

Group B (room 047)

Ferenczy Viktória

Gajdár Július Galbavá Paulína Harvanová Marianna Hložek Tomáš Horáková Eva Hrdlička Vojtěch Hurkova Kamila Iírů Monika Kaliha David Kalužíková Aneta Klusáčková Monika Kopuncová Mária Kotasová Marcela Krmela Aleš Linhart Ondřej Makrlíková Anna Marschner Karel Mika Ian Pavlačka Martin Rombaldová Martina Skalová Štěpánka Svitková Veronika Szabóová Žofia Urbancová Kateina Vosáhlová Iana

Zlámalová Magda

Menu

Thursday, September 22, 2016

- chicken slice with ham and fried eggs, French fries
- vegetarian: breaded cauliflower, potatoes

Friday, September 23, 2016

- chicken pieces, baby carrot, American potatoes
- vegetarian: breaded mushrooms, potatoes