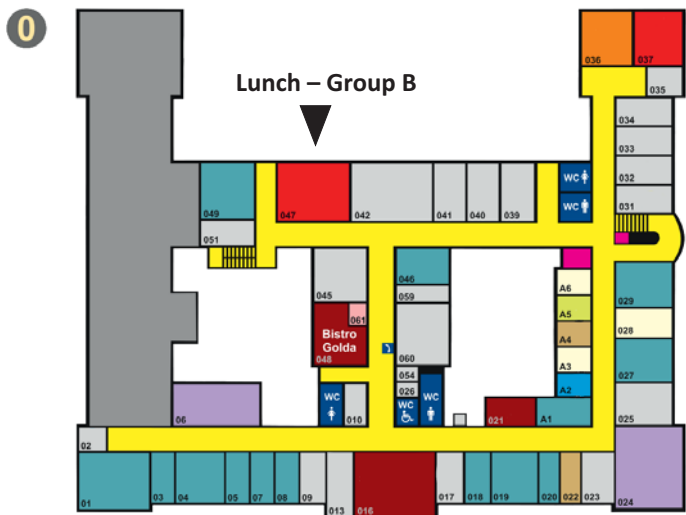
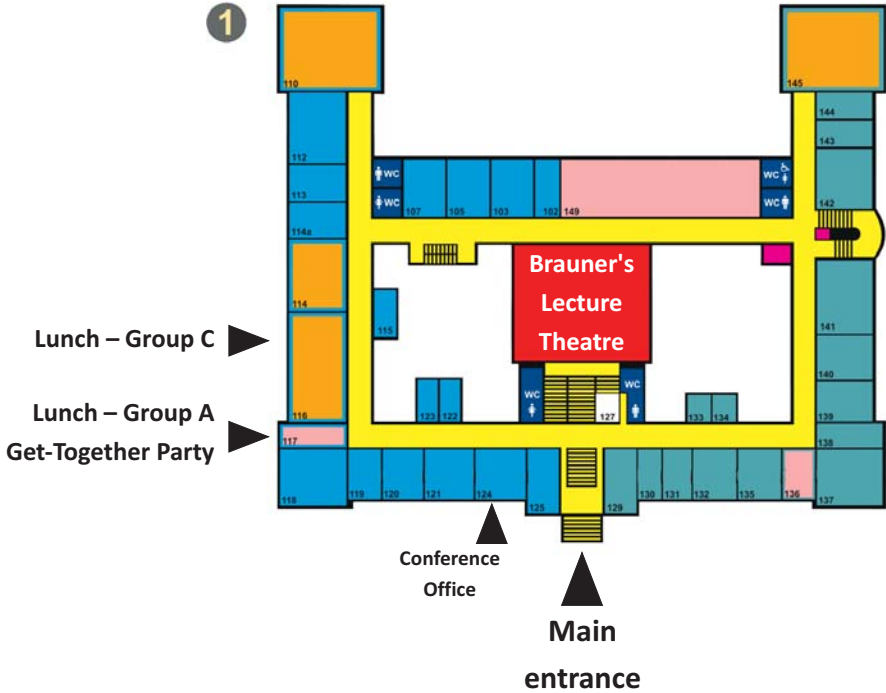

**Programme of the
13th International Students Conference
“Modern Analytical Chemistry”**

Prague, 21—22 September 2017

Charles University, Faculty of Science
Prague 2017

How to Find?



General Information

The **conference is held** at the Institute of Chemistry, Faculty of Science, Charles University (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 21 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 PowerPoint presentation on the local computer in the lecture hall before the start of the session. The letter "P" and following number denote 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, 047 or 116 (please, see details at page 10).

The **get-together party** will be held in room 117, on Thursday, September 21 from 17:45.

There is **WiFi connection** in the building. You could

- a) use your eduroam connection
- b) connect to network **Konference**, open your web browser and insert login and password you will obtain during registration.

Programme

Thursday, September 21, 2017

- 8:30–9:00 **Registration of participants**
- 9:00–9:15 **Opening ceremony, welcoming address**
- 9:15–9:30 **Session 1** • chairperson: Lukáš Taraba
Karel Marschner (Charles University, Czech Republic):
Determination of inorganic arsenic in samples of marine origin (P-268)
- 9:30–9:45 Tomasz Majchrzak (Gdańsk University of Technology, Poland):
Real-time monitoring of vegetable oils' thermal degradation using proton transfer reaction mass spectrometry (P-227)
- 9:45–10:00 Lukas Wunderlich (University of Regensburg, Germany):
Two-dimensional nanomaterials for sensor application
- 10:00–10:15 Ludmila Gabrišová (Slovak University of Technology, Slovakia):
Characterization of nutritional supplement with content of Vaccinium macrocarpon based on comparison of chosen flavonol glycosides by HTGC-MS (P-126)
- 10:15–10:30 Kaja Kalinowska (Gdańsk University of Technology, Poland):
Evaluation of poultry meat shelf life using proton transfer reaction mass spectrometry (P-200)
- 10:30–10:45 **Coffee Break**
- 10:45–11:00 **Session 2** • chairperson: Karel Marschner
Kateryna Yavir (Gdańsk University of Technology, Poland):
Characteristic of morpholinium ionic liquids as gas chromatography stationary phases with McReynolds constants and activity coefficients at infinite dilution (P-75)
- 11:00–11:15 Miroslava Bursová (Charles University, Czech Republic):
Determination of paracetamol and 5-oxoproline in serum by capillary electrophoresis: Implication for clinical toxicology.
- 11:15–11:30 Július Gajdár (Charles University, Czech Republic):
Voltammetric techniques for analysis in a single drop of a solution (P-46)
- 11:30–11:45 Aneta Krakowska (Nicolaus Copernicus University, Poland):
Effect of antioxidant activity of flavonoids and phenolics isolated by supercritical fluid extraction from Medicago sativa leaves (P-57)
- 11:45–12:00 Anton Korban (Belarusian State University, Belarus):
The numerical method for calculation of the quantitative composition of complex water-ethanol solutions (P-160)

- 12:00–12:15 Maria Madej (Jagiellonian University in Kraków, Poland):
Development of a new procedure of gold electrode preparation for electrochemical application (P–144)
- 12:15–12:30 Anna Róžańska (Gdańsk University of Technology, Poland):
Detection of apple in orange juice using ultra-fast gas chromatography (P–239)
- 12:30–13:15 **Lunch**
- Session 3 • chairperson: Silvia Zichová**
- 13:15–13:30 Lukáš Taraba (Charles University, Czech Republic):
Influence of pH on retention behavior of polyaniline-coated silica gel stationary phase investigated using linear solvation energy relationships in capillary liquid chromatography (P–36)
- 13:30–13:45 Piotr Kwiatkowski (Warsaw University of Technology, Poland):
*Separation and identification of zinc complexes in goji berries (*Lycium barbarum*, L.) using CE-MS*
- 13:45–14:00 Jana Vosáhlová (Charles University, Czech Republic):
Electrochemical sensor based on boron doped diamond electrode
- 14:00–14:15 Pavlína Martínková (University of Pardubice, Czech Republic):
Voltammetric determination of leucovorin in pharmaceutical samples (P–210)
- 14:15–14:30 Marek Dębosz (Jagiellonian University in Kraków, Poland):
Nonlinear standard addition method in determination of paracetamol (P–116)
- 14:30–14:45 Oleksandr Kozlov (P. J. Šafárik University, Slovakia):
HPLC separation using cyclofructan selectors with emphasis on enantiomer elution order (P–27)
- 14:45–15:00 **Coffee Break**
- Session 4 • chairperson: Karel Kudláček**
- 15:00–15:15 Ondřej Hodek (Charles University, Czech Republic):
Enzymatic reaction of α -amylase with starch and its monitoring by an online capillary electrophoresis method (P–51)
- 15:15–15:30 Karolina Starzec (Jagiellonian University in Kraków, Poland):
Employment of a prototype of polishing machine for cleaning of gold electrode surface for electrochemical application (P–183)
- 15:30–15:45 Dagmara Kempieńska (Gdańsk University of Technology, Poland):
The use of RP-HPLC-Q-TOF-MS as a powerful tool for selection of water pollution marker (P–216)
- 15:45–16:00 Silvia Zichová (Slovak Technical University, Slovakia):
New approach for the extraction of pesticide residues from cotton products using combined QuEChERS with DLLME (P–69)

- 16:00–16:15 Thomas Herl (University of Regensburg, Germany):
Development and characterization of a miniaturized injection cell for the hyphenation of electrochemistry-capillary electrophoresis-mass spectrometry (P-82)
- 16:15–16:30 Adam Vavrouš (Charles University, Czech Republic):
Phthalate analysis in fatty matrices by HPLC–MS/MS
- 16:30–16:45 **Coffee Break**
- 16:45–17:00 **Session 5** • chairperson: Vojtěch Hrdlička
Vendula Němcová (Charles University, Czech Republic):
A large-surface carbon film electrode used for voltammetric determination of imipramine hydrochloride (P-111)
- 17:00–17:15 Timotej Strmeň (Charles University, Czech Republic):
Development of a tube nebulizer for microflow atmospheric pressure chemical ionization mass spectrometry (P-265)
- 17:15–17:30 Hanna Jakobczyk (Gdańsk University of Technology, Poland):
Characteristics of Cucumis metuliferus, Actinidia deliciosa and Musa paradisiaca fragrance profiles using a comprehensive two-dimensional gas chromatography with time-of-flight mass spectrometric detection (P-195)
- 17:30–17:45 Radek Chalupa (Charles University, Czech Republic):
Analytical chemistry as a tool for suppressing of chemophobia
- 17:45 **Get-Together Party**

Friday, September 22, 2017

Session 6 • chairperson: Jan Klouda

- 9:00–9:15 Karel Kudláček (Charles University, Czech Republic):
Analysis of historical pharmaceutical preparations of natural alkaloids
- 9:15–9:30 Martyna Pajewska (Nicolaus Copernicus University, Poland):
GC-MS and QuEChERS as an analytical tool for the determination of impurities in breast milk (P-65)
- 9:30–9:45 Vojtěch Hrdlička (Charles University, Czech Republic):
Miniaturized boron doped diamond film electrode for neuroblastoma biomarkers determination (P-273)
- 9:45–10:00 Timo Raith (University of Regensburg, Germany):
Forced convection in scanning electrochemical microscopy introduced by an electrochemical flow cell (P-89)
- 10:00–10:15 Anna Lomenova (Slovak Technical University, Slovakia):
Separation of enantiomers of phenylalanine by HPLC method with different types of chiral stationary phases (P-31)
- 10:15–10:30 Mateusz Sugajski (Nicolaus Copernicus University, Poland):
*Optimization of the extraction process of polysaccharides from yeast *Saccharomyces cerevisiae* using response surface methodology (P-100)*

10:30–10:45 **Coffee Break**

Session 7 • chairperson: Štěpánka Skalová

- 10:45–11:00 Dorota Sieńska (Gdańsk University of Technology, Poland):
Analysis of volatile fraction of hybrid fruit pulp using proton transfer reaction–time-of-flight mass spectrometry (P-244)
- 11:00–11:15 Tomáš Vrzal (Charles University, Czech Republic):
A new method for detection and classification of non-volatile nitroso compounds in beer combining gas chromatography with chemiluminescence detection and discriminant analysis (P-12)
- 11:15–11:30 Jan Klouda (Charles University, Czech Republic):
Simultaneous determination of antioxidants by flow-injection analysis with multiple-pulse amperometric detection (P-154)
- 11:30–11:45 Martyna Lubinska (Gdańsk University of Technology, Poland):
Functionality assessment of the Citrus hystertia peel as a protective barrier using gas chromatography (P-223)
- 11:45–12:00 Michaela Kovářová (University of Pardubice, Czech republic):
Isotachophoretic determination of amino acids after their conversion to hydroxy acids (P-20)

- 12:00–12:15 Dominika Pudlak (Gdańsk University of Technology, Poland):
Distinction of citrus fruits based on their volatile composition using the electronic nose (P–234)
- 12:15–12:30 Bartłomiej Cieślík (Gdańsk University of Technology, Poland):
Stabilization of solid residues obtained during sewage sludge thermal treatment (P–190)
- 12:30–13:15 **Lunch**
- 13:15–13:30 **Session 8** • chairperson: Pavlína Martínková
Štěpánka Skalová (Charles University, Czech Republic):
Pilot experiments with a micro-volume voltammetric cell for the determination of electrochemically reducible organic compounds (P–150)
- 13:30–13:45 Hossam Al-Suod (Nicolaus Copernicus University, Poland):
Identification of cyclitols in morphological alfalfa parts using matrix-assisted laser desorption ionization with time-of-flight (P–42)
- 13:45–14:00 Paweł Świt (Jagiellonian University in Kraków, Poland):
Calibration problems in the acidity determination in wines (P–1)
- 14:00–14:15 Anna Makrlíková (Charles University, Czech Republic):
Voltammetric determination of tumor biomarkers using flow injection analysis with amperometric detection (P–7)
- 14:15–14:30 Aleksandra Pollap (Jagiellonian University in Kraków, Poland):
A study on (bio)sensor matrices based on titanium sol-gel composites (P–172)
- 14:30–14:45 Žofia Szabóová (Comenius University in Bratislava, Slovakia):
Analysis of triglycerides in detecting butter fraud by low pressure GC-MS (P–139)
- 14:45–15:00 **Coffee Break**
- 15:00–15:15 **Session 9** • chairperson: Timotej Strmeň
Tomáš Hložek (Charles University, Czech Republic):
Hydrophobic deep eutectic solvents for extraction of phytocannabinoids from Cannabis sativa
- 15:15–15:30 Bartosz Szulczyński (Gdańsk University of Technology, Poland):
Analysis of odor interactions in ternary gas mixtures using electronic nose (P–249)
- 15:30–15:45 Hubert Byliński (Gdańsk University of Technology, Poland):
Direct measurements of odorous volatile organic compounds present in biosolids cakes by proton transfer reaction – mass spectrometry technique (P–205)

- 15:45–16:00 Paulína Galbavá (Comenius University in Bratislava, Slovakia):
Analysis of candle-wax by direct injection to MS via GC (P-133)
- 16:00–16:15 Christian Griesche (University of Regensburg, Germany):
Liposome- and dendrimer-based ECL detection strategies
- 16:15–16:30 Václav Ševčík (Charles University, Czech Republic):
Analysis of prohibited substances in rinse-off cosmetic products
- 16:30 **Closing Ceremony**

Groups for Lunch

The **lunches** are served in rooms number 117, 047 or 116. Please, respect the division of participants.

Group A (room 117)

Cieślak B.M.
Dębosz M.
Griesche C.
Herl T.
Jakobczyk J.
Kalinowska K.
Kempińska D.
Korban A.L.
Lubinska M.
Madej M.M.
Pollap A.
Pudlak D.
Raith T.J.
Róžańska A.
Sieńska D.
Starzec K.E.
Świt P.Z.
Szulczyński B.
Taraba L.
Wunderlich L.

Group B (room 047)

Al-Suod H.H.
Bursová M.
Byliński H.
Gabrišová L.
Galbavá P.
Hložek T.
Hrdlička V.
Kovářová M.
Kozlov O.
Krakowska A.
Kwiatkowski P.
Lomenova A.
Majchrzak T.
Marschner K.
Martínková P.
Pajewska M.
Sugajski M.
Szabóová Ž.
Ševčík V.
Vavrouš A.
Vrzal T.
Yavir K. + husband
Zichová S.

Group C (room 116)

Gajdár J.
Hodek O.
Chalupa R.
Klouda J.
Kudláček K.
Makrliková A.
Němcová V. (veg.)
Skalová Š.
Strmeň T.
Vosáhlová J.

Menu

Thursday, September 21, 2017

- chicken slice with cheese and ham, potatoes
- vegetarian: vegetable salad with mozzarella

Friday, September 22, 2017

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

