

# **SEZNAM PRACÍ**

## **LIST OF PAPERS**

**2007**

**Ústav analytické chemie AV ČR, v. v. i.  
Brno**

**Institute of Analytical Chemistry of the ASCR, v. v. i.  
Brno**

**Published by** Institute of Analytical Chemistry  
Academy of Sciences of the Czech Republic, v. v. i.  
Veverí 97  
CZ - 602 00 Brno  
Czech Republic

**Edited and compiled by** M. Mikešová

In the List of Papers 2007 the papers are divided into the following sections:

- A** Original Papers and Reviews
- B** Books and Chapters in Books
- C** Lectures and Posters
- D** Research Reports
- E** Patents, Patent Applications
- F** Varia
- G** Theses
- H** Papers and Books in Press
- J** Grants

List of Papers 2007 may be requested from:

*Centre of Scientific Information  
Institute of Analytical Chemistry of the ASCR, v. v. i.  
Veverí 97  
CZ – 602 00 Brno*

## A. ORIGINAL PAPERS AND REVIEWS

- A1.** Bekešová, S. - Kováčik, V. - Tvaroška, I. - Čurillová, Z. - Škultéty, L. - Řehulka, P.  
Elimination of isocyanate and isothiocyanate molecules at the electrospray ionization ion trap, ESI-Q-TOF and MALDI TOF-MS fragmentation of sodium cationized brassitin, brassinin and their glycosides.  
*European Journal of Mass Spectrometry*, 13 [2] 147-154 (2007)
- A2.** Bobálová, J. - Chmelík, J.  
Proteomic identification of technologically modified proteins in malt by combination of protein fractionation using convective interaction media and matrix-assisted laser desorption/ionization time-of-flight mass spectrometry.  
*Journal of Chromatography A*, 1163 [1-2] 80-85 (2007)
- A3.** Buršíková, V. - Řehulka, P. - Chmelík, J. - Alberti, M. - Špalt, Z. - Janča, J. - Havel, J.  
Laser ablation time-of-flight mass spectrometry (LA-TOF-MS) of "nitrogen doped diamond-like carbon (DLC) nano-layers".  
*Journal of Physics and Chemistry of Solids*, 68 [5-6] 701-706 (2007)
- A4.** Cabálková, J. - Wahlund, K.G. - Chmelík, J.  
Complex analytical approach to characterization of the influence of carbon dioxide concentration on carbohydrate composition in Norway spruce needles.  
*Journal of Chromatography A*, 1148 [2] 189-199 (2007)
- A5.** Dědina, J.  
Atomization of volatile compounds for atomic absorption and atomic fluorescence spectrometry: On the way towards the ideal atomizer.  
*Spectrochimica Acta B*, 62 [9] 846-872 (2007)
- A6.** Dočekal, B. - Vojtková, B.  
Determination of trace impurities in titanium dioxide by direct solid sampling electrothermal atomic absorption spectrometry.  
*Spectrochimica Acta B*, 62 [3] 304-308 (2007)
- A7.** Figueiredo, E. C. - Dědina, J. - Arruda, M. A. Z.  
Metal furnace heated by flame as a hydride atomizer for atomic absorption spectrometry: Sb determination in environmental and pharmaceutical samples.  
*Talanta*, 73 [4] 621-628 (2007)
- A8.** Foret, F. - Kusý, P.  
Microdevices in mass spectrometry.  
*European Journal of Mass Spectrometry*, 13 [1] 41-44 (2007)
- A9.** Försterová, M. - Svobodová, I. - Lubal, P. - Táborský, P. - Kotek, J. - Hermann, P. - Lukeš, I.  
Thermodynamic study of lanthanide(III) complexes with bifunctional monophosphinic acid analogues of H4dota and comparative kinetic study of yttrium(III) complexes.  
*Dalton Transactions*, - [5] 535-549 (2007)
- A10.** Gebauer, P. - Malá, Z. - Boček, P.  
Recent progress in capillary ITP.  
*Electrophoresis*, 28 [1-2] 26-32 (2007)
- A11.** Horáková, H. - Vespalet, R.  
Chiral separability of hydrophobic boron cluster anions with native cyclodextrins in water-methanol background electrolytes.  
*Electrophoresis*, 28 [20] 3639-3649 (2007)
- A12.** Horáková, H. - Vespalet, R.  
Influence of substituents on selectivity and efficiency of chiral separations of anions containing single nido-7,8-dicarbaundecaborane cluster with alfa-cyclodextrin.  
*Journal of Chromatography A*, 1143 [1-2] 143-152 (2007)
- A13.** Horká, M. - Kubíček, O. - Růžička, F. - Holá, V. - Malinovská, I. - Šlais, K.  
Capillary isoelectric focusing of native and inactivated microorganisms.  
*Journal of Chromatography A*, 1155 [2] 164-171 (2007)
- A14.** Horká, M. - Růžička, F. - Holá, V. - Šlais, K.  
CE separation of proteins and yeasts dynamically modified by PEG pyrenebutanoate with fluorescence detection.  
*Electrophoresis*, 28 [13] 2300-2307 (2007)

- A15.** Horká, M. - Horký, J. - Matoušková, H. - Šlais, K.  
Separation of plant pathogens from different hosts and tissues by capillary electromigration techniques.  
*Analytical Chemistry*, 79 [24] 9539-9546 (2007)
- A16.** Chmelík, J.  
Applications of field-flow fractionation in proteomics: Presence and future.  
*Proteomics*, 7 [16] 2719-2728 (2007)
- A17.** Chmelík, J. - Mazanec, K. - Bohačenko, I. - Psota, V.  
Relationship between the ratio of large and small starch granules determined by gravitational field-flow fractionation and malting quality of barley varieties.  
*Journal of Liquid Chromatography & Related Technologies*, 30 [9-10] 1289-1301 (2007)
- A18.** Chmelík, J. - Mazanec, K. - Šlais, K.  
Novel staining-free proteomic method for simultaneous identification of proteins and determination of their pI values by using low-molecular-mass pI markers.  
*Electrophoresis*, 28 [18] 3315-3323 (2007)
- A19.** Chmelík, J. - Řehulka, P. - Kováčik, V. - Pátoprstý, V. - Kováč, P.  
Negative matrix-assisted laser desorption/ionization time-of-flight/time-of flight tandem mass spectrometry fragmentation of synthetic analogs of the O-specific polysaccharide of Vibrio Cholerae O:1 in the presence of anionic dopants.  
*European Journal of Mass Spectrometry*, 13 [5] 347-353 (2007)
- A20.** Karásek, P. - Planeta, J. - Roth, M.  
Aqueous solubility data for pressurized hot water extraction for solid heterocyclic analogs of anthracene, phenanthrene and fluorene.  
*Journal of Chromatography A*, 1140 [1-2] 195-204 (2007)
- A21.** Klepárník, K. - Boček, P.  
DNA diagnostics by capillary electrophoresis.  
*Chemical Reviews*, 107 [11] 5279-5317 (2007)
- A22.** Kočí, K. - Petrovská, H. - Šimek, Z. - Varadová-Ostrá, E. - Syslová, A.  
Extraction of polycyclic aromatic nitrogen heterocycles from spiked soil samples.  
*International Journal of Environmental Analytical Chemistry*, 87 [2] 111-123 (2007)
- A23.** Kovařková, V. - Dočkalová, H. - Dočekal, B. - Podborská, M.  
Use of the diffusive gradients in thin films technique (DGT) with various diffusive gels for characterization of sewage sludge-contaminated soils.  
*Analytical and Bioanalytical Chemistry*, 389 [7-8] 2303-2311 (2007)
- A24.** Kratzer, J. - Dědina, J.  
Arsine and selenium hydride trapping in a novel quartz device for atomic-absorption spectrometry.  
*Analytical and Bioanalytical Chemistry*, 388 [4] 793-800 (2007)
- A25.** Křenková, J. - Klepárník, K. - Foret, F.  
Capillary electrophoresis mass spectrometry coupling with immobilized enzyme electrospray capillaries.  
*Journal of Chromatography A*, 1159 [1-2] 110-118 (2007)
- A26.** Kubáň, P. - Hauser, P.C.  
High-performance liquid chromatography with contactless conductivity detection for the determination of peptides and proteins using a monolithic capillary column.  
*Journal of Chromatography A*, 1176 [1-2] 185-191 (2007)
- A27.** Kubáň, P. - Houserová, P. - Kubáň, P. - Hauser, P.C. - Kubáň, V.  
Mercury speciation by CE: A review.  
*Electrophoresis*, 28 [1] 58-68 (2007)
- A28.** Kubáň, P. - Houserová, P. - Kubáň, P. - Hauser, P.C. - Kubáň, V.  
Sensitive capillary electrophoretic determination of mercury species with amperometric detection at a copper electrode after cation exchange preconcentration.  
*Journal of Separation Science*, 30 [7] 1070-1076 (2007)
- A29.** Kubáň, P. - Nguyen, H. T. A. - Macka, M. - Haddad, P. R. - Hauser, P.C.  
New fully portable instrument for the versatile determination of cations and anions by capillary electrophoresis with contactless conductivity detection.  
*Electroanalysis*, 19 [19-20] 2059-2065 (2007)
- A30.** Kusý, P. - Klepárník, K. - Aturki, Z. - Fanali, S. - Foret, F.  
Optimization of a pressurized liquid junction nanoelectrospray interface between CE and MS for reliable proteomic analysis.  
*Electrophoresis*, 28 [12] 1964-1969 (2007)

- A31.** Lišková, A. - Šlampová, A.  
Measurement of pKa values of newly synthesized heteroaryl aminoethanols by CZE.  
*European Journal of Pharmaceutical Sciences*, 30 [5] 375-379 (2007)
- A32.** Malá, Z. - Křivánková, L. - Gebauer, P. - Boček, P.  
Contemporary sample stacking in CE: A sophisticated tool based on simple principles.  
*Electrophoresis*, 28 [1-2] 243-253 (2007)
- A33.** Matoušek, T.  
The efficiency of chemical vapour generation of transition and noble metals.  
*Analytical and Bioanalytical Chemistry*, 388 [4] 763-767 (2007)
- A34.** Motyka, K. - Onjia, A. - Mikuška, P. - Večeřa, Z.  
Flow-injection chemiluminescence determination of formaldehyde in water.  
*Talanta*, 71 [2] 900-905 (2007)
- A35.** Ndiaye, I. - Vobecký, M. - Pospíšil, S. - Jakubek, J. - Holý, T.  
Stanovení iridia v meteoritu koincidenční instrumentální neutronovou aktivacní analýzou.  
[Determination of iridium in meteorites by coincidence instrumental neutron activation analysis.]  
*Chemické listy*, 101 [4] 327-333 (2007)
- A36.** Nguyen, H. T. A. - Kubáň, P. - Pham, V. H. - Hauser, P.C.  
Study of the determination of inorganic arsenic species by CE with capacitively coupled contactless conductivity detection.  
*Electrophoresis*, 28 [19] 3500-3506 (2007)
- A37.** Nováková, M. - Křivánková, L. - Bartoš, M. - Urbanová, V. - Vytrás, K.  
Isotachophoretic determination of hydrosulfite and metabisulfite in technical samples.  
*Talanta*, 74 [2] 183-189 (2007)
- A38.** Ošťádalová, I. - Vobecký, M. - Chvojková, Z. - Miková, D. - Hampl, V. - Wilhelm, J. - Ošťádal, B.  
Selenium protects the immature rat heart against ischemia/reperfusion injury.  
*Molecular and Cellular Biochemistry*, 300 [1-2] 259-267 (2007)
- A39.** Pantůčková, P. - Urbánek, M. - Křivánková, L.  
Determination of iodide in samples with complex matrices by hyphenation of capillary isotachophoresis and zone electrophoresis.  
*Electrophoresis*, 28 [20] 3777-3785 (2007)
- A40.** Paul, D.S. - Hernández-Zavala, A. - Walton, F.S. - Adair, B.M. - Dědina, J. - Matoušek, T. - Stýblo, M.  
Examination of the effects of arsenic on glucose homeostasis in cell culture and animal studies: Development of a mouse model for arsenic-induced diabetes.  
*Toxicology and Applied Pharmacology*, 222 [3] 305-314 (2007)
- A41.** Planeta, J. - Karásek, P. - Roth, M.  
Limiting partition coefficients of solutes in biphasic trihexyltetradecylphosphonium chloride ionic liquid-supercritical CO<sub>2</sub> system: measurement and LSER-based correlation.  
*Journal of Physical Chemistry B*, 111 [26] 7620-7625 (2007)
- A42.** Pól, J. - Hohnová, B. - Hyötyläinen, T.  
Characterisation of Stevia Rebaudiana by comprehensive two-dimensional liquid chromatography time-of-flight mass spectrometry.  
*Journal of Chromatography A*, 1150 [1-2] 85-92 (2007)
- A43.** Pól, J. - Varaďová-Ostrá, E. - Karásek, P. - Roth, M. - Benešová, K. - Kotlaříková, P. - Časlavský, J.  
Comparison of two different solvents employed for pressurised fluid extraction of stevioside from Stevia rebaudiana: methanol versus water.  
*Analytical and Bioanalytical Chemistry*, 388 [8] 1847-1857 (2007)
- A44.** Růžička, F. - Horká, M. - Holá, V. - Votava, M.  
Capillary isoelectric focusing - useful tool for detection of the biofilm formation in *Staphylococcus epidermidis*.  
*Journal of Microbiological Methods*, 68 [3] 530-535 (2007)
- A45.** Řehulka, P. - Řehulková, H. - Chmelík, J.  
Měření proteomických dat hmotnostní spektrometrií a jejich bioinformatická interpretace.  
[Acquisition of proteomic data using mass spectrometry and their bioinformatics interpretation.]  
*Chemické listy*, 101 [4] 279-286 (2007)

- A46.** Schuchert-Shi, A. - Kubáň, P. - Hauser, P.C.  
Monitoring of enzymatic reactions using conventional and on-chip capillary electrophoresis with contactless conductivity detection.  
*Electrophoresis*, 28 [24] 4690-4696 (2007)
- A47.** Skalníková, H. - Halada, P. - Vodička, P. - Motlík, J. - Řehulka, P. - Horning, O. - Chmelík, J. - Norregaard Jensen, O. - Kovářová, H.  
A proteomic approach to studying the differentiation of neural stem cells.  
*Proteomics*, 7 [11] 1825-1838 (2007)
- A48.** Skalníková, H. - Řehulka, P. - Chmelík, J. - Martinková, J. - Zilvarová, M. - Gadher, S. J. - Kovářová, H.  
Relative quantitation of proteins fractionated by the ProteomeLab™ PF 2D system using isobaric tags for relative and absolute quantitation (iTRAQ).  
*Analytical and Bioanalytical Chemistry*, 389 [5] 1639-1645 (2007)
- A49.** Stránská, J. - Šebela, M. - Tarkowski, P. - Řehulka, P. - Chmelík, J. - Popa, I. - Peč, P.  
Inhibition of plant amine oxidases by a novel series of diamine derivatives.  
*Biochimie*, 89 [1] 135-144 (2007)
- A50.** Šťastná, M. - Behrens, A. - Noguera, G. - Herretes, S. - McDonnell, P. - Van Eyk, J.E.  
Proteomics of the aqueous humor in healthy New Zealand rabbits.  
*Proteomics*, 7 [23] 4358-4375 (2007)
- A51.** Štyriaková, I. - Štyriak, I. - Malachovský, P. - Večeřa, Z. - Koloušek, D.  
Bacterial clay release and iron dissolution during the quality 3 improvement of quartz sands.  
*Hydrometallurgy*, 89 [-] 99-106 (2007)
- A52.** Táborský, P. - Svobodová, I. - Lubal, P. - Hnatejko, Z. - Lis, S. - Hermann, P.  
Formation and dissociation kinetics of Eu(III) complexes with H(5)do3ap and similar dota-like ligands.  
*Polyhedron*, 26 [15] 4119-4130 (2007)
- A53.** Tomáš, R. - Yan, L. - Křenková, J. - Foret, F.  
Autofocusing and ESI/MS analysis of protein digests in a miniaturized multicompartment electrolyzer.  
*Electrophoresis*, 28 [13] 2283-2290 (2007)
- A54.** Vespalet, R. - Langauf, A. - Laromaine, A. - Vinas, C. - Horáková, H.  
Electrophoretic investigation of the boron cluster anion [7-(2'-pyridyl)-nido-7,8-dicarbaundecaborate]- and its protonated zwitterionic product.  
*Journal of Separation Science*, 30 [16] 2733-2741 (2007)
- A55.** Viana, M. - Maenhaut, W. - ten Brink, H. M. - Chi, X. - Weijers, E. - Querol, X. - Alastuey, A. - Mikuška, P. - Večeřa, Z.  
Comparative analysis of organic and elemental carbon concentrations in carbonaceous aerosols in three European cities.  
*Atmospheric Environment*, 41 [28] 5972-5983 (2007)
- A56.** Viñas, C. - Laromaine, A. - Teixidor, F. - Horáková, H. - Langauf, A. - Vespalet, R. - Matta, I. - Molins, E.  
Synthesis and investigation of the boron cluster anion [7-(2'-pyridyl)-7,8-nido-dicarbaundecaborate] and its protonated form.  
*Dalton Transactions*, - [31] 3369-3377 (2007)
- A57.** Žídková, J. - Řehulka, P. - Chmelík, J.  
Detection of hydrolysis of lipid post-translational modifications during gel-electrophoresis-based proteomic protocol.  
*Proteomics*, 7 [15] 2507-2510 (2007)

## **B. BOOKS AND CHAPTERS IN BOOKS**

**B1.** Dědina, J.

Technika generování hydridů.

[Hydride generation technique.]

In: *Automatická spektrometrie*. Český Těšín : 2THETA, 2007, pp. 197-204.

ISBN 978-80-86380-39-1

**B2.** Dědina, J.

Atomové absorpcní a fluorescenční detektory pro speciační analýzu založenou na generování těkavých sloučenin.

[AAS and AFS detectors for speciation analysis based on generation of volatile compounds.]

In: *Inovace v atomové absorpcní a fluorescenční spektroskopii*. Praha : Pražské analytické centrum inovací, 2007 - (Dědina, J.), pp. 105-126.

ISBN 978-80-86238-33-3

**B3.** Dočekal, B.

Atomová absorpcní spektrometrie.

[Atomic absorption spectrometry.]

*Automatická spektrometrie*. Český Těšín : 2THETA, 2007, pp. 154-196.

ISBN 978-80-86380-39-1

**B4.** Dočekal, B.

Atomová absorpcní spektrometrie s využitím laserových diod.

[Laser diode atomic absorption spectrometry.]

In: *Inovace v atomové absorpcní a fluorescenční spektroskopii*. Praha : Pražské analytické centrum inovací, 2007 - (Dědina, J.), pp. 3-10.

ISBN 978-80-86238-33-3

**B5.** Dočekal, B.

Detektory v atomové absorpcní spektrometrii.

[Detectors in atomic absorption spectrometry.]

In: *Inovace v atomové absorpcní a fluorescenční spektroskopii*. Praha : Pražské analytické centrum inovací, 2007 - (Dědina, J.), pp. 11-15.

ISBN 978-80-86238-33-3

**B6.** Dočekal, B.

Přímá analýza pevných vzorků atomovou absorpcní spektrometrií s elektrotermickou atomizací.

[Direct solid sampling electrothermal atomic absorption spectrometry.]

In: *Inovace v atomové absorpcní a fluorescenční spektroskopii*. Praha : Pražské analytické centrum inovací, 2007 - (Dědina, J.), pp. 53-60.

ISBN 978-80-86238-33-3

## **C. LECTURES AND POSTERS**

- C1.** Abele, S. - Foret, F. - Macka, M.  
Photopolymerised monoliths prepared using low UV light emitting diodes as a light source.  
*CECE 2007. 4th international interdisciplinary meeting on bioanalysis.* Brno: Ústav analytické chemie AV ČR, v.v.i, 2007, pp. 9-10. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis /4./. 15.11.2007-16.11.2007, Brno]
- C2.** Bekešová, S. - Kováčik, V. - Tvaroška, I. - Pátoperstý, V. - Škultéty, L. - Řehulka, P.  
Elimination of isocyanate and thioisocyanate molecules at the ESI-IT, ESI-Q/TOF and MALDI/TOF/TOF MS/MS fragmentation of sodium cationized brassitin, brassinin and their glycosides.  
*25th Informal Meeting on Mass Spectrometry. Book of Abstracts.* 2007, p. 143. ISBN 978-963-7067-14-3.  
[Informal Meeting on Mass Spectrometry /25./. 06.05.2007-10.05.2007, Nyíregyháza-Sóstó]
- C3.** Bruthans, J. - Kamas, J. - Balák, I. - Dostál, I. - Vilhelm, Z. - Kahle, V. - Šebela, R.  
Stará řeka, Tipeček a Žegrovský vodopád v Rudickém propadání: nové poznatky na základě stopovacích zkoušek a sifonový jev Tipečku.  
[Stará řeka, Tipeček and Žegrovský waterfall in the Rudické propadání cave: new data from tracer tests and sump effect of the Tipeček.]  
*Speleofórum 2007.* Praha : Česká speleologická společnost, 2007, pp. 69-74. ISSN 1211-8397.  
[Speleofórum 2007. Moravský kras (CZ), 20.04.2007-22.04.2007]
- C4.** Čáslavský, J. - Řihák, P.  
Fragmentation of boron cluster compounds in MS/MS on spherical ion trap.  
[Fragmentace borových klastrových sloučenin ve sférické iontové pasti.]  
*25th Informal Meeting on Mass Spectrometry. Book of Abstracts.* 2007, p. 73. ISBN 978-963-7067-14-3.  
[Informal Meeting on Mass Spectrometry /25./. 06.05.2007-10.05.2007, Nyíregyháza-Sóstó]
- C5.** Čejchanová, M. - Wranová, K. - Spěváčková, V. - Korunová, V. - Vobecký, M.  
Stanovení rtuti a methylrtuti ve vlasech pomocí AMA 254 a radioindikátorovou metodou.  
[Determination of mercury and methylmercury in hair by AMA 254 and radiotracers method.]  
*13. Spektroskopická konference.* Lednice : Spektroskopická společnost Jana Marka Marci, 2007, p. 90. ISBN 80-903732-2-4.  
[Spektroskopická konference /13./. 18.06.2007-21.06.2007, Lednice]
- C6.** Dědina, J. - Kratzer, J.  
New tool for ultratrace analysis: hydride trapping in quartz atomizers for atomic absorption spectrometry.  
*Abstract Book of Colloquium Spectroscopicum Internationale XXXV.* Xiamen : Xiamen University Press, 2007, p. 16.  
[Colloquium Spectroscopicum Internationale /35./. 23.09.2007-27.09.2007, Xiamen]
- C7.** Dočekal, B. - Dočekalová, H. - Řezáčová-Smetková, V. - Mládková, Z.  
Characterization of soils by diffusive gradients in thin film (DGT) technique.  
*Abstract Book. 1st Sino-Hungarian Workshop on Toxic Substances in the Environment.* 2007 - (Wang, Y.; Záray, G.; Yao, J.), p. 15.  
[Sino-Hungarian Workshop on Toxic Substances in the Environment /1./. 20.09.2007-22.09.2007, Wuhan]
- C8.** Dočekal, B. - Hrušovská, Z. - Krejčí, P.  
Investigation of mechanisms of trapping and interference effects in collection of hydride forming elements within atomizers.  
*Abstract Book of Colloquium Spectroscopicum Internationale XXXV.* Xiamen : Xiamen University Press, 2007, p. 31.  
[Colloquium Spectroscopicum Internationale /35./. 23.09.2007-27.09.2007, Xiamen]
- C9.** Dočekal, B. - Hrušovská, Z. - Krejčí, P.  
Mechanisms of trapping and interference effects in collection of volatile hydride forming elements within electrothermal atomizers.  
*13. Spektroskopická konference.* Lednice : Spektroskopická společnost Jana Marka Marci, 2007, p. 8. ISBN 80-903732-2-4.  
[Spektroskopická konference /13./. 18.06.2007-21.06.2007, Lednice]

- C10.** Dočekal, B. - Mikuška, P. - Šikola, T. - Večeřa, Z. - Zlámal, J. Electrochemical preconcentration of airborne particles for on line monitoring of element composition of aerosols by plasma source atomic emission spectrometry.  
*13. Spektroskopická konference*. Lednice : Spektroskopická společnost Jana Marka Marci, 2007, p. 59. ISBN 80-903732-2-4.  
 [Spektroskopická konference /13./. 18.06.2007-21.06.2007, Lednice]
- C11.** Dočekal, B. - Mikuška, P. - Šikola, T. - Večeřa, Z. - Zlámal, J. Electrostatic pre-concentration of airborne particles for on-line monitoring of element composition of aerosols by plasma source atomic emission spectrometry.  
*CANAS'07. Colloquium Analytische Atomspektroskopie*. 2007, p. P12.  
 [CANAS'07. Colloquium Analytische Atomspektroskopie.  
 18.03.2007-21.03.2007, Konstanz]
- C12.** Dočekal, B. - Mikuška, P. - Šikola, T. - Večeřa, Z. - Zlámal, J. Electrostatic pre-concentration of airborne particles for on-line monitoring of element composition of aerosols by plasma source atomic emission spectrometry.  
*Abstract Book of Colloquium Spectroscopicum Internationale XXXV*. Xiamen : Xiamen University Press, 2007, p. 73.  
 [Colloquium Spectroscopicum Internationale /35./. 23.09.2007-  
 27.09.2007, Xiamen]
- C13.** Dočekal, B. - Večeřa, Z. - Mikuška, P. - Šikola, T. - Zlámal, J. Design of electric focusing preconcentration device for in-time monitoring of element composition of atmospheric aerosols by atomic emission spectroscopy.  
*European Aerosol Conference*. Salzburg : Universität Salzburg, 2007, p. LP 27.  
 [European Aerosol Conference 2007. 09.09.2007-14.09.2007,  
 Salzburg]
- C14.** Dočekal, B. - Vojtková, B. Determination of trace impurities in titanium dioxide by direct solid sampling ETAAS.  
*CANAS'07. Colloquium Analytische Atomspektroskopie*. 2007, p. P13.  
 [CANAS'07. Colloquium Analytische Atomspektroskopie.  
 18.03.2007-21.03.2007, Konstanz]
- C15.** Dočekal, B. - Vojtková, B. Determination of trace impurities in titanium dioxide by direct solid sampling ETAAS.  
*13. Spektroskopická konference*. Lednice : Spektroskopická společnost Jana Marka Marci, 2007, p. 60. ISBN 80-903732-2-4.  
 [Spektroskopická konference /13./. 18.06.2007-21.06.2007, Lednice]
- C16.** Dočekal, B. - Vojtková, B. Determination of trace impurities in titanium dioxide by direct solid sampling ETAAS.  
*Abstract Book of Colloquium Spectroscopicum Internationale XXXV*. Xiamen : Xiamen University Press, 2007, p. 74.  
 [Colloquium Spectroscopicum Internationale /35./. 23.09.2007-  
 27.09.2007, Xiamen]
- C17.** Dočekalová, H. - Dočekal, B. - Kovaříková, V. Effects of fly ash on agricultural ecosystem, an assessment of bioavailable part of trace metals.  
*Abstract Book of Colloquium Spectroscopicum Internationale XXXV*. Xiamen : Xiamen University Press, 2007, p. 75.  
 [Colloquium Spectroscopicum Internationale /35./. 23.09.2007-  
 27.09.2007, Xiamen]
- C18.** Foret, F. Enzymatic microreactors for mass spectrometry coupling.  
*Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. Book of Abstracts*. Olomouc : Palacký University, 2007 - (Petr, J.; Znaleziona, J.; Ranc, V.; Vítková, K.), p. 24. ISBN 978-80-244-1705-9.  
 [Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. 24.06.2007-27.06.2007, Olomouc]
- C19.** Foret, F. Enzymatic microreactors for mass spectrometry coupling.  
*DICP Symposium (XIII) on Lab on Chip*. 2007, p. 14.  
 [DICP Symposium on Lab on Chip /13./. 21.06.2007-22.06.2007,  
 Dalian]
- C20.** Foret, F. Mikrofluidika a hmotnostní spektrometrie - nové směry.  
 [Mikrofluidics and mass spectrometry – new trends.]  
*Klinická biochemie a metabolismus*. Praha : Česká lékařská společnost J. E. Purkyně, 2007. S. 52. ISSN 1210-7921.

[Celostátní sjezd České společnosti klinické biochemie /8./.  
23.09.2007-25.09.2007, České Budějovice]

- C21.** Foret, F. - Křenková, J. - Klepárník, K. - Kusý, P.  
Miniaturization technology for bioanalysis.  
*13th International Symposium on Separation Sciences*. - : -, 2007, p. L26-1. ISBN 978-80-227-2698-6.  
[International Symposium on Separation Sciences /13./. 27.06.2007-29.06.2007, Štrbské Pleso]
- C22.** Gebauer, P. - Malá, Z. - Šlampová, A. - Boček, P.  
Regular properties of simple electrophoretic BGEs with multiprotic weak acids: Discovery of complex hybrid system boundaries.  
*CECE 2007. 4th international interdisciplinary meeting on bioanalysis*. Brno : Ústav analytické chemie AV ČR, v.v.i, 2007, pp. 26-27. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis /4./. 15.11.2007-16.11.2007, Brno]
- C23.** Gregušová, M. - Dočekal, B. - Řezáčová-Smetková, V.  
Vliv huminových kyselin na odezvu v technice difusních gradientů v tenkém filmu (DGT) - nové sorpční gely pro speciační analýzu.  
[Influence of humic acids on the response in DGT technique - new resin gels for speciation analysis.]  
*Anorganická analýza v životním prostředí*. Český Těšín : 2THETA, 2007, pp. 45-52. ISBN 978-80-86380-41-4.  
[Anorganická analýza v životním prostředí. Komorní Lhotka (CZ), 05.11.2007-07.11.2007]
- C24.** Grossová, O. - Dědina, J.  
Development of L-shaped hydride multiatomizer for atomic absorption spectrometry.  
*Modern Analytical Chemistry. Book of Proceedings*. Prague : Czech Chemical Society, 2007, pp. 119-125. ISBN 80-86238-96-2.  
[International Student Conference "Modern Analytical Chemistry" /3./. Praha (CZ), 29.01.2007-30.01.2007]
- C25.** Grossová, O. - Rychlovský, P. - Dědina, J.  
Effect of optical tube porosity on multiatomizer performance for HG AAS.  
*13. Spektroskopická konference*. Lednice : Spektroskopická společnost Jana Marka Marci, 2007, p. 63. ISBN 80-903732-2-4.  
[Spektroskopická konference /13./. 18.06.2007-21.06.2007, Lednice]

- C26.** Grossová, O. - Rychlovský, P. - Dědina, J.  
Porous optical tube multiatomizer for HGAAS.  
*Abstract Book of Colloquium Spectroscopicum Internationale XXXV*. Xiamen : Xiamen University Press, 2007, p. 80.  
[Colloquium Spectroscopicum Internationale /35./. 23.09.2007-27.09.2007, Xiamen]
- C27.** Grym, J. - Foret, F.  
Development of microfluidic systems for multidimensional separations.  
*CECE 2007. 4th international interdisciplinary meeting on bioanalysis*. Brno : Ústav analytické chemie AV ČR, v.v.i, 2007, pp. 34-35. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis /4./. 15.11.2007-16.11.2007, Brno]
- C28.** Hezinová, V. - Svobodová, I. - Podešva, P. - Klepárník, K. - Foret, F.  
Preparation and physico-chemical properties of CdTe quantum dots.  
*CECE 2007. 4th international interdisciplinary meeting on bioanalysis*. Brno : Ústav analytické chemie AV ČR, v.v.i, 2007, pp. 35-36. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis /4./. 15.11.2007-16.11.2007, Brno]
- C29.** Horáková, H. - Vespalet, R.  
Exploration on indirect photometric detection of boron cluster anions in methanol.  
*13th International Symposium on Separation Sciences*. - : -, 2007, p. N03-1. ISBN 978-80-227-2698-6.  
[International Symposium on Separation Sciences /13./. 27.06.2007-29.06.2007, Štrbské Pleso]
- C30.** Horáková, H. - Vespalet, R.  
Indirect photometric detection of boron cluster anions dissolved in methanol.  
*EUROBORON 4*. Bremen : Universität Bremen, 2007, p. 161.  
[Euroboron /4./. 02.09.2007-06.09.2007, Bremen]
- C31.** Horáková, H. - Vespalet, R.  
Nepřímá fotometrická detekce klastrových aniontů boru v metanolu.  
[Indirect photometric detection of boron cluster anions in methanol.]  
*Advances in Chromatography and Electrophoresis 2007 &*

- CHIRANAL 2007. Book of Abstracts.* Olomouc : Palacký University, 2007 - (Petr, J.; Znaleziona, J.; Ranc, V.; Vítková, K.), p. 61. ISBN 978-80-244-1705-9.  
 [Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. 24.06.2007-27.06.2007, Olomouc]
- C32.** Horká, M. - Růžička, F. - Holá, V. - Šlais, K.  
 Separation and detection of yeasts by electromigration techniques.  
*Amino Acids.* Roč. 33, - (2007), p. 47. ISSN 0939-4451.  
 [International Congress on Amino Acids and Proteins /10./. 20.08.2007-25.08.2007, Kallithea]
- C33.** Horký, J. - Horká, M. - Matoušková, H.  
 Separation and detection of bacteria pathogenic on tomatoes by electromigration techniques.  
*Program and Abstract Book: Second International Symposium on Tomato Diseases.* Kusadasi : E.U. Faculty of Agriculture, 2007, p. 121.  
 [International Symposium on Tomato Diseases /2./. 08.10.2007-12.10.2007, Kusadasi]
- C34.** Horký, J. - Matoušková, H. - Horká, M.  
 Possibilities of diagnostics of phytopathogenic bacteria from the stone fruits in the Czech Republic.  
*COST 873. Diagnostic and Monitoring of Bacterial Disease of Stone Fruits and Nuts.* Angers, 2007, p. 22.  
 [COST 873. Diagnostic and Monitoring of Bacterial Disease of Stone Fruits and Nuts. 17.04.2007-19.04.2007, Angers]
- C35.** Chmelík, J.  
 Optimization of particle separation in different elution modes in Field-Flow Fractionation.  
*FFF 2007, 13th International Symposium on Field-and Flow-based Separation.* Salt Lake City : State of Utah Center of Excellence for Biomedical Microfluidics, 2007, p. L34.  
 [FFF 2007. International Symposium on Field-and Flow-based Separation /13./. 27.06.2007-30.06.2007, Salt Lake City]
- C36.** Chmelík, J. - Mazanec, K. - Šlais, K. - Chmelík, J.  
 Novel gel-based proteomic staining-free method for simultaneous identification of proteins and determination of their pI values by using low-molecular mass pI markers.  
*2nd Congress of the Spanish Proteomics Society, 1st Meeting of the European Proteomics Association.* Valencia, 2007, p. 121.  
 [Congress of the Spanish Proteomics Society /2./, Meeting of the European Proteomics Association /1./. 10.02.2007-14.02.2007, Valencia]
- C37.** Chmelík, J. - Mazanec, K. - Šlais, K. - Řehulka, P. - Chmelík, J.  
 Identification of post-translational modifications based on proteomic method for simultaneous identification of proteins and determination of their pI values.  
*25th Informal Meeting on Mass Spectrometry. Book of Abstracts.* 2007, p. 139. ISBN 978-963-7067-14-3.  
 [Informal Meeting on Mass Spectrometry /25./. 06.05.2007-10.05.2007, Nyíregyháza-Sóstó]
- C38.** Karásek, P. - Roth, M. - Planeta, J.  
 Pressurized hot water extraction: Instrumental implementation with emphasis on solubility data measurement of polycyclic aromatic compounds.  
*ExTech 2007. Ninth International Symposium on Advances in Extraction Technologies.* 2007, pp. 216-217.  
 [ExTech 2007. International Symposium on Advances in Extraction Technologies /9./. 03.06.2007-06.06.2007, Ålesund]
- C39.** Karásek, P. - Planeta, J. - Roth, M.  
 Pressurized hot water: sample treatment option, experimental aspects, and aqueous solubility data.  
*13th International Symposium on Separation Sciences.* - : -, 2007, pp. A02-1-A02-4. ISBN 978-80-227-2698-6.  
 [International Symposium on Separation Sciences /13./. 27.06.2007-29.06.2007, Štrbské Pleso]
- C40.** Kellner, V. - Jurková, M. - Čulík, J. - Horák, T. - Čejka, P. - Karásek, P. - Roth, M. - Planeta, J.  
 Pressurized fluid extraction - new progressive alternative of extraction of bitter acids from hops and hop products and phenolic compounds from malt and hops.  
*3rd International Symposium on Recent Advances in Food Analysis.* Prague : Institute of Chemical Technology Prague, 2007, p. 389.  
 [International Symposium on Recent Advances in Food Analysis /3./. 07.11.2007-09.11.2007, Prague]

- C41.** Klepářník, K. - Křenková, J. - Otevřel, M. - Kusý, P. - Grym, J. - Foret, F.  
 Miniaturized device integrating capillary electrophoresis of proteins, their on-line enzymatic digestion and identification by mass spectrometry.  
*13th International Symposium on Separation Sciences*. - : -, 2007, p. L37-1. ISBN 978-80-227-2698-6.  
 [International Symposium on Separation Sciences /13./. 27.06.2007-29.06.2007, Štrbské Pleso]
- C42.** Klepářník, K. - Svobodová, I. - Foret, F.  
 Application of nanotechnologies in sample preparation of biological relevant macromolecules for high sensitivity analyses.  
*ExTech 2007. Ninth International Symposium on Advances in Extraction Technologies*. 2007, p. 45.  
 [ExTech 2007. International Symposium on Advances in Extraction Technologies /9./. 03.06.2007-06.06.2007, Alesund]
- C43.** Kratzer, J. - Dědina, J. - Rychlovský, P.  
 As and Se hydride trapping at the quartz surface - a step forward to in-situ trapping in quartz tube atomizers for AAS.  
*Modern Analytical Chemistry. Book of Proceedings*. Prague : Czech Chemical Society, 2007. pp. 59-67. ISBN 80-86238-96-2.  
 [International Student Conference "Modern Analytical Chemistry" /3./. Praha (CZ), 29.01.2007-30.01.2007]
- C44.** Kratzer, J. - Vobecký, M. - Rychlovský, P. - Dědina, J.  
 As and Se hydride trapping at the quartz surface.  
*CANAS'07. Colloquium Analytische Atomspektroskopie*. 2007, p. P16.  
 [CANAS'07. Colloquium Analytische Atomspektroskopie. 18.03.2007-21.03.2007, Konstanz]
- C45.** Kratzer, J. - Vobecký, M. - Rychlovský, P. - Dědina, J.  
 Hydride trapping in quartz atomizers for atomic absorption spectrometry: radiotracer study and routine applications.  
*Abstract Book of Colloquium Spectroscopicum Internationale XXXV*. Xiamen : Xiamen University Press, 2007, p. 34.  
 [Colloquium Spectroscopicum Internationale /35./. 23.09.2007-27.09.2007, Xiamen]
- C46.** Kratzer, J. - Vobecký, M. - Rychlovský, P. - Dědina, J.  
 Prekoncentrace hydridotvorných prvků na křemenném povrchu: stopová stanovení As a Se technikou HG-AAS.
- [Preconcentration of hydride forming elements at the quartz surface: determination of As and Se traces by the HG-AAS technique.]  
*13. Spektroskopická konference*. Lednice : Spektroskopická společnost Jana Marka Marci, 2007, p. 21. ISBN 80-903732-2-4.  
 [Spektroskopická konference /13./. 18.06.2007-21.06.2007, Lednice]
- C47.** Krejčí, P. - Dočekal, B.  
 Miniature device for electrothermal collection of hydride forming elements.  
*13. Spektroskopická konference*. Lednice : Spektroskopická společnost Jana Marka Marci, 2007, p. 70. ISBN 80-903732-2-4.  
 [Spektroskopická konference /13./. 18.06.2007-21.06.2007, Lednice]
- C48.** Krejčí, P. - Dočekal, B.  
 New observations in electrothermal collection of hydride forming elements in the molybdenum-foil strip vaporizer.  
*CANAS'07. Colloquium Analytische Atomspektroskopie*. 2007, p. P14.  
 [CANAS'07. Colloquium Analytische Atomspektroskopie. 18.03.2007-21.03.2007, Konstanz]
- C49.** Křenková, J. - Klepářník, K. - Foret, F.  
 Open tubular enzymatic reactor as an electrospray needle for on-line CE/MS of proteins.  
*MSB 2007. Book of Abstracts*. 2007, p. 227.  
 [MSB 2007. International Symposium on MicroScale Bioseparations /21./. 14.01.2007-18.01.2007, Vancouver]
- C50.** Křivánková, L. - Pantůčková, P.  
 Selection of proper electrolyte systems for hyphenation of capillary isotachophoresis and zone electrophoresis aimed at trace analyses of complex matrices.  
*HPLC 2007. Abstract Book*. 2007 - (Sandra, T.; Dumont, E.; Sandra, P.), p. 88.  
 [International Symposium on High Performance Liquid Phase Separations and Related Techniques /31./. 17.06.2007-21.06.2007, Ghent]
- C51.** Kusý, P. - Křenková, J. - Grym, J. - Klepářník, K. - Foret, F.  
 CE-ESI/MS with miniaturized and functionalized nanoelectrospray emitters.  
*55th ASMS Conference on Mass Spectrometry and Allied Topics*. Indianapolis : ASMS, 2007, p. 122.

- [ASMS Conference on Mass Spectrometry and Allied Topics.  
03.06.2007-07.06.2007, Indianapolis]
- C52.** Langauf, A. - Vespalet, R.  
Využitelnost UV absorpčních spekter solí klastrových aniontů boru pro fotometrickou detekci jejich aniontů.  
*Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. Book of Abstracts.* Olomouc : Palacký University, 2007 - (Petr, J.; Znaleziona, J.; Ranc, V.; Vítková, K.), p. 130. ISBN 978-80-244-1705-9.  
[Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. 24.06.2007-27.06.2007, Olomouc]
- C53.** Laštovičková, M. - Mazanec, K. - Šalplachta, J. - Bobálová, J. - Chmelík, J.  
How the barley malting changes the protein profile?  
*CECE 2007. 4th international interdisciplinary meeting on bioanalysis.* Brno : Ústav analytické chemie AV ČR, v.v.i, 2007, pp. 38-39. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis /4./. 15.11.2007-16.11.2007, Brno]
- C54.** Laštovičková, M. - Mazanec, K. - Šalplachta, J. - Bobálová, J. - Chmelík, J.  
The changes of protein profile during the barley malting.  
*1st Central and Eastern European Proteomic Conference and 3rd Czech Proteomic Conference.* Mělník : ÚŽFG, 2007, p. 56.  
[Central and Eastern European Proteomic Conference /1./ and Czech Proteomic Conference /3./. 29.10.2007-31.10.2007, Praha]
- C55.** Malá, Z. - Gebauer, P. - Boček, P. - Křivánková, L.  
Techniques and principles of stacking methods in capillary zone electrophoresis.  
*Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. Book of Abstracts.* Olomouc : Palacký University, 2007 - (Petr, J.; Znaleziona, J.; Ranc, V.; Vítková, K.), p. 32. ISBN 978-80-244-1705-9.  
[Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. 24.06.2007-27.06.2007, Olomouc]
- C56.** Matoušek, T.  
Chemical vapour generation of silver: reaction conditions and atomization in the quartz multiatomizer for AAS.
- Abstract Book of Colloquium Spectroscopicum Internationale XXXV.*  
Xiamen : Xiamen University Press, 2007, p. 78.  
[Colloquium Spectroscopicum Internationale /35./. 23.09.2007-27.09.2007, Xiamen]
- C57.** Mazanec, K. - Šlais, K. - Chmelík, J.  
Search for the posttranslational modifications of barley proteins during malting by IEF followed by MS identification.  
*CECE 2007. 4th international interdisciplinary meeting on bioanalysis.* Brno : Ústav analytické chemie AV ČR, v.v.i, 2007, pp. 37-38. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis /4./. 15.11.2007-16.11.2007, Brno]
- C58.** Mazanec, K. - Šlais, K. - Chmelík, J.  
Study of changes of barley proteins during malting by method for simultaneous identification of proteins and determination of their pI values.  
*1st Central and Eastern European Proteomic Conference and 3rd Czech Proteomic Conference.* Mělník : ÚŽFG, 2007, p. 60.  
[Central and Eastern European Proteomic Conference /1./ and Czech Proteomic Conference /3./. 29.10.2007-31.10.2007, Praha]
- C59.** Mikuška, P. - Večeřa, Z. - Motyka, K. - Vojtěšek, M.  
Analysis of particulate nitrate, nitric acid, nitrous acid, nitrogen dioxide and ozone in air.  
*European Aerosol Conference.* Salzburg : Universität Salzburg, 2007, p. LP 26.  
[European Aerosol Conference 2007. 09.09.2007-14.09.2007, Salzburg]
- C60.** Mládková, Z. - Dočkalová, H. - Dočekal, B.  
Vliv vlhkosti půdy na odezvu DGT. Charakterizace dostupnosti kovů v půdách.  
[Characterization of metal accessibility in soils by investigation of influence of moisture content on response in DGT technique.]  
*Anorganická analýza v životním prostředí.* Český Těšín : 2THETA, 2007, pp. 32-44. ISBN 978-80-86380-41-4.  
[Anorganická analýza v životním prostředí. Komorní Lhotka (CZ), 05.11.2007-07.11.2007]
- C61.** Musil, S. - Matoušek, T. - Rychlovsý, P.  
On-line pre-reduction of pentavalent arsenicals by thioglycolic acid

- for speciation analysis by selective hydride generation-cryotrapping-AAS.
- 13. Spektroskopická konference*. Lednice : Spektroskopická společnost Jana Marka Marci, 2007, p. 77. ISBN 80-903732-2-4.  
[Spektroskopická konference /13./. 18.06.2007-21.06.2007, Lednice]
- C62.** Musil, S. - Matoušek, T. - Rychlovský, P.  
On-line pre-reduction of pentavalent arsenicals by thioglycolic acid for speciation analysis by selective hydride generation-cryotrapping-AAS.  
*Abstract Book of Colloquium Spectroscopicum Internationale XXXV*. Xiamen : Xiamen University Press, 2007, p. 403.  
[Colloquium Spectroscopicum Internationale /35./. 23.09.2007-27.09.2007, Xiamen]
- C63.** Nováková, M. - Křivánková, L. - Bartoš, M. - Urbanová, V.  
Isotachophoretic determination of hydrosulfite and metabisulfite in technical samples.  
*Euroanalysis XIV*. Antwerp : European Association for Chemical and Molecular Sciences, 2007, pp. 401-402.  
[Euroanalysis /14./. 09.09.2007-14.09.2007, Antwerp]
- C64.** Nováková, M. - Křivánková, L. - Skalická, I. - Bartoš, M. - Urbanová, V.  
Isotachophoretic determination of potassium and ammonium ions.  
*Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. Book of Abstracts*. Olomouc : Palacký University, 2007 - (Petr, J.; Znaleziona, J.; Ranc, V.; Vítková, K.), p. 144. ISBN 978-80-244-1705-9.  
[Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. 24.06.2007-27.06.2007, Olomouc]
- C65.** Otevřel, M. - Foret, F.  
Aerodynamic simulation of ESI-MS interface using the finite element method.  
*CECE 2007. 4th international interdisciplinary meeting on bioanalysis*. Brno : Ústav analytické chemie AV ČR, v.v.i, 2007, p. 39. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis /4./. 15.11.2007-16.11.2007, Brno]
- C66.** Pantůčková, P. - Nováková, M. - Křivánková, L.  
On-line combination of capillary isotachophoresis and zone electrophoresis - an effective tool for enhancement of sensitivity and selectivity.
- CSPS. From bench to market*. 2007, pp. 92-93.  
[CSPS. Canadian Society for Pharmaceutical Sciences Annual Meeting /10./. 30.05.2007-02.06.2007, Montreal]
- C67.** Pantůčková, P. - Urbánek, M. - Křivánková, L.  
Determination of iodide in samples with complex matrices by hyphenation of capillary isotachophoresis and zone electrophoresis.  
*Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. Book of Abstracts*. Olomouc : Palacký University, 2007 - (Petr, J.; Znaleziona, J.; Ranc, V.; Vítková, K.), p. 134. ISBN 978-80-244-1705-9.  
[Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. 24.06.2007-27.06.2007, Olomouc]
- C68.** Pátoprstý, V. - Kováčik, V. - Bekešová, S. - Rehulka, P. - Chmelík, J. - Kováč, P.  
Comparison of ESI IT multistage and MALDI TOF/TOF mass spectral behaviour of synthetic fragments of lipopolysaccharides of *Vibrio cholerae* O:1.  
*25th Informal Meeting on Mass Spectrometry. Book of Abstracts*. 2007, p. 42. ISBN 978-963-7067-14-3.  
[Informal Meeting on Mass Spectrometry /25./. 06.05.2007-10.05.2007, Nyíregyháza-Sóstó]
- C69.** Pavelka, S. - Babický, A. - Vobecký, M.  
Simultaneous use of  $^{82}\text{Br}$  and  $^{24}\text{Na}$  radionuclides in the whole-body counting of animals by high-resolution gamma-ray spectrometry.  
*12th International Conference on Modern Trends in Activation Analysis*. Tokyo : Tokyo Metropolitan University, 2007, p. 117.  
[International Conference on Modern Trends in Activation Analysis /12./. 16.09.2007-21.09.2007, Hachioji]
- C70.** Pavelka, S. - Vobecký, M. - Babický, A.  
Simultaneous determination of bromine and iodine in the rat thyroid by short-term INAA.  
*12th International Conference on Modern Trends in Activation Analysis*. Tokyo : Tokyo Metropolitan University, 2007, p. 118.  
[International Conference on Modern Trends in Activation Analysis /12./. 16.09.2007-21.09.2007, Hachioji]

- C71.** Pešková, K. - Krejčová, A. - Pouzar, M.  
Kryogenní mletí k úpravě vzorků k analýze.  
[Cryogenic grinding for sample preparation.]  
*Anorganická analýza v životním prostředí*. Český Těšín : 2THETA, 2007, pp. 59-62. ISBN 978-80-86380-41-4.  
[Anorganická analýza v životním prostředí. Komorní Lhotka (CZ), 05.11.2007-07.11.2007]
- C72.** Petry-Podgorska, I. - Žídková, J. - Bobálová, J. - Chmelík, J.  
Approaches for studying phosphorylation and glycation in selected proteins.  
*1st Central and Eastern European Proteomic Conference and 3rd Czech Proteomic Conference*. Mělník : ÚŽFG, 2007, p. 61.  
[Central and Eastern European Proteomic Conference /1./ and Czech Proteomic Conference /3./. 29.10.2007-31.10.2007, Praha]
- C73.** Pittenauer, E. - Stübiger, G. - Marchetti, M. - Řehulká, P. - Chmelík, J. - Allmaier, G.  
The reinvention and/or misinterpretation of high-energy CID of biomolecules obtained by MALDI-TOF/RTOF mass spectrometry.  
*25th Informal Meeting on Mass Spectrometry. Book of Abstracts*. 2007, p. 41. ISBN 978-963-7067-14-3.  
[Informal Meeting on Mass Spectrometry /25./. 06.05.2007-10.05.2007, Nyíregyháza-Sóstó]
- C74.** Planeta, J. - Karásek, P. - Roth, M.  
Use of ionic liquids as stationary phases in supercritical fluid chromatography: measurement and laser-based correlation of analyte distribution constants.  
*13th International Symposium on Separation Sciences*. - : -, 2007, pp. A01-1-A01-3. ISBN 978-80-227-2698-6.  
[International Symposium on Separation Sciences /13./. 27.06.2007-29.06.2007, Štrbské Pleso]
- C75.** Pól, J. - Hohnová, B. - Hyötyläinen, T.  
Comprehensive two-dimensional liquid chromatography time-of-flight mass spectrometry of Stevia rebaudiana leaves.  
*13th International Symposium on Separation Sciences*. - : -, 2007, pp. K13-1-K13-3. ISBN 978-80-227-2698-6.  
[International Symposium on Separation Sciences /13./. 27.06.2007-29.06.2007, Štrbské Pleso]
- C76.** Procházková, B. - Šalplachta, J.  
The use of carrier ampholyte-free isoelectric focusing (CAF-IEF) for proteomic analysis.  
*Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. Book of Abstracts*. Olomouc : Palacký University, 2007 - (Petr, J.; Znaleziona, J.; Ranc, V.; Vítková, K.), p. 136. ISBN 978-80-244-1705-9.  
[Advances in Chromatography and Electrophoresis 2007 & CHIRANAL 2007. 24.06.2007-27.06.2007, Olomouc]
- C77.** Roth, M. - Planeta, J. - Karásek, P.  
Phase equilibrium data for green processes involving ionic liquids, supercritical CO<sub>2</sub>, and pressurized hot water.  
*5th International Symposium on High Pressure Process Technology and Chemical Engineering*. - : -, 2007 - (Knez, Z.; Cocero, M.), pp. 1-9.  
[International Symposium on High Pressure Process Technology and Chemical Engineering /5./. Segovia (ES), 24.06.2007-27.06.2007]
- C78.** Růžička, F. - Holá, V. - Horká, M. - Tejkalová, R. - Votava, M.  
Možnosti detekce biofilmpozitivních mikrobů na základě jejich povrchových vlastností.  
*Bulletin Československé společnosti mikrobiologické*. Praha : Československá společnost mikrobiologická, 2007, p. 52. ISSN 0009-0646.  
[Kongres Československé společnosti mikrobiologické /24./. 02.10.2007-05.10.2007, Liberec]
- C79.** Řehulká, P. - Řehulková, H. - Chmelík, J. - Skalníková, H. - Kovářová, H.  
Application of isobaric tags for relative and absolute quantitation (iTRAQ) for proteins separated using ProteomeLab PF 2D system.  
*25th Informal Meeting on Mass Spectrometry. Book of Abstracts*. 2007, p. 144. ISBN 978-963-7067-14-3.  
[Informal Meeting on Mass Spectrometry /25./. 06.05.2007-10.05.2007, Nyíregyháza-Sóstó]
- C80.** Řehulká, P. - Skalníková, H. - Chmelík, J. - Gadher, S. J. - Kovářová, H.  
Quantitation of intact proteins fractionated by ProteomeLab PF 2D system using isobaric tags for relative and absolute quantitation (iTRAQ).  
*2nd Congress of the Spanish Proteomics Society, 1st Meeting of the*

- European Proteomics Association.* Valencia, 2007, p. 132.  
 [Congress of the Spanish Proteomics Society /2./, Meeting of the European Proteomics Association /1./. 10.02.2007-14.02.2007, Valencia]
- C81.** Řehulková, H. - Chmelík, J. - Žídková, J. - Řehulka, P. - Bobálová, J.  
 High coverage proteomic identification of post-translationally modified proteins.  
*Materials Structure in Chemistry, Biology, Physics and Technology.*  
 Roč. 14, č. 1 (2007), p. 44. ISSN 1211-5894.  
 [Discussions in Structural Molecular Biology and Bioinformatics /6./. 29.03.2007-31.03.2007, Nové Hrady]
- C82.** Řehulková, H. - Řehulka, P. - Chmelík, J.  
 iTRAQ quantitation of lower concentrated peptide mixtures.  
*1st EU-Summer School in Proteomic Basics "Sample Preparation and Separation".* Brixen : -, 2007, p. 70.  
 [EU-Summer School in Proteomic Basics "Sample Preparation and Separation" /1./. 12.08.2007-18.08.2007, Kloster Neustift]
- C83.** Řehulková, H. - Řehulka, P. - Chmelík, J. - Dostálka, P.  
 Application of proline-specific protease from *Aspergillus Niger* for proteolytic digestion of hordeins.  
*1st Central and Eastern European Proteomic Conference and 3rd Czech Proteomic Conference.* Mělník : ÚZFG, 2007, p. 40.  
 [Central and Eastern European Proteomic Conference /1./ and Czech Proteomic Conference /3./. 29.10.2007-31.10.2007, Praha]
- C84.** Řehulková, H. - Řehulka, P. - Chmelík, J. - Dostálka, P.  
 Proteolytic digestion of hordeins with proline-specific protease from *Aspergillus niger* under nonreducing and reducing conditions.  
*CECE 2007. 4th international interdisciplinary meeting on bioanalysis.* Brno : Ústav analytické chemie AV ČR, v.v.i, 2007, pp. 42-43. ISBN 978-80-254-0427-0.  
 [CECE 2007. International interdisciplinary meeting on bioanalysis /4./. 15.11.2007-16.11.2007, Brno]
- C85.** Řihák, P. - Čáslavský, J.  
 Application of tandem mass spectrometry on 3D-ion trap for the identification of carboranes.  
*25th Informal Meeting on Mass Spectrometry. Book of Abstracts.* 2007, p. 105. ISBN 978-963-7067-14-3.
- [Informal Meeting on Mass Spectrometry /25./. 06.05.2007-10.05.2007, Nyíregyháza-Sóstó]
- C86.** Skalníková, H. - Řehulka, P. - Chmelík, J. - Gadher, S. J. - Kovářová, H.  
 ProteomeLab PF2D chromatography separation of proteins for quantitative mass spectrometry in cancer research.  
*Advances in Proteomics in Cancer Research.* Amelia Island, 2007, p. 1.  
 [Advances in Proteomics in Cancer Research. 27.02.2007-02.03.2007, Amelia Island]
- C87.** Spěváčková, V. - Čejchanová, M. - Wranová, K. - Korunová, V. - Spěváček, V.  
 Determination of mercury and methylmercury in hair - pilot study.  
*CANAS '07. Colloquium Analytische Atomspektroskopie.* 2007. [CANAS '07. Colloquium Analytische Atomspektroskopie. 18.03.2007-21.03.2007, Konstanz]
- C88.** Svoboda, M. - Matoušek, T. - Stýblo, M. - Rychlovský, P. - Dědina, J.  
 Arsenic speciation analysis by hydride generation - cryogenic trapping - atomic absorption spectrometry.  
*13. Spektroskopická konference.* Lednice : Spektroskopická společnost Jana Marka Marci, 2007, p. 80. ISBN 80-903732-2-4.  
 [Spektroskopická konference /13./. 18.06.2007-21.06.2007, Lednice]
- C89.** Svoboda, M. - Matoušek, T. - Stýblo, M. - Rychlovský, P. - Dědina, J.  
 Minimization of detection limits in arsenic speciation analysis by hydride generation - cryogenic trapping - atomic absorption spectrometry.  
*Abstract Book of Colloquium Spectroscopicum Internationale XXXV.* Xiamen : Xiamen University Press, 2007, p. 77.  
 [Colloquium Spectroscopicum Internationale /35./. 23.09.2007-27.09.2007, Xiamen]
- C90.** Šalplachta, J. - Bobálová, J. - Chmelík, J.  
 Screening of celiac-related proteins of barley and wheat by SDS gel electrophoresis and MALDI mass spectrometry.  
*1st Central and Eastern European Proteomic Conference and 3rd Czech Proteomic Conference.* Mělník : ÚZFG, 2007, p. 55.  
 [Central and Eastern European Proteomic Conference /1./ and Czech Proteomic Conference /3./. 29.10.2007-31.10.2007, Praha]

- C91.** Šlais, K.  
Divergent flow isoelectric focusing.  
*7th Balaton Symposium on High-Performance Separation Methods.*  
Budapest : Hungarian Society for Separation Sciences, 2007, p. 45.  
ISBN 978-963-06-2925-6.  
[Balaton Symposium on High-Performance /7./. 05.09.2007-  
07.09.2007, Siofok]
- C92.** Šlais, K.  
Divergent flow isoelectric focusing.  
*CECE 2007. 4th international interdisciplinary meeting on  
bioanalysis.* Brno : Ústav analytické chemie AV ČR, v.v.i, 2007, pp.  
19-20. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis  
/4./. 15.11.2007-16.11.2007, Brno]
- C93.** Šlampová, A. - Boček, P.  
Rigorous statistical analysis of mobility curves for the determination  
of pKA of weak acids.  
*CECE 2007. 4th international interdisciplinary meeting on  
bioanalysis.* Brno : Ústav analytické chemie AV ČR, v.v.i, 2007, pp.  
27-28. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis  
/4./. 15.11.2007-16.11.2007, Brno]
- C94.** Šlampová, A. - Boček, P.  
Rigorous statistical analysis of mobility curves for the determination  
of pKA of weak bases.  
*CECE 2007. 4th international interdisciplinary meeting on  
bioanalysis.* Brno : Ústav analytické chemie AV ČR, v.v.i, 2007. -. ISBN 978-80-254-0427-0.  
[CECE 2007. International Interdisciplinary Meeting on Bioanalysis  
/4./. 15.11.2007-16.11.2007, Brno]
- C95.** Tomáš, R. - Nováková, M. - Křivánková, L. - Valík, D. - Foret, F.  
Determination of 5-methyltetrahydrofolate in serum by capillary  
isotachophoresis/electrospray mass spectrometry.  
*ISCCE 2007.* 2007, p. P-117-F.  
[International Symposium on Capillary Chromatography &  
Electrophoresis /31./. 28.11.2007-30.11.2007, Albuquerque]
- C96.** Vadinská, M. - Bosáková, Z. - Tesařová, E. - Coufal, P. - Planeta, J.  
Evaluation of capillary columns with teicoplanin-aglycone bonded  
chiral stationary phase in liquid chromatography.  
*13th International Symposium on Separation Sciences.* - : -, 2007,  
pp. C03-1-C03-2. ISBN 978-80-227-2698-6.  
[International Symposium on Separation Sciences /13./. 27.06.2007-  
29.06.2007, Štrbské Pleso]
- C97.** Vespałec, R. - Horáková, H.  
Novel subject for electrophoretic separations in non-aqueous media:  
boron cluster compounds.  
*4th Nordic Separation Science Society (NoSSS) International  
Conference.* Kaunas : Vytautas Magnus University, 2007 -  
(Maruška, A.; Kornýšova, O.), p. 59. ISBN 978-9955-12-232-6.  
[Nordic Separation Science Society (NoSSS) International  
Conference /4./. 26.08.2007-29.08.2007, Kaunas]
- C98.** Vespałec, R. - Horáková, H. - Langauf, A.  
Cyclodextrins and boron cluster anions as model compounds for  
interaction studies of hydrophilic and hydrophobic species.  
*13th International Symposium on Separation Sciences.* - : -, 2007,  
pp. L.39-1-L.39-3. ISBN 978-80-227-2698-6.  
[International Symposium on Separation Sciences /13./. 27.06.2007-  
29.06.2007, Štrbské Pleso]
- C99.** Vespałec, R. - Horáková, H. - Teixidor, F. - Viñas, C.  
Electrophoretic investigation of acid-base properties of boron cluster  
compounds.  
*EUROBORON 4.* Bremen : Universität Bremen, 2007, p. 27.  
[Euroboron /4./. 02.09.2007-06.09.2007, Bremen]
- C100.** Vobecký, M.  
Sedmdesát let aktivační analýzy.  
[Seventy years of activation analysis.]  
*Souhrny přednášek semináře Radioanalytické metody IAA 06.* Praha  
: Spektroskopická společnost Jana Marka Marci, 2007 - (Vobecký,  
M.), pp. 5-17. ISBN 80-903732-1-6.  
[Seminář Radioanalytické metody IAA 06. Praha (CZ), 28.06.2006]
- C101.** Žídková, J. - Chmelík, J.  
Hydrolysis of lipid post-translational modification by  
electrophoresis-based proteomic protocol.  
*1st Central and Eastern European Proteomic Conference and 3rd*

*Czech Proteomic Conference.* Mělník : ÚZFG, 2007, p. 39.  
[Central and Eastern European Proteomic Conference /1./ and Czech  
Proteomic Conference /3./. 29.10.2007-31.10.2007, Praha]

- C102.** Žídková, J. - Matejková, M. - Petry-Podgorska, I. - Žídek, L. -  
Sikorová, K. - Nálezková, M. - Chmelík, J. - Sklenář, V.  
Lipid transfer proteins of barley.  
*Materials Structure in Chemistry, Biology, Physics and Technology.*  
Roč. 14, č. 1 (2007), p. 51. ISSN 1211-5894.  
[Discussions in Structural Molecular Biology and Bioinformatics  
/6./. 29.03.2007-31.03.2007, Nové Hrady]

#### **D. RESEARCH REPORTS**

## E. PATENTS, PATENT APPLICATIONS

## F. VARIA

- F1.** Corthals, G., Řehulka, P., Míšek I.  
In memoriam: Josef Chmelík, RNDr, PhD (1953-2007).  
Obituary.  
*Proteomics*, **7** [17] 3031 (2007)
- F2.** Foret, F. - Kutter, J.P.  
Miniaturization 2007 Issue.  
Editorial.  
*Electrophoresis*, **28** [24] 4509 (2007)
- F3.** Vobecký, M.  
První československý výzkumný jaderný reaktor.  
[First Czechoslovak research nuclear reactor.]  
*Akademický bulletin AV ČR*, - [9] 10-11 (2007)

## G. THESES

- G1.** Cabálková, J.  
Study of carbohydrates in Norway spruce needles using modern analytical techniques.  
Fakulta chemická VUT, Ústav chemie potravin a biotechnologií.  
Obhájeno: Brno. 3.12.2007. - Brno, 2007. 135 s.  
(Ph.D.)
- G2.** Křenková, J.  
Development of capillary enzyme reactors for integration into microfluidic systems.  
Univerzita Pardubice, Fakulta chemicko-technologická, Katedra analytické chemie. Obhájeno: Pardubice. 18.4.2007. - Brno, 2007. 176 s.  
(Ph.D.)
- G3.** Laštovičková, M.  
The characterization of biopolymers (glycoproteins and polysaccharides) by using separation methods and mass spectrometry.  
Fakulta chemická VUT, Ústav chemie potravin a biotechnologií.  
Obhájeno: Brno. 3.12.2007. - Brno, 2007. 132 s.  
(Ph.D.)
- G4.** Mazanec, K.  
Characterization of polymers by combination of separation techniques and mass spectrometry.  
Fakulta chemická VUT, Ústav chemie materiálů. Obhájeno: Brno. 3.12.2007. - Brno, 2007. 95 s.  
(Ph.D.)
- G5.** Motyka, K.  
Transport vybraných polutantů přes mezifázové rozhraní vzduch-voda.  
[Transport of selected pollutants across air-water interface.]  
Masarykova univerzita, Přírodovědecká fakulta. Obhájeno: Brno. 4.4.2007. - Brno, 2007. 40 s.  
(Ph.D.)
- G6.** Nováková, M.  
Využití kapilární izotachoforézy pro stanovení mikrosložek ve vzorcích se složitou matricí.  
[Using of capillary isotachophoresis for determination of microcomponents in samples with complex matrix.]  
Univerzita Pardubice, Fakulta chemicko-technologická, Katedra analytické chemie. Obhájeno: Pardubice. 20.11.2007. - Brno, 2007. 131 s.  
(Ph.D.)

## **H. PAPERS AND BOOKS IN PRESS**

- H1.** Gebauer, P. - Malá, Z. - Šlampová, A. - Boček, P.  
Regular properties of simple electrophoretic BGEs with multiprotic weak acids: Discovery of complex hybrid system boundaries.  
*Electrophoresis*, in press
- H2.** Hernández-Zavala, A. - Matoušek, T. - Drobná, Z. - Paul, D.S. - Walton, F. - Adair, B.M. - Dědina, J. - Thomas, D. J. - Stýblo, M.  
Speciation analysis of arsenic in biological matrices by automated hydride generation-cryotrapping-atomic absorption spectrometry with multiple microflame quartz tube atomizer (multiatomizer).  
*Journal of Analytical Atomic Spectrometry*, in press
- H3.** Karásek, P. - Planeta, J. - Roth, M.  
Simple first-order group contribution scheme for solubilities of solid polycyclic aromatic hydrocarbons and solid polycyclic aromatic heterocycles in pressurized hot water.  
*Industrial and Engineering Chemistry Research*, in press
- H4.** Karásek, P. - Planeta, J. - Roth, M.  
Solubilities of triptycene, 9-phenylanthracene, 9,10-dimethylanthracene, and 2-methylanthracene in pressurized hot water at temperatures from 313 K to the melting point.  
*Journal of Chemical and Engineering Data*, in press
- H5.** Matoušek, T. - Hernández-Zavala, A. - Svoboda, M. - Langrová, L. - Adair, B.M. - Drobná, Z. - Thomas, D. J. - Stýblo, M. - Dědina, J.  
Oxidation state specific generation of arsines from methylated arsenicals based on L-cysteine treatment in buffered media for speciation analysis by hydride generation - automated cryotrapping - gas chromatography- atomic absorption spectrometry with the mMultiatomizer.  
*Spectrochimica Acta Part B: Atomic Spectroscopy*, in press
- H6.** Nováková, M. - Křivánková, L. - Skalická, I. - Bartoš, M. - Vytřas, K.  
Determination of potassium and ammonium in complex matrices by capillary isotachophoresis.  
*Chromatographia*, in press
- H7.** Procházková, B. - Šalplachta, Jiří  
The use of carrier ampholyte-free isoelectric focusing for proteomic analysis.  
*Chromatographia*, in press
- H8.** Šlais, K.  
Divergent flow isoelectric focusing.  
*Electrophoresis*, in press
- H9.** Šlampová, A. - Boček, P.  
Statistical data processing of mobility curves of univalent weak bases.  
*Electrophoresis*, in press
- H10.** Večeřa, Z. - Mikuška, P. - Smolík, J. - Eleftheriadis, K. - Bryant, C. - Colbeck, I. - Lazaridis, M.  
Shipboard measurements of ozone, nitrogen dioxide, nitrous and nitric acids, and sulphur dioxide in the Eastern Mediterranean Sea.  
*Water, Air, Soil Pollution Focus*, in press

## J. GRANTS

- J1.** Boček, P.  
Vzorkem indukované elektromigrační efekty v kapilární elektroforéze.  
[Sample induced electromigration phenomena in capillary electrophoresis.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAA400310609** (2006-2009).
- J2.** Brzobohatý, B. - Bobálová, J. - Bouchal, P.  
Dynamika proteomu v odpovědi na zvýšené hladiny cytokininů u Arabidopsis.  
[Proteome dynamics in response to increased cytokinin levels in Arabidopsis.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAA600040701** (2007-2010).
- J3.** Brzobohatý, B. - Pilař, M. - Fišer, J. - Kopačka, V. - Griga, M. - Rakouský, S. - Sehnal, F. - Dědič, P. - Macek, T. - Macháčková, I. - Řehulka, P.  
Funkční genomika a proteomika ve šlechtění rostlin  
[Functional genomics and proteomics for crop improvement.]  
Ministerstvo školství, mládeže a tělovýchovy České republiky  
[Ministry of Education, Youth and Physical Training of the Czech Republic], **1M06030** (2006-2009).
- J4.** Čáslavský, J. - Grüner, B. - Vespalet, R.  
Hmotnostně spektrometrický a elektroforetický výzkum klastrových sloučenin boru.  
[Mass spectrometric and electrophoretic research of boron cluster compounds.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAA400310613** (2006-2009).
- J5.** Čejchanová, M. - Spěváčková, V. - Korunová, V.  
Rtuť a metylrtuť ve vlasech vybrané populace v ČR jako bioindikátor expozice rtuti.  
[Mercury and methylmercury in hair of selected population in Czech Republic as a bioindicator of mercury exposure.]  
Ministerstvo zdravotnictví České republiky [Ministry of Health of the Czech Republic], **NR8955** (2006-2008).
- J6.** Černý, V. - Přibyla, L.  
Výzkum možností zdokonalení postupu výroby dohřívaných sýrů s využitím biochemických charakteristik používaných ČMK.  
[Research of possibilities for the more effective method of heated cheese production including the biochemical characteristics of utilized pure dairy cultures.]  
Ministerstvo zemědělství České republiky [Ministry of Agriculture of the Czech Republic], **QF 4082** (2004-2007).
- J7.** Dědina, J. - Rychlovský, P.  
Speciační analýza atomovou fluorescenční a atomovou absorpcní spektrometrií založená na generování hydridů.  
[Speciation analysis by hydride generation atomic fluorescence and atomic absorption spectrometry.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAA400310507** (2005-2009).
- J8.** Dočekal, B.  
Miniaturní kolekcní zařízení pro metody atomové spektroskopie.  
[Miniature collection devices for atomic spectrometry methods.]  
Grantová agentura České republiky [Czech Science Foundation], **GA203/06/1441** (2006-2008).
- J9.** Dočekal, B. - Šikola, T.  
Elektrická fokusační předkoncentrace a kontinuální prvková analýza aerosolů atomovou emisní spektrometrií.  
[An electric focusing preconcentration and in-time monitoring of element composition of air aerosols by atomic emission spectroscopy.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAA400310505** (2005-2007).

- J10.** Ehrenbergerová, J. - Chmelík, J. - Melzoch, K. - Kosař, K. - Sigler, K. - Vaculová, K.  
Výzkumné centrum pro studium obsahových látek ječmene a chmele.  
[Research center for study of active compounds in barley and hops.]  
Ministerstvo školství, mládeže a tělovýchovy České republiky  
[Ministry of Education, Youth and Physical Training of the Czech Republic], **1M0570** (2005-2009).
- J11.** Foret, F. - Paleček, E.  
Mikroanalytická instrumentace pro analýzy biopolymerů modifikovaných strukturální sondami.  
[Microfluidic instrumentation for analyses of biopolymers modified by structural probes.]  
Grantová agentura České republiky [Czech Science Foundation], **GA203/06/1685** (2006-2008).
- J12.** Foret, F. - Paleček, E.  
Nanotechnologie pro proteinovou a genovou diagnostiku.  
[Nanotechnologies for protein and gene diagnostics.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **KAN400310651** (2006-2010).
- J13.** Gabrovská, D. - Tlaskalová, H. - Chmelík, J. - Plicka, J. - Rubínová, B.  
Hodnocení bezpečnosti potravin pro bezlepkovou dietu.  
[Evaluation of food safety for celiac diet.]  
Ministerstvo zemědělství České republiky [Ministry of Agriculture of the Czech Republic], **1B53002** (2005-2008).
- J14.** Glatz, Z. - Kozák, L. - Foret, F.  
Integrované bioanalytické technologie pro mikroanalýzy a diagnostiku s využitím LIF a hmotnostní spektrometrie.  
[Integrated bioanalytical technologies for microanalyses and diagnostics with laser induced fluorescence and mass spectrometry coupling.]  
Ministerstvo školství, mládeže a tělovýchovy České republiky  
[Ministry of Education, Youth and Physical Training of the Czech Republic], **LC06023** (2006-2009).
- J15.** Grym, J.  
Vývoj mikrofluidických systémů pro vícerozměrné separace.  
[Development of microfluidic devices for multidimensional separations.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **KJB400310710** (2007-2008).
- J16.** Horáková, H.  
Výzkum interakcí klastrových sloučenin boru s běžnými složkami a speciálními aditivami elektroforetických systémů.  
[Investigation of interactions of boron cluster anions with common constituents and special additives of electrophoretic systems.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **KJB400310705** (2007-2009).
- J17.** Horká, M. - Růžička, F. - Horký, J. - Kubíček, O.  
Rychlá detekce a identifikace patogenních mikroorganizmů a virů pomocí elektromigračních technik a hmotnostní spektrometrie.  
[Rapid detection and identification of pathogenic microorganisms and viruses by electromigration techniques and mass spectrometry.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAAX00310701** (2007-2011).
- J18.** Kahle, V. - Glatz, Z.  
Monolitické stacionární fáze pro moderní kapalinové separační metody.  
[Monolithic stationary phases for modern liquid separation methods.]  
Grantová agentura České republiky [Czech Science Foundation], **GA203/06/1179** (2006-2008).
- J19.** Klepárník, K. - Márová, I.  
Systémy mikrofluidiky a hmotnostní spektrometrie pro diferenciální proteomickou a metabolickou analýzu průmyslově významných mikroorganismů.  
[Systems of microfluidics and mass spectrometry for differential proteomic and metabolic analysis of industrially important microrganisms.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAA400310506** (2005-2008).

- J20.** Křenková, J.  
Vývoj reaktorů s imobilizovanými enzymy pro integraci do mikrofluidických systémů.  
[Development of immobilized enzymatic reactors for integration into microfluidic systems.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **KJB400310604** (2006-2007).
- J21.** Křivánková, L.  
Metodologie kombinace kapilární izotachoforézy a hmotnostní spektrometrie.  
[Methodology of on-line combination of capillary electrophoresis and mass spectrometry.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAA400310703** (2007-2010).
- J22.** Matoušek, T.  
Využití chemického generování těkavých forem přechodných a vzácných kovů pro metody analytické atomové spektrometrie.  
[Application of chemical generation of volatile forms of transition and noble metals to the methods of analytical atomic spectroscopy.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAA400310704** (2007-2009).
- J23.** Neužil, J. - Weiser, J. - Chmelík, J.  
Signální dráhy buněčné smrti v mesotheliomálních buňkách díky účinku farmakologických a imunologických induktorů apoptosis: genomický a proteomický přístup.  
[Cell death pathways in mesothelioma cells exposed to pharmacological and immunological inducers of apoptosis: genomic and proteomic approach.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **IAA500520602** (2006-2008).
- J24.** Paleček, E. - Vojtěšek, B. - Foret, F.  
Elektrody modifikované proteiny a DNA. Nové nástroje pro biomedicínu.  
[Protein and DNA-modified electrodes. New tools for biomedicine.]  
Grantová agentura České republiky [Czech Science Foundation], **GA301/07/0490** (2007-2009).
- J25.** Planeta, J.  
Vývoj a aplikace kolonové technologie v SFC a HPLC.  
[Development and applications of column technology in SFC and HPLC.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **KJB400310504** (2005-2007).
- J26.** Pól, J.  
Využití přímé nadkritické fluidní extrakce v kontinuálním režimu v analýze životního prostředí a potravin.  
[Use of direct continuous supercritical fluid extraction in environmental and food analysis.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **KJB4031405** (2004-2007).
- J27.** Psota, V. - Chmelík, J.  
Vývoj nových metod charakterizace zbytkového extraktu, které umožní identifikovat a hodnotit složení dextrinů typických pro české pivo.  
[Development of new methods for characterization of nonfermentable extract that allow identification and evaluation of composition of dextrans typical for Czech beer.]  
Ministerstvo školství, mládeže a tělovýchovy České republiky [Ministry of Education, Youth and Physical Training of the Czech Republic], **2B06037** (2006-2010).
- J28.** Roth, M.  
Rozpustnost polycyklických aromatických heterocyklů ve stlačené horké vodě: podkladová data pro extrakční aplikace  
[Background data for pressurized hot water extraction: aqueous solubilities of polycyclic heteroaromatic compounds.]  
Grantová agentura České republiky [Czech Science Foundation], **GA203/07/0886** (2007-2009).
- J29.** Stýblo, M. - Dědina, J.  
Optimalizované systémy pro speciační analýzu arsenu založené na generování hydridu.

[Optimized hydride generation systems for arsenic speciation analysis.]

**NIH/FIRCA 1 R03 TW007057-01** (2004-2007).

- J30.** Svobodová, I.  
Analýza stresových proteinů v jedné buňce pomocí mikrofluidických zařízení.  
[Single cell analysis of stress proteins in microfluidic devices.]  
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], **KJB400310709** (2007-2009).
- J31.** Vytřas, K. - Křivánková, L.  
Moderní instrumentace v chemické, potravinářské a klinické analýze.  
[Modern instrumentation in chemical, food and clinical analysis.]  
Grantová agentura České republiky [Czech Science Foundation], **GA203/05/2106** (2005-2007).
- J32.** Zapletal, M. - Hůnová, I. - Večeřa, Z.  
Snížení plnění celospolečenských funkcí lesa vlivem potencionálního působení přízemního ozonu v kontextu klimatické změny.  
[Reduction of corporate function of the forest owing to potential impact of ground level ozone in relation to global change.]  
Ministerstvo životního prostředí [Ministry of the Environment of the Czech Republic], **SP/1B7/189/07** (2007-2010).

## AUTHOR INDEX

[\* Authors being not members of the Institute]

*	Abele, S.	C1
*	Adair, B.M.	A40, H2, H5
*	Alastuey, A.	A55
*	Alberti, M.	A3
*	Allmaier, G.	C73
*	Arruda, M.A.Z.	A7
*	Aturki, Z.	A30
*	Babický, A.	C69, C70
*	Balák, I.	C3
*	Bartoš, M.	A37, C63, C64, H6
*	Behrens, A.	A50
*	Bekešová, S.	A1, C2, C68
*	Benešová, K.	A43
*	Bobálová, J.	A2, C53, C54, C72, C81, C90, J2
*	Boček, Petr	A10, A21, A32, C22, C55, C93, C94, H1, H9, J1
*	Bohačenko, I.	A17
*	Bosáková, Z.	C96
*	Bouchal, P.	J2
*	Bruthans, J.	C3
*	Bryant, C.	H10
*	Brzobohatý, B.	J2, J3
*	Buršková, V.	A3
*	Cabálková, J.	A4, G1
*	Colbeck, I.	H10
*	Corthals, G.	F1
*	Coufal, P.	C96
*	Čáslavský, J.	A43, C4, C85, J4
*	Čejchanová, M.	C5, C87, J5
*	Čejka, P.	C40
*	Černý, V.	J6
*	Čulík, J.	C40
*	Čurillová, Z.	A1
*	Dědič, P.	J3
*	Dědina, J.	A5, A7, A24, A40, B1, B2, C6, C24, C25, C26, C43, C44, C45, C46, C88, C89, H2, H5, J7, J29
*	Dočekal, B.	A6, A23, B3, B4, B5, B6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C23, C47, C48, C60, J8, J9

*	Dočekalová, H.	A23, C7, C17, C60	*	Hrušovská, Z.	C8, C9
*	Dostál, I.	C3	*	Hůnová, I.	J32
*	Dostálek, P.	C83, C84	*	Hyötyläinen, T.	A42, C75
*	Drobná, Z.	H2, H5	*	Chi, X.	A55
*	Ehrenbergerová, J.	J10		Chmelík, Jan	C36, C37
*	Eleftheriadis, K.	H10		Chmelík, Josef	A2, A3, A4, A16, A17, A18, A19, A45, A47, A48, A49, A57, C35, C36, C37, C53, C54, C57, C58, C68, C72, C73, C79, C80, C81, C82, C83, C84, C86, C90, C101, C102, J10, J13, J23, J27
*	Fanali, S.	A30	*	Chvojková, Z.	A38
*	Figueiredo, E.C.	A7	*	Jakůbek, J.	A35
*	Fišer, J.	J3	*	Janča, J.	A3
	Foret, F.	A8, A25, A30, A53, C1, C18, C19, C20, C21, C27, C28, C41, C42, C49, C51, C65, C95, F2, J11, J12, J14, J24	*	Jurková, M.	C40
*	Försterová, M.	A9	*	Kahle, V.	C3, J18
*	Gabrovská, D.	J13	*	Kamas, J.	C3
*	Gadher, S.J.	A48, C80, C86	*	Karásek, P.	A20, A41, A43, C38, C39, C40, C74, C77, H3, H4
	Gebauer, Petr	A10, A32, C22, C55, H1	*	Kellner, V.	C40
*	Glatz, Z.	J14, J18		Klepárník, K.	A21, A25, A30, C21, C28, C41, C42, C49, C51, J19
	Gregušová, M.	C23	*	Kočí, K.	A22
*	Griga, M.	J3	*	Koloušek, D.	A51
	Grossová, O.	C24, C25, C26	*	Kopačka, V.	J3
*	Grüner, B.	J4		Korunová, V.	C5, C87, J5
	Grym, J.	C27, C41, C51, J15	*	Kosař, K.	J10
*	Haddad, P.R.	A29	*	Kotek, J.	A9
*	Halada, P.	A47	*	Kotlaříková, P.	A43
*	Hampl, V.	A38	*	Kováč, P.	A19, C68
*	Hauser, P.C.	A26, A27, A28, A29, A36, A46	*	Kováčik, V.	A1, A19, C2, C68
*	Havel, J.	A3	*	Kovaříková, V.	A23, C17
*	Hermann, P.	A9, A52	*	Kovářová, H.	A47, A48, C79, C80, C86
*	Hernández-Zavala, A.	A40, H2, H5	*	Kozák, L.	J14
*	Herreter, S.	A50		Kratzer, J.	A24, C6, C43, C44, C45, C46
	Hezínová, V.	C28	*	Krejčí, P.	C8, C9, C47, C48
*	Hnatejko, Z.	A52	*	Krejčová, A.	C71
	Hohnová, B.	A42, C75		Křenková, J.	A25, A53, C21, C41, C49, C51, G2, J20
*	Holá, V.	A13, A14, A44, C32, C78		Křivánková, L.	A32, A37, A39, C50, C55, C63, C64, C66, C67, C95, H6, J21, J31
*	Holý, T.	A35		Kubáň, Pavel	A26, A27, A28, A29, A36, A46
*	Horák, T.	C40	*	Kubáň, Petr	A27, A28
	Horáková, H.	A11, A12, A54, A56, C29, C30, C31, C97, C98, C99, J16	*	Kubáň, V.	A27, A28
	Horká, M.	A13, A14, A15, A44, C32, C33, C34, C78, J17	*	Kubíček, O.	A13, J17
*	Horký, J.	A15, C33, C34, J17			
*	Horning, O.	A47			
*	Houserová, P.	A27, A28			

* Kusý, P.	A8, A30, C21, C41, C51	* Norregaard Jensen, O.	A47
* Kutter, J.P.	F2	Nováková, M.	A37, C63, C64, C66, C95, G6, H6
Langauf, A.	A54, A56, C52, C98	* Onjia, A.	A34
* Langrová, L.	H5	* Ošťádal, B.	A38
* Laromaine, A.	A54, A56	* Ošťádalová, I.	A38
Laštovičková, M.	C53, C54, G3	Otevřel, M.	C41, C65
* Lazaridis, M.	H10	* Paleček, E.	J11, J12, J24
* Lis, S.	A52	Pantůčková, P.	A39, C50, C66, C67
* Lišková, A.	A31	* Pátoprstý, V.	A19, C2, C68
* Lubal, P.	A9, A52	* Paul, D.S.	A40, H2
* Lukeš, I.	A9	* Pavelka, S.	C69, C70
* Macek, T.	J3	* Peč, P.	A49
* Macka, M.	A29, C1	Pešková, K.	C71
* Maenhaut, W.	A55	* Petrovská, H.	A22
* Macháčková, I.	J3	Petry-Podgórska, I.	C72, C102
Malá, Z.	A10, A32, C22, C55, H1	* Pham, V.H.	A36
* Malachovský, P.	A51	* Pilař, M.	J3
Malinovská, I.	A13	* Pittenauer, E.	C73
* Marchetti, M.	C73	Planeta, J.	A20, A41, C38, C39, C40, C74, C77, C96, H3, H4, J25
* Márová, I.	J19	* Plicka, J.	J13
* Martinková, J.	A48	* Podborská, M.	A23
* Matejková, M.	C102	* Podešva, P.	C28
Matoušek, T.	A33, A40, C56, C61, C62, C88, C89, H2, H5, J22	Pól, J.	A42, A43, C75, J26
* Matoušková, H.	A15, C33, C34	* Popa, I.	A49
* Matta, I.	A56	* Pospíšil, S.	A35
Mazanec, K.	A17, A18, C36, C37, C53, C54, C57, C58, G4	* Pouzar, M.	C71
* McDonnell, P.	A50	* Procházková, B.	C76, H7
* Melzoch, K.	J10	Přibyla, L.	J6
* Míková, D.	A38	* Psota, V.	A17, J27
Mikuška, P.	A34, A55, C10, C11, C12, C13, C59, H10	* Querol, X.	A55
* Mišek, I.	F1	* Rakouský, S.	J3
* Mládková, Z.	C7, C60	Roth, M.	A20, A41, A43, C38, C39, C40, C74, C77, H3, H4, J28
* Molins, E.	A56	* Rubínová, B.	J13
* Motlík, J.	A47	* Růžička, F.	A13, A14, A44, C32, C78, J17
Motyka, K.	A34, C59, G5	* Rychlovský, P.	C25, C26, C43, C44, C45, C46, C61, C62, C88, C89, J7
Musil, S.	C61, C62	Řehulka, P.	A1, A3, A19, A45, A47, A48, A49, A57, C2, C37, C68, C73, C79, C80, F1, J3
* Nálezková, M.	C102	* Řehulková, H.	A45, C79, C81, C82, C83, C84
* Ndiaye, I.	A35	* Řezáčová-Smetková, V.	C7, C23
* Neužil, J.	J23	Řihák, P.	C4, C85
* Nguyen, H.T.A.	A29, A36		
* Noguera, G.	A50		

* Sehnal, F.	J3	* Valík, D.	C95
* Schuchert-Shi, A.	A46	* Van Eyk, J.E.	A50
* Sigler, K.	J10	Varađová Ostrá, E.	A22, A43
* Sikorová, K.	C102	Večeřa, Z.	A34, A51, A55, C10, C11, C12, C13, C59,
* Skalická, I.	C64, H6	Vespałec, R.	H10, J32
* Skalníková, H.	A47, A48, C79, C80, C86	* Viana, M.	A11, A12, A54, A56, C29, C30, C31, C52,
* Sklenář, V.	C102	* Vilhelm, Z.	C97, C98, C99, J4
* Smolík, J.	H10	* Viñas, C.	A55
* Spěváček, V.	C87	* Vobecký, M.	C3
* Spěváčková, V.	C5, C87, J5	* Vodička, P.	A54, A56, C99
* Stránská, J.	A49	* Vojtěšek, B.	A35, A38, C5, C44, C45, C46, C69, C70,
* Stübiger, G.	C73	Vojtěšek, M.	C100, F3
* Stýblo, M.	A40, C88, C89, H2, H5, J29	* Vojtková, B.	A47
* Svoboda, M.	C88, C89, H5	* Votava, M.	J24
Svobodová, I.	A9, A52, C28, C42, J30	* Vytřas, K.	C59
* Syslová, A.	A22	* Wahlund, K.G.	A6, C14, C15, C16
Šalplachta, J.	C53, C54, C76, C90, H7	* Walton, F.	A44, C78
* Šebela, M.	A49	* Walton, F.S.	A37, H10, J31
* Šebela, R.	C3	* Weijers, E.	A4
* Šikola, T.	C10, C11, C12, C13, J9	* Weiser, J.	H2
* Šimek, Z.	A22	* Wilhelm, J.	A40
* Škultéty, L.	A1, C2	* Wranová, K.	A38
Šlais, K.	A13, A14, A15, A18, C32, C36, C37, C57,	* Yan, L.	C5, C87
Šlampová, A.	C58, C91, C92, H8	* Zapletal, M.	A53
* Špalt, Z.	A31, C22, C93, C94, H1, H9	* Zilvarová, M.	J32
Šťastná, M.	A3	* Zlámal, J.	A48
* Štyriak, I.	A50	* Žídková, J.	C10, C11, C12, C13
* Štyriaková, I.	A51	* Žídek, L.	A57, C72, C81, C101, C102
Táborský, P.	A9, A52		C102
* Tarkowski, P.	A49		
* Teixidor, F.	A56, C99		
* ten Brink, H.M.	A55		
* Tejkalová, R.	C78		
* Tesařová, E.	C96		
* Thomas, D.J.	H2, H5		
* Tlaskalová, H.	J13		
Tomáš, R.	A53, C95		
* Tvaroška, I.	A1, C2		
* Urbánek, M.	A39, C67		
* Urbanová, V.	A37, C63, C64		
* Vaculová, K.	J10		
* Vadinská, M.	C96		