

SEZNAM PRACÍ

LIST OF PAPERS

2001

**Ústav analytické chemie
Akademie věd České republiky
Brno**

**Institute of Analytical Chemistry
Academy of Sciences of the Czech Republic
Brno**

Published by Institute of Analytical Chemistry
Academy of Sciences of the Czech Republic
Veveří 97
CZ – 61142 Brno
Czech Republic

Editor J. Doleželová

Compiled by M. Fojtlová, M. Mikešová and J. Doleželová

In the List of Papers 2001 the papers are divided into the following sections:

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

List of Papers 2001 may be requested from:

*Department of Scientific Information
Institute of Analytical Chemistry
Academy of Sciences of the Czech Republic
Veveří 97
CZ – 61142 Brno*

A. ORIGINAL PAPERS

- A1.** Beckers, J. L. - Gebauer, P. - Boček, P.
System zones in capillary zone electrophoresis.
Electrophoresis, 22 [17] 3648-3658 (2001).
- A2.** Beckers, J. L. - Gebauer, P. - Boček, P.
Why robust background electrolytes containing multivalent ionic species can fail in capillary zone electrophoresis.
Journal of Chromatography A, 916 [1] 41-49 (2001).
- A3.** Boček, P. - Gebauer, P. - Beckers, J.L.
Success and failure with phthalate buffers in capillary zone electrophoresis.
Electrophoresis, 22 [6] 1106-1111 (2001).
- A4.** Buzas, Z. - Chang, H. T. - Vieira, N.E. - Yergey, A. L. - Šťastná, M. - Chrambach, A.
Direct vertical electroelution of protein from a PhastSystem band for mass spectrometric identification at the level of a few picomoles.
Proteomics, 1 [5] 691-698 (2001).
- A5.** Chiari, M. - Cretich, M. - Šťastná, M. - Radko, S. P. - Chrambach, A.
Rapid capillary coating by epoxy-poly-(dimethylacrylamide): Performance in capillary zone electrophoresis of protein and polystyrene carboxylate.
Electrophoresis, 22 [4] 656-659 (2001).
- A6.** Chmelík, J.
Experimental determination of elution modes in field-flow fractionation.
London, *ChebWeb Inc.* 2001.

- A7.** Chmelík, J. - Krumlová, A. - Budinská, M. - Kruuml, T. - Psota, V. - Bohačenko, I. - Mazal, P. - Vydrová, H.
Comparison of size characterization of barley starch granules determined by electron and optical microscopy, low angle laser light scattering and gravitational field-flow fractionation.
Journal of the Institute of Brewing, 107 [1] 11-17 (2001).
- A8.** Chmelík, J. - Planeta, J. - Řehulka, P. - Chmelík Jr., J.
Determination of molecular mass distribution of silicone oils by supercritical fluid chromatography, matrix-assisted laser desorption ionization time-of-flight mass spectrometry and their off-line combination.
Journal of Mass Spectrometry, 36 [7] 760-770 (2001).
- A9.** Chmelík, J. - Řehulka, P. - Mayrhofer, C. - Allmaier, G.
Proteomika - nový a rychlý nástroj pro identifikaci odrůd ječmene.
Proteomics - a new and fast tool for identification of barley varieties.
Kvasný průmysl, 47 [6] 159-163 (2001).
- A10.** Dočekal, B. - Marek, P.
Investigation of in situ trapping of selenium and arsenic hydrides within a tungsten tube atomiser.
Journal of Analytical Atomic Spectrometry, 16 [8] 831-837 (2001).
- A11.** Felten, C. - Foret, F. - Minarik, M. - Goetzinger, W. - Karger, B. L.
Automated high-throughput infusion ESI-MS with direct coupling to a microtiter plate.
Analytical Chemistry, 73 [7] 1449-1454 (2001).
- A12.** Horká, M. - Willimann, T. - Blum, M. - Nording, P. - Friedl, Z. - Šlais, K.
Capillary isoelectric focusing with UV-induced fluorescence detection.
Journal of Chromatography A, 916 [1-2] 65-71 (2001).

- A13.** Jandera, P. - Bunčeková, S. - Mihlbachler, K. - Guiochon, G. - Bačkovská, V. - Planeta, J.
Fitting adsorption isotherms to the distribution data determined using packed micro-columns for high-performance liquid chromatography.
Journal of Chromatography A, 952 [1-2] 19-29 (2001).
- A14.** Janoušková, J. - Budinská, M. - Plocková, J. - Chmelík, J.
Optimization of experimental conditions for the separation of small and large starch granules by gravitational field-flow fractionation.
Journal of Chromatography A, 914 [1-2] 183-187 (2001).
- A15.** Kabátek, Z. - Klepárník, K. - Gaš, B.
Effect of temperature on the separation of long DNA fragments in polymer solution.
Journal of Chromatography A, 916 [1-2] 305-310 (2001).
- A16.** Kautz, R. A. - Lacey, M. E. - Wolters, A. M. - Foret, F. - Webb, A. G. - Karger, B. L. - Sweedler, J. V.
Sample concentration and separation for nanoliter-volume NMR spectroscopy using capillary isotachophoresis.
Journal of the American Chemical Society, 123 [13] 3159-3160 (2001).
- A17.** Klepárník, K. - Malá, Z. - Boček, P.
Fast separation of DNA sequencing fragments in highly alkaline solutions of linear polyacrylamide using electrophoresis in bare silica capillaries.
Electrophoresis, 22 [4] 783-788 (2001).
- A18.** Kotlík, B. - Sysalová, J. - Kučera, J.
Zabezpečení jakosti stanovení stopových prvků ve vzorcích prašného aerosolu.
[Quality assurance of trace elements determination in airborne particulate matter.]
Ochrana ovzduší, - [4] 15-18 (2001).

- A19.** Kvasničková, L. - Glatz, Z. - Štěrbová, H. - Kahle, V. - Slanina, J. - Musil, P.
Application of capillary electrochromatography using macroporous polyacrylamide columns for the analysis of lignans from seeds of *Schisandra chinensis*.
Journal of Chromatography A, 916 [1-2] 265-271 (2001).
- A20.** Marmiroli, N. - Maestri, E. - Mucchino, C. - Antonioli, G. – Marmiroli, M. - Izquierdo, C. G. - Hernandez, T. - Waclawek, W. - Mocko, A. - Bozym, M. - Nowak, A. - Nowak, J. - Večeřa, Z. - Dočekal, B.
Fertilia: a European International Cooperation (INCO EU) project for monitoring trace elements in agricultural ecosystems.
Minerva Biotecnologica, 13 [1] 41-54 (2001).
- A21.** Mikuška, P. - Večeřa, Z.
Determination of nitrate in water by flow-injection analysis.
Chemia i Inżynieria Ekologiczna, 8 [1] 115-120 (2001).
- A22.** Pavelka, S. - Babický, A. - Vobecký, M. - Lener, J.
Effect of high bromide levels in the organism on the biological half-life iodine in the rat.
Biological Trace Element Research, 82 [1-3] 125-132 (2001).
- A23.** Pavelka, S. - Babický, A. - Vobecký, M. - Lener, J.
High bromide intake affects the accumulation of iodide in the rat thyroid and skin.
Biological Trace Element Research, 82 [1-3] 133-142 (2001).
- A24.** Pešková, J. - Pařízek, P. - Večeřa, Z.
Wet effluent diffusion technique and determination of C1-C5 alcohols in air.
Chemia i Inżynieria Ekologiczna, 8 [1] 121-127 (2001).
- A25.** Pešková, J. - Pařízek, P. - Večeřa, Z.
Wet effluent diffusion denuder technique and determination of volatile organic compounds in air. I. Oxo compounds (alcohols and ketones).
Journal of Chromatography A, 918 [1] 153-158 (2001).

- A26.** Plocková, J. - Chmelík, J.
Different elution modes and field programming in gravitational field-flow fractionation. III. Field programming by flow-rate gradient generated by a programmable pump.
Journal of Chromatography A, 918 [2] 361-370 (2001).
- A27.** Radko, S. P. - Šťastná, M. - Chrambach, A.
Polydispersity of liposome preparations as a likely source of peak width in capillary zone electrophoresis.
Journal of Chromatography A, 761 [1] 69-75 (2001).
- A28.** Roth, M. - Maag, K. - Schneider, G. M. - Tůma, D.
Solution properties of C₆₀ and C₇₀ fullerenes and C₂₁ to C₄₀ n-alkanes at infinite dilution in carbon dioxide from supercritical fluid chromatography.
Journal of Physical Chemistry B, 105 [42] 10373-10378 (2001).
- A29.** Šlampová, A. - Jančářová, I. - Smělá, D. - Šlais, K. - Kubáň, V.
Determination of synthetic colourants in foods by micellar electrokinetic and liquid chromatography.
Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, XLIX [3] 91-100 (2001).
- A30.** Šťastná, M. - Radko, S. P. - Chrambach, A.
Discrimination between peak spreading in capillary zone electrophoresis of proteins due to interaction with the capillary wall and due to protein microheterogeneity.
Electrophoresis, 22 [1] 66-70 (2001).
- A31.** Večeřa, Z.
Isoprenoidy v atmosféře.
Isoprenoids in the atmosphere.
Chemické Listy, 95 [3] 157-162 (2001).
- A32.** Večeřa, Z. - Dočekal, B. - Marek, P. - Sáňka, M.
Characterization of sewage sludge amended soils and related crop plants with respect to phytoavailability of heavy metals (Cd, Cr, Cu, Ni, Pb, Zn).
Chemia i Inżynieria Ekologiczna, 8 [2-3] 243-252 (2001).

- A33.** Vespalet, R. - van Leeuwen, H. P.
Mechanism of streaming current generation by concentration gradients in packed-particle columns.
Journal of Colloid and Interface Science, 244 [1] 66-73 (2001).
- A34.** Zdráhal, Z. - Vermeylen, R. - Claeys, M. - Maenhaut, W. - Guyon, P. - Artaxo, P.
Characterization of novel di- and tricarboxylic acids in fine tropical aerosols.
Journal of Mass Spectrometry, 36 [4] 403-416 (2001).
- A35.** Zhang, B. - Foret, F. - Karger, B. L.
High throughput microfabricated CE/ESI-MS: automated sampling from a microwell plate.
Analytical Chemistry, 73 [11] 2675-2681 (2001).
- A36.** Žídková, J. - Chmelík, J.
Determination of saccharides in fruit juices by capillary electrophoresis and matrix-assisted laser desorption/ionization time-of-flight mass spectrometry.
Journal of Mass Spectrometry, 36 [4] 417-421 (2001).

B. BOOKS, CONTRIBUTIONS TO MONO-GRAPHS, REVIEWS

- B1.** Chmelík, J.
Elution modes in field-flow fractionation.
In: *Encyclopedia of Chromatography*. - New York, Marcel Dekker 2001, pp. 303-306.
- B2.** Janák, J.
Personal recollections, achievements and opinions.
In: *Chromatography - A Century of Discovery – (1900-2000) - The Bridge to the Sciences and Technology*. - Amsterdam, Elsevier 2001, pp. 263-270.
- B3.** Klepárník, K. - Malá, Z. - Boček, P.
DNA analysis under highly denaturing conditions in bare fused silica capillaries.
In: *Capillary electrophoresis of nucleic acids. Methods in molecular biology. Vol. 1.* - Totowa, Humana Press 2001, pp. 239-258.
- B4.** Klepárník, K. - Müller, O. M. - Foret, F.
Ultra-fast DNA separations using capillary electrophoresis.
In: *Capillary electrophoresis of nucleic acids. Methods in molecular biology. Vol. 2.* - Totowa, Humana Press 2001, pp. 19-39.
- B5.** Křivánková, L.
Kombinace kapilární izotachoforézy se zónovou elektroforézou.
[Combination of capillary isotachophoresis and zone electrophoresis.]
In: *Elektroanalytické metody*. - Český Těšín, Helán V. 2001, pp. 254-267.
- B6.** Šubert, J. - Šlais, K.
Progress in the separation of enantiomers of chiral drugs by TLC without their prior derivatization.
Pharmazie, 56 [5] 355-360 (2001).

C. LECTURES, ABSTRACTS, POSTERS

- C1.** Budinská, M. - Plocková, J. - Janoušková, J. - Krumlová, A. - Chmelík, J.
Characterization of barley starch granules by gravitational field-flow fractionation.
16th International Bratislava Meeting on Polymers.
Workshop/Conference. – Bratislava (SK), September 9-13, 2001.
In: 16th International Bratislava Meeting on Polymers. Coupled, Hyphenated and Multidimensional Liquid Chromatographic Procedures for Separation of Macromolecules. Book of Abstracts. - Polymer Institute of the Slovak Academy of Sciences, Bratislava 2001, p. 69.
(poster)
- C2.** Budinská, M. - Plocková, J. - Janoušková, J. - Krumlová, A. - Chmelík, J.
Stanovení velikosti částic škrobových zrn metodou gravitační field-flow frakcionace, optimalizace systému.
[Determination of particle size of starch granules by gravitational field-flow fractionation, system optimization.]
XXXII. Symposium o nových směrech výroby a hodnocení potravin. - Skalský Dvůr (CZ), May 28-30, 2001.
In: XXXII. Symposium o nových směrech výroby a hodnocení potravin. Sborník souhrnů sdělení. - Praha 2001, p. 55.
(poster)
- C3.** Chmelík, J. - Wahlund, K. G.
Development of rapid methods for assessing the quality of starch particles from various cereal species for purposes of agricultural and food industry.
International Symposium on Characterization of Macromolecules and Particles of Biological Origin. - Brno (CZ), September 3, 2001.
(lecture)

- C4.** Chmelík, J.
Experimental determination of elution modes in field-flow fractionation.
Ninth International Symposium on Field-Flow Fractionation. - Colorado (US), June 26-29, 2001.
In: FFF 2001. Ninth International Symposium on Field-Flow Fractionation. - Department of Chemistry and Geochemistry, Colorado School of Mines, Golden, Colorado 2001, p. L2.
(lecture)
- C5.** Chmelík, J. - Budinská, M. - Janoušková, J. - Krumlová, A.
Comparison of various methods for size characterization of starch granules from barley.
International Symposium on Characterization of Macromolecules and Particles of Biological Origin. - Brno (CZ), September 3, 2001.
(lecture)
- C6.** Chmelík, J. - Planeta, J. - Zdráhal, Z. - Řehulka, P. - Chmelík Jr., J.
Determination of molecular mass distribution of silicone oils by supercritical fluid chromatography, matrix-assisted laser desorption ionization mass spectrometry and their off-line combination.
18th Informal Meeting on Mass Spectrometry. - Praha (CZ), April 30 - May 4, 2000.
In: 18th IMMS 2000. Proceedings of the 18th Informal Meeting on Mass Spectrometry. - Ioannes Marcus Marci Spectrometric Society, Prague 2000, p. 55.
(lecture)
- C7.** Chmelík, J. - Plocková, J. - Matulík, F.
Hydrodynamic lift force programming in gravitational field-flow fractionation: a tool for fast and efficient separation of particles.
Ninth International Symposium on Field-Flow Fractionation. - Colorado (US), June 26-29, 2001.
In: FFF 2001. Ninth International Symposium on Field-Flow Fractionation. - Department of Chemistry and Geochemistry, Colorado School of Mines, Golden, Colorado 2001, p. P15.
(poster)

- C8.** Chmelík, J. - Řehulka, P. - Čáslavský, J.
Characterization of polymers by MALDI-TOF MS and several
separation techniques.
16th International Bratislava Meeting on Polymers.
Workshop/Conference. – Bratislava (SK), September 9-13, 2001.
In: 16th International Bratislava Meeting on Polymers. Coupled,
Hyphenated and Multidimensional Liquid Chromatographic
Procedures for Separation of Macromolecules. Book of Abstracts.
- Polymer Institute of the Slovak Academy of Sciences, Bratislava
2001, p. 6.
(lecture)
- C9.** Chmelík, J. - Řehulka, P. - Čáslavský, J. - Allmaier, G.
Characterization of polymers by MALDI-TOF and several
separation techniques.
19th Informal Meeting on Mass Spectrometry. – Noszvaj (HU),
April 29 - May 3, 2001.
In: 19th IMMS. Proceedings of the 19th Informal Meeting on
Mass Spectrometry. - Hungarian Academy of Sciences, Budapest
2001, p. 50.
(poster)
- C10.** Colbeck, I. - Bryant, C. - Drossinos, I. - Havránek, V. - Mikuška,
P. - Smolík, J. - Večeřa, Z. - Ždímal, V. - Eleftheriadis, K. -
Housiadas, C. - Lazaridis, M.
Preliminary results from subgrid scale investigations of factors
determining the occurrence of ozone and fine particles (SUB-
AERO).
12th Aerosol Society Annual Meeting. - Bath (GB), June 18-19,
2001.
In: 12th Aerosol Society Annual Meeting. Book of Abstracts. -
University of Bath, Bath 2001, pp. 12-15.
(poster)
- C11.** Čáslavský, J. - Chmelík, J.
Characterization of barley starch degradation products by MALDI-
TOF mass spectrometry.
International Symposium on Characterization of Macromolecules
and Particles of Biological Origin. - Brno (CZ), September 3,
2001.
(lecture)

- C12.** Čáslavský, J. - Chmelík, J.
Influence of the laser power and analyte concentration on the results in MALDI-TOF MS of oligosaccharides.
18th Informal Meeting on Mass Spectrometry. - Praha (CZ), April 30 - May 4, 2000.
In: 18th IMMS 2000. Proceedings of the 18th Informal Meeting on Mass Spectrometry. - Ioannes Marcus Marci Spectrometric Society, Prague 2000, p. 26.
(poster)
- C13.** Čáslavský, J. - Kotlaříková, P.
The application of LDI-TOF MS and HPLC/APCI-ITMS for the analysis of heavy PAHs in environmental samples.
19th Informal Meeting on Mass Spectrometry. – Noszvaj (HU), April 29 - May 3, 2001.
In: 19th IMMS. Proceedings of the 19th Informal Meeting on Mass Spectrometry. - Hungarian Academy of Sciences, Budapest 2001, pp. 46-47.
(poster)
- C14.** Dědina, J. - Matoušek, T. - D'Ulivo, A. - Lampugnani, L. - Selecká, A.
Atomization of hydrides for atomic absorption and atomic fluorescence spectroscopy - current state and perspectives.
CSI XXXII. Colloquium Spectroscopicum Internationale. - Pretoria (ZA), July 8-13, 2001.
In: CSI XXXII. Colloquium Spectroscopicum Internationale. Volume of Abstracts. - South African Spectroscopic Society and South African Chemical Institute, Pretoria 2001, p. MO2-2.
(lecture)
- C15.** Dobšík, M. - Mikuška, P. - Večeřa, Z.
Kontinuální stanovení stopových koncentrací amoniaku ve vzduchu.
[The continuous determination of trace concentrations of ammonia in air.]
Ovzduší 2001. - Brno (CZ), May 14-16, 2001.
In: Ovzduší 2001. Program a sborník konference. - Vydavatelství Masarykovy univerzity, Brno 2001, pp. 205-208.
(lecture)

- C16.** Dočekal, B.
Direct solid sampling ET-AAS in the analyses of HiTec materials.
21st Workshop on Atomic Spectroscopy. - Rosos (NO), October
21-23, 2001.
(lecture)
- C17.** Dočekal, B.
Elektrotermické vypařování.
[Electrothermal vaporization.]
Spektrometrie s indukčně vázaným plazmatem. - Brno (CZ),
September 11-13, 2001.
In: Spektrometrie s indukčně vázaným plazmatem. Sborník
příspěvků semináře. – Spektroskopická společnost Jana Marka
Marci, Brno 2001, pp. 45-48.
(lecture)
- C18.** Dočekal, B.
In situ trapping of hydride forming elements with tungsten tube
atomizer.
21st Workshop on Atomic Spectroscopy. - Rosos (NO), October
21-23, 2001.
(lecture)
- C19.** Dočekal, B.
Základy atomové absorpcní spektrometrie.
[Principles of atomic absorption spectrometry.]
Automatická spektrometrie. - Žermanická přehrada (CZ), June 11-
15, 2001.
(lecture)
- C20.** Dočekal, B.
Zmlžování suspenzí.
[Slurry nebulization.]
Spektrometrie s indukčně vázaným plazmatem. - Brno (CZ),
September 11-13, 2001.
In: Spektrometrie s indukčně vázaným plazmatem. Sborník
příspěvků semináře. – Spektroskopická společnost Jana Marka
Marci, Brno 2001, pp. 49-53.
(lecture)

- C21.** Dočekal, B. - Marek, P.
In situ trapping of hydride forming elements within a tungsten tube atomizer.
CANAS'01. Colloquium Analytische Atomspektroskopie. - Freiberg (DE), March 11-15, 2001.
In: CANAS'01. Colloquium Analytische Atomspektroskopie. Program, Kurzfassungen der Vorträge und Poster. - TU Bergakademie, Freiberg 2001, p. 29.
(lecture)
- C22.** Dočekal, B. - Marek, P.
In situ trapping of hydride-forming elements within a tungsten atomiser.
CSI XXXII. Colloquium Spectroscopicum Internationale. - Pretoria (ZA), July 8-13, 2001.
In: CSI XXXII. Colloquium Spectroscopicum Internationale. Volume of Abstracts. - South African Spectroscopic Society and South African Chemical Institute, Pretoria 2001, p. FR3-4.
(lecture)
- C23.** Dočekal, B. - Smetková, V. - Dočekalová, H.
Charakterizace půd technikou DGT.
[Characterization of soils by the DGT technique.]
Anorganická analýza v životním prostředí. - Komorní Lhotka (CZ), November 12-15, 2001.
In: Anorganická analýza v životním prostředí. Sborník přednášek ze semináře. - 2THETA, Český Těšín 2001, pp. 5-21.
(lecture)
- C24.** Foret, F.
Microchips and MS coupling.
SBS 2001. 2nd International Symposium Separations in the BioSciences. - Praha (CZ), September 17-20, 2001.
In: SBS 2001. 2nd International Symposium Separations in the BioSciences. Program and Book of Abstracts. - Prague 2001, p. 15.
(lecture)

- C25.** Foret, F.
Miniaturization of the CE/MS interface.
Proteomics. IBC Conference on Delivering New Routes to Drug Discovery. - Philadelphia (US), May 14-17, 2001.
In: Proteomics. Delivering New Routes to Drug Discovery. – IBC Philadelphia 2001.
(lecture)
- C26.** Foret, F.
Miniaturization and mass spectrometric interfacing.
Analysdagarna. - Stockholm (SE), June 11-14, 2001.
In: Analysdagarna. Abstracts. - The Swedish Chemical Society, Analytical Division, Stockholm 2001, p. 32.
(lecture)
- C27.** Gebauer, P. - Beckers, J. L. - Boček, P.
Success and fiasco with robust electrolyte systems in CZE.
HPLC 2001. 25th International Symposium on High Performance Liquid Phase Separations and Related Techniques. - Maastricht (NL), June 17-22, 2001.
In: HPLC 2001. 25th International Symposium on High Performance Liquid Phase Separations and Related Techniques. Abstractbook. Vol.I. - Maastricht 2001, p. 16.
(lecture)
- C28.** Gebauer, P. - Křivánková, L. - Pantůčková, P. - Boček, P.
Impact of sample matrix on quantitation in CZE.
SBS 2001. 2nd International Symposium Separations in the BioSciences. - Praha (CZ), September 17-20, 2001.
In: SBS 2001. 2nd International Symposium Separations in the BioSciences. Program and Book of Abstracts. - Prague 2001, p. 84.
(poster)

- C29.** Horká, M. - Šlais, K.
Dynamic modification of proteins for fluorometric detection in CZE.
SBS 2001. 2nd International Symposium Separations in the BioSciences. - Praha (CZ), September 17-20, 2001.
In: SBS 2001. 2nd International Symposium Separations in the BioSciences. Program and Book of Abstracts. - Prague 2001, p. 91.
(poster)
- C30.** Hu, P. - Rejtar, T. - Preisler, J. - Foret, F. - Karger, B. L.
LC - MALDI/TOF MS analysis of complex peptide mixtures using vacuum deposition interface.
The 49th ASMS Conference. - Chicago (US), May 27-31, 2001.
In: Proceedings of the 49th ASMS Conference. - Chicago 2001.
(poster)
- C31.** Janoušková, J. - Budinská, M. - Plocková, J. - Krumlová, A. - Chmelík, J.
Optimization of experimental conditions for characterization of barley starch granules by gravitational field-flow fractionation.
Ninth International Symposium on Field-Flow Fractionation. - Colorado (US), June 26-29, 2001.
In: FFF 2001. Ninth International Symposium on Field-Flow Fractionation. - Department of Chemistry and Geochemistry, Colorado School of Mines, Golden, Colorado 2001, p. P3.
(poster)
- C32.** Karásek, P. - Pól, J. - Vejrosta, J.
Analytické možnosti kontinuální superkritické fluidní extrakce vodných médií.
[Analytical applications of continuous supercritical fluid extraction of aqueous media.]
Analýza organických látok. - Komorní Lhotka (CZ), October 16-18, 2001.
(lecture)

- C33.** Karásek, P. - Varad'ová-Ostrá, E. - Vejrosta, J. - Fetner, M.
New instrumentation for pressurized fluid extraction and
applications.
ExTech 2001 "Advances in Extraction Technologies". - Barcelona
(ES), September 17-19, 2001.
In: ExTech 2001 "Advances in Extraction Technologies". -
Barcelona 2001, p. 93.
(poster)
- C34.** Kautz, R. A. - Lacey, M. E. - Wolters, A. M. - Foret, F. -
Sweedler, J. V. - Karger, B. L.
Improved capillary NMR performance using capillary
isotachophoretic sample focusing and separation (CITP-NMR).
HPCE 2001. 14th International Symposium on Microscale
Separations and Analysis. - Boston (US), January 13-18, 2001.
In: HPCE 2001. 14th International Symposium on Microscale
Separations and Analysis. Final Program & Book of Abstracts. -
Boston 2001, p. 54.
(poster)
- C35.** Klepárník, K.
Fast DNA diagnostic sequencing.
HPCE 2001. 14th International Symposium on Microscale
Separations and Analysis. - Boston (US), January 13-18, 2001.
In: HPCE 2001. 14th International Symposium on Microscale
Separations and Analysis. Final Program & Book of Abstracts. -
Boston 2001, pp. 100-101.
(lecture)
- C36.** Klepárník, K.
Možnosti kapilární elektroforézy v DNA diagnostice.
[Applicability of capillary electrophoresis in DNA diagnostics.]
PCR v medicíně III. – Praha (CZ), November 21, 2001.
(lecture)
- C37.** Klepárník, K.
On the DNA sequencing under highly alkaline conditions.
The Barnett Institute, Northeastern University Boston (US),
January 23, 2001.
(lecture)

- C38.** Klepárník, K.
Fast DNA diagnostics by capillary electrophoresis.
HPLC Kyoto. International Symposium on High Performance
Liquid Phase Separations and Related Techniques. - Kyoto (JP),
September 11-14, 2001.
In: HPLC Kyoto. International Symposium on High Performance
Liquid Phase Separations and Related Techniques. Abstract Book.
- Kyoto Institute of Technology, Kyoto 2001, p. 141.
(poster)
- C39.** Klepárník, K.
Moderní metody klinické molekulární diagnostiky.
[Modern methods of clinical molecular diagnostics.]
Piešťany '01. 14th International Conference Chromatographic
Methods and Human Health. - Piešťany (SK), November 12-15,
2001.
In: Piešťany '01. 14th International Conference Chromatographic
Methods and Human Health. Proceedings. - Slovenská chemická
spoločnosť pri SAV, Bratislava 2001, p. 30.
(lecture)
- C40.** Korunová, V.
Selenium determination in biological materials by microwave
digestion and in-situ trapping in GF AAS.
CSI XXXII. Colloquium Spectroscopicum Internationale. -
Pretoria (ZA), July 8-13, 2001.
In: CSI XXXII. Colloquium Spectroscopicum Internationale.
Volume of Abstracts. - South African Spectroscopic Society and
South African Chemical Institute, Pretoria 2001, p. P7-8.
(poster)
- C41.** Kotlík, B. - Kučera, J. - Sysalová, J.
Zabezpečení jakosti stanovení stopových prvků (As, Cd, Cr, Mn,
Ni, Pb a Zn) ve vzorcích prašného aerosolu.
[Quality assurance of trace determination (As, Cd, Cr, Mn, Ni, Pb
and Zn) in sampling air particulate matter.]
Ovzduší 2001. - Brno (CZ), May 14-16, 2001.
In: Ovzduší 2001. Program a sborník konference. - Vydavatelství
Masarykovy univerzity, Brno 2001, p. 196-199.
(poster)

- C42.** Křivánková, L.
Potenciál kapilárních elektroforetických technik pro analýzy mikrokomponent ve vzorcích se složitými matricemi.
[Potential of capillary electrophoretic techniques for analyses of microcomponents in samples with complex matrices.]
30. konference Syntéza a analýza léčiv. - Brno (CZ), September 17-19, 2001.
In: 30. konference Syntéza a analýza léčiv. Sborník příspěvků. - Veterinární a farmaceutická univerzita, Brno 2001, p. 7.
(lecture)
- C43.** Křivánková, L. - Gebauer, P. - Pantůčková, P. - Boček, P. - Thormann, W.
Chloride present in biological samples as a tool for enhancement of sensitivity in CZE analysis of trace analytes.
ICES 2001: An Electrophoretic Odyssey. - Verona (IT), June 10-13, 2001.
In: ICES 2001: An Electrophoretic Odyssey. Final Program and Abstracts Volume. – Verona 2001, p. 97.
(poster)
- C44.** Křivánková, L. - Očko, M. - Popelínský, L. - Boček, P.
Rychlé vyhledávání optimálních separačních podmínek pro analýzy metodou kapilární zónové elektroforézy informačním systémem "Xemic".
[Fast searching of optimum separation conditions for analyses with the method of capillary zone electrophoresis using informatic system "Xemic".]
30. konference Syntéza a analýza léčiv. - Brno (CZ), September 17-19, 2001.
In: 30. konference Syntéza a analýza léčiv. Sborník příspěvků. - Veterinární a farmaceutická univerzita, Brno 2001, p. 23.
(lecture)

- C45.** Křivánková, L. - Očko, M. - Popelínský, L.
Xemic: systém pro rozhodování v chemii metodami strojového učení.
[Xemic: a system for considerations in chemistry using machine learning methods.]
Datakon 2001. - Brno (CZ), November 20-23, 2001.
In: Datakon 2001. Proceedings of the Annual Database Conference. – Slovenská technická univerzita Bratislava 2001, pp. 351-354.
(poster)
- C46.** Kvasničková, L. - Štěrbová, H. - Glatz, Z. - Kahle, V. - Slanina, J.
Determination of biologically active compounds in medical plants by capillary electrophoresis.
SBS 2001. 2nd International Symposium Separations in the BioSciences. - Praha (CZ), September 17-20, 2001.
In: SBS 2001. 2nd International Symposium Separations in the BioSciences. Program and Book of Abstracts. - Prague 2001, p. 85.
(poster)
- C47.** Kvasničková, L. - Štěrbová, H. - Glatz, Z. - Kahle, V. - Slanina, J. - Musil, P.
Stanovení biologicky aktivních látek v léčivých rostlinách pomocí kapilární elektrochromatografie.
[Determination of biologically active compounds in medical plants by capillary electrochromatography.]
V. Pracovní setkání biochemiků a molekulárních biologů. - Brno (CZ), February 14, 2001.
(poster)
- C48.** Lazaridis, M. - Colbeck, I. - Drossinos, I. - Eleftheriadis, K. - Havránek, V. - Housiadas, C. - Kallos, G. - Mihalopoulos, N. - Mikuška, P. - Smolík, J. - Solberg, S. - Spiridaki, A. - Stefanou, E. - Stordal, F. - Svenby, T. - Večeřa, Z. - Ždímal, V.
Subgrid scale investigations of factors determining the occurrence of ozone and fine particles (SUB-AERO).
EAC 2001. European Aerosol Conference 2001. - Leipzig (DE), September 3-7, 2001.
In: Journal of Aerosol Science, 32 [Suppl. 1] S119-S120 (2001).
(lecture)

- C49.** Lazaridis, M. - Colbeck, I. - Drossinos, I. - Eleftheriadis, K. - Havránek, V. - Housiadas, C. - Kallos, G. - Mikuška, P. - Smolík, J. - Večeřa, Z. - Ždímal, V.
Subgrid scale investigations of factors determining the occurrence of ozone and fine particles (SUB-AERO).
8th European Symposium on the Physico-Chemical Behaviour of Atmospheric Pollutants. – Torino (IT), September 17-20, 2001.
In: 8th European Symposium on the Physico-Chemical Behaviour of Atmospheric Pollutants. Abstracts. – Torino 2001, p. AP86.
(poster)
- C50.** Lochman, P. - Adam, T. - Friedecký, T. - Hlídková, E. - Klepárník, K.
Determination of total of urinary thiols by capillary electrophoresis/laser induced fluorescence (CE-LIF) for high throughput screening of metabolic diseases.
HPCE 2001. 14th International Symposium on Microscale Separations and Analysis. - Boston (US), January 13-18, 2001.
In: HPCE 2001. 14th International Symposium on Microscale Separations and Analysis. Final Program & Book of Abstracts. - Boston 2001, p. 168.
(poster)
- C51.** Malá, Z. - Klepárník, K. - Boček, P.
Electromigration behavior of SSDNA fragments in highly alkaline solutions of linear polyacrylamide.
HPCE 2001. 14th International Symposium on Microscale Separations and Analysis. - Boston (US), January 13-18, 2001.
In: HPCE 2001. 14th International Symposium on Microscale Separations and Analysis. Final Program & Book of Abstracts. - Boston 2001, p. 156.
(poster)

- C52.** Matoušek, T. - Dědina, J. - Selecká, A.
Microflame quartz tube multiatomizer: a novel conception of hydride atomization for atomic absorption spectrometry.
CSI XXXII. Colloquium Spectroscopicum Internationale. - Pretoria (ZA), July 8-13, 2001.
In: CSI XXXII. Colloquium Spectroscopicum Internationale. Volume of Abstracts. - South African Spectroscopic Society and South African Chemical Institute, Pretoria 2001, p. P3-5.
(poster)
- C53.** Mikuška, P.
Stable generator of polydisperse aerosol.
EAC 2001. European Aerosol Conference 2001. - Leipzig (DE), September 3-7, 2001.
In: Journal of Aerosol Science, 32 [Suppl. 1] S823-S824 (2001).
(poster)
- C54.** Novák, P. - Chmelík, J.
Kombinace chromatografických technik a TOF analyzátoru.
[Combination of chromatographic techniques and TOF analyser.]
Kurz HPLC/MS. Spojení vysokoúčinné kapalinové chromatografie a hmotnostní spektrometrie (HPLC/MS). - Pardubice (CZ), November 5-7, 2001
In: Spojení vysokoúčinné kapalinové chromatografie a hmotnostní spektrometrie (HPLC/MS). Sborník přednášek kurzu HPLC/MS pořádaného Spektroskopickou společností Jana Marka Marci a Univerzitou Pardubice. - Univerzita Pardubice 2001, pp. 74-79.
(lecture)
- C55.** Planeta, J. - Vejrosta, J.
Superkritická fluidní chromatografie - instrumentace a příklady separací organických látek.
[Supercritical fluid chromatography – instrumentation and applications of the separation of organic compounds.]
Analýza organických látek. - Komorní Lhotka (CZ), October 16-18, 2001.
(lecture)

- C56.** Plocková, J. - Matulík, F. - Chmelík, J.
Field programming in gravitational field-flow fractionation: a tool
for fast and efficient separation of particles.
16th International Bratislava Meeting on Polymers.
Workshop/Conference. – Bratislava (SK), September 9-13, 2001
In: 16th International Bratislava Meeting on Polymers. Coupled,
Hyphenated and Multidimensional Liquid Chromatographic
Procedures for Separation of Macromolecules. Book of Abstracts.
- Polymer Institute of the Slovak Academy of Sciences, Bratislava
2001, p. 68.
(poster)
- C57.** Pól, J. - Karásek, P. - Vejrosta, J.
Continuous supercritical fluid extraction of phenols from aqueous
solutions.
5. Anwendertreffen „Extraktion zur Probenvorbereitung“. –
Siegen (DE), May 9-10, 2001.
(poster)
- C58.** Preisler, J. - Hu, P. - Rejtar, T. - Moskovets, E. - Foret, F. -
Karger, B. L.
A vacuum deposition interface for MALDI MS analysis with a
high repetition rate laser.
HPCE 2001. 14th International Symposium on Microscale
Separations and Analysis. - Boston (US), January 13-18, 2001.
In: HPCE 2001. 14th International Symposium on Microscale
Separations and Analysis. Final Program & Book of Abstracts. -
Boston 2001, pp. 54-55.
(poster)
- C59.** Rejtar, T. - Hu, P. - Preisler, J. - Foret, F. - Karger, B. L.
Performance of vacuum deposition interface for coupling of
capillary electrophoresis to MALDI TOF/MS.
The 49th ASMS Conference. - Chicago (US), May 27-31, 2001.
In: Proceedings of the 49th ASMS Conference. - Chicago 2001.
(poster)

- C60.** Rejtar, T. - Hu, P. - Preisler, J. - Foret, F. - Karger, B. L.
Vacuum deposition interface for off-line coupling of capillary
electrophoresis to MALDI/TOF MS.
HPCE 2001. 14th International Symposium on Microscale
Separations and Analysis. - Boston (US), January 13-18, 2001.
In: HPCE 2001. 14th International Symposium on Microscale
Separations and Analysis. Final Program & Book of Abstracts. -
Boston 2001, pp. 78-79.
(poster)
- C61.** Roth, M. - Maag, K. - Schneider, G. M. - Tůma, D.
Partial molar properties and solute-solvent interactions in dilute
solutions of C60 and C70 fullerenes and C21 to C40 n-alkanes in
CO₂ from supercritical fluid chromatography.
76th International Bunsen Discussion Meeting Global Phase
Diagrams. - Walberberg (DE), August 19-22, 2001.
In: 76th International Bunsen Discussion Meeting Global Phase
Diagrams. Book of Abstracts. - Shaker Verlag Aachen 2001, p.
75.
(poster)
- C62.** Řehulka, P. - Chmelík, J.
Calibration of MALDI-TOF MS using matrix-ion clusters.
19th Informal Meeting on Mass Spectrometry. – Noszvaj (HU),
April 29 - May 3, 2001.
In: 19th IMMS. Proceedings of the 19th Informal Meeting on
Mass Spectrometry. - Hungarian Academy of Sciences, Budapest
2001, p. 135.
(poster)
- C63.** Řehulka, P. - Chmelík, J. - Allmaier, G.
Identification of barley proteins from in-gel digests by MALDI-
TOF MS.
19th Informal Meeting on Mass Spectrometry. – Noszvaj (HU),
April 29 - May 3, 2001.
In: 19th IMMS. Proceedings of the 19th Informal Meeting on
Mass Spectrometry. - Hungarian Academy of Sciences, Budapest
2001, p. 136.
(poster)

- C64.** Řehulka, P. - Chmelík, J. - Mayrhofer, C. - Allmaier, G.
Proteomics of barley proteins by combination of in-gel digestion
and MALDI-TOF MS.
SBS 2001. 2nd International Symposium Separations in the
BioSciences. - Praha (CZ), September 17-20, 2001.
In: SBS 2001. 2nd International Symposium Separations in the
BioSciences. Program and Book of Abstracts. - Prague 2001, p.
133.
(poster)
- C65.** Sadagoff, Y. M. - Dědina, J.
Atom diffusion in furnaces-models and measurements.
CSI XXXII. Colloquium Spectroscopicum Internationale. -
Pretoria (ZA), July 8-13, 2001.
In: CSI XXXII. Colloquium Spectroscopicum Internationale.
Volume of Abstracts. - South African Spectroscopic Society and
South African Chemical Institute, Pretoria 2001, p. FR4-4.
(lecture)
- C66.** Slavíček, V. - Grüner, B. - Plešek, J. - Vespalet, R.
Chiral separations of charged boranes.
EUROBORON 2. 2nd European Symposium on Boron Chemistry.
- Dinard (FR), September 2-6, 2001.
In: EUROBORON 2. 2nd European Symposium on Boron
Chemistry. Program and Abstracts. – Université de Rennes 2001,
p. O33.
(lecture)
- C67.** Slavíček, V. - Grüner, B. - Plešek, J. - Vespalet, R.
Chiral separations of charged boranes by capillary zone
electrophoresis.
EUROBORON 2. 2nd European Symposium on Boron Chemistry.
- Dinard (FR), September 2-6, 2001.
In: EUROBORON 2. 2nd European Symposium on Boron
Chemistry. Program and Abstracts. - Université de Rennes 2001,
p. P54.
(poster)

- C68.** Slavíček, V. - Grüner, B. - Plzák, Z. - Vespalet, R.
Achiral separations of deltahedral borate anions by capillary zone electrophoresis.
EUROBORON 2. 2nd European Symposium on Boron Chemistry.
- Dinard (FR), September 2-6, 2001.
In: EUROBORON 2. 2nd European Symposium on Boron Chemistry. Program and Abstracts. - Université de Rennes 2001,
p. P53.
(poster)
- C69.** Slavíček, V. - Vespalet, R.
Chiral separations of charged boranes and carboranes by CZE.
SBS 2001. 2nd International Symposium Separations in the BioSciences. - Praha (CZ), September 17-20, 2001.
In: SBS 2001. 2nd International Symposium Separations in the BioSciences. Program and Book of Abstracts. - Prague 2001, p.
51.
(lecture)
- C70.** Slavíček, V. - Vespalet, R.
Chiral separations of charged cluster boranes and their derivatives by CZE.
Piešťany '01. 14th International Conference Chromatographic Methods and Human Health. - Piešťany (SK), November 12-15, 2001.
In: Piešťany '01. 14th International Conference Chromatographic Methods and Human Health. Proceedings. - Slovenská chemická spoločnosť pri SAV, Bratislava 2001, pp. 36-37.
(lecture)
- C71.** Smetková, V. - Dočekalová, H. - Dočekal, B.
Determination of soil phytoavailable trace metals using diffusive gradients in thin-films technique (DGT).
Industrial Toxicology 2001. 21st International Symposium. - Bratislava (SK), May 30 -June 1, 2001.
In: Industrial Toxicology 2001. Proceedings. - Bratislava 2001, p.
185.
(poster)

- C72.** Sosic, Z. - Miller, A. W. - Foret, F. - Li-Sucholeiki, X. C. – Thilly, W. G. - Karger, B. L.
High throughput constant denaturant capillary array electrophoresis with automated fraction collection for mutational analysis.
HPCE 2001. 14th International Symposium on Microscale Separations and Analysis. - Boston (US), January 13-18, 2001.
In: HPCE 2001. 14th International Symposium on Microscale Separations and Analysis. Final Program & Book of Abstracts. - Boston 2001, p. 127.
(poster)
- C73.** Šlais, K. - Nováčková, J. - Friedl, Z.
Standards for capillary isoelectric focusing with laser induced fluorescence detection.
SBS 2001. 2nd International Symposium Separations in the BioSciences. - Praha (CZ), September 17-20, 2001.
In: SBS 2001. 2nd International Symposium Separations in the BioSciences. Program and Book of Abstracts. - Prague 2001, p. 81.
(poster)
- C74.** Šťastná, M. - Radko, S. P. - Chrambach, A.
CZE of proteins in capillaries of various diameters.
HPLC-2000. 24th International Symposium on High Performance Liquid Phase Separations and Related Techniques. - Seattle (US), June 24-30, 2000.
In: HPLC-2000. 24th International Symposium on High Performance Liquid Phase Separations and Related Techniques. Meeting Abstracts. - Washington 2000.
(poster)

- C75.** Večeřa, Z. - Pešková, J. - Broškovičová, A.
Denuder so stekajúcim filmom kvapaliny a stanovenie monoterpénov v ovzduší.
[Wet effluent diffusion denuder technique and determination of monoterpenes in air.]
Piešťany '01. 14th International Conference Chromatographic Methods and Human Health. - Piešťany (SK), November 12-15, 2001.
In: Piešťany '01. 14th International Conference Chromatographic Methods and Human Health. Proceedings. - Slovenská chemická spoločnosť pri SAV, Bratislava 2001, pp. 34-35.
(lecture)
- C76.** Vejrosta, J.
Využití fluidních stavů v přípravě analytických vzorků.
[Benefit of fluid states in analytical sample preparation.]
Katedra analytické chemie, PřF Univerzity Palackého, Olomouc, January 31, 2001.
(lecture)
- C77.** Vejrosta, J. - Karásek, P. - Planeta, J. - Goliáš, J.
Continuous supercritical extraction of water based matrices.
Application for the specification of wine varieties.
ExTech 2001 "Advances in Extraction Technologies". - Barcelona (ES), September 17-19, 2001.
In: ExTech 2001 "Advances in Extraction Technologies". - Barcelona 2001, p. 48.
(lecture)
- C78.** Vlčková, M. - Barták, P. - Vespalet, R.
Electrophoretic behaviour and properties of sanguinarine and chelerythrine.
Piešťany '01. 14th International Conference Chromatographic Methods and Human Health. - Piešťany (SK), November 12-15, 2001.
In: Piešťany '01. 14th International Conference Chromatographic Methods and Human Health. Proceedings. - Slovenská chemická spoločnosť pri SAV, Bratislava 2001, p. 31-32.
(lecture)

- C79.** Vlčková, M. - Vespalet, R.
Studium elektroforetických vlastností sanguinarinu a chelerythrinu.
[Study of electrophoretic properties of sanguinarine and chelerythrine.]
30. konference Syntéza a analýza léčiv. - Brno (CZ), September 17-19, 2001.
In: 30. konference Syntéza a analýza léčiv. Sborník příspěvků. - Veterinární a farmaceutická univerzita, Brno 2001, p. 37.
(poster)
- C80.** Zdráhal, Z. - Vermeylen, R. - Claeys, M. - Cafmeyer, J. - Maenhaut, W.
Characterization of novel dicarboxylic and tricarboxylic acids in tropical atmospheric aerosols.
2nd Meeting on Crossing Borders in Mass Spectrometry. - Antwerp (BE), April 5, 2000.
In: 2nd Meeting on Crossing Borders in Mass Spectrometry. - University of Antwerp, Antwerp 2000, p. 14.
(poster)
- C81.** Zdráhal, Z. - Oliveira, J. - Vermeylen, R. - Claeys, M. - Maenhaut, W.
Levoglucosan: a marker for biomass burning.
Workshop. Physico-chemical Characterization, Source Identification, and Transboundary Transport of Atmospheric Aerosols over Southern Africa. - Antwerp (BE), May 23, 2001.
(lecture)
- C82.** Žídková, J. - Přibyla, L. - Chmelík, J.
Determination of saccharides in beverages by capillary electrophoresis and MALDI-TOF mass spectrometry.
SBS 2001. 2nd International Symposium Separations in the BioSciences. - Praha (CZ), September 17-20, 2001.
In: SBS 2001. 2nd International Symposium Separations in the BioSciences. Program and Book of Abstracts. - Prague 2001, p. 149.
(poster)

- C83.** Žídková, J. - Přibyla, L. - Chmelík, J.
Stanovení sacharidů v ovocných nápojích pomocí kapilární
elektroforézy a MALDI-TOF hmotnostní spektrometrie.
[Determination of saccharides in fruit juices by capillary
electrophoresis and MALDI-TOF mass spectrometry.]
XXXII. Symposium o nových směrech výroby a hodnocení
potravin. - Skalský Dvůr (CZ), May 28-30, 2001.
In: XXXII. Symposium o nových směrech výroby a hodnocení
potravin. Sborník souhrnů sdělení. - Praha 2001, p. 13.
(poster)

D. RESEARCH REPORTS

E. PATENTS, PATENT APPLICATION

F. VARIA

- F1.** Roth, M.
Odešel Ing. Jiří Vejrosta, CSc.
Chemické Listy, 95 [10] 680 (2001).

G. THESES

H. PAPERS AND BOOKS IN PRESS

- H1.** Barták, P. - Šimánek, V. - Vlčková, M. - Vespaletc, R.
Electrophoretic investigation of the interaction of sanguinarine and chelerythrine with molecules containing the mercapto group.
Analytical Chemistry - submitted (XI/2001).
- H2.** Beckers, J. L. - Boček, P.
Multivalent weak electrolytes - risky BGEs for CZE.
Electrophoresis - submitted (XI/2001).
- H3.** Beckers, J. L. - Boček, P.
Three effects of the surfactant CTAB as additive in CZE.
Electrophoresis - submitted (XI/2001)
- H4.** Chmelík, J. - Řehulka, P. - Střelcová, M. - Kubáň, V. - Mayrhofer, C. - Allmaier, G.
Proteomic analysis of different extracts from barley grains.
Rostlinná výroba - submitted (XII/2001)
- H5.** Dobšík, M. - Mikuška, P. - Večeřa, Z.
Kontinuální stanovení stopových koncentrací amoniaku ve vzduchu.
Chemické Listy - submitted (XII/2001)
- H6.** Foret, F. - Preisler, J.
Liquid phase interfacing and miniaturization in MALDI mass spectrometry.
Electrophoresis - submitted (IX/2001)
- H7.** Horká, M. - Šlais, K.
Pyrenebutanoate as a dynamic protein modifier for fluorometric detection in CZE.
Electrophoresis - submitted (X/2001)

- H8.** Karásek, P. - Pól, J. - Planeta, J. - Roth, M. - Vejrosta, J. - Wičar, S.
Continuous supercritical fluid extraction of aqueous media with carbon dioxide: apparatus design and validation data on equilibrium partitioning of phenols in co-current mode.
Analytical Chemistry - submitted (XII/2001)
- H9.** Křivánková, L. - Gebauer, P. - Pantůčková, P. - Boček, P.
Quantitation of trace analytes in CZE with UV-absorbance detection: A critical study of approaches based on peak height.
Electrophoresis - submitted (IX/2001)
- H10.** Matoušek, T. - Dědina, J. - Selecká, A.
Multiple microflame quartz tube atomizer – further development towards the ideal hydride atomizer for atomic absorption spectrometry.
Spectrochimica Acta B - in press
- H11.** Matoušek, T. - Dědina, J. - Selecká, A.
Continuous flow silver volatilization for atomic absorption spectroscopy using tetrahydroborate (III) reduction system performance and assessment of the efficiency using instrumental neutron activation analysis.
Spectrochimica Acta B - in press
- H12.** Mikuška, P. - Večeřa, Z.
Chemiluminiscenční průtokové stanovení dusičnanů ve vodě.
Chemické Listy - submitted (IX/2001)
- H13.** Minarík, M. - Klepárník, K. - Gilár, M. - Foret, F. - Miller, A. W. - Sosic, Z. - Karger, B. L.
Design of fraction collector for capillary array electrophoresis.
Electrophoresis - in press
- H14.** Plocková, J. - Matulík, F. - Chmelík, J.
Different elution modes and field programming in gravitational field-flow fractionation: 4. Field programming achieved with channels of non-constant cross-sections.
Journal of Chromatography - submitted (X/2001)

- H15.** Roth, M.
Interaction second virial coefficients for CO₂-n-C_mH_{2m+2} pairs
(m = 21 to 40) from supercritical fluid chromatography.
Journal of Chemical Thermodynamics - submitted (X/2001)
- H16.** Sadagoff, Y. M. - Dědina, J.
Atom diffusion in furnace-models and measurements.
Spectrochimica Acta B – in press
- H17.** Sysalová, J. - Spěváčková, V.
Contribution to arsenic species determination in urine and blood
by AAS.
International Journal of Environmental Analytical Chemistry -
submitted (VII/2001)
- H18.** Šedo, A. - Vlašicová, K. - Barták, P. - Vespałec, R. - Vičar, J. -
Šimánek, V. - Ulrichová, J.
Quaternary benzo(c)phenanthridine alkaloids as inhibitors of
aminopeptidase N and dipeptidyl peptidase IV.
Phytotherapy Research, in press

J. GRANTS

- J1.** Adam, T. - Šťastná, S. - Kozák, L. - Klepárník, K.
Cystinurie - biochemická a molekulárně biologická studie.
[Cystinuria - a study by biochemistry and molecular biology.]
Grantová agentura České republiky [Grant Agency of the Czech Republic], grant **303/00/0928** (2000-2002).
- J2.** Boček, P.
Metodologie analytické elektroforézy vzorků se složitými matricemi.
[Methodology of analytical electrophoresis of samples with complex matrices.]
Grantová agentura Akademie věd ČR [Grant Agency of the Academy of Sciences of the Czech Republic], grant **A4031703** (1997-2001).
- J3.** Boček, P.
Metodologie analytické elektroforézy vzorků se složitými matricemi.
[Methodology of analytical electrophoresis of samples with complex matrices.]
Grantová agentura Akademie věd ČR [Grant Agency of the Academy of Sciences of the Czech Republic], grant **D4031106** (2001).
- J4.** Boček, P.
Systémové jevy v analytické kapilární elektroforéze
[System phenomena in analytical capillary electrophoresis.]
Grantová agentura Akademie věd ČR [Grant Agency of the Academy of Sciences of the Czech Republic], grant **A4031103** (2001-2005).
- J5.** Boček, P.
Mapování elektrolytových systémů pro kapilární elektroforézu.
[Mapping of electrolyte systems for capillary electrophoresis.]
Grantová agentura České republiky [Grant Agency of the Czech Republic], grant **203/01/0401** (2001-2003).

- J6.** Bohačenko, I., - Psota, V. - Chmelík, J.
Vliv distribuce velikosti škrobových zrn na technologickou kvalitu ječmene.
[The influence of distribution of size of starch granules on the technological quality of barley.]
Ministerstvo zemědělství České republiky [Ministry of Agriculture of the Czech Republic], grant **QD 1005** (2001-2005).
- J7.** Čáslavský, J.
Analýza látek organického původu pomocí netradičních spojení separačních metod s hmotnostní spektrometrií.
[Analysis of compounds of organic origin by non-traditional coupling of separation methods and mass spectrometry.]
Grantová agentura Akademie věd ČR [Grant Agency of the Academy of Sciences of the Czech Republic], grant **A4031104** (2001-2005).
- J8.** Čáslavský, J.
Vzorkování organických polutantů pomocí SPMDs.
[Sampling of organic pollutants using SPMDs.]
Grantová agentura České republiky [Grant Agency of the Czech Republic], grant **205/01/0836** (2001-2003).
- J9.** Dědina, J. - Rychlovský, P.
Rozvoj technik generování a atomizace těkavých sloučenin perspektivních pro stopovou a ultrastopovou prvkovou a speciační analýzu metodami atomové spektrometrie.
[Development of promising techniques of generation and atomization of volatile compounds for (ultra)trace element analysis and for speciation by atomic spectrometry methods.]
Grantová agentura České republiky [Grant Agency of the Czech Republic], grant **203/01/0453** (2001-2003).

- J10.** Holý, A. - Dobeš, J. - Ulbrich, K. - Marek, M. V. - Rudajev, V. - Šlotová, J. - Boček, P. - Autrata, R. - Dvořák, V.
Fyzika, chemie a informatika pro biologické, ekologické a lékařské aplikace.
[Physics, chemistry and informatics for biological, ecological and medical applications.]
Grantová agentura Akademie věd ČR [Grant Agency of the Academy of Sciences of the Czech Republic], grant **K4055109** (2001-2004).
- J11.** Chloupek, O. - Chmelík, J.
Molekulární markéry tolerance ječmene k suchu a chladu.
[Molecular markers of barley for drought and cold tolerance.]
Grantová agentura České republiky [Grant Agency of the Czech Republic], grant **521/99/1576** (1999-2001).
- J12.** Chmelík, J.
Vývoj rychlých metod pro stanovení kvality škrobových zrn z různých druhů obilovin pro účely zemědělství a potravinářského průmyslu.
[Development of rapid methods for assessing the quality of starch particles from various cereal species for purposes of agriculture and food industry.]
Evropská komise [European Commission], INCO Copernicus, grant **ERB IC15-CT98-0909** (1998-2001).
- J13.** Chmelík, J.
Vývoj rychlých metod pro stanovení kvality škrobových zrn z různých druhů obilovin pro účely zemědělství a potravinářského průmyslu.
[Development of rapid methods for assessing the quality of starch particles from various cereal species for purposes of agricultural and food industry.]
Ministerstvo školství, mládeže a tělovýchovy ČR [Ministry of Education, Youth and Sports of the Czech Republic], grant **OK 348** (1998-2001).

- J14.** Chmelík, J.
Studium posttranslačních modifikací bílkovin karbonylovými sloučeninami pomocí hmotnostní spektrometrie MALDI-TOF a kapilární elektroforézy.
[Investigation of posttranslational modifications of proteins with carbonyl compounds by using MALDI-TOF mass spectrometry and capillary electrophoresis.]
Program KONTAKT, MŠMT ČR [Program KONTAKT - Ministry of Education, Youth and Physical Training of the Czech Republic], grant **ME 230** (1998-2001).
- J15.** Chmelík, J.
Studium elučních mechanismů v gravitační field-flow frakcionaci a jejich využití pro separaci částic a buněk.
[Investigation of elution modes in gravitational field-flow fractionation and application to separation of particles and cells.]
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], grant **A4031805** (1998-2001).
- J16.** Chmelík, J.
Vývoj screeningových mikrometod a vývoj zařízení pro specifické stanovení sacharidů v potravinách za účelem kontroly kvality a původnosti použitých surovin.
[The development of screening micromethods and the development of a device for specific determination of carbohydrates in food with the aim to prove the quality.]
Ministerstvo zemědělství České republiky [Ministry of Agriculture of the Czech Republic], grant **EP9410** (1999-2002).
- J17.** Chmelík, J. - Tlaskalová, H. - Gabrovská, D. - Rubínová, B. - Plicka, J.
Analýza glutenu (lepu) a sledování kvality bezlepkových potravin a surovin.
[Analysis of gluten and quality monitoring of gluten-free raw materials and foods.]
Ministerstvo zemědělství České republiky [Ministry of Agriculture of the Czech Republic], grant **QD 1023** (2001-2005).

- J18.** Chráska, P. - Šteiner, I. - Sehnal, F. - Říhová, B. - Němec, L. - Macháčková, I. - Špičák, A. - Palouš, J. - Mareš, P. - Bosák, P. - Smolík, J. - Křivánek, R. - Boček, P. - Sklenička, V. - Dvořák, V. Rozvoj unikátních diagnostických a detekčních metod.
[Development of unique diagnostic and detection methods.]
Grantová agentura Akademie věd ČR [Grant Agency of the Academy of Sciences of the Czech Republic], grant **P1043020** (2000-2001).
- J19.** Klepárník, K. - Kozák, L. - Horký, M.
Vývoj ultracitlivých analytických metod pro molekulární identifikaci a diagnostiku závažných chorob.
[Development of ultrasensitive analytical methods for molecular identification and diagnostics of serious diseases.]
Grantová agentura České republiky [Grant Agency of the Czech Republic], grant **203/00/0772** (2000-2002).
- J20.** Maenhaut, W. - Večeřa, Z.
Charakterizace a zdroje atmosférických aerosolů obsahujících uhlík.
[Characterization and sources of carbonaceous atmospheric aerosols.]
Dodatkový grant financovaný Belgií, grant **BL/02/CR01** (2001-2005).
- J21.** Mikuška, P.
Vývoj nového aerosolového kolektoru pro kontinuální odběr jemné frakce atmosférických aerosolů.
[Development of new aerosol collector for continuous sampling of fine fraction of atmospheric aerosols.]
Grantová agentura Akademie věd ČR [Grant Agency of the Academy of Sciences of the Czech Republic], grant **A4031105** (2001-2003).
- J22.** Pavelka, S. - Vobecký, M. - Lener, J.
Interference bromidu z životního prostředí s metabolismem jodu ve štítné žláze a dalších tkáních.
[Interference of environmental bromine with iodine metabolism in thyroid gland and other tissues.]
Ministerstvo zdravotnictví ČR [Ministry of Health of the Czech Republic], grant **NJ6109** (2000-2002).

- J23.** Šlais, K.
Kapilární izotachoforéza s kombinovanými kontinuálními gradienty vodivosti a pH.
[Capillary isotachophoresis with combined continuous conductivity and pH gradients.]
Grantová agentura Akademie věd České republiky [Grant Agency of the Academy of Sciences of the Czech Republic], grant **A4031901** (1999-2001).
- J24.** Večeřa, Z.
Recyklace stopových kovových prvků pro trvale udržitelné obhospodařování zemědělských půd.
[Cycling of trace metals in sustainable management of agricultural soils.]
Evropská komise [European Commission], INCO Copernicus, grant **ERB IC15-CT98-0124** (1998-2002).
- J25.** Večeřa, Z.
Recyklace stopových kovových prvků pro trvale udržitelné obhospodařování zemědělských půd.
[Cycling of trace metals in sustainable management of agricultural soils.]
Ministerstvo školství, mládeže a tělovýchovy ČR [Ministry of Education, Youth and Sports of the Czech Republic], grant **OK 385** (1999-2001).
- J26.** Večeřa, Z.
SUB-AERO – Sítové monitorování faktorů určujících výskyt ozónu a mikročástic.
[Subgrid scale investigations of factors determining the occurrence of ozone and fine particles SUB-AERO.]
Evropská komise [European Commission], INCO Copernicus, grant **SUB-AERO-EVK2-1999-0052** (1999-2003).

- J27.** Vejrosta, J./ Roth, M.
Výzkum a vývoj metodiky a instrumentace přímé extrakce vodných roztoků nadkritickým oxidem uhličitým.
[Research and development of the methodology and instrumentation for direct extraction of aqueous matrices by supercritical carbon dioxide.]
Grantová agentura Akademie věd ČR [Grant Agency of the Academy of Sciences of the Czech Republic], grant **S4031110** (2001-2003).
- J28.** Vejrosta, J./Roth, M. - Goliáš, J.
Využití kontinuální superkritické fluidní extrakce (SFE) oxidem uhličitým a GC-MS v analýze alkoholických nápojů.
[Use of continuous supercritical fluid extraction with carbon dioxide and GC-MS in analysis of alcoholic beverages.]
Grantová agentura České republiky [Grant Agency of the Czech Republic], grant **525/99/1570** (1999-2001).
- J29.** Vytřas, K. - Křivánková, L.
Využití nové analytické instrumentace ve výzkumu analytických a diagnostických postupů.
[The use of new analytical instrumentation in research of analytical and diagnostic methods.]
Grantová agentura České republiky [Grant Agency of the Czech Republic], grant **203/99/0044** (1999-2001).

AUTHORS INDEX

[* Authors being not members of the Institute]

- * Adam, T. C50, J1
- * Allmaier, G. A9, C9, C63, C64, H4
- * Antonioli, G. A20
- * Artaxo, P. A34
- * Autrata, R. J10
- Babický, A. A22, A23
- * Bačkovská, V. A13
- * Barták, P. C78, H1, H18
- * Beckers, J. L. A1, A2, A3, C27, H2, H3
- * Blum, M. A12
- Boček, P. A1, A2, A3, A17, B3, C27, C28, C43, C44, C51, H2, H3, H9, J2, J3, J4, J5, J10, J18
- * Bohačenko, I. A7, J6
- * Bosák, P. J18
- * Bozym, M. A20
- Broškovičová, A. C75
- * Bryant, C. C10
- Budinská, M. A7, A14, C1, C2, C5, C31
- * Bunčeková, S. A13
- * Buzas, Z. A4
- * Cafmeyer, J. C80
- * Chang, H. T. A4
- * Chiari, M. A5
- * Chloupek, O. J11
- Chmelík, J. A6, A7, A8, A9, A14, A26, A36, B1, C1, C2, C3, C4, C5, C6, C7, C8, C9, C11, C12, C31, C54, C56, C62, C63, C64, C82, C83, H4, H14, J6, J11, J12, J13, J14, J15, J16, J17
- * Chmelík Jr., J. A8, C6
- * Chrambach, A. A4, A5, A27, A30, C74
- * Chráska, P. J18
- * Claeys, M. A34, C80, C81
- * Colbeck, I. C10, C48, C49

- * Cretich, M. A5
- Čáslavský, J. C8, C9, C11, C12, C13, J7, J8
- Dědina, J. C14, C52, C65, H10, H11, H16, J9
- * Dobeš, J. J10
- Dobšík, M. C15, H5
- Dočekal, B. A10, A20, A32, C16, C17, C18, C19, C20, C21, C22, C23, C71
- * Dočekalová, H. C23, C71
- * Drossinos, I. C10, C48, C49
- * D'Ulivo A. C14
- * Dvořák, V. J10, J18
- * Eleftheriadis, K. C10, C48, C49
- * Felten, C. A11
- * Fetner, M. C33
- Foret, F. A11, A16, A35, B4, C24, C25, C26, C30, C34, C58, C59, C60, C72, H6, H13
- * Friedecký, T. C50
- * Friedl, Z. A12, C73
- * Gabrovská, D. J17
- * Gaš, B. A15
- Gebauer, P. A1, A2, A3, C27, C28, C43, H9
- * Gilár, M. H13
- * Glatz, Z. A19, C46, C47
- * Goetzinger, W. A11
- * Goliáš, J. C77, J28
- * Grüner, B. C66, C67, C68
- * Guiochon, G. A13
- * Guyon, P. A34
- * Havránek, V. C10, C48, C49
- * Hernandez, T. A20
- * Hlídková, E. C50
- * Holý, A. J10
- Horká, M. A12, C29, H7
- * Horký, M. J19
- * Housiadas, C. C10, C48, C49
- * Hu, P. C30, C58, C59, C60
- * Izquierdo, C. G. A20
- Janák, J. B2
- * Jančářová, I. A29

* Jandera, P.	A13
Janoušková, J.	A14, C1, C2, C5, C31
* Kabátek, Z.	A15
Kahle, V.	A19, C46, C47
* Kallos, G.	C48, C49
Karásek, P.	C32, C33, C57, C77, H8
* Karger, B. L.	A11, A16, A35, C30, C34, C58, C59, C60, C72, H13
* Kautz, R. A.	A16, C34
Klepárník, K.	A15, A17, B3, B4, C35, C36, C37, C38, C39, C50, C51, H13, J1, J19
Korunová, V.	C40
* Kotlaříková, P.	C13
* Kotlík, B.	A18, C41
* Kozák, L.	J1, J19
* Kruml, T.	A7
Krumlová, A.	A7, C1, C2, C5, C31
* Křivánek, R.	J18
Křivánková, L.	B5, C28, C42, C43, C44, C45, H9, J29
* Kubáň, V.	A29, H4
* Kučera, J.	A18, C41
* Kvasničková, L.	A19, C46, C47
* Lacey, M. E.	A16, C34
* Lampugnani, L.	C14
* Lazaridis, M.	C10, C48, C49
* Lener, J.	A22, A23, J22
* Li-Sucholeiki, X.C.	C72
* Lochman, P.	C50
* Maag, K.	A28, C61
* Macháčková, I.	J18
* Maenhaut, W.	A34, C80, C81, J20
* Maestri, E.	A20
Malá, Z.	A17, B3, C51
* Marek, M.V.	J10
Marek, P.	A10, A32, C21, C22
* Mareš, P.	J18
* Marmiroli, M.	A20
* Marmiroli, N.	A20
Matoušek, T.	C14, C52, H10, H11
Matulík, F.	C7, C56, H14

- * Mayrhofer, C. A9, C64, H4
- * Mazal, P. A7
- * Mihalopoulos, N. C48
- * Mihlbachler, K. A13
 - Mikuška, P. A21, C10, C15, C48, C49, C53, H5, H12, J21
- * Miller, A.W. C72, H13
- * Minarik, M. A11, H13
- * Mocko, A. A20
- * Moskovets, E. C58
- * Mucchino, C. A20
- * Müller, O.M. B4
- * Musil, P. A19, C47
- * Němec, L. J18
- * Nording, P. A12
 - Nováčková, J. C73
- * Novák, P. C54
- * Nowak, A. A20
- * Nowak, J. A20
- * Očko, M. C44, C45
- * Oliveira, J. C81
- * Palouš, J. J18
 - Pantůčková, P. C28, C43, H9
 - Pařízek, P. A24, A25
- * Pavelka, S. A22, A23, J22
 - Pešková, J. A24, A25, C75
 - Planeta, J. A8, A13, C6, C55, C77, H8
- * Plešek, J. C66, C67
- * Plicka, J. J17
 - Plocková, J. A14, A26, C1, C2, C7, C31, C56, H14
- * Plzák, Z. C68
 - Pól, J. C32, C57, H8
- * Popelínský, L. C44, C45
- * Preisler, J. C30, C58, C59, C60, H6
 - Příbyla, L. C82, C83
- * Psota, V. A7, J6
- * Radko, S. P. A5, A27, A30, C74
 - Rejtar, T. C30, C58, C59, C60
 - Roth, M. A28, C61, F1, H8, H15, J27, J28
- * Rubínová, B. J17

- * Rudajev, V. J10
- * Rychlovský, P. J9
Řehulka, P. A8, A9, C6, C8, C9, C62, C63, C64, H4
- * Říhová, B. J18
- * Sadagoff, Y.M. C65, H16
- * Sáňka, M. A32
- * Schneider, G.M. A28, C61
- * Sehnal, F. J18
Selecká, A. C14, C52, H10, H11
- * Sklenička, V. J18
- * Slanina, J. A19, C46, C47
Slavíček, V. C66, C67, C68, C69, C70
- * Smělá, D. A29
- * Smetková, V. C23, C71
- * Smolík, J. C10, C48, C49, J18
- * Solberg, S. C48
- * Sosic, Z. C72, H13
- * Spěváčková, V. H17
- * Spiridaki, A. C48
- * Stefanou, E. C48
- * Stordal, F. C48
- * Střelcová, M. H4
- * Svenby, T. C48
- * Sweedler, J. V. A16, C34
Sysalová, J. A18, C41, H17
- * Šedo, A. H18
- * Šimánek, V. H1, H18
Šlais, K. A12, A29, B6, C29, C73, H7, J23
- * Šlampová, A. A29
- * Šlotová, J. J10
- * Špičák, A. J18
- * Šteiner, I. J18
Šťastná, M. A4, A5, A27, A30, C74
- * Šťastná, S. J1
- * Štěrbová, H. A19, C46, C47
- * Šubert, J. B6
- * Thilly, W.G. C72
- * Thormann, W. C43
- * Tlaskalová, H. J17

* Tůma, D.	A28, C61
* Ulbrich, K.	J10
* Ulrichová, J.	H18
* van Leeuwen, H.P.	A33
Varad'ová-Ostrá, E.	C33
Večeřa, Z.	A20, A21, A24, A25, A31, A32, C10, C15, C48, C49, C75, H5, H12, J20, J24, J25, J26
Vejrosta, J.	C32, C33, C55, C57, C76, C77, H8, J27, J28
* Vermeylen, R.	A34, C80, C81
Vespalec, R.	A33, C66, C67, C68, C69, C70, C78, C79, H1, H18
* Vičar, J.	H18
* Vieira, N.E.	A4
* Vlašicová, K.	H18
Vlčková, M.	C78, C79, H1
Vobecký, M.	A22, A23, J22
* Vydrová, H.	A7
* Vytřas, K.	J29
* Waclawek, W.	A20
* Wahlund, K.G.	C3
* Webb, A. G.	A16
Wičar, S.	H8
* Willimann, T.	A12
* Wolters, A. M.	A16, C34
* Yergey, A. L.	A4
Zdráhal, Z.	A34, C6, C80, C81
* Zhang, B.	A35
* Ždímal, V.	C10, C48, C49
Žídková, J.	A36, C82, C83