

Sunday, March 16

15:00 – 20:00 REGISTRATION

18:00 – 20:00 WELCOME PARTY – foyers Prague and Budapest

Monday, March 17

8:00 – 18:00 REGISTRATION

Halls Prague A+B+C

8:30 – 9:00 OPENING CEREMONY

Opening plenary session (chairperson: E. Plško)

9:00 – 9:40 PL1: M. Hof - Hydration, mobility, aggregation and nanodomain formation in model membranes studies by fluorescence spectroscopy

9:40 – 10:20 PL2: B. Welz - Determination of halogens using high-resolution graphite furnace molecular absorption spectrometry in comparison with ETV-ICP-MS

10:20 – 10:50 COFFEE BREAK

Halls Prague A+B

Session A

Session MON A1 – ICP-MS (chairperson: E. Bulska)

10:50 – 11:20 IL1: M. Resano - New methodologies for clinical monitoring based on elemental and isotopic analysis of dried matrix spots

11:20 – 11:50 IL2: M. A. Z. Arruda - Inductively coupled plasma mass spectrometry as a powerful technique in nanotechnology science and image analysis

11:50 – 12:10 L1: U. Noetzel - Handling the high matrix samples with ease using MPAES, ICP-MS and ICPQQQ

12:10 – 12:30 L2: M. Dronov - A new method for increasing the precision of isotope ratio analysis on a Quadrupole ICP-MS based on measurements of lead and strontium

12:40 – 14:00 LUNCH TIME

Session MON A2 – Atomic spectrometry (chairperson: B. Welz)

14:30 – 15:00 IL4: E. Beinrohr - Electrochemical hydride generation for atomic spectroscopy:
Advantages and limitations

15:00 – 15:20 L6: P. Kolečkář - New development of the firm SPECTRO AI, Kleve in the field of spectrometers for inorganic analysis

15:20 – 15:40 L7: J. Schram - Species-analysis of organo-magnesium-compounds e.g. of chlorophylls by HPLC-FAAS

15:40 – 16:10 COFFEE BREAK

Session MON A3 – Atomic spectrometry (chairperson: J. Dědina)

16:10 – 16:40 IL6: A. D'Ulivo - Vapor generation for trace analysis by atomic and mass spectrometry. Some recent developments

16:40 – 17:00 L11: Z. Kowalewska - Feasibility of various atomic spectrometry approaches for silicon determination in Diesel oil with increased sulphur content

17:00 – 17:20 L12: H. Matusiewicz - Advanced spectrochemical methods for metal ions in biological and environmental systems

17:20 – 17:40 L13: A. Bergner - Affordable benchtop NMR spectroscopy for the laboratory

Monday, March 17

Hall Prague C

Session B

Session MON B1 – Advances in molecular spectroscopy (chairperson: M. Hof)

- 10:50 – 11:20** **IL3: M. M. Heinl** - Further development and evaluation of a long path sheath flow UV/VIS absorbance detection cell for capillary electrophoresis
- 11:20 – 11:40** **L3: R. Bulánek** - New methodology for IR spectra of carbon dioxide adsorbed on CCS adsorbents measurement
- 11:40 – 12:00** **L4: A. Benkő** - Jasco's new series of spectroscopy products
- 12:00 – 12:20** **L5: I. A. Kamińska** - Applicability of quinolizinO-coumarins as spectroscopic probes for monitoring photopolymerization processes by fluorescence spectroscopy

12:40 – 14:00 LUNCH TIME

Session MON B2 – LIBS (chairperson: K. Niemax)

- 14:00 – 14:30** **IL5: J. Kaiser** - Laser-induced breakdown spectroscopy – from tabletop to stand-off (and back)
- 14:30 – 14:50** **L8: T. Zikmund** - X-ray micro computed tomography utilization for laser spectroscopy
- 14:50 – 15:10** **L9: G. Galbács** - Laser induced breakdown spectrometry using multiple colinear laser pulses
- 15:10 – 15:30** **L10: M. Zvolská** - Quantitative analysis of fluorine in samples of K_2TaF_7 with using laser-induced breakdown spectrometry (LIBS)

15:40 – 16:10 COFFEE BREAK

Session MON B3 – LIBS (chairperson: G. Galbács)

- 16:10 – 16:40** **IL7: P. Veis** - The use of laser induced breakdown spectroscopy in geochemistry and ecology- elemental composition, trace elements detection and stable isotope determination
- 16:40 – 17:00** **L14: K. Novotný** - Feasibility of elemental mapping by laser-induced breakdown spectroscopy
- 17:00 – 17:20** **L15: V. Helán** - Books are still necessary
- 17:20 – 17:40** **L16: T. Černohorský** - Fast determination of surface concentration of titanium in ultrathin layers using LIBS spectrometry

Halls Prague D + Vienna I

8:00 – 17:45 PUTTING UP OF POSTERS

17:45 – 19:45 POSTER SESSION (*chairperson: M. de Loos-Vollebregt, G. Schlemmer, P. Matějka, T. Černohorský, T. Uhlíková*)

Hall Budapest, foyer

Conference Partners' Presentation

Tuesday, March 18

8:00 – 18:00 REGISTRATION

Halls Prague A+B

Session A

Session TUE A1 – Atomic spectrometry (chairperson: A. D'Ulivo)

- 8:30 – 9:00 IL8: R. E. Sturgeon** - Photochemical vapor generation: A new paradigm or a transient distraction?
- 9:00 – 9:30 IL9: Q. Wang** - Nanosemiconductor-based photocatalytic vapor generation sample introduction techniques for atomic spectrometry
- 9:30 – 9:50 L17: T. Černohorský** - New products from RMI
- 9:50 – 10:10 L18: J. Kratzer** - Dielectric barrier discharge: critical evaluation of a novel AAS atomizer

10:10 – 10:40 COFFEE BREAK

Session TUE A2 – Atomic spectrometry (chairperson: R.E. Sturgeon)

- 10:40 – 11:10 IL12: J. Dědina** - The case of gold: How to atomize (and preconcentrate) its volatile species?
- 11:10 – 11:40 IL13: G. Schlemmer** - Criteria for analytical quality in optical atomic spectrometry the quest for generally accepted rules
- 11:40 – 12:00 L21: V. Sychra** - Complexometry with EDTA as a quality control tool for certified single-element aqueous standard solutions used in atomic spectroscopy
- 12:00 – 12:20 L22: U. Oppermann** – Characterization and quantitative analysis of heavy metals in wine using “State of the art” spectroscopy
- 12:20 – 12:40 L23: D. Milde** - Traceability of measurement results in (atomic) spectrometry

12:40 – 14:00 LUNCH TIME

Session TUE A3 – ICP spectrometry (chairperson: M. Resano)

- 14:00 – 14:30 IL16: V. Salvadó** – Speciation analysis of phosphorus oxoanions by inductively-coupled plasma mass spectrometry
- 14:30 – 14:50 L27: V. G. Sántáné** - Determination of selenium-79 in solution after extraction chromatographic separation using ICP-MS
- 14:50 – 15:10 L28: M. Petrich** – Single particle analysis using ultra-fast quadrupole ICP-MS
- 15:10 – 15:30 L29: T. Matoušek** - Postcolumn hydride generation with on-line prereduction for arsenic speciation analysis by gradient HPLC-HG-ICP-MS
- 15:30 – 15:50 L30: R. Chemnitzer** - Enhanced detection capabilities in speciation analysis using a highly sensitive ICP-MS
- 15:50 – 16:10 L31: G. Heltai** - ICP-OES multielemental calibration of BCR sequential extraction method for various environmental solid samples
- 16:10 – 16:30 L32: J. Návesník** - Multielemental determination of liquid micro-samples by oaTOF-ICP-MS with linear pump sample introduction system

16:40 – 17:00 COFFEE BREAK

Tuesday, March 18

Hall Prague C

Session B

Session TUE B1 – Special spectroscopic methods (chairperson: P. Matějka)

- 8:30 – 9:00 IL10: J. Sitek** - Mössbauer spectroscopy of radiation damaged nanocrystals
9:00 – 9:30 IL11: M. Miglierini - Applications of Mössbauer spectrometry
9:30 – 9:50 L19: M. H. Mannsberger - A combined XPS/AR-XPS and AR-REELS study of plasma treated polystyrene
9:50 – 10:10 L20: A. Hrdlička - Easily ionizable elements in analytical plasma pencil spectroscopy

10:10 – 10:40 COFFEE BREAK

Session TUE B2 – Surface-enhanced vibrational spectroscopy (chairperson: V. Prokopec)

- 10:40 – 11:10 IL14: B. Vlčková** - SERRS and SERS spectroscopy of adsorbates in plasmonic nanoparticle assemblies
11:10 – 11:40 IL15: P. Matějka - Variability of surface-enhanced vibrational spectra: Profits and drawbacks
11:40 – 12:00 L24: A. Kokaislová - Surface-enhanced infrared absorption spectroscopy: Temperature dependence and application of multivariate analysis
12:00 – 12:20 L25: M. Dendisová - SERS study of biologically important compounds adsorbed on silver and gold nanoparticles
12:20 – 12:40 L26: A. Otmarová – Surface enhanced Raman spectroscopy as a tool for study on the organic dyes used for tinting and toning of motion picture films

12:40 – 14:00 LUNCH TIME

Session TUE B3 – Vibrational spectroscopy in material science (chairperson: B. Vlčková)

- 14:00 – 14:30 IL17: I. Němec** - Selected applications of vibrational spectroscopy in the field of non-linear optics
14:30 – 15:00 IL18: T. Uhlíková - Prague Microwave spectroscopy: From small interstellar radicals to large pheromones
15:00 – 15:20 L33: V. Sutrová - Advantages of chloride-modified AgNPs as substrates for SERS spectroscopy
15:20 – 15:40 L34: V. Čmolík - Simple method for a multi-spectral fitting
15:40 – 16:00 L35: V. Prokopec - Use of vibrational spectroscopic techniques for the characterization of chemical robots
16:00 – 16:20 L36: M. Liška - Thermodynamic model and Raman spectra of glasses for CHROMPIC nuclear waste vitrification
16:20 – 16:40 L37: I. Matulková - Vibrational spectroscopic and X-ray diffraction study of phase transformation of novel NLO materials

16:40 – 17:00 COFFEE BREAK

Halls Prague D + Vienna I

8:00 – 17:00 PUTTING UP OF POSTERS

17:00 – 19:00 POSTER SESSION (*chairpersons: M. Sperling, E. Beinrohr, M. Miglierini, I. Němec, B. Vlčková*)

Hall Budapest, foyer

Conference Partners' Presentation

Wednesday, March 19

8:00 – 11:00 REGISTRATION

Halls Prague A+B+C

Ceremonial Ioannes Marcus Marci session

9:00 – 10:30 Ioannes Marcus Marci Medal ceremony

Ramon M. Barnes
Vladimir E. Bondybey
Kay Niemax

10:30 – 11:00 COFFEE BREAK

12:00 Departure to the sightseeing tour

15:00 Boat trip

18:30 Concert

Hall Budapest, foyer

Conference Partners' Presentation

Thursday, March 20

8:00 – 18:00 REGISTRATION

Halls Prague A+B

Session A

Session THU A1 – Mass spectrometry (chairperson: J. Havel)

- 8:30 – 9:00 IL19: V. Havlíček** - Profiling of microorganisms by mass spectrometry
9:00 – 9:30 IL20: J. Roithová – Ion spectroscopy of reactive ions
9:30 – 10:00 IL21: M. Holčapek - Development of comprehensive LC/MS approach for clinical lipidomic applications and biomarker discovery

10:00 – 10:30 COFFEE BREAK

Session THU A2 – Mass spectrometry (chairperson: V. Havlíček)

- 10:30 – 11:00 IL25: P. Španěl** - Ion chemistry for breath analysis
11:00 – 11:30 IL26: J. Havel - Time of flight (TOF) mass spectrometry for analysis of inorganic, nano or plasma modified materials and laser ablation synthesis
11:30 – 11:50 L38: J. Časlavský - Application of mass spectrometry in waste water analysis

12:10 – 13:30 LUNCH TIME

Session THU A3 – LA-ICP-MS (chairperson: C. Vogt)

- 13:30 – 14:00 IL28: D. Günther** - Analysis of small samples by ICP-MS and laser ablation ICP-MS
14:00 – 14:30 IL29: E. Bulska - Atomic and mass spectrometry for the certification of environmental reference materials
14:30 – 14:50 L41: A. Limbeck - Quantification of micro nutrients in fermentation media using LA-ICP-OES/MS analysis of dried sample droplets
14:50 – 15:10 L42: T. Černohorský - Laser ablation systems from CETAC Teledyne Technologies and Photon Machines
15:10 – 15:30 L43: H. Nováková - Study of particle size distribution produced by laser ablation
15:30 – 15:50 L44: J. P. Thieleke - Calibration strategies for the determination of beryllium distribution in plant tissue by LA-ICP-MS

15:50 – 16:20 COFFEE BREAK

Session THU A4 – LA-ICP-MS (chairperson P. Veis)

- 16:20 – 16:50 IL32: M. Sperling** - Laser ablation-based imaging with elemental and molecular mass spectrometry – towards spatially resolved speciation analysis
16:50 – 17:20 IL33: M. Vašinová Galiová - Limitations and possibilities of laser ablation ICP-MS for analysis of skeletal remains
17:20 – 17:40 L49: J. Miková - Elemental mapping of fish otoliths by LA-ICP-MS
17:40 – 18:00 L50: B. Wagner - Characterization of ancient nubian wall-paintings by pXRF, LA-ICPMS and Raman spectroscopy

Thursday, March 20

Hall Prague C

Session B

Session THU B1 – XRF (chairperson: J. Kaiser)

- 8:30 – 9:00** **IL22: G. Záray** – Study of bioaccumulation and biotransformation by microanalytical X-ray techniques
9:00 – 9:30 **IL23: E. M. M. Flores** - Green sample preparation methods for atomic spectrometry
9:30 – 10:00 **IL24: C. Vogt** - In vitro and ex vivo investigation of metallic implant materials by X-ray, mass and Raman spectroscopic methods

10:00 – 10:30 COFFEE BREAK

Session THU B2 – ICP-OES/MS (chairperson: R. M. Barnes)

- 10:30 – 11:00** **IL27: M. de Loos-Vollebregt** - A study of carbon related matrix effects in inductively coupled plasma - atomic emission and mass spectrometry
11:00 – 11:30 **L39: D. Wüstkamp** - ETV-ICP-OES – New perspectives for material analysis
11:30 – 11:50 **L40: A. Krejčová** - The further insight into matrix effects in the ICP-OES

12:10 – 13:30 LUNCH TIME

Session THU B3 – Environmental analysis (chairperson: G. Záray)

- 13:30 – 14:00** **IL30: B. Dočekal** - Characterization of aerosol particulate matter by diffusive gradients in thin film (DGT) technique
14:00 – 14:30 **IL31: M. Tüzen** - Separation and preconcentration of vanadium by ionic liquid dispersive microextraction and determination of its in water and food samples using GFAAS
14:30 – 14:50 **L45: H. Dočekalová** - Towards the estimation of metals bioaccessibility and bioavailability
14:50 – 15:10 **L46: J. Száková** - The effect of soil microbial community on mobile portions of mercury in contaminated soil
15:10 – 15:30 **L47: K. Marschner** - Arsenic speciation analysis based on selective hydride generation and atomic fluorescence detection
15:30 – 15:50 **L48: H. Gleisner** – The high resolution array ICP OES by Analytik Jena

15:50 – 16:20 COFFEE BREAK

Session THU B4 – Ultratrace analysis (chairperson: B. Dočekal)

- 16:20 – 16:50** **IL34: V. Krivan** – Ultra trace analysis of high purity advanced materials: the potentials and the limitations of present-day routine methods
16:50 – 17:10 **L51: D. Barnhart** - Performance comparison of high resolution glow discharge mass spectrometry and other direct sampling methods as applied to analysis of high purity alumina and titanium dioxide powders
17:10 – 17:30 **L52: V. G. Mihucz** – Elemental characterization and oxidative potential in PM2.5 aerosols collected in modern office buildings

20:00 CONFERENCE DINNER – Announcement of Best Poster Award and Best Young Scientist Oral Presentation Award

Hall Budapest, foyer
Conference Partners' Presentation

Friday, March 21

Halls Prague A+B+C

Plenary session (chairperson: D. Günther)

- 9:00 – 9:40 PL3: V. E. Bondybey** - Low temperature spectroscopy of reactive intermediates
9:40 – 10:20 PL4: R. M. Barnes - Inductively coupled plasma spectroscopy: Where the action is!
10:20 – 11:00 PL5: K. Niemax - Spectrochemical analyses by laser ablation – Have we to know the relevant physical processes?

11:00 – 11:40 CLOSING CEREMONY

12:00 – 13:20 LUNCH TIME

General partners



Main partner



Partners

