



Online event • 11-12 March 2021

1st European Sample Preparation e-Conference

Organized by the EuChemS-DAC Sample Preparation Study Group and Network

Programme

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This Webex event is hosted by

**Dipartimento di Scienza e Tecnologia del Farmaco,
Università di Torino, Italy**



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1st European Sample Preparation e-Conference | 11-12 March, 2021

Chairs:

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Elia Psillakis, Head of EuChemS-DAC Sample Preparation Study Group and Network,
Technical University of Crete, Greece

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Scientific Programme at a glance

Please mind that the **detailed programme is scheduled for CET** (Belgium, Croatia, Czech Republic, Denmark, France, Germany, Italy, Norway, Poland, Serbia, Slovenia, Spain, and Switzerland). The schedule for **GMT** (Portugal, and the UK) and **EET** (Cyprus and Greece) is also indicated here. For Turkey **EET+1h** should be applied. Non-European participants are advised to calculate their local time by using the GMT.

CET	Thursday, 11 March 2021	GMT	EET	CET	Friday, 12 March 2021	GMT	EET
09:00	Opening Session	08:00	10:00	09:00	Oral Session-O5	08:00	10:00
09:10	Plenary Lecture	08:10	10:10				
09:30	Oral Session-O1	08:30	10:30				
10:30	Break	09:30	11:30	10:30	Break	09:30	11:30
11:00	Oral Session-O2	10:00	12:00	11:00	Oral Session-O6	10:00	12:00
12:00	Satelite Event	11:00	13:00	12:00	Round Table Discussion	11:00	13:00
13:00	Poster Sessions A & B	12:00	14:00	13:00	Poster Sessions C & D	12:00	14:00
14:00	Oral Session-O3	13:00	15:00	14:00	Oral Session-O7	13:00	15:00
15:15	Break	14:15	16:15				
15:30	Oral Session-O4: Young Scientists	14:30	16:30	15:30	Break	14:30	16:30
				15:45	Oral Session-O8	14:45	16:45
				16:30	Plenary Lecture	15:30	17:30
				16:50	Plenary Lecture	15:50	17:50
17:10	One-to-one meetings	16:10	18:10	17:10	Closing Session/Awards	16:10	18:10
17:30		16:30	18:30	17:30		16:30	18:30

Conference link

The **Webex** link to the meeting is:

<https://unito.webex.com/unito-en/j.php?MTID=m2a3b7e35236c7f44283b5eb74b437b91>

Meeting number: 121 344 4894

Meeting password: 8zyYi7YdQw3

Scientific Programme – detailed schedule

The programme schedule is given in CET

Thursday, 11 March 2021

9:00 - 9:10

Opening Session:

S. Ražić, Chair of EuChemS-DAC, University of Belgrade, Serbia

E. Psillakis, Head of EuChemS-DAC Sample Preparation Study Group and Network,
Technical University of Crete, Greece

Oral
Session O1

Chairs: **S. Ražić**, **E. Psillakis**

9:10 - 9:30

PL1. To Prepare or not to Prepare Samples: What is Necessary for a Green and Sustainable Extraction of Bioactive Compounds from Agro-industrial Wastes

V. G. Zuin¹⁻³.

(1) Department of Chemistry, Federal University of São Carlos, Rod. Washington Luís (SP-310), km 235, 13565-905, São Carlos, SP, Brazil.

(2) Institute of Sustainable and Environmental Chemistry, Leuphana University, Universitätsallee 1, 21335, Lüneburg, Germany.

(3) Green Chemistry Centre of Excellence, University of York, Heslington, York, YO10 5DD, UK.

9:30 - 9:45

O-1. Electromembrane Extraction – Sample Preparation Based on Electrokinetic Extraction Across a Supported Liquid Membrane

S. Pedersen-Bjergaard^{1,2}.

(1) Department of Pharmacy, University of Oslo, P.O. Box 1068 Blindern, 0316 Oslo, Norway.

(2) Department of Pharmacy, Faculty of Health and Medical Sciences, University of Copenhagen, Universitetsparken 2, 2100 Copenhagen, Denmark.

9:45 - 10:00

O-2. Ionic Liquids: An “Old” Class of Chemicals of High Interest in Modern Sample Preparation and Analysis

C. Bicchi, C. Cagliero.

Laboratory of Pharmaceutical Biology and Food Chemistry. Dipartimento di Scienza e Tecnologia del Farmaco, Università di Torino, Torino, Italy.

10:00 - 10:15

O-3. In Situ Growth of Imidazolium-based Porous Organic Polymer via Controlled Polymerization in Confined Space for In Vivo Microextraction

G. Ouyang¹, Q. Hu¹, H. Fang², J. Huang¹, X. Liu¹, J. Xu², J. Zhang².

(1) KLGHEI of Environment and Energy Chemistry, School of Chemistry, Sun Yat-sen University, Guangzhou, Guangdong 510275, China.

(2) MOE Laboratory of Polymeric Composite and Functional Materials, School of Materials Science and Engineering, Sun Yat-sen University, Guangzhou 510275, China.

10:15 - 10:30

O-4. Bead Injection as In-Line Renewable Solid-Phase Extraction Approach: Is There Room for Improvement?

M. Miró.

FI-TRACE Group, Department of Chemistry, University of Balearic Islands, Carretera de Valldemossa, Km 7.5, E 07122, Palma de Mallorca, Spain.

10:30 - 11:00

Coffee Break

Oral Session O2 **Chairs: M. Segundo, S. Pedersen-Bjergaard**

- 11:00 - 11:15 **O-5. Sustainable Supports for Microextraction**
R. Lucena, S. Cárdenas.
Departamento de Química Analítica, Instituto Universitario de Investigación en Química Fina y Nanoquímica (IUNAN), Universidad de Córdoba, Campus de Rabanales, Edificio Marie Curie, E-14071 Córdoba, Spain.
- 11:15 - 11:30 **O-6. Mixed-mode Amphoteric Materials to Solid-Phase Extract Ionisable Compounds from Environmental Waters**
N. Fontanals¹, J.C. Nadal¹, F. Borrull¹, P.A.G. Cormack², R.M. Marcé¹.
(1) Department of Analytical Chemistry and Organic Chemistry, Universitat Rovira i Virgili, Sescelades Campus, Marcel·lí Domingo 1, 43007 Tarragona, Spain.
(2) WestCHEM, Department of Pure and Applied Chemistry, University of Strathclyde, Thomas Graham Building, 295 Cathedral Street, Glasgow, G1 1XL, Scotland, United Kingdom.
- 11:30 - 11:45 **O-7. An Innovative Green Protocol for the Quantification of Benzothiazoles, Benzotriazoles and Benzenesulfonamide in PM10 Using Microwave-Assisted Extraction Coupled with Solid-Phase Microextraction Gas Chromatography Tandem-Mass Spectrometry**
A. Naccarato¹, A. Tassone¹, M. Martino¹, R. Elliani², F. Sprovieri¹, N. Pirrone¹, A. Tagarelli².
(1) CNR-Institute of Atmospheric Pollution Research, c/o UNICAL polifunzionale – 87040 Rende (CS), Italy.
(2) Dipartimento di Chimica e Tecnologie Chimiche, Università della Calabria – 87040 Rende (CS), Italy.
- 11:45 - 12:00 **O-8. Combining Headspace Microextraction Approaches with Miniaturized Detection Systems and IT Equipment for Determination of Anionic Species**
F. Pena-Pereira, I. Lavilla, C. Bendicho.
Centro de Investigación Mariña, Universidade de Vigo, Departamento de Química Analítica e Alimentaria, Grupo QA2, 36310 Vigo, España.

Satellite Event: The art of scientific publication

Chair: S.A. Ozkan

- 12:00 - 12:30 **Preparation of Manuscript That is Likely to be Accepted in High End Journal**
F. Švec
Faculty of Pharmacy in Hradec Kralove, Charles University, Prague, Czech Republic
- 12:30 – 12:40 **Q&A**
- 12:40 – 12:50 **How to Write a Scientifically Sound Review Article-Tips and Tricks**
M. Miró.
FI-TRACE Group, Department of Chemistry, University of Balearic Islands, Carretera de Valldemossa, Km 7.5, E 07122, Palma de Mallorca, Spain
- 12:50 – 13:00 **Q&A**

Poster Session A **Chairs: S. Ražić, M. Zoccali**

13:00 - 14:00 **Parallel poster session Break Room PS-A**

Poster Session B **Chairs: R. Lucena, G. Purcaro**

13:00 - 14:00 **Parallel poster session Break Room PS-B**

**Oral
Session O3**

Chairs: S.A. Ozkan, F. Pena-Pereira

- 14:00 - 14:15 **O-9. Ionic Liquids for Micro-Scale Extractions from Plants: From the Plant Genome to the Plant Metabolome**
C. Cagliero¹, A. Marengo¹, G. Mastellone¹, B. Sgorbini¹, C. Bicchi¹, V. Pino², J. Anderson³, P. Rubiolo¹.
(1) *Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino, I-10125 Torino, Italy.*
(2) *Laboratorio de Materiales para Análisis Químicos (MAT4LL), Departamento de Química, Unidad Departamental de Química Analítica, Universidad de La Laguna (ULL), 38206 Tenerife, Spain.*
(3) *Ames Laboratory—USDOE and Department of Chemistry, Iowa State University, Ames, IA 50011, USA.*
- 14:15 - 14:30 **O-10. Task Specific Ionic Liquids Based on 2-mercaptobenzothiazole for Selective Extraction of Cd**
T. Trtić-Petrović¹, I. Pušica¹, S. Ražić², M. Vraneš³, S. Papović³, S. Gadžurić³.
(1) *University of Belgrade, Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, P.O.Box 522, 11001 Belgrade, Serbia.*
(2) *University of Belgrade, Faculty of Pharmacy - Department of Analytical Chemistry, Belgrade, Serbia.*
(3) *University of Novi Sad, Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Trg Dositeja Obradovića3, 21000 Novi Sad, Serbia.*
- 14:30 - 14:45 **O-11. Modeling the Effect of Temperature on Solid-Phase Microextraction of Volatile Organic Compounds from Air Using Finite Element Analysis**
B. Kenessov, D. Orazbayeva, N.V. Bakaikina, A. Kapar, A. Muratuly, B. Bukenov.
Center of Physical Chemical Methods of Research and Analysis, Al-Farabi Kazakh National University, 96A Tole bi street, Almaty, 050012, Kazakhstan.
- 14:45 - 15:00 **O-12. The Impact of Solid Phase Microextraction (SPME) Adsorbent Properties on Analytical Performance**
D. Mendivelso¹, O. Shimelis¹, S. Shollenberger¹, F. Michel², K. Buckendahl¹.
(1) *MilliporeSigma, 595 N. Harrison Road, Bellefonte, PA 16823 USA.*
(2) *Sigma-Aldrich Chemie GmbH, Eschenstraße 5, 82024 Taufkirchen, Germany.*
- 15:00 - 15:15 **O-13. Asking Better Questions in Microextraction**
E. Psillakis.
Laboratory of Aquatic Chemistry, School of Environmental Engineering, Technical University of Crete, GR-73100, Chania, Crete, Greece.

15:15 - 15:30 **Coffee Break**

**Oral
Session O4**

OS Young Scientists

Chairs: M. Segundo, R. Lucena

- 15:30 - 15:40 **O-14. Microfluidic Paper-Based Analytical Devices for Sample Preparation and Rapid Detection**
Y. Pan^{1,2}, Z. Yang².
(1) *School of Engineering, University of Glasgow, Glasgow, G12 8LT, UK.*
(2) *Cranfield Water Science Institute, Cranfield University, Bedfords, MK43 0AL, UK.*
- 15:40 - 15:50 **O-15. Miniaturized Active Air Sampling Method for the Analysis of Tire Rubber Pollutants from Indoor and Outdoor Places**
D. Armada¹, M. Celeiro¹, A. Martinez-Fernandez¹, P. Nurerk^{1,2}, T. Dagnac³, M. Llompарт¹.
(1) *CRETUS Institute, Department of Analytical Chemistry, Nutrition and Food Science, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain.*
(2) *Functional Materials and Nanotechnology Center of Excellence, School of Science, Walailak University, Nakhon Si Thammarat 80160, Thailand.*
(3) *Agronomic and Agrarian Research Centre (AGACAL-CIAM), Galician Agency for Food Quality, Unit of Organic Contaminants, Apartado 10, E-15080, A Coruña, Spain.*

- 15:50 - 16:00 **O-16. Column Switching for Automated Online Enrichment and Separation of Polar and Nonpolar Analytes from Aqueous Matrices**
K. Kochale^{1,2}, T. Teutenberg¹, T.C. Schmidt².
 (1) Institut für Energie- und Umwelttechnik e.V., Bliersheimer Strasse 58-60, 47229 Duisburg.
 (2) University Duisburg-Essen, Universitaetsstrasse 5, 45141 Essen.
- 16:00 - 16:10 **O-17. Chromatographic Fingerprinting and Accurate Quantitative Profiling by Multiple Headspace Solid Phase Microextraction and Differential-Flow Modulated Comprehensive Two-Dimensional Gas Chromatography: The Aroma Blueprint of Extra Virgin Olive Oil**
F. Stilo¹, C. Bicchi¹, S. E. Reichenbach^{2,3}, J. McCurry⁴, D. Peroni⁵, C. Cordero¹.
 (1) Institut für (1) University of Turin, Dipartimento di Scienza e Tecnologia del Farmaco - Via Pietro Giuria 9, 10125, Torino, Italy.
 (2) Computer Science and Engineering Department, University of Nebraska, 256 Avery Hall, Lincoln, NE 68588, USA
 (3) GC Image LLC – 201 N 8th St Unit 420, Lincoln, NE 68508, USA
 (4) Agilent Technologies, Gas Phase Separations Division – 2850 Centerville Rd, Wilmington, DE 19808, USA
 (5) SRA Instruments SpA – Via alla Castellana 3, 20063, Cernusco sul Naviglio, Italy
- 16:10 - 16:20 **O-18. Working Towards Comprehensive Steroid Detection in Urine via Targeted MIPs Clean-up and Fully Automated GCxGC-MS Analysis.**
R. A. Hand^{1,2}, G. Morgan², T. Bassindale³, N. Turner¹.
 (1) School of Pharmacy, De Montfort University, Leicester, LE2 9BH, UK.
 (2) School of Physical Sciences, The Open University, Milton Keynes, MK7 6AA, UK.
 (3) Department of Biosciences and Chemistry, Sheffield Hallam University, Sheffield, S1 1WB, UK.
- 16:20 - 16:30 **O-19. Lab-In-Syringe Automated Double-Stage Extraction for the Determination of Sulfonamides Antibiotics in Urine**
K. Fikarová, B. Horstkotte, D. Machián, H. Sklenářová, P. Solich.
 Charles University, Faculty of Pharmacy in Hradec Králové, Department of Analytical Chemistry, Akademika Heyrovského 1203, 500 05 Hradec Králové, Czech Republic.
- 16:30 - 16:40 **O-20. Fabric Phase Sorptive Extraction Followed by Gas Chromatography-Tandem Mass Spectrometry for the Analysis of Multiclass Fungicides in Water**
L. Vazquez¹, M. Celeiro¹, T. Dagnac², A. Kabir³, M. Llompert¹.
 (1) CRETUS Institute, Department of Analytical Chemistry, Nutrition and Food Science, Faculty of Chemistry, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain.
 (2) Agronomic and Agrarian Centre (AGACAL-CIAM), Unit of Organic Contaminants, Apartado 10, E-15080, A Coruña, Spain.
 (3) International Forensic Research Institute, Department of Chemistry and Biochemistry, Florida International University, Miami, FL-33199, USA.
- 16:40 - 16:50 **O-21. Menthol-Based Deep Eutectic Solvent Dispersive Liquid-Liquid Microextraction: A Simple and Quick Approach for the Analysis Extraction of Phthalic Acid Esters from Water, Beverages and Infusions**
J. González-Sálamo^{1,2}, C. Ortega-Zamora¹, G. Jiménez-Skrzypek¹, C. Hernández-Sánchez^{2,3}, J. Hernández-Borges^{1,2}.
 (1) Universidad de La Laguna, Departamento de Química, Unidad Departamental de Química Analítica, Facultad de Ciencias, Avda. Astrofísico Fco. Sánchez, s/nº. 38206 San Cristóbal de La Laguna, Spain.
 (2) Universidad de La Laguna, Instituto Universitario de Enfermedades Tropicales y Salud Pública de Canarias, Avda. Astrofísico Fco. Sánchez, s/nº. 38206 San Cristóbal de La Laguna, Spain.
 (3) Universidad de La Laguna, Departamento de Obstetricia y Ginecología, Pediatría, Medicina Preventiva y Salud Pública, Toxicología, Medicina Forense y Legal y Parasitología, Área de Medicina Preventiva y Salud Pública, Escuela Politécnica Superior de Ingeniería, Sección de Náutica, Máquinas y Radioelectrónica Naval, Vía Auxiliar Paso Alto, nº 2. 38001 Santa Cruz de Tenerife, Spain.
- 16:50 - 17:00 **O-22. Fabric Phase Sorptive Extraction: A Convenient Tool for Therapeutic Drug Monitoring, Illicit Drug Investigation and Other Clinical/Toxicological Study Using Unconventional Biological Fluids**
A. Tartaglia¹, A. Kabir², H.I. Ulusoy³, G.M. Merone⁴, F. Savini⁵, C. D'Ovidio⁶, E. Rosato¹, U. De Grazia⁷, K.G. Furton², M. Locatelli¹.
 (1) Department of Pharmacy, University of Chieti-Pescara "G. d'Annunzio", Via dei Vestini 31, Chieti 66100, Italy.
 (2) Department of Chemistry and Biochemistry, Florida International University, 11200 SW 8th St, Miami, FL 33199, USA.
 (3) Department of Analytical Chemistry, Faculty of Pharmacy, Cumhuriyet University, Sivas 58140, Turkey.
 (4) Department of Neuroscience, Imaging and Clinical Sciences, University of Chieti-Pescara "G. d'Annunzio", 66100 Chieti, Italy.
 (5) Pharmacotoxicology Laboratory—Hospital "Santo Spirito", Via Fonte Romana 8, Pescara 65124, Italy.

(6) Department of Medicine and Aging Sciences, Section of Legal Medicine, University of Chieti–Pescara “G. d’Annunzio”, Chieti 66100, Italy.

(7) Fondazione IRCCS Istituto Neurologico Carlo Besta, Laboratory of Neurological Biochemistry and Neuropharmacology, Via Celoria 11, Milan 20133, Italy.

17:00 - 17:10 **O-23. Electromembrane Extraction Using Deep Eutectic Solvents As Liquid Membrane**

F.A. Hansen¹, E. Santigosa-Murillo², M. Ramos-Payán³, M. Munoz², E. Leere Øiestad⁴, S. Pedersen-Bjergaard^{1,5}.

(1) Department of Pharmacy, University of Oslo, P.O. Box 1068 Blindern, 0316 Oslo, Norway.

(2) Department of Analytical Chemistry, Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona, Spain.

(3) Department of Analytical Chemistry, University of Seville, 41012 Seville, Spain.

(4) Oslo University Hospital, Division of Laboratory medicine, Department of Forensic Sciences, P.O. Box 4459 Nydalen, 0424 Oslo, Norway.

(5) School of Pharmaceutical Sciences, Faculty of Health and Medical Sciences, University of Copenhagen, Universitetsparken 2, 2100 Copenhagen, Denmark.

17:10 – 17:30 **One-to-one meetings**

Friday, 12 March 2021

Oral
Session O5

Chairs: S. Ražić, R. Lucena

- 9:00 - 9:15 **O-24. Sample Introduction and Multidimensionality as Part of Sample Preparation**
G. Purcaro.
Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium.
- 9:15 - 9:30 **O-25. Automatization and Miniaturization of Sample Preparation of Food and Biological Samples for Lipidomics Studies**
D. Donnarumma¹, G. Micalizzi¹, F. Rigano², L. Mondello^{1,2,3,4}.
*(1) Chromaleont s.r.l., Messina, Italy.
(2) University of Messina, Messina, Italy,
(3) BeSep s.r.l., Messina, Italy.
(4) University Campus Bio-Medico of Rome, Rome, Italy.*
- 9:30 - 9:45 **O-26. Automated Analysis of 2-,3-MCPD and Glycidyl Esters in Edible Oils and Fats**
T. Cucu, C. Devos, F. David, P. Sandra.
RIC, Pres. Kennedypark 26, B-8500 Kortrijk, Belgium.
- 9:45 - 10:00 **O-27. Aroma Discovery of Low-cost to Luxury Honey Using a High-Capacity Sorptive Extraction Technique (HiSorb) and Gas Chromatography Mass Spectrometry**
N.D. Spadafora^{1,2}, R. Szafnauer¹, R. Cole¹, L. McGregor³, N. Bukowski¹.
*(1) Markes International Ltd, Gwaun Elai Medi-Science Campus, Llantrisant, RCT, CF72 8XL, UK
(2) Department of Biology, Ecology and Earth Sciences, University of Calabria, Via Ponte P. Bucci Cubo 6b, 87036, Arcavacata Di Rende, Cosenza, Italy.
(3) SepSolve Analytical Ltd, 4 Swan Court, Hampton, PE7 8GX, Peterborough, UK.*
- 10:00 - 10:15 **O-28. Determination of 2-Methyisoborneol and Geosmin as Malodours in Catfish for Quality Control Using a Fully Automated Sample Prep Platform Coupled with Gas Chromatography and Mass Spectrometry**
R. Szafnauer¹, R. Cole¹, L. McGregor², N. Bukowski¹, N. D. Spadafora^{1,3}.
*(1) Markes International Ltd, Gwaun Elai Medi-Science Campus, Llantrisant, RCT, CF72 8XL, UK.
(2) SepSolve Analytical Ltd, 4 Swan Court, Hampton, PE7 8GX, Peterborough, UK.
(3) Department of Biology, Ecology and Earth Sciences, University of Calabria, Via Ponte P. Bucci 6b, 87036, Arcavacata Di Rende, Cosenza, Italy.*
- 10:15 - 10:30 **O-29. Development of A Low-Cost, Lab-Made Y-Interface for LC-GC Coupling for On-line Analysis in a Fully Automatized Way of Mineral Oils in Food Samples.**
M. Zoccali¹, A. Arena¹, P.Q. Tranchida¹, L. Mondello^{1,2,3,4}.
*(1) University of Messina, Messina, Italy.
(2) Chromaleont s.r.l., Messina, Italy.
(3) BeSep s.r.l., Messina, Italy.
(4) University Campus Bio-Medico of Rome, Rome, Italy.*

10:30 - 11:00 **Coffee Break**

Oral Session O6 **Chairs: M. Miró, A. Martín-Esteban**

11:00 - 11:15 **O-30. 3D-printed Stirring Cages for Semi-Dispersive Fibrous Sorbent Extraction of Bisphenols**

B. Horstkotte, I.H. Šrámková, D. Šatínský, P. Solich.

Charles University, Faculty of Pharmacy, Department of Analytical Chemistry, Akademika Heyrovského 1203, 5005 Hradec Králové, Czech Republic.

11:15 - 11:30 **O-31. Automation of Immunoaffinity Extraction Using the Bead Injection Concept**

M.A. Segundo, S.S. Marques, I.I. Ramos, L. Barreiros.

LAQV, REQUIMTE, Department of Chemical Sciences, Faculty of Pharmacy, University of Porto, R Jorge Viterbo Ferreira, 228, 4050-313 Porto, Portugal.

11:30 - 11:45 **O-32. Combining Lab-In-Syringe with Bead-Injection for Preconcentration of Nonsteroidal Anti-Inflammatory Drugs in Surface Waters Coupled Online to High Performance Liquid Chromatography**

C.V. Gemuh, B. Horstkotte, P. Solich.

Department of Analytical Chemistry, Faculty of Pharmacy, Charles University, Akademika Heyrovskeho 1203, 500 05 Hradec Kralove, Czech Republic.

11:45 - 12:00 **O-33. Automated Monitoring in Sequential Injection Analysis**

H. Sklenářová¹, R. Ernest¹, B. Horstkotte¹, M. Miró^{1,2}, P. Solich¹.

(1) Charles University, Faculty of Pharmacy, Akademika Heyrovského 1203, 500 05 Hradec Králové, Czech Republic.

(2) FI-TRACE group, Department of Chemistry, University of the Balearic Islands, Palma de Mallorca, Spain.

12:00 - 13:00 **Round Table Discussion: Green Sample Preparation**

**Moderators: V. Zuin, S.A. Ozkan, Á.I. López-Lorente,
S. Pedersen-Bjergaard, E. Psillakis**

Poster Session C **Chairs: M. Segundo, E. Psillakis**

13:00 - 14:00 **Parallel poster session Break Room PS-C**

Poster Session D **Chairs: S. Ražić, M. Zoccali**

13:00 - 14:00 **Parallel poster session Break Room PS-D**

Oral Session O7 **Chairs: G. Purcaro, F. Pena-Pereira**

14:00 - 14:15 **O-34. Magnetic Dispersive Solid-Phase Extraction Using a Zeolite-Based Composite for Direct Electrochemical Determination of Lead(II) in Urine Using Screen-Printed Electrodes**

L. Vidal¹, E. Fernández¹, J. Silvestre-Albero², A. Canals¹.

(1) Departamento de Química Analítica, Nutrición y Bromatología e Instituto Universitario de Materiales, Universidad de Alicante, E-03080 Alicante, Spain.

(2) Laboratorio de Materiales Avanzados, Departamento de Química Inorgánica-Instituto Universitario de Materiales, Universidad de Alicante, E-03080 Alicante, Spain.

- 14:15 - 14:30 **O-35. Influence of Sampling Trap Materials on the Volatilome From *In Vitro* and *Ex Vivo* Samples**
F. A. Franchina, D. Zanella, T. Dejong, J.-F. Focant.
Organic and Biological Analytical Chemistry Group, MolSys, University of Liège, Belgium.
- 14:30 - 14:45 **O-36. Fabric Phase Sorptive Membrane Array: A Novel Approach for Non-Invasive In Vivo Sampling for Disease Diagnosis, Air Pollution monitoring, and Beyond**
M. Locatelli¹, A. Tartaglia¹, H.I. Ulusoy², S. Ulusoy³, F. Savini⁴, S. Rossi⁴, F. Santavenere⁴, G.M. Merone⁵, E. Bassotti⁶, C. D'Ovidio⁷, E. Rosato⁷, K.G. Furton⁸, A. Kabir⁸.
 (1) Department of Pharmacy, University of Chieti–Pescara “G. d’Annunzio”, Via dei Vestini 31, Chieti 66100, Italy.
 (2) Department of Analytical Chemistry, Faculty of Pharmacy, Cumhuriyet University, Sivas 58140, Turkey.
 (3) Department of Chemistry, Faculty of Science, Cumhuriyet University, Sivas 58140, Turkey.
 (4) Pharmatotoxicology Laboratory—Hospital “Santo Spirito”, Via Fonte Romana 8, Pescara 65124, Italy.
 (5) Department of Neuroscience, Imaging and Clinical Sciences, University of Chieti–Pescara “G. d’Annunzio”, 66100 Chieti, Italy.
 (6) R&D Department Eureka Lab Division, Chiaravalle, Italy.
 (7) Department of Medicine and Aging Sciences, Section of Legal Medicine, University of Chieti–Pescara “G. d’Annunzio”, Chieti 66100, Italy.
 (8) Department of Chemistry and Biochemistry, Florida International University, 11200 SW 8th St, Miami, FL 33199, USA.
- 14:45 - 15:00 **O-37. Application of New HLB Solid Phase Extraction Towards Analysis of Pharmaceuticals in Plasma Samples**
F. Michel¹, M.J. Ross², O. Shimelis², C. Price².
 (1) Sigma-Aldrich Chemie GmbH, Eschenstraße 5, 82024 Taufkirchen, Germany.
 (2) MilliporeSigma, 595 N. Harrison Road, Bellefonte, PA 16823 USA.
- 15:00 - 15:15 **O-38. Measurement of Protein Binding Property of Drugs Using High-Throughput Automated Solid Phase Microextraction and LC-MS/MS Detection**
O. Shimelis¹, M.J. Ross¹, F. Michel².
 (1) MilliporeSigma, 595 N. Harrison Road, Bellefonte, PA 16823 USA.
 (2) Sigma-Aldrich Chemie GmbH, Eschenstraße 5, 82024 Taufkirchen, Germany.
- 15:15 - 15:30 **O-39. Matrix Modifiers to Improve SPME Performances for Analytes Heavily Bound to Biological Samples**
M. Tascon¹, G.A. Gómez-Ríos².
 (1) Instituto de Investigación e Ingeniería Ambiental (IIIA-CONICET), Universidad Nacional de San Martín (UNSAM), San Martín, 1650 Buenos Aires, Argentina.
 (2) Restek Corporation, 110 Benner Circle, Bellefonte, PA 16823, USA.

15:30 - 15:45 **Coffee Break**

Oral Session O8 **Chairs: S. Pedersen-Bjergaard, M. Miró**

- 15:45 - 16:00 **O-40. Hollow-Fiber Supported Liquid Membranes and Molecularly Imprinted Polymers as Solid Acceptor Phase for Highly Selective Extractions**
A. Martín-Esteban, E. Turiel, M. Díaz-Álvarez.
Departamento de Medio Ambiente y Agronomía. INIA. Carretera de A Coruña km. 7. 28040 Madrid. Spain.
- 16:00 - 16:15 **O-41. Biofluid Sampler: Beginning of a New Era of Mail-in-Analysis of Whole Blood Sample**
A. Kabir¹, A. Tartaglia², C. D'Ovidio³, E. Rosato², H.I. Ulusoy⁴, K.G. Furton¹, M. Locatelli².
 (1) Department of Chemistry and Biochemistry, Florida International University, 11200 SW 8th St, Miami, FL 33199, USA.
 (2) Department of Pharmacy, University of Chieti–Pescara “G. d’Annunzio”, Via dei Vestini 31, Chieti 66100, Italy.
 (3) Department of Medicine and Aging Sciences, Section of Legal Medicine, University of Chieti–Pescara “G. d’Annunzio”, Chieti 66100, Italy.
 (4) Department of Analytical Chemistry, Faculty of Pharmacy, Cumhuriyet University, Sivas 58140, Turkey.

16:15 - 16:30 **O-42. Advances in Ionic Liquid-Based Sorbent Materials for Sample Preparation**
J.L. Anderson.
Iowa State University, 1605 Gilman Hall, Ames, IA. 50011 USA.

Plenary **Chairs: E. Psillakis, V. Zuin**

Lectures

16:30 - 16:50 **PL2. EuChemS Division of Green and Sustainable Chemistry/ Compressed CO₂: An Attractive Green Solvent for the Preparation of Nanostructured Materials**

N. Ventosa

Nanomol – TECNIO, Institut de Ciència de Materials de Barcelona (CSIC)-CIBER-BBN, Campus de UAB, 08193, Bellaterra, Barcelona, Spain.

16:50 - 17:10 **PL3. The Periodic Table of the Elements of Green and Sustainable Chemistry**

P.T. Anastas^{1,2}

(1) Yale University, School of the Environment, 195 Prospect St., New Haven, CT 06511, United States.

(2) Yale Center for Green Chemistry and Green Engineering, 370 Prospect St., New Haven, CT 06511, United States.

17:10 - 17:30 **Closing ceremony and awards**

Chairs: S. Ražić, E. Psillakis

Poster Sessions

Two parallel poster sessions (**PS-A** and **PS-B**) are scheduled on Thursday, 11 March (CET 13:00 - 14:00) and another two poster sessions (**PS-C** and **PS-D**) on Friday, 12 March (CET 13:00 - 14:00).

Thursday, 11 March 2021
13:00 - 14:00

PS-A **Chairs: S. Ražić, M. Zoccali**

P1. Capsule Phase Microextraction of Selected Polycyclic Aromatic Hydrocarbons from Water Samples Prior to their Determination by GC-MS

N. Manousi¹, A. Kabir², K. G. Furton², E. Rosenberg³, G. A. Zachariadis¹.

(1) *Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece, nmanousi@chem.auth.gr.*

(2) *International Forensic Research Institute, Department of Chemistry and Biochemistry, Florida International University, Miami, FL, USA.*

(3) *Institute of Chemical Technology and Analytics, Vienna University of Technology, 1060 Vienna, Austria.*

P2. Dispersive Liquid-Liquid Microextraction Based on the Solidification of the Floating Organic Droplet using a Menthol-Based Deep Natural Eutectic Solvent for the Extraction of Phthalic Acid Esters from Soft Drinks and Infusions

C. Ortega-Zamora¹, G. Jiménez-Skrzypek¹, J. González-Sálamo^{1,2}, J. Hernández-Borges^{1,2}.

(1) *Universidad de La Laguna, Departamento de Química, Unidad Departamental de Química Analítica, Facultad de Ciencias, Avda. Astrofísico Fco. Sánchez, s/n°. 38206 San Cristóbal de La Laguna, Spain.*

(2) *Universidad de La Laguna, Instituto Universitario de Enfermedades Tropicales y Salud Pública de Canarias, Avda. Astrofísico Fco. Sánchez, s/n°. 38206 San Cristóbal de La Laguna, Spain.*

P3. Determination of Drugs of Abuse in Saliva Samples via Dual-Template Molecularly Imprinted Paper and Direct Infusion Mass Spectrometry

M.C. Díaz-Liñán, M.T. García-Valverde, R. Lucena, S. Cárdenas, A.I. López-Lorente.

Departamento de Química Analítica, Instituto Universitario de Investigación en Química Fina y Nanoquímica IUNAN, Universidad de Córdoba, Campus de Rabanales, Edificio Marie Curie, E-14071 Córdoba, Spain.

P4. Magnetic Paper Sorptive Phase for the Extraction of Parabens and Triclosan from Swimming Pool Waters

F.A. Casado-Carmona, R. Lucena, S. Cárdenas.

Departamento de Química Analítica, Instituto Universitario Nanoquímica (IUNAN), Universidad de Córdoba, Campus de Rabanales, Edificio Marie Curie, E-14071, Córdoba, Spain.

P5. High Throughput Determination of Three Drugs of Abuse by Direct Infusion Mass Spectrometry Using Nylon-6 Coated Wooden Toothpicks

J. Millán-Santiago, R. Lucena, S. Cárdenas.

Departamento de Química Analítica, Instituto Universitario de Investigación en Química Fina y Nanoquímica (IUNAN), Universidad de Córdoba, Campus de Rabanales, Edificio Marie Curie, E-14071 Córdoba, Spain.

P6. Combining Nanotechnology and Ultrasound: In Situ Synthesis of Magnetic Nanocomposite for Mercury Preconcentration

I. De la Calle, J. Páez-Cabaleiro, V. Romero, I. Lavilla, C. Bendicho.

Centro de Investigación Mariña, Universidade de Vigo, Departamento de Química Analítica e alimentaria, Grupo QA2, Edificio CC Experimentais, Campus de Vigo, As Lagoas, Marcosende 36310, Vigo, Spain.

P7. Development of Magnetic Nano-MIPs for the Selective Extraction of Proteins

B. Fresco-Cala, T. Rappold, B. Keitel, A.D. Batista, B. Mizaikoff.

Institute of Analytical and Bioanalytical Chemistry, Ulm University, 89081, Ulm, Germany.

P8. Preparation, Characterization and Application of C18 Thermally Immobilized onto Zirconized Silica as Sorbent for Solid-Phase Extraction

C.G.A. da Silva, T.S. Justiniano.

University of Mato Grosso (UFMT), Av. Fernando Correa da Costa, 2367, Boa Esperança, Cuiabá-MT, 78060-900, Brazil.

P9. Thermal and Ultrasound Pretreatments for Enhancing Phenolic Recovery from Different Grape Extracts

N. Dabetic, V. Todorovic, S. Sobajic.

Department of Bromatology, Faculty of Pharmacy, University of Belgrade, Vojvode Stepe 450, 11221 Belgrade, Serbia.

P10. μ -Separation of Petroleum Fractions Using a Metal-Organic Framework

J. Sundberg, K. Huynh, A. E. Jensen.

Centre for Oil & Gas, Technical University of Denmark, Elektrovej 375, 2800 Kgs. Lyngby, Denmark.

P11. Long-Term Evaluation of AAS Quality Control Data for Sample Preparation for Metal Analysis—Examples from Practice

J. Beljin, N. Duduković, K.Z. Tenodi, S. Maletić, S. Rončević.

Department of Chemistry, Biochemistry and Environmental Protection, Faculty of Sciences, University of Novi Sad, Trg Dositeja Obradovica 3, Novi Sad, 21000, Serbia.

P12. Hollow Fiber Membrane-Protected Molecularly Imprinted Microspheres for Micro Solid-Phase Extraction and Clean-Up of Thiabendazole in Citrus Samples

M. Díaz-Álvarez, A. Martín-Esteban, E. Turiel.

Departamento de Medio Ambiente y Agronomía. INIA. Carretera de A Coruña km. 7. 28040 Madrid. Spain.

P13. An Integrated Sample Preparation/Sensing Approach for Iodide Determination Involving Polyvinylpyrrolidone-Protected Copper Nanoclusters

F. Pena-Pereira, N. Capón, L. Placer, I. Lavilla, C. Bendicho.

Centro de Investigación Mariña, Universidade de Vigo, Departamento de Química Analítica e Alimentaria, Grupo QA2, 36310 Vigo, Spain.

P14. Surface Modified-Magnetic Nanoparticles by Molecular Imprinting For The Dispersive Solid-Phase Extraction of Triazines from Environmental Waters

E. Turiel, M. Díaz-Álvarez, A. Martín-Esteban.

Departamento de Medio Ambiente y Agronomía. INIA. Carretera de A Coruña km. 7. 28040 Madrid. Spain.

P15. Multi-Cumulative Trapping HS-SPME to Enhance the Volatile Profile of Extra-Virgin Olive Oil

S. Mascrez, **G. Purcaro**.

Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium.

P16. Vacuum-Assisted Headspace SPME: A Powerful Tool for Extra Virgin Olive Oil Profiling Enhancement

S. Mascrez¹, E. Psillakis², G. Purcaro¹.

(1) Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium.

(2) Laboratory of Aquatic Chemistry, School of Environmental Engineering, Technical University of Crete, Chania, Crete GR-73100, Greece.

P17. Improving the Performance of SPME Using Trap-Based Preconcentration with Enrichment

R. Szafnauer¹, R. Cole¹, J.P. Mayser¹, N.D. Spadafora^{1,2}.

(1) Markes International Ltd, Gwaun Elai Medi-Science Campus, Llantrisant, RCT, CF72 8XL, UK.

(2) Department of Biology, Ecology and Earth Sciences, University of Calabria, Via Ponte P. Bucci 6b, 87036, Arcavacata Di Rende, Cosenza, Italy.

P18. Pressurized Hot Water Extraction Combined to SPME and GC×GC for Assessment of the Organic Fraction on Oil-bearing Source-rocks

B.J. Pollo¹, P.T.V. Rosa¹, F. Augusto^{1,2}.

(1) University of Campinas (UNICAMP), Cidade Universitária "Zeferino Vaz" 13083-970 Campinas-Brazil.

(2) National Institute for Science and Bionanalytical Technology (INCTBio), UNICAMP, Campinas-Brazil.

P19. FPSE-HPLC-PDA Method for Rapid Determination of Solar UV Filters in Human Whole Blood, Plasma and Urine

A. Tartaglia¹, M. Locatelli¹, C. D'Ovidio², E. Rosato¹, M. Bonelli², K.G. Furton³, A. Kabir³.

(1) Department of Pharmacy, University of Chieti–Pescara "G. d'Annunzio", Via dei Vestini 31, Chieti 66100, Italy.

(2) Department of Medicine and Aging Sciences, Section of Legal Medicine, University of Chieti–Pescara "G. d'Annunzio", Chieti 66100, Italy.

(3) Department of Chemistry and Biochemistry, Florida International University, 11200 SW 8th St, Miami, FL 33199, USA.

P20. Development of a Miniaturized Solid-Phase Microextraction Methodology for the Analysis of Volatile and Semivolatile Compounds in Honey

L. Vazquez¹, M. Celeiro¹, M. Sergazina^{1,2}, T. Dagnac³, M. Llompert¹.

(1) CRETUS Institute. Department of Analytical Chemistry, Nutrition and Food Science, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain.

(2) Department of Chemistry, Institute of Natural Science and Geography, Abai Kazakh National Pedagogical University, Almaty, Kazakhstan.

(3) Agronomic and Agrarian Research Centre (AGACAL-CIAM), Galician Agency for Food Quality, Unit of Organic Contaminants, Apartado 10, E-15080, A Coruña. Spain.

P21. Can Recycled Crumb Rubber Materials Spread Pollutants in Water? Evaluation of Water Leaches from Synthetic Turf Football Fields by HS-SPME-GC-MS/M

D. Armada¹, M. Celeiro¹, N. Ratola², T. Dagnac³, J. de Boer⁴, M. Llompert¹.

(1) CRETUS Institute, Department of Analytical Chemistry, Nutrition and Food Science, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain.

(2) LEPABE Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering, University of Porto, Rua Dr. Roberto Frias S/n, 4200-465, Porto, Portugal.

(3) Agronomic and Agrarian Research Centre (AGACAL-CIAM), Galician Agency for Food Quality, Unit of Organic Contaminants, Apartado 10, E-15080, A Coruña. Spain.

(4) Vrije Universiteit Amsterdam, Department of Environment & Health, De Boelelaan 1085, 1081HV, Amsterdam, the Netherlands.

P22. Tropical Fruit Waste Valorisation Through Green and Sustainable Chemistry: Microwave Assisted Extraction

M. L. Segatto¹, K. Zanotti¹, A. M. Stahl¹ and V. G. Zuin^{1,2,3}.

(1) Department of Chemistry, Federal University of São Carlos, Rod. Washington Luís, km 235, São Carlos 13565-905, Brazil.

(2) Green Chemistry Centre of Excellence, Department of Chemistry, University of York, Heslington, North Yorkshire YO10 5DD, United Kingdom.

(3) Institute of Sustainable and Environmental Chemistry, Leuphana University Lüneburg, Universitätsallee 1, C13.204 Lüneburg, Germany.

P23. Optimization of Pressurized Liquid Extraction and Evaluation of Antioxidant, Anti-Inflammatory and Anti-Alzheimer Activities In Vitro of Ammodaucus Leucotrichus

N. Abderrezag¹, W. Louaer¹, A.H.Menai¹ and J. A. Mendiola².

(1) Laboratory of Environmental process engineering, Faculty of Process Engineering, University Salah Boubnider, Nouvelle Ville, Constantine 25000 Constantine, Algeria.

(2) Laboratory of Foodomics, Institute of Food Science Research, CIAL, CSIC, Nicolas Cabrera 9, 28049 Madrid Spain.

P24. Fabric Phase Sorptive Extraction of Tocopherols from Nut Oils Prior to Their High Performance Liquid Chromatographic Determination

N.P. Kalogiouri¹, A. Kabir², K.G. Furton², V.F. Samanidou¹.

(1) Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki, Greece.

(2) International Forensic Research Institute, Department of Chemistry and Biochemistry, Florida International University, Miami, FL, USA.

P25. Workflow for Integrated Quality and Safety Control of Dietary Supplements: Presence of Contaminants

L. Ramos, M.A. Fernández, B. Gómara.

Dpt. Instrumental Analysis and Environmental Chemistry, Institute of Organic Chemistry (IQOG-CSIC), Juan de la Cierva 3, 28006 Madrid, Spain.

P26. Green Analytical Chemistry Principles in Anionic Surfactant Detection by Potentiometric Sensors

D. Madunić-Čačić¹, N. Sakač², M. Jozanović³.

(1) *Saponia Chemical, Pharmaceutical and Foodstuff Industry, Inc., 31000 Osijek, Croatia.*

(2) *Faculty of Geotechnical Engineering, University of Zagreb, 42000 Varaždin, Croatia.*

(3) *Department of Chemistry, Josip Juraj Strossmayer University of Osijek, HR-31000 Osijek, Croatia.*

P27. No Sampling, the Best Sampling. Noninvasive and Micro-invasive Strategies for Cultural Heritage Studies

M. Tascon^{1,2}, L. Gheco^{2,3}, F. Castella², E. Ahets Etcheberry², N. Mastrangelo², S. Soto⁴, M. Landino², L. Giuntini^{5,6}, F. Taccetti⁶, F. Marte².

(1) *Instituto de Investigación e Ingeniería Ambiental (IIIA-CONICET-UNSAM), Buenos Aires, Argentina.*

(2) *Instituto de Investigaciones Sobre el Patrimonio Cultural (IIPC-TAREA), Universidad Nacional de San Martín, Buenos Aires, Argentina.*

(3) *Centro de Investigaciones y Transferencia Catamarca (CONICET-UNCa), Catamarca, Argentina.*

(4) *Facultad de Filosofía y Letras, Universidad de Buenos Aires, Buenos Aires, Argentina.*

(5) *Dipartimento di Fisica e Astronomia, Università degli Studi di Firenze, Florence, Italy.*

(6) *Istituto Nazionale di Fisica Nucleare (INFN), Sezione di Firenze, Florence, Italy.*

P28. Preconcentration of Selected Pesticides from Water Samples Using Coconut Shell Activated Carbon as Solid-Phase Extraction Adsorbent

K. Kumrić, R. Vujasin, M. Egerić, Đ. Petrović, K. Stanković, A. Devečerski, Lj. Matović.

Vinča" Institute of Nuclear Sciences – National Institute of the Republic of Serbia, University of Belgrade, P. O. Box 522, 11001 Belgrade, Serbia.

P29. Evaluation of Method Performances for Polycyclic Aromatic Hydrocarbons Analysis in Sediment Using Gas Chromatography/Mass Spectrometry

J. Molnar Jazić, M. Kraguli Isakovski, S. Maletić, A. Tubić, M. Grgić, T. Apostolović, J. Agbaba.

University of Novi Sad, Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Trg Dositeja Obradovića 3, 21000 Novi Sad, Republic of Serbia.

P30. Utilization of DoE Approach to Optimize the Procedure of Modified Nucleosides and Deoxynucleosides Extraction for Targeted Metabolomic Analysis

M. Artymowicz¹, S. Macioszek¹, J. Dawidowska^{1,2}, G. Stachewicz^{1,2}, J. Jacyna¹, W. Struck-Lewicka¹, M.J. Markuszewski¹, D. Siluk¹.

(1) *Department of Biopharmaceutics and Pharmacodynamics, Medical University of Gdańsk, Al. Gen. J. Hallera 107, 80-416 Gdańsk.*

(2) *Department of Forensic Medicine, Medical University of Gdańsk, M. Skłodowskiej-Curie 3a, 80-210 Gdańsk.*

P31. Food Security in Wine Consumption

B. Socas-Rodríguez¹, Á. Santana-Mayor², R. Rodríguez-Ramos², M. Á. Rodríguez-Delgado².

(1) *Laboratory of Foodomics, Institute of Food Science Research, CIAL, CSIC, Nicolás Cabrera 9, Madrid, 28049, Spain.*

(2) *Unidad Departamental de Química Analítica, Departamento de Química, Facultad de Ciencias, Universidad de La Laguna (ULL). Avda. Astrofísico Fco. Sánchez, s/nº. 38206 San Cristóbal de La Laguna, Tenerife, España.*

P32. On-Line in-Syringe Ultrasound-Assisted Cloud Point-Dispersive Liquid-Liquid Microextraction for the Fluorescent Determination of Aluminum in Water and Milk Samples

A.S. Lorenzetti¹, N.A. Gomez¹, J. Camiña², A. Canals³, M. Garrido¹, C.E. Domini¹.

(1) *INQUISUR, Departamento de Química, Universidad Nacional del Sur (UNS)-CONICET, Av. Alem 1253, 8000 Bahía Blanca, Argentina.*

(2) *Instituto de Ciencias de la Tierra y Ambientales de La Pampa (INCITAP-CONICET), Facultad de Ciencias Exactas y Naturales (UNLPam), Av. Uruguay 161 (6300) Santa Rosa, La Pampa, Argentina.*

(3) *Departamento de Química Analítica, Nutrición y Bromatología, Instituto Universitario de Materiales, Universidad de Alicante, Apdo. 99, 03080 Alicante, Spain.*

Friday, 12 March 2021

13:00 - 14:00

PS-C Chairs: M. Segundo, E. Psillakis

P33. A Molecularly Imprinted Polymer Based Electrochemical Sensor for the Determination of a Tyrosine Kinase Inhibitor Drug

S.I. Kaya^{1,2}, A. Cetinkaya¹, G. Ozcelikay¹, E.B. Atici³, S.A. Ozkan¹.

(1) Ankara University, Faculty of Pharmacy, Department of Analytical Chemistry, 06560 Yenimahalle, Ankara, Turkey.

(2) University of Health Sciences, Gulhane Faculty of Pharmacy, Department of Analytical Chemistry, 06018 Kecioren, Ankara, Turkey.

(3) DEVA Holding A.S., R&D Center, Karaagaç Mh. Fatih Blv. No: 26, 59510 Kapaklı, Tekirdag, Turkey.

P34. The Influence of Disintegration Method on Metabolomics Analysis

K.A. Mielko¹, S. Jabłoński², M. Łukaszewicz², P. Młynarz¹.

(1) Department of Biochemistry, Molecular Biology and Biotechnology, Faculty of Chemistry, Wrocław University of Science and Technology.

(2) Biotransformation Department, Faculty of Biotechnology, University of Wrocław.

P35. Electrochemical Immunosensor for Determination of Glial Fibrillary Acidic Protein Using Screen-Printed Electrodes Modified with Au NPs/L-Cysteine

G. Ozcelikay¹, F. Mollarasouli², M.A. Unal³, N. Karadas-Bakirhan⁴, K. Gucuyener⁵, E. Ergenekon⁶, S.A. Ozkan¹.

(1) Ankara University, Faculty of Pharmacy, Department of Analytical Chemistry, Ankara, Turkey.

(2) University of Tabriz, Faculty of Chemistry, Department of Analytical Chemistry, Tabriz, Iran.

(3) Ankara University, Faculty of Engineering, Physics Engineering, Ankara, Turkey.

(4) Hitit University Faculty of Science and Arts, Department of Chemistry, Corum, Turkey.

(5) Gazi University, Faculty of Medicine, Department of Paediatric Neurology, Ankara, Turkey.

(6) Gazi University Hospital, Division of Neonatology, Department of Pediatrics, Ankara, Turkey.

P36. FPSE Method for Sensitive Analysis of Venlafaxine Molecules in Urine Samples

U. Morgul¹, B. Ozdemir¹, H.I. Ulusoy¹, M. Locatelli², S. Ulusoy³, A. Tartaglia², A. Kabir⁴.

(1) Sivas Cumhuriyet University, Faculty of Pharmacy, Department of Analytical Chemistry, Sivas, Turkey.

(2) University of Chieti-Pescara "G. d'Annunzio", Department of Pharmacy, Via dei Vestini 31, Chieti 66100, Italy.

(3) Sivas Cumhuriyet University, Vocational School of Health Service, Department of Pharmacy, Sivas, Turkey.

(4) Florida International University, Department of Chemistry and Biochemistry, 11200 SW 8th St, Miami, FL 33199, USA.

P37. Multiresidue Analysis of Antibiotics in Cereals by Liquid Chromatography Triple Mass Spectrometry

R.A. Pérez, B. Albero, J.L. Tadeo, E. Miguel.

Departamento de Medio Ambiente y Agronomía, Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA), Ctra. de la Coruña, 28040 Madrid, Spain.

P38. Determination of Seven Representative Antibiotics in Lettuce to Monitor Their Uptake

B. Albero, R.A. Pérez, J.L. Tadeo, M.M. Delgado, E. Miguel.

Departamento de Medio Ambiente y Agronomía, Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA), Ctra. de la Coruña, 28040 Madrid, Spain.

P39. Fabrication of an Electrochemical Sensor for Determination of a Serotonin 5-HT₃ Receptor Antagonist

L. Karadurmus^{1,4}, A. Zahid^{1,2}, N. K Bakirhan³, A. Shah⁵, S.A. Ozkan¹.

(1) Ankara University, Faculty of Pharmacy, Department of Analytical Chemistry, Turkey.

(2) Department of Chemistry, Quaid-i-Azam University, Islamabad, 45320, Pakistan.

(3) University of Health Sciences, Gulhane Faculty of Pharmacy, Department of Analytical Chemistry, Turkey.

(4) Department of Analytical Chemistry, Faculty of Pharmacy, Adiyaman University, Turkey.

(5) Department of Chemistry, College of Science, University of Bahrain, Sakhir, 32038, Bahrain.

P40. Development of a Liquid-liquid Extraction Method for the Determination of Short Chain Fatty Acids from Bacteria Culture

K.C. Tok¹, D. Simsek², M. E. Kiymaci³, M. Gumustas¹.

(1) Ankara University, Institute of Forensic Sciences, Department of Forensic Toxicology, 06590, Ankara/Turkey.

(2) Ankara University, Faculty of Pharmacy, Department of Pharmaceutical Microbiology, 06550, Ankara/Turkey.

(3) University of Health Sciences Turkey, Gulhane Faculty of Pharmacy, Department of Pharmaceutical Microbiology, 06018, Ankara/Turkey.

P41. A Nanocomposite Magnetic Core-Shell Material for Sensitive Analysis of Quercetin in Tea Samples by HPLC

S. Ulusoy¹, H.I. Ulusoy², Z. Erbas³, E. Yilmaz⁴, M. Soylak³.

(1) Sivas Cumhuriyet University, Vocational School of Health Service, Department of Pharmacy, Sivas, Turkey.

(2) Sivas Cumhuriyet University, Faculty of Pharmacy, Department of Analytical Chemistry, Sivas, Turkey.

(3) Erciyes University, Faculty of Science, Department of Chemistry, Kayseri, Turkey.

(4) Erciyes University, Faculty of Pharmacy, Department of Analytical Chemistry, Kayseri, Turkey.

P42. Native Fluorescent Natural Deep Eutectic Solvents for Green Sensing Applications: Curcuminoids in *Curcuma longa* Powder

A.S. Lorenzetti¹, E. Vidal², M.F. Silva¹, C. Domini², F.J.V. Gomez¹.

(1) Instituto de Biología Agrícola de Mendoza (IBAM-CONICET) Facultad de Ciencias Agrarias Universidad Nacional de Cuyo Almirante Brown 500, Chacras de Coria, Mendoza, Argentina.

(2) INQUISUR, Departamento de Química, Universidad Nacional del Sur (UNS)-CONICET, Av. Alem 1253, 8000 Bahía Blanca, Argentina.

P43. Voltammetric Determination of Anticancer Drug Axitinib Using Boron-Doped Diamond Electrode

A. Cetinkaya¹, B.D. Topal¹, E.B. Atici², S.A. Ozkan¹.

(1) Ankara University, Faculty of Pharmacy, Department of Analytical Chemistry, Tandogan, Ankara, Turkey.

(2) DEVA Holding A.S., R&D Center, Karaagaç Mh. Fatih Blv. No: 26, 59510 Kapaklı, Tekirdag, Turkey.

P44. Andrew+ Automated Oasis 2x4 Mixed Mode Sorbent Selection SPE Protocol

M. Blaze, K. Brennan

Waters Corporation, 34 Maple St, Milford, MA01757.

P45. Enhancing Laboratory Throughput Using Fully Automated High-Capacity Sorptive Extraction

R. Szafnauer, R. Cole, J. P. Mayser.

Markes International Ltd, Gwaun Elai Medi-Science Campus, Llantrisant, RCT, CF72 8XL, UK.

P46. A Straightforward and Semiautomated Membrane-based Method for the Determination of Cocaine and its Metabolites in Urine Samples Using LC-ESI-QTOF-MS

J. Merib¹, G. Mafra², L. Birk¹, C. Scheid¹, S. Eller¹, R. Brognoli², T. Franco de Oliveira¹, E. Carasek².

(1) Departamento de Farmacociências, Universidade Federal de Ciências da Saúde de Porto Alegre, Porto Alegre, RS 90050-170, Brazil.

(2) Departamento de Química, Universidade Federal de Santa Catarina, Florianópolis, SC 88040-900, Brazil.

P47. Trace Sibutramine Determination in Herbal Slimming Products

H.I. Ulusoy¹, O. Demir¹, S. Ulusoy², M. Locatelli³, A. Kabir⁴.

(1) Sivas Cumhuriyet University, Faculty of Pharmacy, Department of Analytical Chemistry, Sivas, Turkey.

(2) University of Chieti-Pescara "G. d'Annunzio", Department of Pharmacy, Via dei Vestini 31, Chieti 66100, Italy.

(3) Sivas Cumhuriyet University, Vocational School of Health Service, Department of Pharmacy, Sivas, Turkey.

(4) Florida International University, Department of Chemistry and Biochemistry, 11200 SW 8th St, Miami, FL 33199, USA.

P48. Detection of Cationic Surfactants in Disinfectants and Antiseptics by New Direct Potentiometric Surfactant Sensor

N. Sakač¹, M. Jozanović², D. Madunič-Čačić³, S. Kovač¹.

(1) Faculty of Geotechnical Engineering, University of Zagreb, 42000 Varaždin, Croatia.

(2) Department of Chemistry, University of Osijek, HR-31000 Osijek, Croatia.

(3) Saponia Chemical, Pharmaceutical and Foodstuff Industry, Inc., 31000 Osijek, Croatia.

P49. Comparison of Headspace Solid-Phase Microextraction High Capacity Fiber Coatings for Untargeted Analysis of Beer Volatiles Using GC-MS/VUV

D. Zanella¹, H.E. Anderson², T. Selby², R.H. Magnuson II², T. Liden², J.-F. Focant¹, K.A. Schug^{2,3}.

(1) University of Liege, Molecular System, Organic & Biological Analytical Chemistry Group, Liege, Belgium.

(2) Department of Chemistry and Biochemistry, The University of Texas at Arlington, Arlington, Texas, USA.

(3) Affiliate of Collaborative Laboratories for Environmental Analysis and Remediation, The university of Texas at Arlington, Arlington, Texas, USA.

P50. LC-GC×GC-ToFMS/FID: A Powerful Technique for MOSH and MOAH Quantification and Characterization

G. Bauwens, G.Purcaro.

Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium.

P51. Pristine and Functionalized Multi-Walled Carbon Nanotubes as Adsorbent Material for Solid-Phase Extraction of Multi-Class Organic Micropollutants

M.O. Barbosa, R.S. Ribeiro, A.R.L. Ribeiro, M.F.R. Pereira, A.M.T. Silva.

Laboratory of Separation and Reaction Engineering - Laboratory of Catalysis and Materials (LSRE-LCM), Faculdade de Engenharia, Universidade do Porto, Rua Dr. Roberto Frias s/n, 4200-465 Porto, Portugal.

P52. Sub-Ambient Temperature Sampling of Volatiles from Cheese Using Vacuum-Assisted Headspace Thin Film Microextraction and Solid Phase Microextraction

A. Pateraki, D. Tzanetou, E. Psillakis.

Laboratory of Aquatic Chemistry, School of Environmental Engineering, Technical University of Crete, Polytechnioupolis, GR-73100 Chania, Greece.

P53. Leaching of PAHs and Nicotine from Heat-not-Burn Tobacco Products and Cigarette Butts

N. Solomou, M. Sotiropoulou, E. Fernández, E. Psillakis.

Laboratory of Aquatic Chemistry, School of Environmental Engineering, Technical University of Crete, GR-73100, Chania, Crete, Greece.

P54. Use of Cork By-Products to Determine Fungicides in Water by SPE-GC-MS/MS Methodology

L. Vazquez¹, M. Celeiro¹, M. Sergazina^{1,2}, S. Docampo¹, T. Dagnac³, V.J.P. Vilar⁴, M. Llompert¹.

(1) CRETUS Institute. Department of Analytical Chemistry, Nutrition and Food Science, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain.

(2) Department of Chemistry, Institute of Natural Science and Geography, Abai Kazakh National Pedagogical University, Almaty, Kazakhstan.

(3) Agronomic and Agrarian Research Centre (AGACAL-CIAM), Galician Agency for Food Quality, Unit of Organic Contaminants, Apartado 10, E-15080, A Coruña, Spain.

(4) Laboratory of Separation and Reaction Engineering, Laboratory of Catalysis and Materials (LSRE-LCM), Chemical Engineering Department, Faculty of Engineering, University of Porto, Rua Dr. Roberto Frias, 4200-465, Porto, Portugal.

P55. Fabric Phase Sorptive Extraction of Seven Parabens from Human Breast Tissues Prior to High-Performance-Liquid Chromatography – Photodiode Array Analysis of Cancerous and Non-Cancerous Samples

V. Alampanos¹, A. Kabir², K. Furton², Ž. Roje³, I. V. Vrček⁴, V. Samanidou¹.

(1) Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece.

(2) International Forensic Research Institute, Department of Chemistry and Biochemistry, Florida International University, Miami, FL, USA.

(3) Department for Plastic, Reconstructive and Aesthetic Surgery, University Hospital Dubrava, Zagreb, Croatia.

(4) Institute for Medical Research and Occupational Health, Ksaverska cesta 2, 10 000 Zagreb, Croatia.

P56. Betaine-Based Natural Deep Eutectic Solvents as Promising Green Extraction Agents for Pesticides Determination in Valorized Food By-Products

B. Socas-Rodríguez, D.M. Alonso-García, J.A. Mendiola, A. Cifuentes, **E. Ibañez**.

Laboratory of Foodomics, Institute of Food Science Research, CIAL, CSIC, Nicolás Cabrera 9, Madrid, 28049, Spain.

P57. FPSE-HPLC-PDA Method for the Determination of Inflammatory Bowel Disease Treatment Drugs in Whole Blood, Plasma, and Urine

A. Kabir¹, K.G. Furton¹, C. D'Ovidio², E. Rosato³, M. Bonelli², A. Tartaglia³, M. Locatelli³.

(1) Department of Chemistry and Biochemistry, Florida International University, 11200 SW 8th St, Miami, FL 33199, USA.

(2) Department of Medicine and Aging Sciences, Section of Legal Medicine, University of Chieti–Pescara “G. d’Annunzio”, Chieti 66100, Italy.

(3) Department of Pharmacy, University of Chieti–Pescara “G. d’Annunzio”, Via dei Vestini 31, Chieti 66100, Italy.

P58. FPSE-HPLC-PDA Analysis of Seven Paraben Residues in Human Whole Blood, Plasma, and Urine

M. Locatelli¹, A. Tartaglia¹, H.I. Ulusoy², C. D'Ovidio³, E. Rosato¹, M. Bonelli², K.G. Furton⁴, A. Kabir⁴.

(1) Department of Pharmacy, University of Chieti–Pescara “G. d’Annunzio”, Via dei Vestini 31, Chieti 66100, Italy.

(2) Department of Analytical Chemistry, Faculty of Pharmacy, Cumhuriyet University, Sivas 58140, Turkey.

(3) Department of Medicine and Aging Sciences, Section of Legal Medicine, University of Chieti–Pescara “G. d’Annunzio”, Chieti 66100, Italy.

(4) Department of Chemistry and Biochemistry, Florida International University, 11200 SW 8th St, Miami, FL 33199, USA.

P59. Assessment of Contaminants in Cereals with Different Degrees of Processing

B. Socas-Rodríguez¹, R. Rodríguez-Ramos², Á. Santana-Mayor², M. Á. Rodríguez-Delgado².

(1) Laboratory of Foodomics, Institute of Food Science Research, CIAL, CSIC, Nicolás Cabrera 9, Madrid, 28049, Spain.

(2) Unidad Departamental de Química Analítica, Departamento de Química, Facultad de Ciencias, Universidad de La Laguna (ULL). Avda. Astrofísico Fco. Sánchez, s/nº. 38206 San Cristóbal de La Laguna, Tenerife, España.

P60. Green Approach to Extraction of Plant Volatiles from Herbal Teas Using Ionic Liquids

J. Arsenijević¹, M. Drobac¹, T. Trtić-Petrović², N. Kovačević¹, S. Ražić³.

(1) University of Belgrade – Faculty of Pharmacy, Department of Pharmacognosy, Vojvode Stepe 450, 11221 Belgrade, Serbia.

(2) University of Belgrade, Vinča Institute of Nuclear Sciences, Laboratory of Physics, Mike Petrovića Alasa 12-14, 11351 Vinča, Belgrade, Serbia.

(3) University of Belgrade – Faculty of Pharmacy, Department of Analytical Chemistry, Vojvode Stepe 450, 11221 Belgrade, Serbia.

P61. Spinning Cup-Shaped 3D Printed Device for Immunoaffinity Microextraction of Diclofenac in Wastewaters

E.J. Carrasco-Correa¹, J.M. Herrero-Martínez¹, E.F. Simó-Alfonso¹, D. Knopp², M. Miró³.

(1) CLECEM group, Department of Analytical Chemistry, University of Valencia, C/ Doctor Moliner, 50, 46100, Burjassot, Valencia, Spain.

(2) Department of Chemistry, Technical University of Munich, Marchioninstr. 17/I, 83177 München, Germany.

(3) FI-TRACE Group, Department of Chemistry, University of Balearic Islands, Carretera de Valldemossa, Km 7.5, E 07122, Palma de Mallorca, Spain.

P62. Solvent-Reducing Methods to Quantify Siloxanes in Wastewater and Sludge

N. Ratola, M. Fernandes, D. Bogas, A.C. Rodrigues, G. F. Pantuzza, F. Bernardo, I. Bragança, V. Homem, F. Sánchez-Soberón.

LEPABE - Laboratory for Process Engineering, Environment, Biotechnology and Energy, Faculty of Engineering, University of Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal.

P63. Boronate Affinity Sorbents Based on Thiol-Functionalized Polysiloxane-Polymethacrylate Composite Materials in Syringe Format for Selective Extraction of Glycopeptides

J.M. Herrero-Martínez, O. Mompó-Roselló, M. Vergara-Barberán, M.J. Lerma-García, E.F. Simó-Alfonso.

Department of Analytical Chemistry, University of Valencia, C/Dr. Moliner, 50, 46100-Burjassot, Valencia, Spain.

P64. Microwave-Assisted Saponification and SPE for the Simultaneous or Alternative Analysis of Dialkyl Ketones and Sterols in Fat

S. Mascrez¹, S. Danthine², G. Purcaro¹.

(1) Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium.

(2) Department of Food Science and Formulation, Gembloux Agro-Bio Tech, University of Liège, Gembloux, 5030, Belgium.

P65. Vacuum-Assisted Headspace SPME Under Sub-Ambient Temperature for the Analysis of Fish Samples

S. Mascrez¹, E. Psillakis², **G. Purcaro**¹.

(1) Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium.

(2) Laboratory of Aquatic Chemistry, School of Environmental Engineering, Technical University of Crete, Chania, Crete GR-73100, Greece