2nd European Sample Preparation e-Conference

Joint online events | 14 - 16 March, 2022

1st Green and Sustainable Analytical Chemistry e-Conference

Organized by EuChemS-DAC Sample Preparation Study Group and Network

Programme

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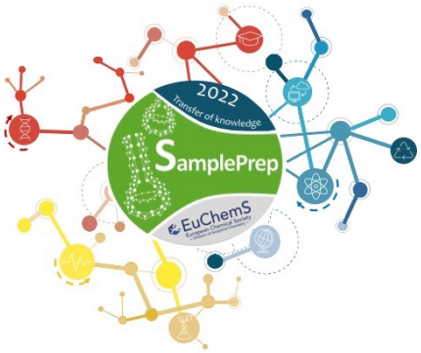

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Interactive Scientific Programme at a glance

Please **click** on the links provided, and you will be sent to the corresponding **Conference Zoom Link.** 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.

Monday, 14 March 2022

EuSP2022

CET	Monday, 14 March 2022	GMT	EET
09:00	EuSP 2022 Opening Session	08:00	10:00
09:10	Plenary Lecture	08:10	10:10
09:35	Oral Session-O-1	08:35	10:35
10:35	Break	09:35	11:35
10:50	Oral Session-O-2	9:50	11:50
12:10	Oral Session-Y-A: Young Scientists	11:10	13:10
13:10	Poster Sessions: EuSP-1 EuSP-2	12:10	14:10
14:00	Plenary Lecture	13:00	15:00
14:25	Oral Session-O-3	13:25	15:25
15:25	Break	14:25	16:25
15:40	Oral Session-O-4	14:40	16:40
17:00 17:10	One-to-one meetings	16:00 16:10	18:00 18:10

Tuesday, 15 March 2022

EuSP2022

GSAC2022

CET	Tuesday, 15 March 2022	GMT	EET
09:00	Oral Session-O-5	08:00	10:00
10:30	Break	09:30	11:30
10:45	Oral Session-O-6	09:45	11:45
12:00	Oral Session-Y-B: Young Scientists	11:00	13:00
13:00	Poster Sessions: EuSP-3 EuSP-4 EuSP-5	12:00	14:00

		GMT	EET
14:00	Opening Ceremony GSAC	13:00	15:00
14:10	Plenary Lecture Common EuSP | GSAC	13:10	15:10
14:40	EuSP | GSAC Common Oral Session O-A	13:40	15:40
15:20	Break	14:20	16:20
15:35	EuSP | GSAC Common Oral Session O-B	14:35	16:35
17:10 17:20	One-to-one meetings	16:10 16:20	18:10 18:20

Wednesday, 16 March 2022

EuSP2022

CET	Wednesday, 16 March 2022	GMT	EET
09:00	Oral Session- FOP-I	08:00	10:00
10:20	Break	09:20	11:20
10:30	Oral Session- FOP-II	9:30	11:30
12:00	Satellite Event – Common EuSP | GSAC		
13:00	Round Table Discussion	12:00	14:00
14:00	Oral Session-Y-C: Young Scientists	13:00	15:00
15:10	Sample Preparation Summer School	14:10	16:10
15:20	Break	14:20	16:20
15:35	Plenary Lecture Common EuSP | GSAC		
16:05	EuSP | GSAC Common Oral Session O-C		
17:20	EuSP | GSAC Closing Ceremony and Awards		

GSAC2022

CET	Wednesday, 16 March 2022	GMT	EET
09:00	Oral Session-I	08:00	10:00
10:15	Break	09:15	11:15
10:30	Plenary Lecture	09:30	11:30
	Oral Session-II		
11:00		11:00	13:00
13:00	Poster Sessions: GSAC-1 GSAC-2 GSAC-3 GSAC-4	12:00	14:00
14:00	Oral Session-III	13:00	15:00
15:25	Break	14:25	16:25
		14:35	16:35
		15:05	17:05
		16:20	18:20

Scientific Programme – detailed schedule

The programme schedule is given in CET.

EuSP2022 — Monday, 14 March 2022

09:00 - 9:10	**Opening Session:** **E. Psillakis,** *Head of EuChemS-DAC Sample Preparation Study Group and Network, Technical University of Crete, Greece* **S. Pedersen-Bjergaard,** *University of Oslo, Norway* **S. A. Ozkan,** *Ankara University, Faculty of Pharmacy, Ankara, Turkey*
09:10 - 9:35	**PL-1. Origami-paper device for rapid diagnosis and wastewater surveillance** **Z. Yang,** Y. Pan, Q. Hui. *Cranfield University, Cranfield, MK43 0AL, United Kingdom*
Oral Session O-1	**Advances in sample preparation I** ***Chairs: E. Psillakis, S. Pedersen-Bjergaard***
09:35 - 09:55	**O-1. Is 3D Printing Revolutionizing the Way that Sample Preparation is Being Performed?** **M. Miró**[1], D.J. Cocovi-Solberg[2], E. J. Carrasco-Correa[3] *(1) FI-TRACE group, Department of Chemistry, University of the Balearic Islands, Carretera de Valldemossa km 7.5, E-07122 Palma de Mallorca, Spain* *(2) Institut für Analytische Chemie, University of Natural Resources and Applied Life Science, Muthgasse 18, 1190 Vienna Austria* *(3) CLECEM Group, Department of Analytical Chemistry, University of Valencia, C/ Doctor Moliner, 50, E-46100, Burjassot, Valencia, Spain*
09:55 - 10:15	**O-2. Smart Samplers for LC-MS Based Protein Analysis** **L. Reubsaet,** T. Grønhaug Halvorsen *University of Oslo, Department of Pharmacy, PO Box 1068 Blindern, 0316 Oslo, Norway*
10:15 - 10:35	**O-3. Spotlighting Solid phase Microextraction on Biological Analysis and New Materials** **G. Ouyang**[1,2,3] *(1) MOE Key Laboratory of Aquatic Product Safety/KLGHEI of Environment and Energy Chemistry, School of Chemistry, Sun Yat-sen University, Guangzhou, 510275, China* *(2) Chemistry College, Center of Advanced Analysis and Gene Sequencing, Zhengzhou University Kexue Avenue 100, Zhengzhou, 450001, China* *(3) Guangdong Provincial Key Laboratory of Chemical Measurement and Emergency Test Technology, Institute of Analysis, Guangdong Academy of Sciences (China National Analytical Center, Guangzhou), Guangzhou 510070, China*
10:35 - 10:50	**Break**

Oral Session O-2 — Advances in sample preparation II

Chairs: F. Švec, E. Rosenberg

10:50 - 11:10 **O-4. Electromembrane Extraction – Towards Implementation in the Analytical Routine Laboratory**

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

11:10 - 11:30 **O-5. Solventless Microextraction Techniques for Water Analysis**

T. C. Schmidt, L. K. Tintrop, N. Lorenzo-Parodi, W. Kaziur-Cegla, N. Stojanović, A. Salemi, M.A. Jochmann
Instrumental Analytical Chemistry and Centre for Water and Environmental Research (ZWU), University of Duisburg-Essen, Universitätsstraße 5, 45141 Essen, Germany

11:30 - 11:50 **O-6. Microplastics Determination in Complex Samples: Exploring Connections Between Environmental Compartments**

J. Hernández-Borges[1,2], J. González-Sálamo[1,2,3], C. Hernández-Sánchez[2,4], F.J. Díaz-Peña[5], C. Villanova-Solano[1,2], R. Pérez-Reverón[1], M. Sevillano-González[1]
(1) Departamento de Química, Unidad Departamental de Química Analítica, Facultad de Ciencias, Universidad de La Laguna (ULL), Avda. Astrofísico Fco. Sánchez, s/n, 38206, San Cristóbal de La Laguna, Spain
(2) Instituto Universitario de Enfermedades Tropicales y Salud Pública de Canarias, Universidad de La Laguna (ULL), Avda. Astrofísico Fco. Sánchez, s/n, 38206, San Cristóbal de La Laguna, Spain
(3) Department of Chemistry, Sapienza University, P.le Aldo Moro 5, 00185, Rome, Italy
(4) 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, Universidad de La Laguna (ULL), Vía Auxiliar Paso Alto, 2, 38001, Santa Cruz de Tenerife, Spain
(5) Departamento de Biología Animal, Edafología y Geología, Facultad de Ciencias, Universidad de La Laguna (ULL), Avda. Astrofísico Fco. Sánchez, s/n, 38206, San Cristóbal de La Laguna, Spain

11:50 - 12:10 **O-7. Recent Developments in Paper-Based Sorptive Phases**

R. Lucena, S. Cárdenas
Affordable and Sustainable Sample Preparation (AS_2P) Research Group, 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, España

Oral Session Y-A — Young Scientists Oral Presentations (Food/Environmental Samples)

Chairs: V. Pino, L. Vidal

12:10 - 12:20 **YS-1. Functionalized HMS Mesostructured Silica as Cation-Exchange Sorbents in Sample Preparation for the Analysis of Atropine and Scopolamine in Thyme, Coriander and Basil**

L. González-Gómez, J. Gañán, S. Morante-Zarcero, D. Pérez-Quintanilla, I. Sierra
Departamento de Tecnología Química y Ambiental, Escuela Superior de Ciencias Experimentales y Tecnología (ESCET), Universidad Rey Juan Carlos (URJC). CP.28933, Móstoles, Madrid, España

12:20 - 12:30 **YS-2. Use of an Online LG-GC System for the Investigation of MOH Contamination in Omega-3 Fatty Acid Dietary Supplements**

A. Arena[1], M. Zoccali[2], P.Q. Tranchida[1], L. Mondello[1,3,4]
(1) Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
(2) Department of Mathematical and Computer Science, Physical Sciences and Earth Sciences, University of Messina, Messina, Italy
(3) Chromaleont s.r.l., c/o Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
(4) Department of Sciences and Technologies for Human and Environment, University Campus Bio-Medico of Rome, Rome, Italy

12:30 - 12:40 **YS-3. Exploration of the Volatile Profile of Whiskey Samples Using Solid-phase Microextraction Arrow Combined with Comprehensive Two-dimensional Gas Chromatography**

A. Ferracane[1,2], N. Manousi[2,3], P. Q. Tranchida[1], G. A. Zachariadis[3], L. Mondello[1,4], E. Rosenber
(1) Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
(2) Institute of Chemical Technologies and Analytics, Vienna University of Technology, 1060 Vienna, Austria
(3) Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece
(4) Chromaleont s.r.l., c/o Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy

12:40 - 12:50 **YS-4. Sustainable Methodology for the Analysis of Hazardous Substances in Air Samples from Places Related to Tire Rubber Materials**

D. Armada[1], M. Celeiro[1], T. Dagnac[2], M. Llompart[1]
(1) CRETUS, Department of Analytical Chemistry, Nutrition and Food Science, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain
(2) Agronomic Research Centre (AGACAL-CIAM), Unit of Organic Contaminants, Apartado 10, E-15080, A Coruña, Spain

12:50 - 13:00 **YS-5. Solid-Phase Microextraction Followed by Gas Chromatography Tandem Mass Spectrometry to Determine Personal Care Products in Hydroalcoholic Gels**

L. Vazquez[1], M. Celeiro[1], A. Castiñeira-Landeira[1], T. Dagnac[2], M. Llompart[1]
(1) CRETUS. Department of Analytical Chemistry, Nutrition and Food Science, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain.
(2) Galician Agency for Food Quality - Agronomic Research Centre (AGACAL-CIAM) – Unit of Organic Contaminants, Apartado 10, E-15080, A Coruña, Spain

13:00 - 13:10 **YS-6. Carbon Nanomaterials from Rice Husk as Novel Sorptive Phases Towards Steroid Hormones from Environmental Waters**

P. Bianchini, F. Merlo, F. Maraschi, A. Profumo, L. Malavasi, A. Speltini
Department of Chemistry, University of Pavia, via Taramelli 12, 27100 Pavia

Poster Session EuSP-1

Green Sample Preparation

Chairs: L. Ramos, M. Llompart

13:10 - 14:00 **Breakout Room EuSP-1**

Poster Session EuSP-2

Food Samples

Chairs: G. Purcaro, C. Cagliero

13:10 - 14:00 **Breakout Room EuSP-2**

Oral Session O-3	**New extraction phases I** ***Chairs: E. Psillakis, R. Lucena***
14:00 - 14:25	**PL-2. Coordination Cages as Hosts for Small-Molecule Guests** **M.D. Ward** *Department of Chemistry, University of Warwick, Coventry CV4 7AL, UK*
14:25 - 14:45	**O-8. MOF-based Composites in Analytical Sample Preparation** **V. Pino[1,2]**, P.I. Napolitano-Tabares[1], A. Gutiérrez-Serpa[1,2], M.J. Trujillo-Rodríguez[1,2], J.H. Ayala[1], J. Pasán[3] *(1) Laboratorio de Materiales para Análisis Químico (MAT4LL), Departamento de Química, Unidad Departamental de Química Analítica, Universidad de La Laguna (ULL), 38206 Tenerife, Spain* *(2) Unidad de Investigación de Bioanalítica y Medioambiente, Instituto Universitario de Enfermedades Tropicales y Salud Pública de Canarias, Universidad de La Laguna (ULL), La Laguna, Tenerife, 38206, Spain* *(3) Laboratorio de Materiales para Análisis Químico (MAT4LL), Departamento de Química, Unidad Departamental de Química Inorgánica, Universidad de La Laguna (ULL), 38206 Tenerife, Spain*
14:45 - 15:05	**O-9. Metal-Organic Frameworks as Sorbent Material for Magnetic Dispersive micro-Solid-Phase Extraction of Polycyclic Aromatic Compounds in Environmental Samples** **F. Bianchi[1,2]**, F. Fornari[1], N. Riboni[1], F. Casoli[3], A. Bacchi[1,4], P.P. Mazzeo[1,4], P. Pelagatti[1,5], M. Careri[1] *(1) Università di Parma, Dipartimento di Scienze Chimiche, della Vita e della Sostenibilità Ambientale, Parco Area delle Scienze 17/A, 43124 Parma, Italy* *(2) Università di Parma, Centro Interdipartimentale per l'Energia e l'Ambiente (CIDEA), Parco Area delle Scienze, 43124 Parma, Italy* *(3) IMEM-CNR, Parco Area delle Scienze 37/A, Parma 43124, Italy* *(4) Biopharmanet-TEC, Università di Parma, Parco Area delle Scienze 27/A, 43124 Parma, Italy* *(5) Consorzio Interuniversitario Reattività Chimica e Catalisi (CIRCC), Via Celso Ulpiani 27, 70126 Bari, Italy*
15:05 - 15:25	**O-10. Novel Extraction Phases Functionalized with Task Specific Ionic Liquids for Metal Detection in Natural Waters** **C. Fontàs**, E. Anticó *Chemistry Department, Faculty of Science, University of Girona, Maria Aurèlia Capmany 69, 17003, Girona, Spain*
15:25 - 15:40	**Break**
Oral Session O-4	**New extraction phases II** ***Chairs: M. Miró, V. Samanidou***
15:40 - 16:00	**O-11. Nucleic Acid Sample Preparation: Towards Point-of-Care Diagnostics in the Era of SARS-CoV-19** **J. Anderson** *Department of Chemistry, Iowa State University, USA*
16:00 - 16:20	**O-12. Capsule Phase Microextraction: A Field Deployable Total Sample Preparation Solution for Modern Environmental Laboratories** **A. Kabir** *Department of Chemistry and Biochemistry, Florida International University, Miami, Florida, USA*
16:20 - 16:40	**O-13. Recent Advances of In-tube SPME for Bioanalysis** **M. E. Costa Queiroz** *Department of Chemistry of FFCLRP – University of São Paulo, Ribeirão Preto, CEP 14040-90, Brazil*
16:40 - 17:00	**O-14. Mercury Speciation in Water Samples Using a Deep Eutectic Solvent as Extractant Phase in Dispersive Liquid-Liquid Microextraction** **L. Vidal**, L. Ripoll, J. Rayos, M.A. Aguirre, A. Canals *Department of Analytical Chemistry, University of Alicante, Alicante, Spain*

17:00 - 17:10 **One-to-one meetings**

EuSP2022

Tuesday, 15 March 2022

Oral Session O-5 — Analysis of Biological Samples

Chairs: S. Pedersen-Bjergaard, E. Boyaci

9:00 - 9:20 **O-15. Electromembrane Extraction for Sample Preparation of Organoids, an Emerging Alternative to Animal Models**

S. R. Wilson[1,2], F. S. Skottvoll[2,3], A. Aizenshtadt[2], F. Hansen[4], S. Pedersen-Bjergaard[4], J. Kutter[5], I. Lise Bogen[6], S. Krauss[2]

(1) Department of Chemistry, University of Oslo, Oslo Norway
(2) Hybrid Technology Hub Centre of Excellence, Faculty of Medicine, University of Oslo, Oslo Norway
(3) SINTEF Digital- MiNaLab, Oslo, Norway
(4) Department of Pharmacy, University of Oslo, Oslo Norway
(5) Department of Pharmacy, University of Copenhagen, Copenhagen, Denmark
(6) Section for Drug Abuse Research, Department of Forensic Sciences, Oslo University Hospital, Norway

9:20 - 9:40 **O-16. Solid Phase Microextraction: A Tool for Monitoring Distribution and Toxicity of Drugs In Vivo in Patients Undergoing In Vivo Lung Perfusion IVLP**

B. Bojko[1,2], N. Looby[1], M. Olkowicz[1,3], A. Roszkowska[1,4], B. Kupcewicz[5], P. R. des Santos[6], K. Ramadan[6], S. Keshavjee[6], T.K. Waddell[6], G. Gómez-Ríos[1], M. Tascon[1], K. Goryński[1], M. Cypel[6], J. Pawliszyn[1]

(1) Department of Chemistry, University of Waterloo, 200 University Avenue, Waterloo, ON M1B 6G3, Canada
(2) Department of Pharmacodynamics and Molecular Pharmacology, Faculty of Pharmacy, Collegium Medicum in Bydgoszcz, Nicolaus Copernicus University in Torun, Dr. A. Jurasza 2 85-089 Bydgoszcz, Poland
(3) Jagiellonian Centre for Experimental Therapeutics (JCET), Jagiellonian University, 14 Bobrzynskiego St., 30-348 Krakow, Poland
(4) Department of Pharmaceutical Chemistry, Medical University of Gdansk, 80-416 Gdansk, Poland
(5) Department of Inorganic and Analytical Chemistry, Faculty of Pharmacy, Collegium Medicum in Bydgoszcz, Nicolaus Copernicus University in Torun, 85-089 Bydgoszcz, Poland
(6) University Health Network - TGH, 200 Elizabeth Street, Eaton North 9-969, Toronto, ON M5G 2C4, Canada

9:40 - 10:00 **O-17. High Throughput Extraction Strategies for Cell Culture Medium-Based Untargeted Exometabolomics Studies**

E. Nemutlu[1,2], T. Reçber[1], C. C. Eylem[1], S. Erdoğan Kablan[1], Selin Özesen[3], B. Derkuş[4], E. Boyacı[3], S. Kır[1]

(1) Hacettepe University, Faculty of Pharmacy, Department of Analytical Chemistry, Ankara, Turkey
(2) Hacettepe University, Faculty of Pharmacy, Bioanalytic and Omics Laboratory, Ankara, Turkey
(3) Middle East Technical University, Department of Chemistry, Ankara, Turkey
(4) Ankara University, Faculty of Science, Department of Chemistry, Stem Cell Research Lab, Ankara, Turkey

10:00 - 10:15 **O-18. Solid Phase Extraction as Sample Preparation Method for Analysis of Intact Proteins from Biological Samples**

K. Maráková[1,2], S. L. Thomas[3], B. J. Renner[3], K. A. Schug[3]

(1) Faculty of Pharmacy, Comenius University, Bratislava, Slovakia
(2) Toxicological and Antidoping Center, Comenius University, Bratislava, Slovakia
(3) Department of Chemistry and Biochemistry, University of Texas at Arlington, Arlington, TX, United States

10:15 - 10:30 **O-19. A Validated Method for Automated SPE-LC-MS/MS Determination of Psychoactive Drugs in Blood Plasma and Serum**

O. Lerch[1], T. Kieliba[2], H. Andresen-Streichert[2]

(1) GERSTEL GmbH & Co. KG, Eberhard-Gerstel-Platz 1, 45473 Muelheim, Germany
(2) Institute of Legal Medicine, Melatenguertel 60/62, 50823 Cologne, Germany

10:30 - 10:45	**Break**

Oral Session O-6	**Analysis of Food and Biological Samples** ***Chairs: L. Ramos, A. Canals Hernandez***
10:45 - 11:05	**O-20. Full Evaporation Static and Dynamic Headspace Sampling: A Forgotten Sample Preparation and Injection Approach for Analysis of Volatiles** **F. David**, C. Devos, A. Pacholska, T. Cucu, P. Sandra *RIC-group, Pres. Kennedypark 26, B-8500 Kortrijk, Belgium*
11:05 - 11:25	**O-21. High-Concentration Capacity Headspace Extraction Coupled with Comprehensive Multidimensional Gas Chromatography for Enhanced Chromatographic Fingerprint of Food** **G. Purcaro**, D. Eggermont, S. Mascrez *Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium*
11:25 - 11:40	**O-22. Olive Oil Characterization: An Innovative Series of Robotic Sample-prep Automations in Accordance with Current Legislation** **A. Carretta**[1], C. Ventre[2] *(1) SRA Instruments Italy. Via alla Castellana 3, 20063 – Cernusco s/N (MI), Italy* *(2) Centro Analisi Biochimiche sas. Via Pitagora, 4 – 89016 Rizziconi (RC), Italy*
11:40 - 12:00	**O-23. Novel Sorptive Extraction Approaches for "Greener" Bioanalysis** **V. Samanidou** *Laboratory of Analytical Chemistry, School of Chemistry, Aristotle University of Thessaloniki*

Oral Session Y-B	**Young Scientists Oral Presentations (Environmental/Biological Samples)** ***Chairs: V. Pino, R. Lucena***
12:00 - 12:10	**YS-7. Functionalization of Commercial Hydrophilic-Lipophilic Balanced Copolymer for Automatic Magnetic Dispersive Micro-Solid Phase Extraction of Surface Water Contaminants** **C.V. Gemuh**, B. Horstkotte, P. Solich *Department of Analytical Chemistry, Faculty of Pharmacy, Akademika Heyrovského 1203, 500 05 Hradec Králové, Czech Republic*
12:10 - 12:20	**YS-8. Luminescent Probes Derived from Citric Acid and β-Aminothiols for Fluorimetric and Smartphone-Based Sensing of pH and Ammonia** **L. Placer**, F. Pena-Pereira, 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*
12:20 - 12:30	**YS-9. Optimization of Impinger and Sorbent Tube Sampling for Determination of Rocket Fuel Transformation Products in Ambient Air** **B. Bukenov[1]**, D. S. Kosyakov[2], N. V. Ul'yanovskii[2], B. Kenessov[1], N. Baimatova[1], M.S. Popov[2] *(1) Center of Physical Chemical Methods of Research and Analysis, Al-Farabi Kazakh National University, 96A Tole bi street, Almaty, 050012, Kazakhstan* *(2) Core Facility Center 'Arktika', Northern (Arctic) Federal University, 17 Northern Dvina emb., Arkhangelsk 163002, Russian Federation*

12:30 - 12:40	**YS-10. Determination of Tryptamine Analogs in Whole Blood by Liquid-Phase Microextraction and Electromembrane Extraction in 96-Well Format** **M. Schüller[1]**, M.-S.-S. Bergh[2], E.L. Øiestad[1,2], S. Pedersen-Bjergaard[1,3] *(1) Department of Pharmacy, University of Oslo, P.O Box 1064 Blindern, 0316, Norway* *(2) Oslo University Hospital, Division of Laboratory Medicine, Department of Forensic Sciences, P.O. Box 4459 Nydalen, 0424, Oslo, Norway* *(3) Department of Pharmacy, Faculty of Health and Medical Sciences, University of Copenhagen, Universitetsparken 2, 2100 Copenhagen, Denmark*
12:40 - 12:50	**YS-11. Derivatization Method for Lipid Profiling of Blood Plasma Using GC×GC-TOF-MS** **K. Bhatt**, T. Dejong, P. H. Stefanuto, J. F. Focant *University of Liège, Organic and Biological Analytical Chemistry Group, MolSys, Liège, Belgium*
12:50 - 13:00	**YS-12. Determination of Indoxyl Sulfate and p-Cresol Sulfate in Plasma by Solid Phase Extraction using a Bead Injection Lab-on-Valve Approach and Mass Spectrometry Detection** **S.R. Fernandes[1]**, L. Barreiros[1], B. Sampaio-Maia[2,3], M. Miró[4], M.A. Segundo[1] *(1) LAQV, REQUIMTE, Department of Chemical Sciences, Faculty of Pharmacy, University of Porto, R Jorge Viterbo Ferreira, 228, 4050-313 Porto, Portugal* *(2) INEB – Instituto Nacional de Engenharia Biomédica / I3S - Institute for Research and Innovation in Health, University of Porto, R Alfredo Allen, 208, 4200-135 Porto, Portugal* *(3) Faculty of Dental Medicine, University of Porto, R Dr. Manuel Pereira da Silva, 4200-393 Porto, Portugal* *(4) FI-TRACE group, Department of Chemistry, University of the Balearic Islands, 07071-Palma de Mallorca, Spain*

Poster Session EuSP-3	**Biological Samples I** ***Chairs: L. Reubsaet, E. Boyaci***
13:00 - 14:00	**Breakout Room EuSP-3**
Poster Session EuSP-4	**Biological Samples II** ***Chairs: S. Pedersen-Bjergaard, A. Martín-Esteban***
13:00 - 14:00	**Breakout Room EuSP-4**
Poster Session EuSP-5	**Environmental Analysis and New Technologies** ***Chairs: M. Miró, J. Hernández-Borges***
13:00 - 14:00	**Breakout Room EuSP-5**

GSAC2022 Tuesday, 15 March 2022

14:00 - 14:10 **Opening Session GSAC2022**

C. Cordero, *University of Turin, Italy*
L. Mondello, *University of Messina, Italy*
E. Psillakis, *Head of EuChemS-DAC Sample Preparation Study Group and Network, Technical University of Crete, Greece*

EuSP | GSAC Common Oral Session

Oral Session O-A **Green Sample Preparation I - Common Oral Session EuSP | GSAC**

Chairs: L. Mondello, C. Cordero

14:10 - 14:40 **PL-3. Evolution of Chemistry-From Green Chemistry to Sustainable Chemistry**
K.K. Kümmerer
Leuphana University Lüneburg Germany

14:40 - 15:00 **O-24. Natural Deep Eutectic Solvents: Achievements and Unresolved Issues**
L. Ramos[1], J. Bintanel-Cenis[1,2], B. Gómara[1]
(1) Dpt. Instrumental Analysis and Environmental Chemistry, IQOG-CSIC, Juan de la Cierva 3, Madrid, Spain
(2) PhD Program. Appl. Chem., Doctoral School, UAM, Cantoblanco, Madrid, Spain

15:00 - 15:20 **O-25. How to Design the Ideal Sample Preparation Method**
E. Rosenberg[1], N. Manousi[1,2], G.A. Zachairiadis[2], V. Samanidou[2], A. Kabir[3,4], K.G. Furton[3]
(1) Vienna University of Technology, Institute of Chemical Technologies and Analytics, Getreidemarkt 9/164, A-1060 Vienna, Austria
(2) Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, Thessaloniki 54124, Greece
(3) International Forensic Research Institute, Department of Chemistry and Biochemistry, Florida International University, Miami, FL, USA
(4) Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University, Dhaka-1207, Bangladesh

15:20 - 15:35 **Break**

Oral Session O-B	**Green Sample Preparation II - Common Oral Session GSAC | EuSP** ***Chairs: C. Bendicho, V. Pino***

15:35 - 15:55 **O-26. The Ten Principles of Green Sample Preparation**

E. Psillakis[1], Á. I. López-Lorente[2], F. Pena-Pereira[3], S. Pedersen-Bjergaard[4], S.A. Ozkan[5]
(1) School of Chemical and Environmental Engineering, Technical University of Crete, GR-73100, Chania, Crete, Greece
(2) Departamento de Química Analítica, Universidad de Córdoba, Campus de Rabanales, Edificio Marie Curie, E-14071, Córdoba, Spain
(3) Departamento de Química Analítica e alimentaria, Universidade de Vigo, Grupo QA2, Edificio CC Experimentais, Campus de Vigo, As Lagoas, Marcosende 36310 Vigo, Spain
(4) Department of Pharmacy, University of Oslo, O.O.Box 1068 Blindern, 0316, Oslo, Norway; University of Copenhagen, Universitetsparken 2, 2100 Copenhagen, Denmark
(5) Ankara University, Faculty of Pharmacy, Department of Analytical Chemistry, 06560, Ankara, Turkey

15:55 - 16:15 **O-27. Greenness and its Metrics in Sample Preparation**

M. Tobiszewski
Department of Analytical Chemistry, Faculty of Chemistry and EcoTech Center, Gdańsk University of Technology (GUT), 11/12 G. Narutowicza St., 80-233 Gdańsk, Poland

16:15 - 16:35 **O-28. Green and Sustainable Sample Preparation Approaches for Targeted and Omics Studies in the Natural Product Field**

C. Cagliero
Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino, I-10125 Torino, Italy

16:35 - 16:55 **O-29. Unraveling the Complex Composition of Produced Water by Specialized Extraction Methodologies**

E. Gionfriddo[1], R. V. Emmons[1], G. S. Shyam Sunder[1], T. Liden[2], K. A. Schug[2], J. R. Kirchhoff[1]
(1) Department of Chemistry and Biochemistry and Dr. Nina McClelland Laboratory for Water Chemistry and Environmental Analysis, The University of Toledo, Toledo, Ohio 43615, USA
(2) Department of Chemistry and Biochemistry and Collaborative Laboratories for Environmental Analysis and Remediation, The University of Texas at Arlington, Arlington, Texas 76019, USA

16:55 - 17:10 **O-30. Fully Automated and Multiplex Sample Analysis Via Coated Blade Spray-Tandem Mass Spectrometry**

G. Gomez-Rios, R. Micklitsch, S. Stevens, M. Lininger, T. Peters, T. Kane
Restek Corporation, 110 Benner Circle, Bellefonte, Pennsylvania, 16823, USA

17:10 - 17:20 **One-to-one meetings**

EuSP2022 Wednesday, 16 March 2022

Oral Session FOP-I — Flash Oral Presentations I

Chairs: R. Lucena, L. Vidal

09:00 - 09:10

FOP-1. Sustainable Blood and Tissue Microsampling for Biomarker Investigation in Animal Models of Amyotrophic Lateral Sclerosis

M. Protti[1], J. Rudge[2], L. Regazzoni[3], V. Valsecchi[4], C. Volpi[5], T. Vovk[6], L. Mercolini[1]

(1) Research Group of Pharmaco-Toxicological Analysis (PTA Lab), Department of Pharmacy and Biotechnology (FaBiT), Alma Mater Studiorum - University of Bologna, Via Belmeloro 6, 40126 Bologna, Italy
(2) Neoteryx LLC, 421 Amapola Ave, Torrance, 90501 CA, USA
(3) Department of Pharmaceutical Sciences, University of Milan, Via Mangiagalli 25, 20133 Milan, Italy
(4) Department of Neuroscience and Reproductive and Odontostomatological Sciences, University of Naples Federico II, Via Pansini 5, 80131 Naples, Italy
(5) Department of Experimental Medicine, University of Perugia, Via Gambuli 1, 06132, Perugia, Italy
(6) Faculty of Pharmacy, University of Ljubljana, Aškerčeva 7, 1000 Ljubljana, Slovenia

09:10 - 09:20

FOP-2. Rapid, Efficient and Selective Preconcentration of Metformin by Molecularly Imprinted Pipette Tip Solid Phase Extraction Adsorbent

C. Armutcu

Hacettepe University, Faculty of Science, Department of Chemistry, Ankara, Turkey

09:20 - 09:30

FOP-3. HiSorb Sorptive Extraction Device for the Determination of Salivary Short Chain Fatty Acids and Hydroxy Acids in Heart Failure Patients

T. Lomonaco, A. Lenzi, D. Biagini, S. Ghimenti, F. Di Francesco

Department of Chemistry and Industrial Chemistry, University of Pisa, Via G. Moruzzi 13, Pisa, Italy

09:30 - 09:40

FOP-4. Determination of Polar and Zwitterionic Methotrexate and its Metabolites in Human Plasma by Electromembrane Extraction in Conductive Vials Followed by LC-MS/MS

F. A. Hansen[1], A.O. Hay[1,2], R. Trones[1,2]

(1) Department of Pharmacy, University of Oslo, P.O. Box 1068 Blindern, 0316 Oslo, Norway
(2) Extraction Technologies Norway, Verkstedveien 29, 1424 Ski, Norway

09:40 - 09:50

FOP-5. Deep Eutectic Solvents in Direct Immersion Single Drop Microextraction: Application to Lab-In-Syringe Automated Determination of Antibiotics

S. Yıldırım[1,2], D.J. Cocovi-Solberg[3], B. Uslu[4], P. Solich[2], B. Horstkotte[2]

(1) Karadeniz Technical University, Faculty of Pharmacy, Department of Analytical Chemistry, Farabi Street, 61080 Trabzon, Turkey
(2) Charles University, Faculty of Pharmacy, Department of Analytical Chemistry, Akademika Heyrovského 1203, 50005 Hradec Králové, Czech Republic
(3) University of Natural Resources and Life Sciences, Vienna, Department of Chemistry, Institute of Analytical chemistry, Muthgasse 18, 1190 Vienna, Austria
(4) Ankara University, Faculty of Pharmacy, Department of Analytical Chemistry, Yenimahalle, Ankara, Turkey

09:50 - 10:00

FOP-6. Ultrafiltration-Based Extraction of Ibuprofen from Human Plasma Samples and HPLC Analysis

M. Nenni[1], Y. Senol[2], A. Dogan[2], M. Çelebier[2]

(1) Cukurova University, Faculty of Pharmacy, Department of Analytical Chemistry, Adana, Turkey
(2) Hacettepe University, Faculty of Pharmacy, Department of Analytical Chemistry, Ankara, Turkey

10:00 - 10:10 **FOP-7. Selective Adsorption of Plant Secondary Metabolites by Solid Sorbents**

S. Fiorito, S. Genovese, F. Epifano
Dipartimento di Farmacia, University "G. d'Annunzio" Chieti – Pescara, Via dei Vestini 31, Chieti Scalo (CH), Italy

10:10 - 10:20 **FOP-8. A Hierarchically Porous Composite Adsorbent for Miniaturized Extraction of Aromatic Environmental Pollutants**

P. Nurerk[1], S. Sillapawisut[1], O. Bunkoed[2], M. Llompart[3]
(1) Functional Materials and Nanotechnology Center of Excellence, School of Science, Walailak University, Nakhon Si Thammarat 80160, Thailand
(2) Center of Excellence for Innovation in Chemistry, Division of Physical Science, Faculty of Science, Prince of Songkla University, Hat Yai, Songkhla 90110, Thailand
(3) CRETUS Institute, Department of Analytical Chemistry, Nutrition and Food Science, Faculty of Chemistry, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain

10:20 - 10:30 **Break**

Oral Session FOP-II **Flash Oral Presentations II**

Chairs: A. Martín-Esteban, J. Hernández-Borges

10:30 - 10:40 **FOP-9. Detection of Trace Emerging Contaminants in Seawater by Polar Organic Chemical Integrative Samplers: Optimization of the Sampler Processing to Enhance the Accuracy of the LC-MS/MS Analysis**

B. Benedetti, M. Baglietto, H. MacKeown, C. Scapuzzi, M. Di Carro, E. Magi
Department of Chemistry and Industrial Chemistry, University of Genoa, Via Dodecaneso 31, Genoa

10:40 - 10:50 **FOP-10. Mediterranean Mussel (Mytilus galloprovincialis) as Bioindicator of Endocrine Disrupting Chemicals Contamination. Application of Ultra-High Performance Liquid Chromatography-Tandem Mass Spectrometry**

L. Martín-Pozo[1], L. García-Fernández[1], M.C. Gómez-Regalado[1], A. Navalón[1], F. Hidalgo[2], A. Zafra-Gómez[1,3]
(1) Department of Analytical Chemistry, University of Granada, E-18071 Granada, Spain
(2) Department of Zoology, University of Granada, E-18071 Granada, Spain
(3) Instituto de Investigación Biosanitaria, Ibs.Granada, E-18016 Granada, Spain

10:50 - 11:00 **FOP-11. Polymer Nanofibers as Versatile Sorbents for Solid Phase Extraction**

I. Lhotská[1], M. Háková[1], S. Zatrochová[1], J. Erben[2], J. Chvojka[2], D. Šatínský[1]
(1) Charles University, Faculty of Pharmacy in Hradec Králové, Heyrovského 1203/8, 50005 Hradec Králové, Czech Republic
(2) Technical University of Liberec, Faculty of Textile Engineering, Studentská 1402/2, 46001 Liberec, Czech Republic

11:00 - 11:10 **FOP-12. Optimization of Microwave-Assisted Extraction and Ultra-High-Performance Liquid Chromatography tandem Mass Spectrometry (MAE-UHPLC-MS/MS) for the Analysis of Steroid Hormones in Wastewater Treatment Solid Samples**

R. Guedes-Alonso[1], J. Domínguez-Pérez[2], Z. Sosa-Ferrera[1], J. J. Santana-Rodríguez[1]
(1) Instituto de Estudios Ambientales y Recursos Naturales, Universidad de Las Palmas de Gran Canaria. Campus Universitario de Tafira, s/n. 35017 Las Palmas de Gran Canaria. Las Palmas, Spain
(2) Escuela de Ingenierías Industriales y Civiles, Universidad de Las Palmas de Gran Canaria. Campus Universitario de Tafira, s/n. 35017. Las Palmas de Gran Canaria. Las Palmas, Spain

11:10 - 11:20 **FOP-13. Carbon-Based Stir bar for Sorptive Extraction in Water Treatment**

M. Pedrosa, A.M.T. Silva, A.R.L. Ribeiro
ALiCE – Associate Laboratory in Chemical Engineering, Faculdade de Engenharia, Universidade do Porto, Rua Dr. Roberto Frias, 4200-465 Porto, Portugal
(2) Charles University, Faculty of Pharmacy, Department of Analytical Chemistry, Akademika Heyrovského 1203, 50005 Hradec Králové, Czech Republic

11:20 - 11:30 **FOP-14. Analysis of Xenobiotic Contaminants in Probiotic Beverages and Bottled Water Based on a Natural Hydrophobic Deep Eutectic Solvent**

A.V. Herrera-Herrera[1,2], Á. Santana-Mayor[1], A. Conde-Díaz[1], B. Socas-Rodríguez[1], M.Á. Rodríguez-Delgado[1]

(1) Departamento de Química, Facultad de Ciencias, Universidad de La Laguna (ULL), Avda. Astrofísico Fco. Sánchez, s/n, San Cristóbal de La Laguna, 38206, España

(2) Instituto Universitario de Bio-Orgánica Antonio González, Universidad de La Laguna (ULL), Avda. Astrofísico Fco. Sánchez, 2, San Cristóbal de La Laguna, 38206, España

11:30 - 11:40 **FOP-15. New Polymeric Phases for Thin-Film Liquid Phase Microextraction (TF-LPME) of Organic Pollutants**

F. Merlo[1], A. Profumo[1], C. Fontàs[2], E. Anticó[2]

(1) Department of Chemistry, University of Pavia, via Taramelli 12, 27100 Pavia, Italy

(2) Department of Chemistry, University of Girona, Campus de Montilivi, 17003 Girona, Spain

11:40 – 11:50 **FOP-16. Development of an Efficient Sample Preparation Workflow for the Determination Multi-Class Pesticides in Complex Matrices: Fatty Matrices**

R. Shinde, M. Dhanshetty, A. Pardeshi, K. Banerjee

National Reference Laboratory, ICAR-National Research Centre for Grapes, Pune 412 307, Maharashtra, India

11:50 - 12:00 **FOP-17. The Many Virtues of Automated Sample Preparation**

C. Liscio

Anatune Ltd, Unit 4 Wellbrook Court CB3 0NA, Girton, Cambridgeshire, UK

EuSP | GSAC Common Session

Satellite Event – Common EuSP | GSAC

Chair: E. Psillakis

12:00 - 13:00 **AGREEprep walkthrough for greenness assessment of sample preparation step**

Presenters: M. Tobiszewski, F. Pena-Pereira

Round Table Discussion

13:00 - 14:00 **Greenness of Official Standard Sample Preparation Methods (IUPAC Project)**

Moderators: C. Bicchi and F. David

Panelists: F. Krokos, Z. Mester, F.J. Pena Pereira, E. Psillakis, B. Raccary and M.A. Segundo

Oral Session Y-C

Young Scientists Oral Presentations (Green Sample Preparation)

Chairs: V. Pino, V. Samanidou

14:00 - 14:10

YS-13. Green Sample Preparation for Quality Control of Cosmetic Products

V. Vállez-Gomis, C. Azorín, G. Peris-Pastor, J.L. Benedé, A. Chisvert, A. Salvador
GICAPC Research Group, Department of Analytical Chemistry, University of Valencia, Doctor Moliner St. 50, 46100 Burjassot, Valencia, Spain

14:10 - 14:20

YS-14. Life Cycle Assessment of Sample Preparation in Analytical Chemistry: A Case Study on SBSE and SPE techniques

B. Raccary[1,2], P. Loubet[1], C. Peres[3], G. Sonnemann[1]
(1) Univ. Bordeaux, CNRS, Bordeaux INP, ISN, UMR 5255, F-33400, Talence, France
(2) Analytiss, 89 Rue des Poissonniers, 76018, Paris, France
(3) Le Labo Durable, 89 Rue des Poissonniers, 75018, Paris, France

14:20 - 14:30

YS-15. Development of a Dispersive Solid-Liquid Microextraction Method Using Natural Eutectic Mixtures for a Greener Extraction of Phytochemicals from Cannabis sp. Samples

G. Mastellone[1], G. Bechis[2], A. Marengo[2], B. Sgorbini[2], P. Rubiolo[2], C. Cagliero[2]
(1) Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino, I-10125 Torino, Italy
(2) Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino, I-10125 Torino, Italy

14:30 - 14:40

YS-16. Assessment of Phthalic Acid Ester Residues in Kombuchas Using a Natural Hydrophobic Deep Eutectic Solvent

R. Rodríguez-Ramos[1], A.V. Herrera-Herrera[1,2], A. Conde-Díaz[1], B. Socas-Rodríguez[1], M.Á. Rodríguez-Delgado[1]
(1) Departamento de Química, Facultad de Ciencias, Universidad de La Laguna (ULL), Avda. Astrofísico Fco. Sánchez, s/n, San Cristóbal de La Laguna, 38206, España
(2) Instituto Universitario de Bio-Orgánica Antonio González, Universidad de La Laguna (ULL), Avda. Astrofísico Fco. Sánchez, 2, San Cristóbal de La Laguna, 38206, España

14:40 - 14:50

YS-17. Deep Eutectic Solvent-Based Extraction and Nano-Liquid Chromatography. A Green Approach for Alkylphenols Analysis

Á. Santana-Mayor[1], G. D'Orazio[2], A.V. Herrera-Herrera[1,3], B. Socas-Rodríguez[1], M.Á. Rodríguez-Delgado[1]
(1) Departamento de Química, Facultad de Ciencias, Universidad de La Laguna (ULL), Avda Astrofísico Fco Sánchez, s/n, San Cristóbal de La Laguna, 38206, Spain
(2) Istituto per i Sistemi Biologici, Consiglio Nazionale delle Ricerche, Via Salaria km 29,300, 00015 Monterotondo (RM), Italy
(3) Instituto Universitario de Bio-Orgánica Antonio González, Universidad de La Laguna (ULL), Avda. Astrofísico Fco. Sánchez, 2, San Cristóbal de La Laguna, 38206, Spain

14:50 - 15:00

YS-18. Development and Application of a New Sustainable Polyaniline-Based Magnetic Micro Dispersive Solid Phase Extraction Method for the Determination of Plastic Migrants in Jellies

A. Conde-Díaz[1], R. Rodríguez-Ramos[1], A.V. Herrera-Herrera[2], B. Socas-Rodríguez[1] y M.A. Rodríguez Delgado[1]
(1) Departamento de Química, Unidad Departamental de Química Analítica, Facultad de Ciencias, Universidad de La Laguna (ULL). Avda. Astrofísico Fco. Sánchez, s/nº. 38206 San Cristóbal de La Laguna, España
(2) Instituto Universitario de Bio-Orgánica Antonio González, Universidad de La Laguna (ULL), Avda. Astrofísico Fco. Sánchez, 2, San Cristóbal de La Laguna, 38206, España

15:00 - 15:10

YS-19. Potential Applicability of Natural Deep Eutectic Solvents as Dispersive Solvents in a DLLME-SFO Approach

L. Carbonell-Rozas[1], R. Canales[2], F.J. Lara[1], A.M. García-Campaña[1], M.F. Silva[2]
(1) Department of Analytical Chemistry, Faculty of Sciences, University of Granada, Spain
(2) Institute of Agricultural Biology of Mendoza (IBAM-CONICET), Faculty of Agricultural Sciences, University of Cuyo, Argentina

15:10 - 15:20 **FOP-18. Modern Sample Preparation Techniques, Sample Preparation Summer School**

H. Sklenarova, B. Horstkotte, P. Chocholous, I. Lhotska, V. Pilarova, P. Solich
Faculty of Pharmacy, Charles University, Akademika Heyrovskeho 1203, Hradec Kralove, Czech Republic

15:20 - 15:35 **Break**

EuSP | GSAC Common Session

Oral Session O-C

Green Chemistry - Common Session GSAC | EuSP

Division of Green and Sustainable Chemistry EuChemS-DGSC

Chairs: A. Aguiar-Ricardo, S. Ražić

Details on the programme of this session can be found at GSAC2022

EuSP | GSAC Common Session

17:20 **EuSP | GSAC Closing Ceremony and Awards**

GSAC2022 Wednesday, 16 March 2022

Oral Session I — Oral Presentations I

Chairs: L. Mondello, C. Cordero

09:00 - 09:25

O-31. Speed limits of SFC separations at ultra-high pressures

G. Desmet, K. Broeckhoven
Vrije Universiteit Brussel, Pleinlaan 2, B-1050 Brussels, Belgium

09:25 - 09:50

O-32. What is the Potential of Modern SFC: Performance, Greenness, MS Coupling and Comparison with LC?

D. Guillarme[1,2], J.L. Veuthey[1,2]
(1) Section des Sciences Pharmaceutiques, Université de Genève, CMU - Rue Michel-Servet, 1, 1206 Genève, Suisse
(2) Institut des Sciences Pharmaceutiques de Suisse Occidentale (ISPSO), Université de Genève, CMU - Rue Michel-Servet, 1, 1206 Genève, Suisse

09:50 - 10:15

O-33. Green in Analytical Chemistry: A Necessary Evolution

C. Pérès, B. Raccary
The Green Analytical Project, 29 rue du midi, 43100 Brioude, France

10:15 - 10:30 **Break**

Oral Session II — Oral Presentations II

Chairs: E. Psillakis, C. Bicchi

10:30 - 11:00

PL-4. Optimization and Green Metrics Analysis on the Microplastics Determination in Water and Sediments

D. Barcelo[1,2], Y. Picó[3]
(1) Department of Environmental Chemistry, IDAEA-CSIC, Jordi Girona 18-26, 08034 Barcelona, Spain
(2) Catalan Institute for Water Research, ICRA – CERCA, Technological Park of the University of Girona, Emili Grahit 101, 17003 Girona, Spain
(3) Environmental and Food Safety Research Group of the University of Valencia (SAMA-UV), Desertification Research Centre (CIDE), CSIC-GV-UV, Moncada Naquera Road Km 4.3, 46113 Moncada, Valencia, Spain

11:00 - 11:25

O-34. Greening Sample Preparation

M. de la Guardia, S. Armenta, F.A. Esteve-Turrillas, S. Garrigues
Department of Analytical Chemistry, University of Valencia, "Jeroni Muñoz" research building, 50th Dr. Moliner st. 46100, Burjassot (Valencia) Spain

11:25 - 11:45

O-35. Green and Sustainable Method for the Analysis of Phthalate Esters in Vegetable Oils by Means of GC×GC-QqQ MS

M. Zoccali[1], A. Arena[2], P.Q. Tranchida[2], L. Mondello[2,3,4]
(1) Department of Mathematical and Computer Science, Physical Sciences and Earth Sciences, University of Messina, Messina, Italy
(2) Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
(3) Chromaleont s.r.l., c/o Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
(4) Department of Sciences and Technologies for Human and Environment, University Campus Bio-Medico of Rome, Rome, Italy

11:45 - 12:00 **O-36. Fabric Phase Sorptive Extraction in TDM and Pharmacotoxicological Studies Using Unconventional Biological Matrices**

M. Locatelli[1], A. Kabir[2], H.I. Ulusoy[3], G.M. Merone[4], F. Savini[4], C. D'Ovidio[5], M. Bonelli[5], E. Rosato[1], U. De Grazia[6], K.G. Furton[2], A. Tartaglia[1]

(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) Pharmatoxicology Laboratory-Hospital "Santo Spirito", Via Fonte Romana 8, Pescara 65124, Italy
(5) Department of Medicine and Aging Sciences, Section of Legal Medicine, University of Chieti–Pescara "G. d'Annunzio", Chieti 66100, Italy
(6) Fondazione IRCCS Istituto Neurologico Carlo Besta, Laboratory of Neurological Biochemistry and Neuropharmacology, Via Celoria 11, Milan 20133, Italy

EuSP | GSAC — Common Session

Satellite Event – Common EuSP | GSAC

Chair: E. Psillakis

12:00 - 13:00 **AGREEprep walkthrough for greenness assessment of sample preparation step**

Presenters: M. Tobiszewski, F. Pena-Pereira

Poster Session GSAC-1

Flash Poster Presentations: Food & Environmental applications

Chairs: T. Schmidt, C. Cordero

13:00 - 14:00 **Breakout Room GSAC-1**

Poster Session GSAC-2

Flash Poster Presentations: Green & Sustainable Methods

Chairs: L. Mondello, D. Guillarme

13:00 - 14:00 **Breakout Room GSAC-2**

Poster Session GSAC-3	**Flash Poster Presentations: Sensors** ***Chairs: L. Vidal, M. Zoccali***
13:00 - 14:00	**Breakout Room GSAC-3**
Poster Session GSAC-4	**Poster Session: Miscellaneous** ***Chair: C. Cagliero***
13:00 - 14:00	**Breakout Room GSAC-4**

Oral Session III	**Oral Presentations III** ***Chairs: G. Purcaro, M. Zoccali***
14:00 - 14:25	**O-37. Moving Forward to Green Foodomics** **M. Herrero,** R. Gallego, J.D. Sánchez-Martínez, A. Cifuentes, E. Ibáñez *Institute of Food Science Research (CIAL, CSIC-UAM), Nicolas Cabrera 9, 28049 – Madrid (Spain)*
14:25 - 14:40	**O-38. Gaseous Mercury Monitoring in Ambient Air Using Unassisted Diffusion Strategies: A Field Intercomparison of Three Passive Air Sampler** **A. Naccarato[1]**, A. Tassone[1], M. Martino[1], S. Moretti[1], N. Pirrone[1], M. Nerentorp[2], J. Munthe[2], I. Wängberg[2], G.W. Stupple[3], C.P.J. Mitchell[4], A.R. Martin[4], A. Steffen[3], D. Babi[5], E.M. Prestbo[5], F. Sprovieri[1], F. Wania[4] *(1) CNR-Institute of Atmospheric Pollution Research, Division of Rende, UNICAL-Polifunzionale, I-87036 Arcavacata di Rende, (CS), Italy* *(2) IVL Swedish Environmental Research Institute, Gothenburg 41133, Sweden* *(3) Air Quality Processes Research Section, Environment and Climate Change Canada, Toronto, M3H 5T4, Canada* *(4) Department of Physical and Environmental Sciences, University of Toronto Scarborough, Toronto, M1C 1A4, Canada* *(5) Tekran Instruments Corporation, 330 Nantucket Boulevard, Toronto, Ontario, M1P 2P4, Canada*
14:40 - 14:55	**O-39. Application of Green Methodology to Pharmaceutical Analysis Using Eco-Friendly Ethanol-Water Mobile Phases** **A. Dogan,** C.C. Eylem, N.E.B. Akduman *Hacettepe University, Faculty of Pharmacy, Department of Analytical Chemistry, 06100, Sihhiye, Ankara,Turkey*
14:55 - 15:10	**O-40. A New Ambient Approach for Acquiring Electron Ionization Mass Spectra in Real-Time with a Low Environmental Impact** **A. Arigò[1],** G. Famiglini[1], P. Palma[1,2], A. Cappiello[1,2] *(1) University of Urbino Carlo Bo, Via Aurelio Saffi, 2 – 61029 Urbino PU – IT, Italy* *(2) Vancouver Island University, 900 Fifth St, Nanaimo, BC V9R 5S5, Canada*

15:10 - 15:25 **O-41. Evaluating Novel Multi-Phase High-Capacity Sorptive Extraction (HiSorbTM) Coupled with Gas Chromatography–Mass Spectrometry (GC–MS) for Flavour Profiling Hard Seltzers**

R. Szafnauer, L. Hearn
Markes International Ltd, 1000B Central Park Western Avenue, Bridgend, CF31 3RT, UK

15:25 - 15:35 **Break**

EuSP | GSAC Common Session

Oral Session O-C

Green Chemistry - Common Session GSAC | EuSP

Division of Green and Sustainable Chemistry EuChemS-DGSC

Chairs: A. Aguiar-Ricardo, S. Ražić

15:35 - 16:05 **PL-5. Processing of homogeneous nanostructured materials using compressed fluids**

N. Ventosa
Institut de Ciència de Materials de Barcelona (CSIC)-CIBER-BBN, Spain

16:05 - 16:30 **O-42. Raman Analysis of Mixtures in Micro-Capillaries**

A. Braeuer[1,2], M.H.H. Fechter[1,2], M. Willger[1], F. Spiske[1], M.T. Gebrekidan[1]
(1) Technische Universität Bergakademie Freiberg, Institute for Thermal, Environmental and Resources' Process Engineering (ITUN), Leipziger Strasse 28, 09599 Freiberg, Germany
(2) Technische Universität Bergakademie Freiberg, Center for Efficient High Temperature Processes and Materials Conversion (ZeHS), Winklerstraße 5, 09599 Freiberg, Germany

16:30 - 16:55 **O-43. Exploring the Combination of Supercritical CO2 and Molecular Imprinting: Challenges and Applications**

T. Casimiro
LAQV-REQUIMTE, Department of Chemistry, NOVA School of Science and Technology, 2829-516 Caparica, Portugal

16:55 - 17:20 **O-44. Exploring Sub- and Supercritical Fluids as Green Solvents in Analytical-Scale Extractions**

C. Turner[1], T. Freedom Gondo[1], F. Nermark[1], V. Pilarová[1,2], M. Norberg[1], D. Papp[1], M. Sandahl[1]
(1) Lund University, Department of Chemistry, Centre for Analysis and Synthesis, P.O. Box 124, SE-22100 Lund, Sweden
(2) Charles University, Department of Analytical Chemistry, Faculty of Pharmacy in Hradec Králové, Czech Republic

EuSP | GSAC Common Session

17:20 **EuSP | GSAC Closing Ceremony and Awards**

EuSP2022 - Poster Sessions

Two parallel poster sessions (**EuSP-1** and **EuSP-2**) are scheduled on Monday, 14 March (CET 13:10 - 14:00) and another three parallel poster sessions (**EuSP-3, EuSP-4** and **EuSP-5**) on Tuesday, 15 March (CET 13:00 - 14:00).

Monday, 14 March 2022
13:10 - 14:00

EuSP-1 Poster Session EuSP-1
Green Sample Preparation

Chairs: L. Ramos, M. Llompart

P1. Matrix Solid-Phase Dispersion as a Green Alternative for the Extraction of Wet Paste Haematococcus Pluvialis Aplanospora Using Solvents Generally Recognised as Safe

A. Castillo[1,2], M., Lores[2], C. Garcia-Jares[1,2]
(1) CRETUS, Department of Analytical Chemistry, Nutrition and Bromatology, Universidade de Santiago de Compostela E-15782, Santiago de Compostela, Spain
(2) Laboratory of Research and Development of Analytical Solutions (LIDSA), Department of Analytical Chemistry, Nutrition and Bromatology, Universidade de Santiago de Compostela E-15782, Santiago de Compostela, Spain

P2. Searching for Phytochemicals in Galician Crops by Ultrasound Assisted Extraction with Green Solvents

L. Rubio[1,2], M.C. Valiño[3], M.J. Expósito[3], M. Lores[2], C. Garcia-Jares[1,2]
(1) CRETUS, Department of Analytical Chemistry, Nutrition and Food Science, Universidade de Santiago de Compostela, E-15782 Santiago de Compostela, Spain, laura.rubio.lareu@usc.es
(2) Laboratory of Research and Development of Analytical Solutions (LIDSA), Department of Analytical Chemistry, Nutrition and Food Science, Universidade de Santiago de Compostela, E-15782 Santiago de Compostela, Spain
(3) Milhulloa S.Coop.Galega, E-27204 Palas de Rei, Lugo, Spain

P3. Multivariate Optimization of Ultrasonic and Infrared Assisted Extraction for Multielement Determination in Animal Feed

F. Cora Jofre[1,2], M. Savio[1,2]
(1) Instituto de Ciencias de la Tierra y Ambientales de La Pampa (INCITAP- CONICET-UNLPam), fcorajofre@exactas.unlpam.edu.ar
(2) Departamento de Química, Facultad de Ciencias Exactas y Naturales, Universidad Nacional de La Pampa (UNLPam)

P4. NADES for Sample Treatment of Immunoglobulins. Compatibility with Capillary Gel Electrophoresis Analysis

A. Puerta, P. Tejedor-Matellanes, M. de Frutos
Institute of Organic Chemistry (IQOG-CSIC), Juan de la Cierva 3. 28006 Madrid. Spain, angeldelapuerta@iqog.csic.es

P5. Infrared Radiation Assisted Digestion as a Greener Simple Method for Pork Meat Multielemental Analysis by MIP OES

M. Savio[1,2], F. Cora Jofre[1,2]
(1) Instituto de Ciencias de la Tierra y Ambientales de La Pampa (INCITAP- CONICET-UNLPam), msavio@exactas.ulpam.edu.ar
(2) Departamento de Química, Facultad de Ciencias Exactas y Naturales, Universidad Nacional de La Pampa (UNLPam)

P6. Selective Fractionation of Bioactive Carbohydrates Using Natural Deep Eutectic Solvents (NADES)

I. Jiménez Amezcua[1,2], M.I. López Martínez[1], S. Rivas Blas[1], A.I. Ruiz Matute[1], M.L. Sanz[1]
(1) Instituto de Química Orgánica General (CSIC) - Juan de la Cierva 3 - 28006 - Madrid - Spain
(2) Pharmactive Biotech Products, S.L. – Faraday 7, 28049 Madrid, Spain

P7. Extraction of Emerging Contaminants from Wastewater and Urine by Dispersive Liquid-Liquid Microextraction with Solidification of the Floating Organic Droplet using Deep Eutectic Mixtures

C. Ortega-Zamora[1,2], J. González-Sálamo[1,2,3], 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/n. 38206 San Cristóbal de La Laguna, Spain, cortegaz@ull.edu.es
(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
(3) Sapienza University, Department of Chemistry, P.le Aldo Moro, 5. 00185 Rome, Italy

P8. Silymarin extraction using Gas Expanded Liquids

N. Abderrezag[1,2], W. Louaer[1], A.H. Meniai[1], J.A. Mendiola[2]
(1) Laboratory of Environmental Process Engineering, Faculty of Process Engineering, University Salah Boubnider–Constantine 3, 25000 Constantine, Algeria. (nourlhouda.abderrazag@univ-constantine3.dz)
(2) Foodomics Laboratory, Bioactivity and Food Analysis Department, Institute of Food Science Research CIAL (UAM-CSIC), Nicolás Cabrera 9, 28049 Madrid, Spain

P9. Antioxidant and Antibacterial Activity of Polyphenol Rich Grape Skin Extracts

N. Dabetic, V. Todorovic, D. Bozic, J.A. Stankovic, S. Sobajic
Faculty of Pharmacy, University of Belgrade, Vojvode Stepe 450, 11221 Belgrade, nevenad@pharmacy.bg.ac.rs

P10. Pre-Cleaned Wooden Toothpicks as Natural Sorbents for the Determination of Tricyclic Antidepressant Drugs in Saliva by Mass Spectrometry

J. Millán-Santiago, R. Lucena, S. Cárdenas
Affordable and Sustainable Sample Preparation (AS2P) Research Group, 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, *q52misaj@uco.es*

P11. Subcritical Ethanol for Accelerated Solvent Extraction of Petroleum Biomarkers in Oil Source Rocks

B.J. Pollo[1], P.T.V. Rosa[1], F. Augusto[1,2]
(1)Institute of Chemistry, University of Campinas, Campinas, SP 13083-970, Brazil, *pollobreno@gmail.com*
(2) National Institute of Science and Technology in Bioanalysis (INCTBio)

P12. Optimization of a Solid Phase Extraction Method Using Sugarcane Bagasse Based Sorbets for the Determination of Pesticides in Water

R. Sayed, M. Wageed, S. Alsherbeny, S. Safty, M. Soliman
Agricultual Research Center, Central Laboratory of Residue Analysis of Pesticides and Heavy Metals in Foods (QCAP Egypt), 7-Nadi Elsaid St., Dokki, Giza, Egypt, ramadanalahmady5@gmail.com

P13. Simultaneous Extraction of Betulin and Betulinic Acid from Birch (Betula sp.) Bark Using Hydrophobic Deep Eutectic Solvents

I. Luque-Jurado[1], S. Rivas[1], M.L. Sanz[1], R. Lebrón-Aguilar[2], J.E. Quintanilla-López[2], A.C. Soria[1]
(1) Instituto de Química Orgánica General (IQOG-CSIC). Juan de la Cierva, 3 28006, Madrid, Spain, iluque@iqog.csic.es
(2) Instituto de Química-Física "Rocasolano" (IQFR-CSIC). Serrano, 119 28006, Madrid, Spain

P14. Green Methods for the Extraction of Hidroxytyrosol and Luteolin from Olive Oil By-Products and Bioacessibility Evaluation

M.N. Mayer, M.A. Fernandez, M. Espino, M.F. Silva
Instituto de Biología Agrícola de Mendoza (IBAM-CONICET), Facultad de Ciencias Agrarias, Universidad Nacional de Cuyo, 5505 Mendoza, Argentina, meyermorgana@gmail.com

P15. Vacuum-Assisted Headspace SPME-Arrow: Theoretical Formulation and Method Optimization for the Extraction of Polycyclic Aromatic Hydrocarbons from Water Samples

I. Kandylioti, A. Pateraki, E. Psillakis
Laboratory of Aquatic Chemistry, School of Environmental Engineering, Technical University of Crete, Polytechneioupolis, GR-73100 Chania, Greece, ikandylioti@isc.tuc.gr

P16. Surface Activity of Imidazolium Based Ionic Liquids

M. Wojcieszak, A. Skrzypczak, K. Materna

Poznan University of Technology, 60-965 Poznan Poland, marta.d.wojcieszak@doctorate.put.poznan.pl

P17. Vacuum Assisted Headspace Solid-Phase Microextraction for the Simultaneous, Reliable and Sustainable Characterization of the Terpenoid and Cannabinoid Fractions of Hemp Inflorescences

F. Capetti, P. Rubiolo, G. Mastellone, A. Marengo, B. Sgorbini, C. Cagliero

Dipartimento di Scienza e Tecnologia del Farmaco, Università di Torino, Via P. Giuria 9, 10125 Turin, Italy, francesca.capetti@unito.it

P18. Production Water Analysis by Combining Electrospray on Paper (EPS) and Laser-Induced Breakdown Spectroscopy (LIBS) techniques

C. Carreño, R. Cabanzo, E. Mejia-Ospino

Laboratorio de Espectroscopía Atómica y Molecular (LEAM), Universidad Industrial de Santander, Bucaramanga, Colombia, albeiroles@gmail.com

P19. Automated µSPE Clean-Up of Polycyclic Aromatic Hydrocarbons from Sunflower Oil for GC-MS Analysis

H.J. Hübschmann[1], P. Eyring[2], T. Preiswerk[3], H.L. Frandsen[2], L. Duedahl-Olesen[2]

(1) CTC Analytics Asia Pte. Ltd., The Gemini #0403B, Science Park II, 41 Science Park Road, Singapore 117610, Singapore, hjhuebschmann@ctc.ch
(2) Danish Technical University, Anker Engelunds Vej 1, 2800 Kgs. Lyngby, Denmark
(3) CTC Analytics AG, Industriestrasse 20, 4222 Zwingen, Switzerland

Monday, 14 March 2022
13:10 - 14:00

EuSP-2 Poster Session EuSP-2
Food Samples

Chairs: G. Purcaro, C. Cagliero

P20. Supported Liquid Membrane-Protected Molecularly Imprinted Micro-Solid Phase Extraction of Sulfonamides in Honey

M. Díaz-Álvarez, A. Martín-Esteban

Departamento de Medio Ambiente y Agronomía. INIA-CSIC. Carretera de A Coruña km. 7. 28040 Madrid. Spain, mdalvarez@inia.es

P21. Multiresidue Analysis of Emerging Contaminants in Cereals

R.A. Pérez, J.L. Tadeo, B. Albero

Departamento de Medio Ambiente y Agronomía, Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA-CSIC), Ctra. de la Coruña, Km. 7, 28040 Madrid, Spain, perez.rosana@inia.es

P22. Selective Separation of Phenolic Compounds and Sugars by Liquid Extraction with Sustainable Solvents

B. Sáenz de Miera, R. Cañadas, I. Díaz, M. Rodríguez, M. González-Miquel, E.J. González

Dpto. Ingeniería Química Industrial y del Medio Ambiente, ETSI Industriales, Universidad Politécnica de Madrid, C/ José Gutiérrez Abascal 2, Madrid, 28006, Spain. blanca.saenz@upm.es

P23. Development of a CPME-HPLC-UV-Vis Method for the Determination of Bisphenol- A and Monomers Released from Dental Resins in Beverages and Refreshments

M. Vladitsi[1], N.P. Kalogiouri[1], P. Mourouzis[2], A. Kabir[3], K. Furton[3], V.F. Samanidou[1]

(1) Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, GR-54124, Thessaloniki, Greece
(2) Laboratory of Operative Dentistry, Department of Dentistry, Aristotle University of Thessaloniki, GR-54124, Thessaloniki, Greece
(3) Department of Pharmacy and Biochemistry, Florida International University, Miami, FL, USA

P24. Development of an FPSE-HPLC-UV Method for the Determination of Monomers Released from Dental Resins in Alcoholic Beverages

C. Nikolaou[1], N.P. Kalogiouri[1], P. Mourouzis[2], A. Kabir[3], K. Furton[3], V.F. Samanidou[1]
(1) Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece, charanik@outlook.com
(2) Laboratory of Operative Dentistry, Department of Dentistry, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece
(3) Department of Pharmacy and Biochemistry, Florida International University, Miami, FL, USA

P25. SPE or DLLME as Extraction Procedure for the GC Determination of Phthalates Residues Released in Hot Beverages

P. Avino, I. Notardonato, S. Passarella, A. Iannone, C. Di Fiore, M.V. Russo
Department of Agriculture, Environmental and Food Sciences, University of Molise, Via De Sanctis, I-86100 Campobasso, Italy,

P26. The Contribution of Varietal Thiols in the Diverse Aroma of Italian Monovarietal White Wines

M. Piergiovanni[1], S. Carlin[2], D. Perenzoni[2], U. Vrhovsek[2], E. Pittari[3], P. Piombino[3], M. Ugliano[4], F. Mattivi[1,2]
(1) Centre Agriculture Food Environment (C3A), University of Trento, San Michele all'Adige, Italy, m.piergiovanni@unitn.it
(2) Department of Food Quality and Nutrition, Research and Innovation Centre, Fondazione Edmund Mach, San Michele all'Adige, Italy
(3) Department of Agricultural Sciences, Division of Vine and Wine Sciences, University of Napoli Federico II, Avellino, Italy
(4) Department of Biotechnology, University of Verona, Verona, Italy

P27. A Rapid CPME-HPLC-DAD Method for the Determination of Coumarin in Bakery Products and the Guarantee of Quality and Safety

N.P. Kalogiouri[1], N. Ampatzi[1], A. Kabir[2,3], K. Furton[3], V.F. Samanidou[1]
(1) Laboratory of Analytical Chemistry, Department of Chemistry, Aristotle University of Thessaloniki, GR-54124 Thessaloniki, Greece,
(2) Department of Pharmacy, Faculty of Allied Health Science, Daffodil International University, Dhaka-1207, Bangladesh
(3) Department of Pharmacy and Biochemistry, Florida International University, Miami, FL, USA

P28. Enhanced Extraction of Volatiles from Greek Thyme Honey Samples Using Vacuum-Assisted Headspace Solid Phase Microextraction

A. Pateraki, M.A. Koutsospyrou, E. Psillakis
Laboratory of Aquatic Chemistry, School of Chemical and Environmental Engineering, Technical University of Crete, Chania, Greece

P29. Solid Phase Extraction-Based on Smart Produced Molecularly Imprinted Polymers for Contaminant Detection in Foods

D. Elfadil[1,2], S. Palmieri[1], F. Silveri[1], F. Della Pelle[1], M. Del Carlo[1], M. Sergi[1], A. Amine[1], D. Compagnone[1]
(1) Faculty of Bioscience and Technology for Food, Agriculture and Environment, University of Teramo, via Renato Balzarini 1, 64100 Teramo, Italy, delfadil@unite.it
(2) Laboratory of Process Engineering and Environment, Faculty of Sciences and Techniques, Hassan II University of Casablanca, Mohammedia, Morocco

P30. HS-HCC Techniques in Combination with Multi Cumulative Trapping and GC×GC-qMS Followed by Machine Learning to Explore the Impact of Packaging on Coffee Brew Aroma

D. Eggermont, S. Mascrez, G. Purcaro
Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium

P31. A Rapid Single Step Microwave-Assisted Extraction and Derivatization Method for the Analysis of Fatty Acid in Food by GC×GC-FID

S. Mascrez, A. Fina, G. Purcaro
Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium, steven.mascrez@uliege.be

P32. Optimization of a Headspace Solid-Phase Microextraction and Gas Chromatography Mass Spectrometry method for profiling volatiles in tropical fruits

M. Saura-Cayuela[1], M.J. Trujillo-Rodríguez[1,2], M.J. Grajal-Martín[3], A. Peña[3], J.H. Ayala[1], V. Pino[1,2]
(1) Laboratorio de Materiales para Análisis Químico (MAT4LL), Departamento de Química, Unidad Departamental de Química Analítica, Universidad de La Laguna (ULL), 38206 Tenerife, Spain, alu0101061061@ull.edu.es
(2) Unidad de Investigación de Bioanalítica y Medioambiente, Instituto Universitario de Enfermedades Tropicales y Salud Pública de Canarias, Universidad de La Laguna (ULL), La Laguna, Tenerife, 38206, Spain
(3) Instituto Canario de Investigaciones Agrarias (ICIA), San Cristóbal de La Laguna, Tenerife, 38297, Spain

P33. Development of an Extraction Process to Obtain Flavonoid-Rich Extract from Bergamot Natural Juice

Y. Oulad El Majdoub[1], M. Russo[1], I. L. Bonaccorsi[1], P. Dugo[1,2], L. Mondello[1,2,3]
(1) Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy, youladelmajdoub@unime.it
(2) Chromaleont s.r.l., c/o Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
(3) Department of Sciences and Technologies for Human and Environment, University Campus Bio-Medico of Rome, Rome, Italy

P34. Challenges and Opportunities for Micro-Extraction Techniques to Accurately Monitor Cheese Volatilome Evolution During Ripening and Promptly Detect Spoilage

A. Caratti[1], P. Bolzoni[1], S. Squara[1], D. Giaccone[2], G. Borreani[3], P. Dolci[3], D. Nucera[3], F. Bruno[4], C. Bicchi[1], B. Sgorbini[1], C. Cordero[1]

(2) ARA Piemonte, Via Torre Roa, Cuneo, Italy
(3) Dipartimento di Scienze Agrarie, Forestali e Alimentari, Università degli Studi di Torino, Largo Paolo Braccini, 2, I-10095 Grugliasco TO, Italy
(4) Beppino Occelli Agrinatura S.r.l, Regione Scarrone 2, I-12060 Farigliano CN, Italy

P35. Butter Volatilome: Vacuum-Assisted Headspace Solid Phase Microextraction Improves Fingerprinting Information Capacity

S. Squara[1], A. Caratti[1], P. Bolzoni[1], D. Giaccone[2], G. Borreani[3], F. Bruno[4], C. Bicchi[1], C. Cordero[1]

(1) Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino, Via Pietro Giuria 9, I-10125 Torino, Italy,
(2) ARA Piemonte, Via Torre Roa, Cuneo, Italy
(3) Dipartimento di Scienze Agrarie, Forestali e Alimentari, Università degli Studi di Torino, Largo Braccini, 2, I-10095 Grugliasco TO, Italy
(4) Beppino Occelli Agrinatura S.r.l, Regione Scarrone 2, I-12060 Farigliano CN, Italy

P36. Synthesis of Polyacrylamide/Carmine Polymer Nanomaterial as an Effective Solid-Phase Material for Ultrasonic-Assisted Solid-Phase Microextraction of Aluminum and Chromium in Vegetable Samples

S. Ulusoy[1], Adil Elik[2], H.I. Ulusoy[3], S. Şimşek[2], N. Altunay[2]

(1) Sivas Cumhuriyet University, Vocational School of Health Service, Department of Pharmacy, Sivas, Turkey,
(2) Department of Chemistry, Sivas Cumhuriyet University, Sivas, Tukey
(3) Sivas Cumhuriyet University, Faculty of Pharmacy, Department of Analytical Chemistry, Sivas, Turkey

P37. Elucidation of Fish Feed MOSH&MOAH Contamination by LC-GC×GC-FID

G. Bauwens, G. Purcaro

Gembloux Agro-Bio Tech, University of Liege, Passage des Déportés, 2, Gembloux, B-5030, Belgium, bauwens.gregory@outlook.be

P38. Molecularly Imprinted Polymer-Based Solid Phase Extraction for Selective Aflatoxins Determination in Food

S. Palmieri[1], D. ElFadil[1,2], A. Amine[2], F. della Pelle[1], M. Sergi[1], D. Compagnone[1]

(1) Faculty of Bioscience and Technology for Food, Agriculture and Environment, University of Teramo, 64100, Teramo, Italy, spalmieri@unite.it
(2) Laboratory of Process Engineering and Environment, Faculty of Sciences and Techniques, Hassan II University of Casablanca, Mohammedia, Morocco

Tuesday, 15 March 2022
13:00 - 14:00

EuSP-3 Poster Session EuSP-3 Biological samples I

Chairs: L. Reubsaet, E. Boyaci

P39. FPSE-HPLC-DAD Method for the Quantification of Anticancer Drugs in Human Whole Blood, Plasma, and Urine

E. Rosato[1], N. Tinari[2], A. Grassadonia[2], A. Tartaglia[1], D. Macerola[1], S. Piccolantonio[1], E. Sperandio[1], C. D'Ovidio[3], S. Carradori[1], H.I. Ulusoy[4], K.G. Furton[5], A. Kabir[5] , M. Locatelli[1]
(1) Department of Pharmacy, University of Chieti-Pescara "G. d'Annunzio", Via dei Vestini 31, 66100 Chieti, Italy,
(2) Department of Medical, Oral and Biotechnological Sciences, University of Chieti-Pescara "G. d'Annunzio", 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
(5) Department of Chemistry and Biochemistry, Florida International University, 11200 SW 8th St, Miami, FL 33199, USA

P40. FPSE-HPLC-PDA Determination of UV Filters Compounds from Cosmetic Products in Biological Matrices

M. Locatelli[1], A. Tartaglia[1], C. D'Ovidio[2], E. Rosato[1], M. Bonelli[2], K.G. Furton[3], A. Kabir[3]
(1) Department of Pharmacy, University of Chieti–Pescara "G. d'Annunzio", Via dei Vestini 31, Chieti 66100, Italy, marcello.locatelli@unich.it
(2) Department of Medicine and Aging Sciences, Section of Legal Medicine, University of Chieti–Pescara "G. d'Annunzio", Chieti, Italy
(3) International Forensic Research Institute, Department of Chemistry and Biochemistry, Florida International University, 11200 SW 8th St, Miami, FL 33199, USA

P41. Coupled HPLC Affinity Columns for PSA Purification from Urine

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P42. Synthesis of Crosslinked Zwitterionic Polymeric Ionic Liquid Sorbent to Determine Amyloid Beta Peptides in Biological Samples by *Fiber-in-tube* Solid-phase Microextraction and UHPLC-MS/MS

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P43. Application of Experimental Design in Measuring Histamine by UPLC in Fish Samples by PITC Derivation Method

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P44.Determination of Volatile Salivary Biomarkers Using Solid-Phase Microextraction and GC-MS

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P45. Capsule Phase Microextraction of Antifungal and Anthelmintic Drugs from Human Urine Using *In Situ* Prepared Monolithic Sol-gel Polyethylene Glycol-Based Sorbent Media

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P46. Characterisation of Pathogen-Specific Biomarkers in Bacterial Pneumonia with High-Capacity Sorptive Extraction (HiSorbTM) and Gas Chromatography – Mass Spectrometry (GC–MS)

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P47. Volumetric Absorptive Microsampling for the Analysis of CBD and its Metabolites

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P48. Dispersive Magnetic Solid Phase Extraction of Capsaicinoid Compounds from Human Serum by Liquid Chromatography and Quadrupole with Time-Of-Flight Mass Spectrometry

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P49. Evaluation of Clozapine and its Metabolites by HemaPEN Technology

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P50. On-Line Aptamer Affinity Solid-Phase Extraction Capillary Electrophoresis-Mass Spectrometry for the Analysis of Food Allergen Proteins

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P51. Optimization of Method Parameters for Electrospun Fiber Coated Thin Film Microextraction of Polar Cancer Biomarkers from Urine

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P52. Application of Bar Adsorptive Microextraction (BAμE) - An Eco-User-Friendly Approach for Screening Synthetic Cannabinoids in Oral Fluids

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P53. Biofluid Sampler: A New Gateway for Mail-in-Analysis of Whole Blood Samples

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Tuesday, 15 March 2022
13:00 - 14:00

EuSP-4 Poster Session EuSP-4 Biological Samples II

Chairs: S. Pedersen-Bjergaard, A. Martín-Esteban

P54. Interaction Between Eltrombopag and Human Serum Albumin: Fluorescence and Electrochemical Studies

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P55. Ultrafiltration-based Sample Preparation and HPLC-UV Determination of Diclofenac in Human Plasma Samples

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P56. Development and Characterization of Magnetic SARS-CoV-2 Peptide-Imprinted Polymers

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(4) Hahn-Schickard Institute for Microanalysis Systems, 89077 Ulm, Germany

P57. Development of Salting-out Extraction Method for the Determination of Piroxicam from Polymeric Based Nanocarriers and Biological Samples

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(4) Ankara University, Faculty of Pharmacy, Department of Pharmacology, Ankara, Turkey

P58. Optimizing In-situ Synthesis of an Organic Monolithic Phase containing Anion Exchange Groups for Determination of Homocysteine and Homocysteic Acid in Biological Samples

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P59. Development of Sensitive Analytical Methodology for Gemcitabine Based on HPLC-DAD after Magnetic Solid Phase Extraction

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P60. Extraction of Residues of Veterinary Medicinal Products in the Larval Stages of *Apis Mellifera Iberiensis* (Larva, Prepupa, Pupa and New Born Bees)

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P61. Determination of Phenobarbital at Trace Levels in Urine Samples by using Magnetic Solid Phase Extraction

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P62. Sample Preparation Using Three-Phase Partitioning Systems for Improved Detection of Pentraxin-3 in Human Serum

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P63. Development of an In-Tube SPME/LC-MS/MS Method to Determine Amyloid-Beta Peptides in Human Cerebrospinal Fluid

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P64. Quantitative Analysis of Endocannabinoid and Related Compound in Biological Matrices by Means µSPE-LC-MS/MS Analysis

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P65. Application of Parallel Artificial Liquid Membrane Extraction for the Analysis of Illicit Drugs in Oral Fluid

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P66. Biomimetic Intestinal Absorption Through Liposome-Based Monolith Using Dispersive Solid Phase Extraction

M. Oliver[1], M.P. Garcia-Moll[1], E.F. Simó-Alfonso[2], J.M. Herrero-Martínez[2], M. Miró[1], E.J. Carrasco-Correa[2]
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P67. New Perspectives for the Extraction of Naltrexone and its Metabolite Used in the Treatment of Opioid Use Disorder

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Tuesday, 15 March 2022
13:00 - 14:00

EuSP-5 Poster Session EuSP-5
Environmental Analysis and New Technologies

Chairs: M. Miró, J. Hernández-Borges

P68. Assessment of Benzothiazoles, Benzotriazoles and Benzenesulfonamides in Environmental Waters Using an Experimental Design-PCA Optimized Synergistic Combination of Microextraction by Packed Sorbent with Programmed Temperature Vaporization-Gas Chromatography Tandem-Mass Spectrometry

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P69. Efficient Extraction of Lipophilic Odorants in Aquaculture Using High-Capacity Sorptive Extraction (HiSorb™) with Analysis b Gas Chromatography – Mass Spectrometry

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P70. Magnetic *Hydrophilic-Lipophilic Balance* Tape in Water Sampling Devices

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P71. Fabrication of a MOF@Cotton Composite as a New Sorbent Phase for the Fabric Phase Sorbitive Extraction and Passive Sampling of Non-Polar Organic Compounds from Natural Waters

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P72. Extraction and Preconcentration of Organophosphorus Pesticides from Water Samples Using *In Situ* Synthesized Monolithic Sol-Gel Octadecyl Capsule Phase Microextraction Media

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P73. Recycled Rubber Surfaces: Concern About the Presence of Hazardous Substances

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P74. Development of an Analytical Methodology to Determine Substitution Herbicides in Soil Samples

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P75. Preparation, Characterization and Application of C18 Thermally Immobilized onto Titanized Silica as Sorbent for Solid-Phase Extraction

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P76. Determination of PFAS in Water According to EU2020/2184 and DIN38407-42 Using Online-SPE-LC-MS/MS

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P77. Combining Low-Density Solvent Based Microextraction with Pulsed Splitless Injection for High Sensitivity GC-MS Analysis of Polycyclic Aromatic Hydrocarbons, Phthalates, and Pesticide Residues in Infant Formulas

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P78. Novel Automated Sample Clean-up: First Comprehensive Evaluation of Different Filtration Devices for x-y-z Robots

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P79. An Insight into the Use of Polyethersufone Membrane as a Single-Phase Passive Sampler for Emerging Contaminants in Water

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P80. Enhanced Analyte Extraction with Automated Multi-Phase High-Capacity Sorptive Extraction (HiSorb) for GC-MS

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P81. Functionalized Ionic Liquid Based on 2-Mercaptobenzothiazole for Solid-Liquid Extraction of Cd(II) and Pb(II) from a Sediment Sample

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P82. Dual SPE Purification, Followed by Offline Derivatization and HPLC-ESI-MS/MS Analysis for the Quantification of Estrogenic Compounds at Ultra-Trace Level: Method Development, Validation, and Screening of Belgian Surface Water

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P83. Dispersive Solid-Phase Extraction (dSPE) Using Cu Functionalized Metal-Organic Frameworks (MOFs) for the Determination of Metals in Gasoline Samples

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P84. Analysis of Organophosphorus Pesticides by HS-SPME

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P85. Water-Compatible Molecularly Imprinted Polymer for Solid-Phase Extraction of Triazines from Environmental Waters

E. Turiel, M. D. Álvarez, A. M. Martín-Esteban
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P86. Optimization and Automation of a Rapid and Selective Analysis of Fatty Acid Methyl Esters from Aqueous Samples by HS-SPME Arrow GC-MS/MS

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GSAC2022 - Poster Sessions

Four parallel poster sessions (**GSAC-1 to GSAC-4**) are scheduled on Wednesday, 16 March (CET 13:00 - 14:00).

Wednesday, 16 March 2022
13:00 - 14:00

GSAC-1 Flash Poster Presentations
Food & Environmental Applications

Chairs: T. Schmidt, C. Cordero

FPP1. Carbon Fibers as Green and Sustainable Sorbent for the Extraction of Isoflavones from Environmental Waters

J. L. Benedé[1,2], A. Chisvert[2], R. Lucena[1], S. Cárdenas[1]
(1) Affordable and Sustainable Sample Preparation (AS2P) Research Group, Departamento de Química Analítica, Instituto Universitario de Investigación en Química Fina y Nanoquímica IUNAN, Universidad de Córdoba, Campus de Rabanales, Edificio Marie Curie (anexo), E-14071, Córdoba, Spain, benede@uv.es
(2) GICAPC Research Group, Department of Analytical Chemistry, University of Valencia, 46100, Burjassot, Valencia, Spain

FPP2. Medium-Scale Ambient Temperature System (MSAT) as a Green Strategy to Obtain Extracts Rich in Bioactive Compounds from Agri-Food Residues

M. Celeiro[1], A. Castillo[1], A. Rosalowska[2], C. Garcia-Jares[1], M. Lores[2]
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(2) LIDSA, Department of Analytical Chemistry, Nutrition and Food Science, Universidade de Santiago de Compostela, E-15782, Santiago de Compostela, Spain

FPP3. Direct Injection Followed by GC-MS/QqQ for VOCs Identification in Wine Aroma Fingerprint Studies

P. Avino[1], E. Guerriero[2], M. Iorizzo[1], M. Cerasa[2], I. Notardonato[1], B. Testa[1], F. Letizia[1], A. Iannone[1], C. Di Fiore[1], S. Passarella[1], M.V. Russo[1]
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(2) Institute of Atmospheric Pollution Research (IIA), National Research Council (CNR), Rome Research Area-Montelibretti, I-00015 Monterotondo Scalo, Italy

FPP4. Thermal Analytical Methodology for Determining Micro-Polyethylene and Polystyrene Plastic Content in Organic Matrices

A. Martín de la Fuente[1], F.C. Marhuenda-Egea[2], M. Ros[1], J.A. Pascual[1], J.A. Saez-Tovar[3], E. Martinez-Sabater[3], R. Peñalver[4]
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(4) Department of Analytical Chemistry, Faculty of Chemistry, Regional Campus of International Excellence "Campus Mare Nostrum", University of Murcia, E-30100 Murcia, Spain

FPP5. Sustainable Valorization of Winery Wastewater Using Bio-based Solvents to Extract Natural Antioxidants

R. Cañada, B. Sáenz de Miera, I. Díaz, M. Rodríguez, E.J. González, M. González-Miquel
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FPP6. Novel Clean-Up and Analysis Methods of Dioxins in Wastes

P. Damato[1,2], A. Fornaro[3], G. Intini[1], C.D. Calvano[2], T.R.I. Cataldi[2]
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FPP7. A Solvent-Free Sample Preparation Technique for Residual Fumigants on Foodstuffs: Multi-Step Enrichment–Headspace–Trap Analysis with Gas Chromatography–Mass Spectrometry

R. Cole[1], L. Hearn[1], J.P. Mayser[2], R. Szafnauer[1]
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FPP8. Use of Headspace SPME-GC×GC-ToF MS with Hydrogen of Carrier Gas for the Chemical Characterization of Food Volatilomes

M. Galletta[1], M. Zoccali[2], P.Q. Tranchida[1], L. Mondello[1,3,4]
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(4) Department of Sciences and Technologies for Human and Environment, University Campus Bio-Medico of Rome, Rome, Italy

FPP9. Capillary Ion Chromatography: A Green and Sustainable Analytical Technique for Analysis of Food Additives and Contaminants

T. D'Amore, A. Di Taranto, M. Immarino
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FPP10. Food Security Assessment in the Scope of the PERVEMAC II Project. Cereals from Macaronesia Region 2017-2020

B. Socas-Rodríguez, R. Rodríguez-Ramos, Á. Santana-Mayor, M.Á. Rodríguez-Delgado
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Wednesday, 16 March 2022
13:00 - 14:00

GSAC-2 Flash Poster Presentations
Green & Sustainable Methods

Chairs: L. Mondello, D. Guillarme

FPP11. Cationic Surfactants Quantification in COVID-19 Disinfectants by Potentiometric Surfactant Sensor

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

FPP12. Monitoring of the PAHs in Simulated Natural and Artificial Fires by HPLC-DAD-FLD with the Application of Multi-Component Integrated Calibration Method

P. Świt, J. Orzeł, S. Maślanka
Institute of Chemistry, Faculty of Science and Technology, University of Silesia in Katowice, 9 Szkolna Street, 40-006 Katowice, Poland,

FPP13. Supercritical Fluid Chromatography as a Sustainable Alternative to Normal Phase Liquid Chromatography for Chiral Separations of Cannabinoids

A. Buratti[1], S. Felletti[1], M. Catani[1], C. De Luca[1], G. Compagnin[1], F. Gasparrini[2], G. Mazzoccanti[2], A. Cavazzini[1]
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FPP14. A Preliminary Study on the Use of Carnosine as Sequestering Ligand for Metal Cations in Aqueous Solution

C. Abate, C. Foti, O. Giuffrè, A. Piperno, A. Scala
Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Viale Ferdinando Stagno D'Alcontres 31, 98166, Messina, Italy, cabate@unime.it

FPP15. Use of Supercritical Fluids to Online Extract and Analyze Chiral Pesticides in Hemp Seeds

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(3) Department of Sciences and Technologies for Human and Environment, University Campus Bio-Medico of Rome, Rome, Italy

FPP16. A Novel Silica Based Molecularly Imprinted Polymer Sensor for the Sensitive Assay of a Bisphenol Analogue

S.I. Kaya[1,2], M.E. Corman[1,3], L. Uzun[4], S.A. Ozkan[1]
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(3) University of Health Sciences, Gulhane Faculty of Pharmacy, Department of Biochemistry, Ankara, Turkey
(4) Hacettepe University, Faculty of Science, Department of Chemistry, Ankara, Turkey

FPP17. Direct Mass Spectrometry Using SPME Coupled to Liquid Electron Ionization and Chemical Ionization: A New Green Approach in Direct Analysis

N. Marittimo[1], G. Famiglini[1], P. Palma[1,2], A. Cappiello [1,2], M.Saeed[3], S.Perry[3], P.Navarro[3]
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(2) Vancouver Island University, Department of Chemistry, Nanaimo, BC, Canada
(3) Syngenta, Bracknell, United Kingdom

FPP18. Chromatography Miniaturization to Green and Enhanced Protein Quantification with Elemental Mass Spectrometry

J. Ruiz-Allica, A. Jiménez Nosti, L. Cid Barrio, F. Calderón-Celis, J. Ruiz Encinar
University of Oviedo, Department of Physical and Analytical Chemistry, University of Oviedo, Av. Julián Clavería 8, 33006, Oviedo, Spain, uo284486@uniovi.es

FPP19. Micellar Liquid Chromatography: An Eco-friendly Alternative to Conventional HPLC Method

P. Pahade[1], A. Durgbanshi[2], D. Bose[1]
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(2) Department of Chemistry, Dr. Harisingh Gour Vishwavidyalaya, Sagar (M.P.), India

FPP20. Effective Remediation of Several Families of Antibiotics in Aqueous Samples Using Bio Metal-Organic Frameworks

H. Martínez-Pérez-Cejuela[1], M. Feltrer-Montesinos[1], C. Negro[2], E.F. Simó-Alfonso[1], J. Ferrando–Soria[2], E. Pardo[2], J.M. Herrero-Martínez[1]
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Wednesday, 16 March 2022
13:00 - 14:00

GSAC-3 Flash Poster Presentations
Sensors

Chairs: L.Vidal, M. Zoccali

FPP22. Titanium Dioxide Assisted-Antibiotic Imprinted Alginate Films for Selective Detection of Vancomycin from Aqueous and Serum Samples Via a Greener Synthesis Route

M.E. Çorman[1,2], A. Cetinkaya[2], E. Yıldız[3], S.I. Kaya[1,4], L. Uzun[3], S.A. Ozkan[2]
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(3) Hacettepe University, Faculty of Science, Department of Chemistry, Ankara, Turkey
(4) University of Health Sciences, Gulhane Faculty of Pharmacy, Department of Analytical Chemistry, Ankara, Turkey

FPP23. Investigating the Electrochemical Performance and the Structure Changes of Anatase TiO2 Nanotube Arrays Electrode in Ionic Liquid Electrolyte after the Galvanostatic Cycling

Roganović[1], S. Papović[1], N. Cvjetićanin[2], M. Vraneš[1], X. Chen[3], T.T. Borović[1], J. Panić[1], S. Gadžurić[1]
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(3) Vehicle Energy and Safety Laboratory, Department of Mechanical Engineering, Ningbo University of Technology, Ningbo 315336, P. R. China

FPP24. Chemometrics-Assisted Voltammetric Determination of Entacapone in the Presence Levodopa and Carbidopa in Tablet Dosage Form

A. Safarnejad[1], F. Budak[1], A. Cetinkaya[1], B. Dogan-Topal[1], H. Abdollahi[2], S.A. Ozkan[1]
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(2) Department of Chemistry, Institute for Advanced Studies in Basic Sciences (IASBS), Zanjan 45137-66731, Iran

FPP25. Potentiometric Determination of Nonionic and Cationic Surfactants in Cleaning and Disinfecting Agents by New High Sensitive NS-Sensor

D. Madunić-Čačić[1,2], N. Sakač[2], M. Jozanović[3]
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(3) Department of Chemistry, Josip Juraj Strossmayer University of Osijek, 31000 Osijek, Croatia

FPP26. A Sensitive and Selective Electrochemical Sensor Fabricated from Multi-Walled Carbon Nanotubes and Iron (III) Oxide Nanoparticles for the Detection of Levodopa

F. Budak[1], A. Safarnejad[2], A. Çetinkaya[1], B.D. Topal[1], H. Abdollahi[2], S.A. Özkan[1]
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FPP27. Natural Compounds as Strategic Tools for Carbon Nanomaterials-Based Sensors

F. Silveri, F. Della Pelle, A. Scroccarello, Q.U.A. Bukhari, S. Fiori, D. Compagnone
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FPP28. Modulating the Stacking Modes of Nanosized Metal-Organic Frameworks by Morphology Engineering for Isomer Separation

S.-S. Meng, Ming-Xu, T. Zhi-Yuan Gu
Jiangsu Key Laboratory of Biofunctional Materials, Jiangsu Collaborative Innovation Center of Biomedical Functional Materials, College of Chemistry and Materials Science, Nanjing Normal University, Nanjing, 210023, China, 15651666851@163.com

FPP29. Modulating the Stacking Modes of Metal-Organic Frameworks Nanosheets Through Host-Guest Noncovalent Interactions for GC Separation

W.Q. Tang, M. Xu, Z.Y. Gu
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FPP30. Portable and Disposable Electrochemical Sensors Based on Ion Imprinted Polymers Applied for the Environmental Monitoring of Metal Ions in Water

S. Di Masi, N.A. Manrique Rodriguez, M. Costa, C. Malitesta
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Wednesday, 16 March 2022
13:00 - 14:00

GSAC-4 Poster Session
Miscellaneous

Chair: C. Cagliero

PP1. Contamination and Spatial Distribution of PAHs in Urban Soils of Santiago de Compostela

C. Herbón[1], M. Celeiro[2], D. Guada[2], R. Paradelo[1], M.T. Barral[1], C. García-Jares[2]
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PP2. Characterization of Ellagitannins in Walnuts Shells Via LC-DAD-MS Analysis

G. Ventura[1], G. Carbone[1], D. Blasi[1], T.R. I. Cataldi[1,2], C.D. Calvano[1,2]
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(2) Centro Interdipartimentale SMART,Università degli Studi di Bari Aldo Moro, Bari, Italy

PP3. Green Photosensitisers for the Degradation of Selected Pesticides of High Risk in Most Susceptible Food: A Safer Approach

M. Zubair[1], A. Baig[2]
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(2) University of Gujrat, Gujrat, Pakistan

PP5. On-line Evaluation of Polar Airborne Compounds In-Continuous Monitoring by Solid-Phase Microextraction/Gas Rhromatography

S. Dugheri[1], G. Cappelli[2], R. Gori[3], D. Squillaci[2], L. Trevisani[2], E. Bucaletti[2], J. Ceccarelli[2], N. Mucci[2], G. Arcangeli[2], F. Degli Esposti[4], D. Peroni[5]
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(5) SRA Instruments S.p.A, Via alla Castellana 3, Cernusco sul Naviglio (MI), Italy

PP6. A Multi-Analytical Approach for the Characterization of Organic Matter in Agricultural Soils Amended with Biochar

A. Rombolà[1], C. Torri[2], I. Vassura[3], B. Rizzi[1], D. Fabbri[1]
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PP7. A Artificial Intelligence (AI) Smelling Machines Based on Multidimensional Chromatography: How Information Capacity and Flexibility Make Greener an Analytical Tool

C. Cordero[1], S. Squara[1], A. Caratti[1], E. Liberto[1], S.E. Reichenbach[2,3], C. Bicchi[1]

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PP8. SPE-Based Active Air Sampling Method for Hexachlorocyclohexane (HCH) Determination in Contaminated Areas

A. Méndez[1], M. Celeiro[2], M. Fabelo, Z. Chaos[1], C. García-Jares[2], C. Monterroso[1]

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PP9. Lab-on-Paper Analytical Device for Extraction-Free Analysis of Olive Oil Polyphenols

A. Scroccarello, F. Della Pelle, M. Del Carlo, D. Compagnone

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PP10. Speciation of Metronidazole with Pb^{2+} and Cd^{2+} in Aqueous Solution for Applications in Natural Waters

F. Carnamucio, C. Foti, O. Giuffrè

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PP11. Characterization of Different Italian Ricotta Cheeses by a Rapid and Sustainable Spectroscopic Method as a Preliminary Study to Detect Adulteration

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PP12. Potential of Brassica Napus for Phytoextraction of Heavy Metals from Soil and Sediment

N. Djukanovic[1], J. Beljin[1], T. Zeremski[2], J. Trickovic[1], S. Roncevic[1], N. Stojanov[2], S. Maletic[1]

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PP13. Application of Experimental Design in Measuring Histamine by UPLC in Fish Samples by PITC Derivation Method

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PP14. Spectrophotometric Method Development of Chloramphenicol Analysis in the Shrimp Based on Diazotization Reaction at Room Temperature

A. Wafi[1], G. Supriyanto[2], T.S. Tjahjandarie[2]

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PP15. Fabric Phase Sorptive Extraction: A Total Sample Preparation Solution to Meet the Demands of 21st Century High Throughput Analytical/Bioanalytical Laboratories

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PP16. Developing and Validation of a High-Performance Liquid Chromatography Method for the Determination of Combined Perindopril, Indapamide and Amlodipine from Pharmaceutical Preparations

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PP17. Extraction of Natural Products Based on Deep Eutectic System

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PP18. Analytical Methods for Characterization of Liposomal Dry Powder Formulations Produced by Supercritical CO_2

C. Costa[1,2], B. Nobre[2], A.S. Matos[3], A.S. Silva[4], T. Casimiro[1], M.L. Corvo[2], A. Aguiar-Ricardo[1]
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PP19. Determining Hexachlorocyclohexane Contamination in Different Plant Species by UAE-GC-MS/MS for Biomonitoring Purpose

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PP20. Development of an Electrochemical Sensor Based on Porous Molecularly Imprinted Polymer Via Photopolymerization for Detection of Somatostatin in Pharmaceuticals and Serum

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PP21. Molecularly Imprinted Sensor for Electrochemical Detection of the Anticancer Drug Enzalutamide

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PP22. Fabrication and Evaluation of a Molecularly Imprinted Polymer Electrochemical Sensor for Precise Monitoring of Antirheumatics Drug

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PP23. Fast Quantitative LC-MS/MS Determination of Illicit substances in Solid and Liquid Unknown Seized Samples

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