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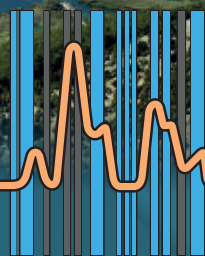
University
of Ioannina



National Technical
University of Athens

20 years

IMA-2019



www.ima2019.gr

11th

International Conference on
Instrumental Methods of Analysis
Modern Trends and Applications

22-25 September 2019

Grand Serai Hotel
Ioannina, Greece

SCIENTIFIC PROGRAM

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PREFACE

The organizing committee of the IMA-2019 Conference would like to welcome all participants to the 11th International Conference on "Instrumental Methods of Analysis-Modern Trends and Applications", held in Ioannina, Greece, from 22-25 September. The conference is organized by the Department of Chemistry, University of Ioannina and the Lab of Inorganic and Analytical Chemistry, School of Chemical Engineering of the National Technical University of Athens. IMA is a biannual series of conferences that started 20 years ago in 1999 and covers all areas of modern trends and applications of chemical analysis.

During this meeting special emphasis will be given to new developments in analytical instrumentation and novel methods, techniques and applications of chemical analysis. Current analytical trends will be revealed through presentations covering a wide range of techniques in the areas of spectroscopy, atomic and molecular mass spectrometry, electrochemical analysis, chromatographic separations, sensors etc. The trend of using hyphenated techniques along with chemo-metric treatment of complex analytical data has unfolded new perspectives and challenges in chemical analysis, dealing with difficult problems related to modern materials, biological systems, food and environmental micro-pollutants of eco-toxicological interest. Due to the current increasing chemical analysis needs and requirements in the field of Food Science and Technology including quality assurance, safety, authentication and nutritional value, this year's conference will continue to emphasize novel aspects of food analysis research and a **special session is organized by the FoodOmicS^{GR} Research Infrastructure**. Another two special sessions are devoted to state-of-the-art topics of **Aerosol metrology and X-ray spectroscopy techniques** organized by the **AEROMET EMPIR EURAMET** project and under the auspices of the **EUROPEAN X-RAY SPECTROSCOPY ASSOCIATION (EXSA)**, respectively, where young scientists participating at IMA2019 will receive special awards for their contribution in these fields.

The scientific program includes invited lectures given by outstanding scientists and, oral and posters contributions from researchers from Academia, Research Institutes and the Industry. The program consists of 13 invited and plenary lectures, 15 sessions with oral presentations and close 130 posters in 2 poster sessions. An exhibition of analytical and laboratory equipment will also take place parallel to the conference. At the same time a cultural program with visits to the Castle of Ioannina and Silversmithing Museum, as well as a visit to the traditional village of Metsovo and the lake of Ioannina will render the participants' stay more interesting and enjoyable.

Participants are invited to submit their papers related to their contribution in one of the following scientific journals: *Analytical and Bioanalytical Chemistry*, *Analyst*, *Metals*, *Open Agriculture*, *Open Chemistry with reference to IMA2019*.

We strongly believe that the discussions and the exchange of ideas among the participants during the 4 days of the conference will make IMA2019 a brilliant platform to initiate new research collaborations, particularly in favor of the young scientists participating in the conference.

We hope you all enjoy the conference and have a memorable stay in Ioannina, looking forward to meet you again at the next IMA2021.

With our best regards

Prof. Triantafyllos A.D. Albanis
 Lab. of Analytical & Environmental Chemistry
 Department of Chemistry
 University of Ioannina

Prof. Maria Ochsenkühn-Petropoulou
 Lab of Inorganic and Analytical Chemistry
 School of Chemical Engineering
 National Technical University of Athens

Chairpersons

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Department of Chemistry,
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Prof. Maria Ochsenkühn-Petropoulou,
Laboratory of Inorganic and Analytical Chemistry,
School of Chemical Engineering,
National Technical University Athens

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Prof. A. **Vlessidis** (Univ. Ioannina),
Prof. K. **Stalikas** (Univ. Ioannina),
Prof. M. **Prodromidis** (Univ. Ioannina),
Prof. A. **Pappa** (NTUA),
Prof. I. **Panderi** (Univ. of Athens),
Assoc. Prof. I. **Konstantinou** (Univ. Ioannina),
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Dr. K.M. **Ochsenkuehn** (NTUA),
Dr. V. **Boti** (Univ. Ioannina),
Dr. Ch. **Tsoutsis** (Univ. Ioannina),
Dr. C. **Tsiafoulis** (Univ. Ioannina),
Dr. A. **Karkabounas** (Univ. Ioannina) and
Dr. Ag. **Florou** (Univ. Ioannina)

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Dr. O. **Serifi** (NTUA),
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M. **Kapsi** (Univ. Ioannina),
Ep. **Trantopoulos** (Univ. Ioannina),
P. **Konstas** (Univ. Ioannina),
M. **Kalamboka** (Univ. Ioannina),
A. **Kalogeropoulou** (Univ. Ioannina),
E. **Gotsis** (Univ. Ioannina),
St. **Pateras** (Univ. Ioannina),
I. **Mpoukouvalas** (Univ. Ioannina),
D. **Kifokeri** (Univ. Ioannina)

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M. **Ochsenkühn-Petropoulou**, NTUA (IMA 1999, 2009, 2013, 2015, 2017), M. **Karayannis**, Univ. Ioannina (IMA 2001), I. **Stratis**, AUTH (IMA 2003), N. **Chaniotakis**, Univ. Crete (IMA 2005), Th. **Christopoulos**, Univ. Patras (IMA 2007), A. **Calokerinos**, Univ. Athens (IMA 2009), N. **Kallithrakas - Kontos**, TU Crete (IMA 2011), R. **Tzimou-Tsitouridou**, AUTH (IMA 2013), J. **Kapolos**, TEI Peloponnese (IMA 2015), S. **Pergantis**, Univ. Crete (IMA2017)

The 11th International Conference "IMA 2019-Instrumental Methods of Analysis-Modern Trends and Applications" 22-25 September 2019, Ioannina, Greece is a 4-days scientific meeting covering all areas of modern trends and applications of Chemical Analysis. For the last 20 years IMA has provided an excellent framework for the presentation of new concepts, instruments, methods, systems, and applications in the area of modern chemical analysis. Researchers and scientists from Universities, Research Institutions, State Organizations, and the Industry come together during the meeting to present and discuss the current state of the art in the area of instrumental methods of analysis. At the same time, it provides the grounds for the graduate and post graduate students to present their projects, discuss scientific collaborations with other groups, as well as to explore employment opportunities. An exhibition of analytical instruments and accessories will be also organized in the conference place whereas a number of excursions, tours and social events are included in the program of the IMA 2019.

Topics

Some of the general themes to be covered at IMA-2019 include current trends, developments and applications in:

- * Spectrochemical, Electrochemical, Chromatographic, Mass Spectrometric, Microscopic, Imaging and Thermal analysis methods,
- * Proteomics, Metabolomics, Metallomics and Elemental Speciation Analysis,
- * Chemical- and bio- sensors,
- * Field analysis - Mobile analytical instruments,
- * Miniaturized analytical systems (Lab-on-a-Chip), micro- and nano- fluidics,
- * Immunoassays, Electrophoretic separation techniques,
- * Robotics and Automation, Quality control-quality assurance in analysis, Metrology
- * Data processing and Chemometrics
- * Aerosol Metrology, Environmental, Biomedical (Eco-toxicological, Clinical), Pharmaceutical, Food, and Materials Analysis (Nanomaterials, Smart/ Advanced Materials, Surface Analysis), as well as Archaeometry,
- * Analytical chemistry markets and possibilities for commercialization.

Oral presentations

The Scientific Program will include oral presentations and plenary lectures, which will provide an up-to-date presentation of modern trends of Instrumental Methods of Analysis as well as of related subjects of general interest.

Duration of Presentations

- Invited and plenary speakers should plan on a **25 minute long talk** followed by **5 minutes for discussion**.
- For all other oral presentations: presenting authors should plan on a **13 min talk** followed by **2 min for questions and discussion**.

Preparation of Presentations

Presentations should be in Microsoft PowerPoint format (ppt or pptx file) or Adobe Acrobat Reader format (pdf file). Preferably, the widescreen ratio (16:9) should be used. The file should be electronically handed by the speaker to the Slide Reception **at least one session** before his/her presentation.

Poster presentations

Contributed papers describing original research work will be also presented as posters in order to promote efficient discussion on new scientific ideas and results. The presenting authors should **hang their posters in the morning** of their presentation in the **parallel hall “Lord Byron”** and **remove them at the end of the poster session**. The preferable dimensions for posters should be 80 cm x 120 cm (width x height). All posters are required to conform to portrait orientation. Type size should be sufficiently large to allow people to read from 2-3 meters. Posters should be clear and easy to read.

All presentations should be in **English**. Poster and oral presentation will be accepted if **at least one of the authors is registered and present** at the conference for personal communication.

Previous conferences

The past conferences were held in Chalkidiki (1999), Ioannina (2001), Thessaloniki (2003), Iraklion (2005), Patras (2007), Athens (2009), Chania (2011), Thessaloniki (2013), Kalamata (2015) and Heraklion (2017) with 250-300 scientific papers presented by scientists from all over the world at each one.

Best Oral & Poster awards

A competition for the best oral and best poster among the young scientists of the scientific sessions will also take place. These awards will be given to recognize excellence in research and presentation. European X-Ray Spectroscopy Association (EXSA) will also award exceptional contributions to the field of X-ray spectrometry apart from supporting the participation of young scientists in the conference. The winners will be announced during the Closing Ceremony on 25th September at noon.

Journal publication

Participants are invited to submit manuscripts based on their presentations in one of the following journals:

- Analytical and Bioanalytical Chemistry
- Analyst
- Metals
- Open Agriculture
- Open Chemistry

e-Abstract Book

All abstracts of the oral and poster presentations will be included in the e-Abstract Book, which will be available on the conference website: **www.ima2019.gr**.

Venue

IMA-2019 takes place at Grand Serai Hotel, a genuine palace, which combines the traditional style of Ioannina with elements of the Middle East. Ideally positioned in the heart of the city of Ioannina, it is the perfect starting point to discover Ioannina and its many historic monuments and museums, all, within easy reach of the business and commercial district. The Grand Serai Hotel built on a land of 13.000 sq.m, comes to offer a brand new perception of hospitality.

GRAND SERAI HOTEL

Dodonis 33, 45332, Ioannina, Greece

Tel.: +30 26510 90550

Website: <http://www.grandserai.com>

Exhibition

Suppliers of analytical instrumentation and laboratory equipment will exhibit their latest offerings in the Exhibition Area during the Conference. Official opening of the exhibition will take place on 23rd September at 19:00. The exhibition area is outside the lecture area and within the coffee break and lunch areas in the Conference Center of Grand Serai Hotel.

Social Events

Opening Ceremony: 22/9/2019 Grand Serai Hotel, 18.00

Welcome Reception: 22/9/2019 Grand Serai Hotel, 20.30

A get-together Cocktail Reception will take place at Grand Serai Hotel upon completion of the program.

Conference dinner: 24/9/2019 Frontzou Politeia Restaurant,
Departure: Grand Serai Hotel, 20:30

The conference dinner celebrating the 20 years of IMA, will be held on September 24th at 21.00 at Frontzou Politeia Restaurant located 2km from the Conference Venue. (Includes transfer from-/to- Grand Serai Hotel)

Half-day tour in Ioannina: 25/9/2019 Departure: Grand Serai Hotel, 14.00
Return: approximately 17:30

(Optional, minimum number of participants required. Info desk available at the Conference Area)

A guided tour around the most important sites of both historical and cultural importance of Ioannina: The Castle of Ioannina, the Byzantine museum and the Silversmithing Museum. (Transfer is included, official English speaking guide and escort)

All day tour to Metsovo: 26/9/2019 Departure: Grand Serai Hotel, 08.30
Return: approximately 17:30

(Optional, minimum number of participants required. Info desk available at the Conference Area)

A post-Conference excursion by bus to the famous traditional village of Metsovo 30 minutes away from Ioannina city. Our guide will walk you to the Averoff Museum and then to Katogi Averof, a local winery where you can have a tour and finally wine degustation in the winery atmospheric cellar. (Transfer is included, official English speaking guide and escort)

Closing Ceremony: 25/9/2019 Grand Serai Hotel, 12.45

Name Badge

All Participants upon confirmation of their registration at the Secretariat will be provided with a **unique Name Badge**. Your personal name badge is your passport to the scientific sessions according to your registration and the exhibition area. All participants are required to wear their badges (visibly) during all sessions. Make sure you will not forget to take always with you this unique name badge.

Certificate of Attendance

All registered participants are entitled to receive a Certificate of Attendance. The **Certificates will be provided electronically** only upon completion of the electronic Evaluation Form. The certificate will be available electronically through the official website of the Conference (**www.ima2019.gr**) using the provided registration barcode.

Liability and Insurance

The Organizers as well as the Organizing-Administrative Bureau of IMA 2019 will assume no liability for injuries or losses of any nature incurred by participants and/or accompanying persons, or for the damage, loss or theft of their personal property during the Conference. Participants are advised to take out their own health, travel and personal insurances.

Organizing-Administrative Bureau/Secretariat

Conferre S.A.

Conferre SA: "The Art of Bringing People Together"


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PROGRAM AT A GLANCE



Sunday, September 22nd 2019



 Evergeton Hall	16.30-20.30	Registration
	18.00-20.30	Opening session
	18.00-18.30	Opening Ceremony
	18.30-20.30	Plenary lectures
	20.30	Welcome Reception



Monday, September 23rd 2019

 Evergeton Hall	08.15-09.00	Registration
	09.00-09.30	Invited Lecture
	09.30-10.45	X-ray Analysis 1
	10.45-11.30	Coffee break
	11.30-12.00	Invited Lecture

 Evergeton Hall	12.00-13.15	Parallel Sessions Food Analysis
 Lord Byron Hall		Foodomics

	13.15-14.15	Lunch
 Lord Byron Hall	14.15-15.15	POSTER SESSION 1 - EXHIBITION
 Evergeton Hall	15.15-15.45	Invited Lecture

 Evergeton Hall	15.45-16.45	Parallel Sessions Mass spectrometry
 Lord Byron Hall		Metabolomics

 Evergeton Hall	16.45-17.15	Coffee break
	17.15-17.45	Invited Lecture
	17.45-18.30	ICP - MS
 Lord Byron Hall	18.30-19.30	POSTER SESSION 1
	19.00	OPENING OF THE EXHIBITION

Tuesday, September 24th 2019

📍 Evergeton Hall	08.15-09.00	Registration
	09.00-09.30	Invited Lecture
	09.30-10.45	Parallel Sessions
📍 Evergeton Hall		Chromatography 1
📍 Lord Byron Hall		Sample Handling / Mobile Instruments
	10.45-11.30	Coffee break
📍 Evergeton Hall	11.30-12.00	Invited Lecture
	12.00-13.00	Parallel Sessions
📍 Evergeton Hall		Materials / Sensors
📍 Lord Byron Hall		Spectrometry 1
	13.00-14.15	Lunch
📍 Lord Byron Hall	14.15-15.15	POSTER SESSION 2 – EXHIBITION
📍 Evergeton Hall	15.15-15.45	Invited Lecture
	15.45-16.45	Aerosol Metrology / X-Ray Analysis 2
	16.45-17.15	Coffee break
📍 Evergeton Hall	17.15-18.30	Aerosol Metrology / X-Ray Analysis 3
📍 Lord Byron Hall	18.30-19.30	POSTER SESSION 2 - EXHIBITION
	21.00	CONFERENCE DINNER

Wednesday, September 25th 2019


📍 Evergeton Hall	08.30-09.00	Registration
	09.00-09.30	Invited Lecture
	09.30-10.30	Chromatography 2 / Spectrometry 2
	10.30-11.00	Coffee break
	11.00-11.30	Invited Lecture
	11.30-12.45	Electrochemistry / Archaeometry
	12.45-13.30	Closing Ceremony / Awards
	14.00-17.30	Excursion - Castle-Museums-Ioannina

Thursday, September 26th 2019

	08.30-17.30	Post-Conference Excursion - Metsovo
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DETAILED PROGRAM

Sunday, September 22nd 2019

Evergeton Hall	16.30-20.30	Registration
		Opening Session T. Albanis, M. Ochsenkühn
	18.00-18.30	Opening Ceremony
	18.30-20.30	Plenary Lectures
		Chair: T. Albanis, M. Ochsenkühn
	18.30-19.00	The Evolution of Analytical Atomic Spectrometry Sir L. Ebdon
	19.00-19.30	ONE HUNDRED AND FIFTY YEARS OF THE PERIODIC TABLE: Dmitri Mendeleev is recognized as a discoverer and inventor, Chemists become "prophets", and the "entropy" of the chemical knowledge is diminishing M. Karayannis
	19.30-20.00	Instrumental Analysis: Dilemmas and Responsibility I. Brceski
	20.00-20.30	Ethics in Chemistry and Science: Is it Useful? H. Frank
	20.30	Welcome Reception

Monday, September 23rd 2019

Evergeton Hall

08.15-09.00		Registration
09.00-09.30		Invited Lecture Chair: B. Beckhoff, Sir L. Ebdon Instrumentation Science: The Third Side of Analytical Chemistry G. Hieftje
09.30-10.45		Oral Session: X-Ray Analysis 1 Chair: B. Beckhoff, Sir L. Ebdon
09.30-09.45	OP01	SYNCHROTRON RADIATION TXRF: STRENGTHS AND CHALLENGES D. Eichert
09.45-10.00	OP02	DEVELOPMENTS IN X-RAY DIFFRACTION TECHNOLOGY I. Hegedues
10.00-10.15	OP03	IMMOBILIZATION OF HEAVY METALS IN DRINKING WATER: THE ROLE OF METAL (OXY)HYDROXIDES ON SORPTION MECHANISM USING X-RAY ABSORPTIONSPECTROSCOPIES F. Pinakidou, M. Katsikini, K. Simeonidis, E. C. Paloura, M. Mitrakas
10.15-10.30	OP04	PORTABLE XRF SPECTROMETRY IN THE FIELD OF CULTURAL HERITAGE M. Kaparou, H. Brekoulaki, C. Caliri, S. Fotiou, R. Grethe, V. Kantarelou, E. Kokiasmenou, M. Kontimpa, G. Mastrotheodoros, D. Papadopoulou, F. P. Romano, K. Tsampa, A. G. Karydas
10.30-10.45	OP05	ADVANCES IN X-RAY TECHNOLOGY FOR MATERIALS ANALYSIS E. Klothakis
10.45-11.30		Coffee break
11.30-12.00		Invited Lecture Chair: I. Brceski, V. Sakkas Using Instrumental Analysis for Determining Food Authenticity, Adulteration and Food Safety I. Malollari

12.00-13.15		Parallel Sessions
Evergeton Hall	Oral Session: Food analysis Chair: I. Brceski, V. Sakkas	
	12.00-12.15	OP06 IDENTIFICATION OF BIO-PHENOLIC PROFILE OF SELECTED NATIVE MONOVARIETAL AND BLENDED FRESHLY PREPARED FRUIT JUICES USING CHROMATOGRAPHIC TECHNIQUES J. Llupa, K. Akrida-Demertzi, U. Gašić, D. Topi, P. Demertzis
	12.15-12.30	OP07 OPTICAL SPECTROSCOPY TECHNIQUES FOR THE CLASSIFICATION AND QUALITY CONTROL OF AGROFOODS E. Orfanakis, N. Fragkoulis, R. Kontzedaki, A. Filippidis, A. Zoumi, M. Velegrakis
	12.30-12.45	OP08 IMMUNOCHEMICAL CONTROL OF RAW MATERIALS' SOURCES IN THE PRODUCTION OF MEAT AND DAIRY FOOD E.A. Zvereva, N.I. Smirnova, A.V. Zherdev, B.B. Dzantiev
	12.45-13.00	OP09 DETERMINATION OF BISPHENOL A IN FOOD SIMULANTS A, B, C AND D1 PERFORMED BY HPLC - FLD AND VALIDATION OF THE METHOD K. Nana, C. Proestos, E. Komaitis
13.00-13.15	OP10 COMBINED EFFECT OF GASEOUS OZONE AND CITRIC ACID TREATMENT ON QUALITY CHARACTERISTICS AND SHELF LIFE OF PACKAGED FRESH-CUT LETTUCE PRESERVED UNDER REFRIGERATED CONDITIONS A. Panou, K. Akrida - Demertzi, P. Demertzis, K. Riganakos	
Lord Byron Hall	Oral Session: Foodomics Chair: G. Theodoridis, I. Konstantinou	
	12.00-12.20	OP11 FoodOmicsGR NATIONAL RESEARCH INFRASTRUCTURE FOR THE COMPREHENSIVE CHARACTERISATION OF FOODS A. Pechlivanis, G. Theodoridis
	12.20-12.40	OP12 HIGH RESOLUTION MASS SPECTROMETRIC FOODOMICS: FROM BASIC RESEARCH TO INDUSTRIAL APPLICATIONS N. Thomaidis
	12.40-12.55	OP13 FOODOMICS APPROACH TO ASSESS FOOD AUTHENTICITY. TWO PARADIGMS ON GRAPES AND ROYAL JELLY SAMPLES C. Virgiliou, D. Kanelis, K. Liva, M. Marinaki, H. Gika, A. Asimopoulou, C. Tananaki, G. Theodoridis
	12.55-13.10	OP14 HRMS STUDY OF BIOACTIVITY COMPOUNDS DURING EDIBLE OLIVE PROCESSING P. Katsianou, G. Koulis, M. Dasenaki, N. Thomaidis
13.15-14.15		Lunch

Lord Byron	14.15-15.15	POSTER SESSION 1 (details in p.17-21)
	P1 01-62	Bioanalytics / Chemometrics / Food Analysis / Foodomics / Mass spectrometry / Metabolomics / X-ray spectroscopy
Evergeton	15.15-15.45	Invited Lecture Chair: H. Frank, S.A. Pergantis Advances in High Resolution Mass Spectrometry for Metal Speciation Analysis R. Lobinski
	15.45-16.45	Parallel Sessions
Evergeton Hall		Oral Session: Mass Spectrometry Chair: H. Frank, S.A. Pergantis
	15.45-16.00	OP15 MASS SPECTROMETRY TECHNIQUES IN FORENSIC TOXICOLOGY V. Boumba
	16.00-16.15	OP16 DETAILED PHYTOCHEMICAL ANALYSIS OF AN ARTEMISIA ANNUA AND AN ARTEMISIA ABSINTHIUM EXTRACT USING A COMBINATION OF NMR AND HPLC/DAD/MS TECHNIQUES V.G. Kontogianni, M. Sakka, A. Primikyri, I.P. Gerathanassis
	16.15-16.30	OP17 DETERMINATION OF POLYCHLORINATED BIPHENYLS IN MUSSELS USING QUECHERS IN COMBINATION WITH GC-MS E. Trantopoulos, V. Boti, T. Albanis
	16.30-16.45	OP18 MAGNETIC SOLID-PHASE EXTRACTION OF PESTICIDES IN NATURAL WATERS USING Fe ₃ O ₄ @SiO ₂ @C ₁₈ NANOPARTICLES AS ADSORBENT COUPLED TO GC-MS DETERMINATION M. Kapsi, V. Sakkas, T. Albanis
Lord Byron Hall		Oral Session: Metabolomics Chair: J. Szpunar, I. Malollari
	15.45-16.15	OP19 NMR IN NATURAL PRODUCTS: CHEMICAL ANALYSIS OF COMPLEX MIXTURES, BIOANALYTICAL AND METABOLOMICS APPLICATIONS AND DFT NMR STRUCTURES OF ANALYTES I. Gerathanassis
	16.15-16.30	OP20 NMR-BASED METABOLOMICS OF THE LIPID FRACTION OF ORGANIC AND CONVENTIONAL BOVINE MILK C. Tsiafoulis, C. Papaemmanouil, D. Alivertis, S. Balayssac, O. Tzamaloukas, M. Malet-Martino, I. Gerathanassis
	16.30-16.45	OP21 UN-TARGETED METABOLOMICS APPROACH FOR THE CHARACTERIZATION, CLASSIFICATION AND MAPPING OF BIOACTIVE COMPOUNDS IN GREEK EXTRA VIRGIN OLIVE OIL S. Drakopoulou, M. Dasenaki, R. Aalizadeh, A. E. Manola, K. Nikolakis, N. Thomaidis

Evergeton Hall

16.45-17.15

Coffee break

17.15-17.45

Invited Lecture

Chair: **G. Hieftje, N. Thomaidis**

ICP/Electrospray Mass Spectrometry for Studies of the Uptake and Metabolism of Nanoparticles

J. Szpunar

17.45-18.30

Oral Session: ICP-MS

Chair: **G. Hieftje, N. Thomaidis**

17.45-18.00

OP22

ADVANCEMENTS AND CHALLENGES FOR THE DETERMINATION OF METALS IN INDIVIDUAL CELLS USING SINGLE CELL INDUCTIVELY COUPLED PLASMA – MASS SPECTROMETRY

E. Mavrakis, N. Lydakis-Simantiris, S. A. Pergantis

18.00-18.15

OP23

SINGLE PARTICLE AND SINGLE CELL ICP-MS ALLOW NEW INSIGHTS TRACKING NANOPARTICLE FATE AND ECOLOGICAL EFFECTS

H. Ernstberger, C. Stephan

18.15-18.30

OP24

IMPROVEMENTS AND APPLICATIONS OF A NOVEL ORTHOGONAL SONIC-SPRAY IONIZATION SOURCE FOR COUPLING MICROBORE AND CONVENTIONAL HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY TO TANDEM MASS SPECTROMETRY

S. Grafanaki, S. A. Pergantis

Lord Byron

18.30-19.30

POSTER SESSION 1 (details in p.17-21)

P1

Bioanalytics / Chemometrics / Food Analysis /

01-62

Foodomics / Mass spectrometry / Metabolomics /

X-ray spectroscopy

19.00

OPENING OF THE EXHIBITION

Bioanalytics / Chemometrics / Food Analysis / Foodomics /
Mass spectrometry / Metabolomics / X-ray spectroscopy

- P1-01** PREPARATION OF NANOCERIA CONJUGATES FOR BIOANALYTICAL ASSAYS
I. P. Gkini, T. K. Christopoulos
- P1-02** CHEMICAL COMPOSITION AND EVIDENCE FOR A SELECTIVE ANTICANCER ACTIVITY OF HELLEBORUS CYCLOPHYLLUS BOISS ON A549 CANCER CELL LINE
P. Yfanti, A. Karkabounas, A. Batistatoy, M. E. Lekka
- P1-03** A NOVEL ELECTROCHEMICAL SENSOR BASED ON REDUCED GRAPHENE OXIDE AND MOLECULAR IMPRINTED OVER-OXIDIZED POLYPYRROLE MODIFIED GOLD NANOPARTICLES FOR AMOXICILLINE DETECTION
H. Essousi, H. Barhoumi, S. Karastogianni, S. Girousi
- P1-04** DETECTION OF MYCOBACTERIUM AVIUM SUBSPECIES PARATUBERCULOSIS IN INFANT FORMULAS BY CULTURE, PCR AND COMBINED PHAGE-PCR
G. Botsaris, M. Christodoulou, C. Rees
- P1-05** INORGANIC ANALYSIS OF TEA SAMPLES USING ENERGY-DISPERSIVE X-RAY FLUORESCENCE SPECTROMETRY AND MULTIVARIATE VARIANCE ANALYSIS
M. Musielak, R. Sitko, B. Walczak
- P1-06** FT-IR SPECTROSCOPY IN COMBINATION WITH CHEMOMETRICS FOR THE DETERMINATION OF THE GEOGRAPHICAL ORIGIN OF EXTRA VIRGIN OIL
E. Kakouri, P.K. Revelou, N.S. Sotiropoulou, Ch. Kanakis, C. Pappas, P.A. Tarantilis
- P1-07** SPECTROSCOPIC-CHEMOMETRIC METHOD FOR THE INVESTIGATION OF HONEY BOTANICAL ORIGIN
N.S. Sotiropoulou, M. Xagoraris, E. Kakouri, P.K. Revelou, C. Kanakis, C. Pappas, P. A. Tarantilis
- P1-08** CHEMISTRY STUDENT'S KNOWLEDGE AND AWARENESS ABOUT BASIC FOOD CONSTITUENTS, THEIR FEATURES AND ROLE
C. Piperidi, K. Akrida-Demertzi, P. Demertzis, G. Tsaparlis
- P1-09** EFFECT OF NATURAL PRODUCTS AGAINST FOODBORNE PATHOGENS
C. Michael, G. Botsaris, A. Chrysargyris, V. Goulas, N. Tzortzakis
- P1-10** APPLICATION OF MYCOBACTERIOPHAGE FOR RAPID DETECTION AND BIOLOGICAL CONTROL OF MYCOBACTERIA IN DAIRY PRODUCTS: THE CASE OF PARATUBERCULOSIS
N. Markantonis, G. Botsaris
- P1-11** IMPROVEMENT OF THE QUALITY OF A GREEK DISTILLATE (TSIPOURO) FROM GRAPES OF THE DEBINA VARIETY WITH THE ADDITION OF SELECTED SUPERFRUITS
K. Gkougkoulis, K. Akrida- Demertzi, P. Demertzis
- P1-12** EFFECT OF IRRIGATION ON THE BIOLOGICALLY ACTIVE COMPONENTS OF TOMATOES
R. Tömösközi-Farkas, B. Schmidt-Szantner, M. Nagy-Gasztonyi, P. Milotay
- P1-13** A REAL-TIME PCR-BASED METHOD FOR THE IDENTIFICATION OF OLEA EUROPAEA var. SYLVESTRIS (WILD-TYPE OLIVE)
C. Kyriakopoulou, D. Kalogianni

- P1-14** ASSESSMENT OF MILK PASTEURIZATION USING A SMARTPHONE OR A CONVENTIONAL DIGITAL CAMERA
A. Sevastou, S. S. Tragoulias, D. P. Kalogianni, T. K. Christopoulos
- P1-15** SIMPLE ANALYTICAL METHODOLOGY FOR THE DETERMINATION OF NEONICOTINOID PESTICIDE RESIDUES IN HONEY SAMPLES
S. Pateras, C. Tsoutsi, T. Albanis
- P1-16** GREEK HONEY AND MILK SPECTROSCOPIC ANALYSIS: BOTANICAL CLASSIFICATION, ORIGIN DISCRIMINATION AND ADULTERATION STUDIES
N. Fragkoulis, E. Orfanakis, M. Markoulidakis, A. Symianaki, A. Zoumi, M. Velegrakis
- P1-17** SPECTROSCOPIC ANALYSIS OF GREEK EXTRA VIRGIN OLIVE OIL: ORIGIN DISCRIMINATION AND ADULTERATION STUDIES
R. Kontzedaki, G. Stavrakakis, G. Sofra-Karanti, E. Orfanakis, N. Fragkoulis, A. Filippidis, S. Mavrakaki, A. Stamataki, M. Velegrakis
- P1-18** FATTY ACID PROFILING IN BLOOD OF HEALTHY INDIVIDUALS AND PATIENTS WITH HYPERLIPIDEMIA AND ASSOCIATION
T. Mouskeftara, A. Goulas, A. Asimopoulou, N. Raikos, G. Theodoridis, E. Gika
- P1-19** PHYSICOCHEMICAL CHARACTERIZATION OF CASEIN MICELLES FOR NANOFORMULATIONS IN FOOD INDUSTRY
A. Papagiannopoulos, M. D. Charavgi, P.F. Karakousi, I. Tseti, E.D. Chrysinia, S. Pispas
- P1-20** METABOLOMIC APPROACH FOR GREEK HONEY ORIGIN DISCRIMINATION MAKING USE OF ULTRA-HIGH PERFORMANCE LIQUID CHROMATOGRAPHY COUPLED TO HIGH RESOLUTION MASS SPECTROMETRY
G. Koulis, P. Katsianou, E. Panagopoulou, C. Proestos, N. Thomaidis
- P1-21** SINGLE PARTICLE ICP-MS: NEW PEAK IDENTIFICATION APPROACH FOR ULTRAFAST MEASUREMENT
M. Loula, A. Kana, O. Mestek
- P1-22** DETERMINATION OF MACRO- AND MICROELEMENT CONCENTRATIONS IN COAL AND ASH SAMPLE BY ICP-MS
V. Lyubomirova, V. Mihaylova, B. Zlateva, B. Todorov, R. Djingova
- P1-23** PHOTOLYTIC AND PHOTOCATALYTIC DEGRADATION OF FUROSEMIDE: KINETICS, IDENTIFICATION OF TRANSFORMATION PRODUCTS AND REACTION PATHWAYS USING LIQUID CHROMATOGRAPHY-ACCURATE MASS SPECTROMETRY (UPLC-MS/MS-LTQ-ORBITRAP)
G. Koutsikou, I. Konstantinou
- P1-24** PHARMACEUTICAL RESIDUES IN HOSPITAL WASTEWATERS USING LIQUID CHROMATOGRAPHY COUPLED TO HIGH-RESOLUTION MASS SPECTROMETRY
M. Kapsi, P. Konstas, E. Trantopoulos, Ch. Kosma, A. Karkabounas, V. Boti, I. Konstantinou, T. Albanis
- P1-25** COUPLING LIBS TO SSI-MS. INTERFERENCE OF PLASMA FORMATION WITH MASS ANALYSIS
K. Marmatakis, S. A. Pergantis, D. Anglos

- P1-26** IN-DEPTH INVESTIGATION OF THE OCCURRENCE OF PER- AND POLYFLUORINATED SUBSTANCES IN TOP PREDATORS AND THEIR PREY EMPLOYING HIGH-RESOLUTION MASS Spectrometry
A. Androulakakis, N. Alygizakis, G. Gkotsis, V. Nikolopoulou, M.-C. Nika, A. Cincinelli, R. Dekker, G. Duke, N. Glowacka, B. Knopf, J. Koschorreck, T. Martellini, P. Movalli, H. Ruedel, R. Shore, G. Treu, J. Slobodnik, N. Thomaidis
- P1-27** APPLICATION OF SINGLE PARTICLE INDUCTIVELY COUPLED PLASMA - MASS SPECTROMETRY FOR THE DETECTION AND CHARACTERIZATION OF METAL-CONTAINING NANOPARTICLES IN SEAWATER SAMPLES
M.I. Chronakis, M. Mavrakis, S.A. Pergantis, R.Á. Fernández García, M. Montes - Bayón, J. Bettmer, A. Tsiola, A. Gondikas, M. Tsapakis
- P1-28** EVALUATION OF ADVANCED DRINKING WATER TREATMENT PROCESSES BY A COMBINATION OF POWERFUL MASS SPECTROMETRIC TECHNIQUES AND EPR SPECTROSCOPY
M. Antonopoulou, N. Ioannidis, C. Avagianos, T. Kaloudis, T. Triantis, A. Hiskia
- P1-29** DETERMINATION OF 12 PHTHALATE ESTERS IN GREEK GRAPE MARC SPIRITS BY LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY
D. Diamantidou, O. Begou, H. Gika, E. Tsochatzis, S. Kalogiannis, N. Kataiftsi, E. Soufleros, G. Theodoridis, A. Zotou
- P1-30** BUILDING A LOCAL LIBRARY OF REFERENCE HPLC CHROMATOGRAMS AND QTOF-MS MASS SPECTRA USING THE MSMLS KIT
D. Diamantidou, P. Katechis, E. Lazaridou, H. Gika, G. Theodoridis
- P1-31** ANALYSIS AT TRACE LEVELS OF POLYCHLORINATED BIPHENYLS IN ENVIRONMENTAL WATER SAMPLES BY GAS CHROMATOGRAPHY-MASS SPECTROMETRY
P. Siachoulis, V. Boti, T. Albanis
- P1-32** DETERMINATION OF NITROFURAN METABOLITES IN FISH SAMPLES BY MEANS OF LIQUID CHROMATOGRAPHY COUPLED TO HIGH-RESOLUTION-ORBITRAP MASS SPECTROMETRY
E. Trantopoulos, Ch. Kosma, A. Karkabounas, V. Boti, T. Albanis
- P1-33** NOVEL MALDI-TOFMS-BASED METHODOLOGY FOR RAPID DETECTION OF PDO FETA CHEESE ADULTERATION
A. Kritikou, D. Damalas, I. Barla, C. Baessmann, N. Thomaidis
- P1-34** NON-SPECTRAL INTERFERENCES IN SINGLE-PARTICLE ICP-MS
A. Kaña, M. Loula, O. Mestek
- P1-35** DETERMINATION OF RARE EARTH ELEMENTS OF HIGH CONTENTS IN RARE EARTH ORE USING 5-ACID DIGESTION BY ICP-MS
W. Myung Choi, C. Hun Eum
- P1-36** DEVELOPMENT AND VALIDATION OF METHOD FOR DETERMINATION OF TREE NUT ALLERGENS WITH LC-MS/MS
K. Rodi, M. Kostakis, N. Thomaidis, G. Siragakis
- P1-37** DEVELOPMENT OF A MULTI-RESIDUE METHODOLOGY FOR THE DETERMINATION OF VETERINARY DRUGS IN ANIMAL FEED BY RP-HPLC-MS/MS
A. Christopoulou, A. Kritikou, M. Dasenaki, N. Thomaidis

- P1-38** MARKERS OF OXIDATIVE STRESS AND AMINOACIDS IN INFANT'S SERUM SAMPLES WITH URETEROPELVIC JUNCTION OBSTRUCTION BY STABLE - ISOTOPE DILUTION GC-MS WITH NEGATIVE CHEMICAL IONIZATION
O. Begou, A. Bollenbach, K. Drabert, A. Pavlaki, H. Gika, N. Printza, G. Theodoridis, D. Tsikas
- P1-39** CHEMOMETRIC APPROACH TO THE OPTIMIZATION OF HS-SPME/GC-MS PARAMETERS FOR THE DETERMINATION OF MULTICLASS PESTICIDE RESIDUES IN FRUITS AND VEGETABLES
E. Ayeni Kikelomo, L. B. Abdulra'uf
- P1-40** A GC-MS METHOD FOR THE DETERMINATION OF FIVE NPS IN WHOLE BLOOD AND THE DETECTION OF SIX NPS IN URINE
A. Alexandridou, T. Mouskeftara, E. Gika, O. Mastrogianni, A. Orfanidis, N. Raikos
- P1-41** DETERMINATION OF ROYAL JELLY FREE FATTY ACIDS BY LIQUID CHROMATOGRAPHY-HIGH RESOLUTION MASS SPECTROMETRY
M. G. Kokotou, C. Mantzourani, R. Babaiti, G. Kokotos
- P1-42** METABOLOMIC PROFILING OF ZEBRAFISH WITH NMR AND LC-MS/MS AFTER EXPOSURE TO NON-DOPED, N-DOPED AND N,S-DOPED CARBON NANODOTS
K. Pliatsika, T. Chatzimitakos, I. Chousidis, I. Leonardos, C. Stalikas
- P1-43** UNTARGETED FECAL METABOLOMICS-BASED ANALYSIS OF CAROB TREATED RATS
O. Begou, O. Deda, H. Gika, I. Taitzoglou, N. Raikos, A. Agapiou, G. Theodoridis
- P1-44** METABOLOMICS STUDY OF THE EFFECT OF TOLUENE ON PSEUDOMONAS POTIDA DOT-T1E STRAINS
A. Sayqal
- P1-45** METABOLOMICS ANALYSIS FOR THE IN VITRO TOXICITY ASSESSMENT OF COCAINE IN HEPG2
A. Krokos, C. Virgiliou, H. Gkika, N. Raikos, E. Aggelidou, A. Kritis, G. Theodoridis
- P1-46** TARGETED AND UNTARGETED METABOLOMICS OF MICE URINE AND FECAL SAMPLES, IN THE DISCOVERY OF ALCOHOL TOXICITY BIOMARKERS
C. Virgiliou, O. Deda, A. Orfanidis, H. Gika
- P1-47** XRD CHARACTERIZATION OF CRYSTALLINITY AND PHASE COMPOSITION OF SUBFOSSIL HOLOCENE REINDEER BONES AND ANTLERS FROM THE UST'-POLUY ANCIENT SANCTUARY (WESTERN SIBERIA, RUSSIA)
A. Ryanskaya, D. Kiseleva, P. Kosintsev, O. Bachura, S. Votyakov, N. Fedorova, A. Gusev
- P1-48** AN X-RAY SPECTROSCOPY STUDY ON THE MECHANISM OF SB(V) AND CR(VI) ADSORPTION BY TIN AND IRON OXY-HYDROXIDES
G. Papadopoulos, T. Asimakidou, D. Karfaridis, F. Pinakidou, K. Simeonidis
- P1-49** EUROPEAN NETWORK FOR CHEMICAL ELEMENTAL ANALYSIS BY TOTAL REFLECTION X-RAY FLUORESCENCE
D. Eichert, L. Borgese

- P1-50** NON-INVASIVE COMPOSITIONAL STUDY OF COPPER ALLOY VESSELS FROM THE ARCHAIC CEMETERY OF SINDOS IN THESSALONIKI
C. Katsifas, A. Touloumzidou, G. Zachariadis
- P1-51** DEVELOPMENT AND VALIDATION OF A HPLC-PDA METHOD FOR THE DETERMINATION OF OLMESARTAN MEDOXOMIL.
T. Meikopoulos, E. Andriotis, D. Fatouros, N. Mavriki, C. Pourzitaki, G. Theodoridis, H. Gika
- P1-52** LIQUID CHROMATOGRAPHY COUPLED TO QUADRUPOLE-ORBITRAP MASS SPECTROMETRY TO INVESTIGATE THE OCCURRENCE OF PHARMACEUTICAL RESIDUES IN NATURAL WATERS
V. Boti, D. Kifokeri, C. Nannou, T. Albanis
- P1-53** DETERMINATION OF AMITRAZ, BROMOPROPYLATE, COUMAPHOS AND T-FLUVALINATE RESIDUES IN HONEY BY QUECHERS AND HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY-UV/DAD
E. Gotsi, V. Boti, T. Albanis
- P1-54** A GC/MS METHOD FOR THE DETECTION AND QUANTIFICATION OF C12-16 ALKYLDIMETHYLAMINES IN HUMAN BLOOD
E. Brousa, O. Mastrogiani, A. Orfanidis, N. Raikos, H. Zagelidou
- P1-55** VALIDATION AND APPLICATION OF METHOD FOR THE DETERMINATION OF PESTICIDE RESIDUES IN NATURAL WATERS AND SEDIMENTS, COUPLED TO GC-MS DETERMINATION
M. Kapsi, V. Sakkas, T. Albanis
- P1-56** ANALYTICAL METHODS FOR THE DETECTION OF PHARMACEUTICALS AND THEIR METABOLITES IN SURFACE WATERS
A. Kalogeropoulou, Ch. Kosma, T. Albanis
- P1-57** BIORECOVERY OF SCANDIUM AND OTHER RARE EARTH ELEMENTS FROM GREEK RED MUD
K. Kiskira, O. Serifi, G. Lytras, G. Lyberatos, M. Ochsenkuehn-Petropoulou
- P1-58** DETERMINATION OF MAJOR ELEMENTS IN BULGARIAN BOTTLED MINERAL WATER
V. Lyubomirova, V. Mihaylova, B. Zlateva-Rangelova, R. Djingova
- P1-59** A UHPLC-MS/MS METHOD FOR THE DETECTION AND QUANTIFICATION OF 84 DRUGS OF ABUSE AND PHARMACEUTICALS IN HUMAN BLOOD
A. Orfanidis, H. Gika, G. Theodoridis, O. Mastrogiani, N. Raikos
- P1-60** AN EFFICIENT DLLME-GC-MS METHOD DEVELOPED FOR THE DETERMINATION OF MONOHYDROXY AND DIHYDROXY PAHs METABOLITES IN HUMAN URINE
S. Zichová, S. Hrouzková, T. Göen
- P1-61** MODIFIED GRAPHENE OXIDE FOR RARE EARTH METALS' PRECONCENTRATION METHOD AFTER DISPERSIVE SOLID PHASE EXTRACTION AND OPTIMIZATION WITH CENTRAL COMPOSITE DESIGN
N. Manousi, E. Deliyanni, G. Zachariadis
- P1-62** COMPARISON OF THE DATA OBTAINED BY XRF AND ICP-AES FOR ANALYSIS OF BELT ACCESSORIES DATED TO THE GREAT MIGRATION PERIOD IN BULGARIA
B. Zlateva, D. Lesigyariski, V. Mihaylova, V. Lyubomirova, R. Djingova, I. Kuleff, L. Vagalinski

Tuesday, September 24th 2019

Evergeton Hall	08.15-09.00		Registration
	09.00-09.30		Invited Lecture Chair: R. Lobinski, D. Hela A New Algorithm for Enhancing Chromatographic and Spectroscopic Measurements and Data Processing E. Rosenberg
Evergeton Hall	09.30-10.45		Parallel Sessions
			Oral Session: Chromatography 1 Chair: R. Lobinski, D. Hela
	09.30-10.00	OP25	THE UTILITY OF HIGH RESOLUTION MASS SPECTROMETRY & INFORMATICS FOR NATURAL PRODUCT ANALYTICS I. Riba
	10.00-10.15	OP26	ENHANCED VARIANTS OF MICROEXTRACTION PROCEDURES BASED ON MAGNETIC IONIC LIQUIDS T. Chatzimitakos, J. Anderson, C. Stalikas
	10.15-10.30	OP27	SYNTHESIS OF AMBERLITE XAD-4 BASED METAL CHELATOR VIA ARYLDIAZONIUM RADICAL ROUTE FOR SOLID PHASE EXTRACTION OF HEAVY METALS FROM GROUNDWATER SAMPLES A. Alsuheimi
	10.30-10.45	OP28	FABRIC PHASE SORPTIVE EXTRACTION FOR THE DETERMINATION OF ANTIDEPRESSANT DRUGS IN ENVIRONMENTAL SAMPLES PRIOR TO HPLC-DAD C. Jimenez Holgado, C. Chrimatopoulos, M. Kalaboka, V. Sakkas
Lord Byron Hall			Oral Session: Sample Handling/Mobile Instruments Chair: J. Barek, M. Prodromidis
	09.30-09.45	OP29	DNA HYBRIDIZATION ASSAYS AND QUANTITATIVE POLYMERASE CHAIN REACTION USING A SMARTPHONE AS A CHEMILUMINESCENCE IMAGER P. Kalligosfyri, A. Sevastou, I. Kyriakou, S. Tragoulias, D. Kalogianni, T. Christopoulos
	09.45-10.00	OP30	FLUORESCENCE INSTRUMENTATION FOR RAPID, IN SITU WATER QUALITY ASSESSMENT N. Adányi, M. Berki, É. Kónya, S. Klátyik, D. Lázár, B. Gémes, D. Csősz, S. Lenk, A. Barócsi, T. L. Csőke, A. Csákványi, L. Domján, G. Szarvas, L. Kocsányi, A. Székács

Lord Byron Hall	10.00-10.15	OP31	PORTABLE DIAGNOSTIC MEDICAL DEVICES UTILIZING FREE-STANDING RESPONSIVE POLYMER FILM-BASED BIOSENSORS AND LOW-COST TRANSDUCERS FOR POINT-OF-CARE APPLICATIONS <u>E. Tzianni, J. Hrbac, D. K. Christodoulou, M. I. Prodromidis</u>
	10.15-10.30	OP32	KINETIC STUDY OF PETROLEUM GENERATION USING OPEN-PYROLYSIS ROCK-EVAL ANALYTICAL SYSTEM <u>K. Kokkinopoulou, N. Pasadakis</u>
	10.30-10.45	OP33	THE STUDY OF MERCURY ACCUMULATION BY PLANTS DEPENDING ON ITS SPECIATION IN GROWING SUBSTRATE <u>O. V. Shuvaeva, M. A. Gustaytis, A. Pohorukova</u>
Evergeton Hall	10.45-11.30	Coffee break	
	11.30-12.00	Invited Lecture Chair: <i>J. Gerothanassis, K. Stalikas</i> Synthesis Routes for the Preparation of Magnetic Nanoparticles for Health and Environmental Applications <i>P. Morales</i>	
12.00-13.00		Parallel Sessions	
Evergeton Hall	Oral Session: Materials / Sensors Chair: <i>K. Stalikas, K. Simeonidis</i>		
	12.00-12.15	OP34	MICROFLUIDIC ANALYTICAL TOOL COUPLING A FLUORESCENT MOLECULAR PROBE AND A MICRO-HYDROCYCLONE FOR THE DETECTION OF WATER CHLORINATION LEVEL <u>J. Bell, A. Tillo, J. Bartelmess, V. P. Chauhan, K. Rurack</u>
	12.15-12.30	OP35	LABORATORY EVALUATION OF ULTRAMAFIC ROCKS EXPLOITATION TOWARDS THE PRODUCTION OF ADDED-VALUE PRODUCTS <u>E. Tzamos, K. Simeonidis, E. Pagona, X. Ntampou, A. Zouboulis, M. Mitrakas</u>
	12.30-12.45	OP36	LOW-COST "GREEN" SENSORS BASED ON GRAPHITE NANOMATERIALS PREPARED FROM PENCIL LEADS WITH THE AID OF A 3D POSITIONING SPARKING DEVICE FOR THE SENSITIVE DETECTION OF NITROAROMATIC EXPLOSIVES <u>M.G. Trachioti, J. Hrbac, D. Hemzal, M.I. Prodromidis</u>
	12.45-13.00	OP37	AUTOMATED INSPECTION OF PMMA COATING ON NON-PATTERNED SILICON WAFERS <u>A. Knápek, M. Drozd, M. Matějka, J. Chlumská, S. Král, V. Kolařík</u>

Lord Byron Hall

- Oral Session: Spectrometry 1**
Chair: **K. Valko, I. Gerotheranassis**
- 12.00-12.15 **OP38** DIAGNOSTIC POTENTIAL OF FT-IR-BASED METABOLOMICS FOR THE AUTHENTICATION OF LAURUS NOBILIS L. ESSENTIAL OIL IS SUPPORTED BY GC-FID AND GC-MS ANALYSES
M. Papapostolou, S. Ordoudi, S. Kokkini, M. Tsimidou
- 12.15-12.30 **OP39** COMPARATIVE STUDY OF DATA OBTAINED FOR THE EFSA HEALTH CLAIM 'ON OLIVE OIL POLYPHENOLS' WITH A UHPLC-DAD- FLUORESCENCE PROTOCOL AND A 1H-NMR SPECTROSCOPY PROCEDURE
N. Nenadis, O. Winkelmann, A. Mastralexi, D.L. García-González, T. Gallina-Toschi, M.Z. Tsimidou
- 12.30-12.45 **OP40** THE LEAN WAY OF CLEANING PHARMACEUTICAL SOILS: A SPECTROSCOPY BASED APPROACH
A. Kumar, J.H. Hyslop, J.J. Leahy, S. Moore
- 12.45-13.00 **OP41** MONITORING BIOGAS REACTORS USING ANALYTICAL AND MOLECULAR TOOLS
P.G. Kougias, L. Treu, S. Campanaro, X. Zhu, I. Angelidaki

13.00-14.15

Lunch

Lord Byron Hall

14.15-15.15

POSTER SESSION 2 (details in p.27-31)

- P2** Aerosol metrology / Archaeometry / Chemical- and bio-sensors / Chromatography / Environmental analysis / Materials / Mobile analytical instruments / Pharmaceutical analysis / Sample handling / Sensors / Spectrochemical analysis / Thermal analysis
- 01-61**

EXHIBITION

Evergeton Hall

15.15-15.45

Invited Lecture

Chair: **D. Eichert, P. Morales**

The EMPIR AEROMET project - dimensional and analytical aerosol metrology based upon different traceability chains

B. Beckhoff

15.45-16.45	Oral Session: Aerosol Metrology / X-Ray Analysis 2
	Chair: D. Eichert, P. Morales
15.45-16.00	OP42 QUANTITATIVE ELEMENTAL ANALYSIS OF AMBIENT AEROSOL PARTICLES USING PORTABLE TXRF S. Seeger, B. Pollakowski-Herrmann, A. Gross, J. Osan, L. Stabile
16.00-16.15	OP43 AEROMET - THE METROLOGY OF AMBIENT PARTICULATE METALS MEASUREMENTS AND THE EXAMPLE OF THE UK NATIONAL MONITORING NETWORK S. Goddard, P. Quincey, L. Bregonzio-Rozier, P. Fiscaro, C. Oster, V. Gianotti, M. Laus
16.15-16.30	OP44 AEROMET PROJECT - PROTOCOL DEVELOPMENT FOR HEAVY METALS ANALYSIS OF COLLECTED AEROSOLS SIZE FRACTIONS L. Brégonzio-Rozier, C. Oster, P. Fiscaro, F. Gaie-Levrel, S. Goddard, P. Quincey, M. Ochsenkühn-Petropoulou, L.A. Tsakanika, T. Lymperopoulou, F. Tsopeles, K.M. Ochsenkuehn
16.30-16.45	OP45 DEVELOPMENT AND CHARACTERIZATION OF AEROSOL REFERENCE MATERIALS FOR THE CALIBRATION OF NUCLEAR ANALYTICAL TECHNIQUES M. Gini, M. Manousakas, V. Kantarelou, V. Vasilatou, M. Chiari, A.G. Karydas, K. Eleftheriadis
16.45-17.15	Coffee break
17.15-18.30	Oral Session: Aerosol Metrology / X-Ray Analysis 3
	Chair: P. Morales, P. Quincey
17.15-17.35	OP46 LIGHT ABSORBING CARBON MEASUREMENTS ON ATMOSPHERIC AEROSOL PTFE FILTER SAMPLES BY THE MULTI-WAVELENGTH ABSORPTION BLACK CARBON INSTRUMENT (MABI).INTERCOMPARISON WITH OTHER MEASUREMENT TECHNIQUES K. Eleftheriadis
17.35-17.45	OP47 EXSA: European X-ray Spectrometry Association D. Eichert
17.45-18.00	OP48 DESIGN AND DEVELOPMENT OF A NEW AEROSOL GENERATION SYSTEM FOR INHALATION EXPOSURE APPLICATIONS S. Taghvaei, A. Mousavi, M.H. Sowlat, C. Sioutas

Evergeton Hall 18.00-18.15 **OP49** AUTONOMOUS 1.57 MM DIFFERENTIAL ABSORPTION LASER DEVICE FOR REMOTE SENSING OF ATMOSPHERIC CO₂
P. Siozos, G. Psyllakis, P. Samartzis, M. Velegrakis

18.15-18.30 **OP50** EDXRF AND XANES AS ANALYTICAL TOOLS FOR NEW MERCURY COMPLEXING MEMBRANES
N. Kallithrakas-Kontos, S. Foteinis, E. Vazgiouraki

Lord Byron Hall 18.30-19.30 **POSTER SESSION 2** (*details in p.27-31*)
P2 Aerosol metrology / Archaeometry / Chemical-and bio-
01-61 sensors / Chromatography / Environmental analysis /
Materials / Mobile analytical instruments /
Pharmaceutical analysis / Sample handling / Sensors /
Spectrochemical analysis / Thermal analysis

EXHIBITION

21.00

CONFERENCE DINNER

POSTER SESSION 2 • P2-01 – P2-61

Aerosol metrology / Archaeometry / Chemical- and bio- sensors / Chromatography / Environmental analysis / Materials / Mobile analytical instruments / Pharmaceutical analysis / Sample handling / Sensors / Spectrochemical analysis / Thermal analysis

- P2-01** CASCADE IMPACTOR SAMPLING HARMONIZED TO NON-DESTRUCTIVE ELEMENTAL ANALYSIS OF AEROSOL PARTICLES
C. Dian, J. Osan, E. Börcsök, L. Stabile, S. Török
- P2-02** AEROSOL METROLOGY FOR ATMOSPHERIC SCIENCE AND AIR QUALITY
F. Tsopeles, M. Ochsenkuehn Petropoulou, T. Lymperopoulou, L. A. Tsakanika, K. M. Ochsenkuehn, O. Serifi, C. Stergiopoulos, B. Beckhoff
- P2-03** MINERALOGICAL COMPOSITION OF THE BRONZE AGE POTTERY FROM THE KAMENNY AMBAR SETTLEMENT (SOUTHERN URALS, RUSSIA)
A. Ryanskaya, M. Piskareva, D. Kiseleva, S. Panteleeva
- P2-04** MINERALOGICAL AND CHEMICAL COMPOSITION OF PREHISTORIC PIGMENTS FROM CAVE PAINTINGS AND PICTOGRAPHS (SOUTHERN URALS, RUSSIA) BY SEM-EDS AND RAMAN SPECTROSCOPY
D. Kiseleva, E. Shagalov, E. Pankrushina, A. Ryanskaya, V. Shirokov
- P2-05** ALL-SCREEN-PRINTED INTEGRATED PERMANENT BONDED MAGNETS ELECTROCHEMICAL CELLS
A. Papavasileiou, M. Prodromidis, I. Panagiotopoulos
- P2-06** INVESTIGATION OF A MULTIPLEX INJECTOR FOR TIME-RESOLVED GAS CHROMATOGRAPHIC MONITORING
M. Antoniadou, E. Rosenberg, J. Kahr
- P2-07** DETERMINATION OF PESTICIDES IN RIVER WATER SAMPLES BY SOLID PHASE EXTRACTION COMBINED WITH HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY/UV DETECTION (HPLC/UV-DAD)
K. Boushi, V. Boti, T. Albanis
- P2-08** ON-LINE EXTRACTION COUPLED TO LIQUID CHROMATOGRAPHIC ANALYSIS OF HYDROPHOBIC ORGANIC COMPOUNDS IN SOILS
A. Votani, T. Choleva, M. Tarara, C. Tziasiou, G. Tsogas, A. Vlessidis, D. Giokas
- P2-09** OPTIMIZATION AND VALIDATION OF HPLC METHOD FOR SOME PESTICIDES FROM HUMAN URINE AND COMMERCIAL DOSAGE FORM
W. H. Gebrehiwot, C. Erkmen, B. Uslu
- P2-10** BREATH ANALYSIS: A NOVEL NON-INVASIVE TOOL FOR MONITORING RECOVERY AFTER EXERCISE-INDUCED MUSCLE DAMAGE IN HUMANS.
K. Mikedi, E. Moutafis, S. Karma, A. Pappa, A. Krokidas, T. Nomikos
- P2-11** QUECHERS-HPLC METHOD FOR AFLATOXIN DETECTION OF FOODS
L. B. Abdulra'uf, A. Sirhan, G. Huat Tan, R. C. S Wong
- P2-12** GAS CHROMATOGRAPHY AS A TOOL FOR THE OPTIMIZATION OF DOCOSAHEXAENOIC ACID (DHA) RECOVERY FROM CRYPTHECODINIUM COHNII MICROALGA
M. Stramarkou, A. Chalima, V. Oikonomopoulou, E. Topakas, M. Krokida

- P2-13** MICELLAR CHROMATOGRAPHY USING TWEEN-20 AS SURFACTANT: ELUTION MECHANISM AND QUANTITATIVE RETENTION- ACTIVITY RELATIONSHIPS FOR ESTIMATION OF BIOPHARMACEUTICAL PROPERTIES OF STRUCTURALLY-DIVERSE DRUGS
F. Tsopelas, K. Vasileiou, E. Leventaki, A. Tsantili- Kakoulidou
- P2-14** THE POTENTIAL OF IMMOBILIZED PLASMA PROTEIN HIGH PERFORMANCE LIQUID CHROMATOGRAPHY TO ESTIMATE ECOTOXICITY OF PESTICIDES
C. Stergiopoulos, F. Tsopelas, M. Petropoulou-Ochsenkuehn
- P2-15** INITIATING EFFICIENT SB(V) REMOVAL FOR DRINKING WATER BY A MECHANISM OF REDUCTION/ADSORPTION SEQUENCE
T. Asimakidou, G. Vourlias, K. Kalaitzidou, M. Mitrakas, K. Simeonidis
- P2-16** SYNTHESIS AND CHARACTERIZATION OF Ag, ZnO AND AgZnO DECORATED GRAPHENE OXIDE FOR ENVIRONMENTAL APPLICATIONS
N. Adamopoulos, A. Ntziouni, A. Zourou, K. Kordatos
- P2-17** GRAPHENE OXIDE/ATTAPULGITE AND GRAPHENE OXIDE/ZEOLITE COMPOSITE HYBRID MATERIALS AS ABSORBENTS IN DYES WASTEWATER TREATMENT
P. Koukakis, N. Adamopoulos, A. Zourou, K. Kordatos
- P2-18** SYNTHESIS AND CHARACTERIZATION OF MAGNETIC GRAPHENE OXIDE FOR ENVIRONMENTAL APPLICATIONS
A. Zourou, N. Adamopoulos, A. Ntziouni, K. Kordatos
- P2-19** SYNTHESIS AND CHARACTERIZATION OF GRAPHENE OXIDE-CERIA NANOHYBRID MATERIAL
A. Zourou, A. Koniaris, A. Ntziouni, K. Kordatos
- P2-20** GRAPHENE OXIDE/ β -CYCLODEXTRIN NANOHYBRID AS AN ADSORBENT FOR DYES REMOVAL
A. Zourou, N. Adamopoulos, A. Ntziouni, K. Kordatos
- P2-21** MICRO-LIBS MAPPING OF MARINE MOLLUSK SHELLS ENABLES RELIABLE USE OF Mg/Ca AS A TEMPERATURE PROXY
N. Hausmann, I. Malegiannaki, A. Lemonis, P. Siozos, D. Anglos
- P2-22** DETERMINATION OF THREE ANTIDEPRESSANT DRUGS BY FABRIC-PHASE SORPTIVE EXTRACTION (FPSE) COUPLED TO HPLC-UV/DAD
C. Chrimatopoulos, C. Jimenez-Holgado, M. Kalampoka, V. Sakkas
- P2-23** SILICON LEACHABILITY FROM BAUXITE RESIDUE-THE CASE OF GEL FORMATION
L.A. Tsakanika, T. Lympelopoulou, M. Ochsenkuehn Petropoulou
- P2-24** MAGNETIC GRAPHENE OXIDE SOLID-PHASE EXTRACTION OF SELECTED PHARMACEUTICALS FROM ENVIRONMENTAL WATERS
M. Kalampoka, T. Chatzimitakos, C. Stalikas, V. Boti, T. Albanis, V. Sakkas
- P2-25** FLUORESCENT CARBON NANODOTS FROM OLIVE OIL PRODUCTION RESIDUES: PREPARATION, CHARACTERIZATION AND ANALYTICAL APPLICATION
N.M. Christopoulou, D. Kalogianni, T. Christopoulos
- P2-26** EFFECT OF CARBON ADDITIVE ON SINTERING OF ZIRCONIA CERAMICS
S. Ghyngazov

- P2-27** THE EFFECT OF pH ON THE STRUCTURAL AND OPTICAL PROPERTIES OF CARBON QUANTUM DOTS
P. Tsintavi, A. Segos, A. Ntziouni, N. Adamopoulos, L.A. Tsakanika, E. Alexandratou, C. Tsamis, K. Kordatos, A. Zourou
- P2-28** UV-FEMTOSECOND DOUBLE-PULSE LIBS FOR THE IN-SITU CHARACTERIZATION OF ITO-BASED THIN FILMS
N. Giannakaris, P. Siozos, S. P. Banerjee, M. Sentis, D. Anglos
- P2-29** SYNERGISTIC EFFECTS OF SOLID-PHASE INTERACTIONS IN FERRITE POWDER SYSTEMS UNDER COMPLEX HIGH-ENERGY MECHANICAL AND ELECTRON-BEAM IMPACTS
E. Lysenko, A. Surzhikov, E. Nikolaev
- P2-30** FLUORESCENCE INSTRUMENTATION FOR RAPID, IN SITU DETERMINATION OF DISSOLVED ORGANIC MATTER IN WATER
É. Kónya, M. Berki, S. Klátyik, D. Lázár, D. Csősz, S. Lenk, A. Barócsi, T. L. Csőke, A. Csákányi, L. Domján, G. Szarvas, L. Kocsányi, N. Adányi, A. Székács
- P2-31** FLUORESCENCE INSTRUMENTATION FOR RAPID, IN SITU DETERMINATION OF ALGAL DENSITY IN WATER
D. Lázár, B. Gémes, S. Klátyik, É. Kónya, M. Berki, D. Csősz, S. Lenk, A. Barócsi, T.L. Csőke, A. Csákányi, L. Domján, G. Szarvas, L. Kocsányi, N. Adányi, A. Székács
- P2-32** FLUORESCENCE INSTRUMENTATION FOR RAPID, IN SITU DETERMINATION OF PAHS IN SURFACE WATER
M. Berki, É. Kónya, B. Gémes, S. Klátyik, D. Csősz, S. Lenk, A. Barócsi, T. L. Csőke, A. Csákányi, L. Domján, G. Szarvas, L. Kocsányi, N. Adányi, A. Székács
- P2-33** APPLICATION OF ANALYTICAL QUALITY BY DESIGN PRINCIPLES FOR THE DETERMINATION OF ALKYL P-TOLUENESULFONATES IMPURITIES IN APREPITANT BY HPLC. VALIDATION USING TOTAL-ERROR CONCEPT
C. Zacharis, E. Vastardi
- P2-34** INSTRUMENTAL ANALYTICAL METHODS AS A TOOL FOR THE EVALUATION OF DEOXYCHOLIC ACID ENCAPSULATION EFFICIENCY IN NATURAL MATRICES USING ELECTROHYDRODYNAMIC PROCESS
M. Panagiotopoulou, S. Papadaki, M. Krokida
- P2-35** OCCURRENCE, REMOVAL AND ENVIRONMENTAL RISK ASSESSMENT OF PHARMACEUTICALS IN HOSPITAL AND URBAN WASTEWATERS
P. Martinaiou, E. Trantopoulos, C. Kosma, T. Albanis
- P2-36** CHARACTERIZATION OF THE ANTIMICROBIAL ACTIVITY OF HERBAL EXTRACTS FOR REPLACING ANTIBIOTICS IN LIVESTOCK
M.S.G. Kafyra, A. Anastasiadis, M. Krokida
- P2-37** DEVELOPMENT AND VALIDATION OF AN RP-HPLC METHOD FOR THE ANALYSIS OF GUAIACOL IN A PHARMACEUTICAL DOSAGE FORM
A. Addoun, C. Chelghoum

- P2-38** MAGNETIC MOLECULARLY IMPRINTED POLYMER NANOPARTICLES AS SOLID PHASE EXTRACTION MATRIX IN THERAPEUTIC DRUG MONITORING
M. Nebsen, M. Al-Ghobashy, O. Attallah
- P2-39** SYNTHESIS OF MAGNETIC BIMETALLIC Fe-Cu NANOPARTICLES FOR THE DISPERSIVE MICROEXTRACTION OF EMERGING POLLUTANS
A. Vasilas, T. Chatzimitakos, C. Stalikas
- P2-40** A NOVEL APPROACH: pH CONTROLLED DISPERSIVE LIQUID-LIQUID MICROEXTRACTION (DLLME) OF PAHS METABOLITES FROM HUMAN URINE
S. Hrouzková, T. Göen, S. Zichová
- P2-41** RHODIUM NANOPARTICLES AS PEROXIDASE-MIMETICS FOR THE DETERMINATION OF GLUCOSE
T. Choleva, V. Gatselou, G. Tsogas, A. Vlessidis, D. Giokas
- P2-42** DISPERSIVE LIQUID-LIQUID MICROEXTRACTION METHOD FOR HPLC DETERMINATION OF PHENOLIC COMPOUNDS IN CAROB SYRUP
V. Goulas, C. Kalogirou
- P2-43** APPLICATION OF DISSOLVABLE LAYERED DOUBLE HYDROXIDES AS AN EXTRACTION MEDIUM OF GOLD NANOPARTICLES PRIOR TO THEIR DETERMINATION BY ATOMIC ABSORPTION SPECTROMETRY
T. Choleva, D. Giokas
- P2-44** DETERMINATION OF HYDRAZINE BY ON-LINE SOLID PHASE EXTRACTION AND DERIVATIZATION USING ZONE FLUIDICS
P. Tzanavaras, C. Zacharis, S. Themistokleous
- P2-45** PAPER-BASED DNA BIOSENSOR FOR VISUAL DETECTION OF MILK ADULTERATION
E. Bougadi, D. Kalogianni
- P2-46** SYNTHESIS, CHARACTERIZATION AND ANALYTICAL UTILITY OF FREE-STANDING PH RESPONSIVE POLYMER FILMS IN SENSING APPLICATIONS
E. Tzianni, A. Lazanas, M. Trachioti, A. Florou, M. Prodromidis, I. Moutsios, D. Moschovas, M. Karabela, A. Avgeropoulos
- P2-47** MICROFLUIDIC PLATFORM FOR FUNCTIONALISATION, EXTRACTION AND DETECTION OF PHOSPHORYLATED AMINO ACIDS USING FLUORESCENT SENSORY PARTICLES
S. C. Burnage, J. Bell, W. Wan, K. Rurack
- P2-48** ADVANCED SENSORS FOR HEAVY METALS BASED ON MONOELEMENTAL 2D BISMUTHENE AND GRAPHENE NANOCOMPOSITES PRODUCED BY SHEAR-FORCE LIQUID EXFOLIATION
A. Lazanas, A. Paipetis, M. Prodromidis
- P2-49** qNMR AS A POWERFUL TOOL FOR PROVIDING PURITY ASSESSMENT AND METROLOGICAL TRACEABILITY
C. Alexopoulos, A. Georgopoulou, P. Giannikopoulou, E. Kakoulides, E. Stathoudaki, V. Schoina, A. Panagiotopoulou
- P2-50** NOVEL ¹H NMR METHOD FOR THE DETERMINATION OF ANTHOCYANINS IN FRUIT EXTRACTS
V. Goulas, I. Gerathanassis, G. Manganaris

- P2-51** RAPID AND SENSITIVE NMR AND MOLECULAR DYNAMICS MAPPING OF SELECTIVE BINDING SITES OF FATTY ACIDS WITH ALBUMIN
I. Gerothanassis, E. Alexandri, A. Primikyri, G. Papamokos
- P2-52** FLUORESCENCE SPECTROSCOPY – AN EFFECTIVE TOOL FOR CHARACTERIZATION OF GOLD NANOPARTICLES-PROTEINS CONJUGATES – THE COMPONENTS OF BIOANALYTICAL SYSTEMS
D. Sotnikov, E. Zvereva, A. Zherdev, B. Dzantiev
- P2-53** PHOTOCHEMICAL REDUCTION OF SILVER HALIDES FOR THE COLORIMETRIC DETERMINATION OF BIOTHIOLS WITH CONSUMER ELECTRONIC IMAGING DEVICES AS DETECTORS
F. Kappi, M. Tarara, G. Tsogas, A. Vlessidis, D. Giokas
- P2-54** HYPER-SPECTRAL RAMAN MAPPING OF MODERN HUMAN ENAMEL AND DENTIN
E. Pankrushina, D. Kiseleva, A. Ryanskaya, A. Lyogkih, N. Ozhgikhina, Y. Mandra
- P2-55** ANALYTICAL AND STRUCTURAL STUDIES OF LIPIDS AND RELATED COMPOUNDS WITH THE USE OF NMR AND DFT CALCULATIONS
T. Venianakis, M. Siskos, I. Gerothanassis
- P2-56** OPTICAL SCREENING OF BIOTHIOL LEVELS BASED ON ABSORBANCE QUENCHING OF GOLD-COATED SURFACTANT MICELLAR ASSEMBLIES
E. Akrivi, N. Kourkoumelis, A. Vlessidis
- P2-57** THERMAL ANALYSIS STUDY OF γ -C₃N₄ PREPARATION USING Al, Al₂O₃, Pt/Rh COVERED AND UNCOVERED CRUCIBLES
F. Bairamis, T. Vaimakis, I. Konstantinou, D. Petrakis
- P2-58** INVESTIGATIONS OF BIOMATERIALS WITH VIDEO PARTICLE TRACKING MICRORHEOLOGY
A. Papagiannopoulos
- P2-59** APPLICATION OF THE QUECHERS TECHNIQUE FOR THE PRE-CONCENTRATION OF MALATHION PESTICIDES IN FRUIT SAMPLES
L. Chimuka, H. Musarurwa, N. Tavengwa
- P2-60** MONITORING OF ANTIBIOTICS IN THE PYRENEAN RIVER WATERS USING SOLID-PHASE EXTRACTION UPLC-MS/MS
E. Avramiotis, S. Gozzo, S. Godin, M. Peña Ormad, J. Szpunar
- P2-61** ASSESSMENT OF EXPOSURE TO ENDOCRINE DISRUPTING COMPOUNDS USING GAS CHROMATOGRAPHIC-MASS SPECTROMETRIC ANALYSIS OF COMPOSITE FOOD SAMPLES IN A TOTAL DIET STUDY
A. Karakitsou, D. Hela

Wednesday, September 25th 2019

Evergeton Hall


08.30-09.00		Registration
09.00-09.30		Invited Lecture Chair: E. Rosenberg, A. Pappa, M. Krokida Application of Biomimetic HPLC Properties for the Estimation of Brain to Blood Distribution of Drug Discovery Compounds Including New Modalities K. Valko
09.30-10.15		Oral Session: Chromatography 2 / Spectrometry 2 Chair: E. Rosenberg, A. Pappa, M. Krokida
09.30-09.45	OP51	BIOMIMETIC CHROMATOGRAPHY: CONDITIONS, ELUTION MECHANISMS AND APPLICATIONS IN EARLY DRUG DISCOVERY F. Tsopelas, P. Danias, E. Notari, D. Anagnostopoulou, E. Paroutsi, A. Pappa, A. Tsantili - Kakoulidou
09.45-10.00	OP52	IN-CELL NMR SPECTROSCOPY APPLIED IN THE STUDY OF LIGAND-PROTEIN INTERACTIONS IN LIVING CANCER CELLS A. Primikyri, N. Sayyad, G. Quilici, E.I. Vrettos, K. Lim, S.W. Chi, G. Musco, I.P. Gerothanassis, A. G. Tzakos
10.00-10.15	OP53	THE USE OF BIOPARTITIONING MICELLAR CHROMATOGRAPHY TO PREDICT ECOTOXICITY OF PESTICIDES IN AQUATIC ENVIRONMENT C. Stergiopoulos, F. Tsopelas, M. Ochsenkühn-Petropoulou
10.15-10.30	OP54	INTERPRETING TOF-SIMS DATA: A HOLISTIC APPROACH E. Chatzitheodoridis
10.30-11.00		Coffee break
11.00-11.30		Invited Lecture Chair: M. Karayannis, K. Ochsenkühn, F. Tsopelas Possibilities and Limitations of Electroanalytical Chemistry 60 Years after Nobel Prize for Polarography J. Barek

11.30-12.45		Oral Session: Electrochemistry / Archaeometry
		Chair: M. Karayannis, K. Ochsenkühn, F. Tsopelas
11.30-11.45	OP55	GOLD-SPUTTERED SENSOR FOR THE VOLTAMMETRIC DETERMINATION OF TRACE ARSENIC A. Economou, J. Gonciarczyk, C. Kokkinos, A. Bobrowski
11.45-12.00	OP56	⁸⁷ Sr/ ⁸⁶ Sr ISOTOPE RATIO DETERMINATION BY MC-ICP-MS USING THE SSB TECHNIQUE FOR ARCHAEOMETRIC PROVENANCE STUDIES D. Kiseleva, A. Kasyanova, M. Streletskaya, M. Chervyakovskaya
12.00-12.15	OP57	THE CHALLENGE OF USING PHAGE IN FOOD AND VETERINARY DIAGNOSTICS: DETECTION OF MYCOBACTERIUM AVIUM SUBSPECIES ARATUBERCULOSIS IN INFANT FORMULAS BY CULTURE, PCR AND COMBINED PHAGE-PCR C. Rees, G. Botsaris
12.15-12.30	OP58	CHEMICAL COMPOSITION OF BELT ACCESSORIES FROM CENTRAL AND WEST BULGARIA DATED TO THE GREAT MIGRATION PERIOD D. Lesigyarski, B. Zlateva, L. Traikova, V. Mihailova, V. Bonev
12.30-12.45	OP59	A COMPUTATIONALLY DESIGNED CARBON PASTE SENSOR FOR SELECTIVE DETERMINATION OF ISOXUPRINE HYDROCHLORIDE IN DIFFERENT MATRICIES E. S. Elzanfaly, A. S. Saad, M. K. Halimb, K. M. Kelani
12.45-13.30		Closing Ceremony / Awards
		Chair: T. Albanis, M. Ochsenkühn
14.00-17.30		Excursion - Castle-Museums (Ioannina)

Thursday, September 26th 2019

08.30-17.30	Post-Conference Excursion - Metsovo
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European X-ray Spectrometry Association

EXSA is a non-profit organization founded in 2004 for promoting cooperation and scientific exchanges between X-ray spectroscopists and analysts within Europe. It brings together users of X-ray spectrometry in various fields of research as well as manufacturers of X-ray devices and developers of X-ray methodologies. **EXSA** aims to stimulate interaction and communication between young and experienced scientists, between academia and industry, thus fostering scientific progress and innovation.

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EXSA awards scientists for their exceptional contributions to the field of X-ray spectrometry. Two awards for young X-ray spectrometrists and one award for outstanding scientific achievements are bestowed usually during the EXRS conferences. The next application period for EXSA's Young Scientist Award will start in **November 2019** and end on **February 2020**.

EXSA gathers more than 100 members from academia and industry and is sponsored and supported by more than 10 companies. **EXSA** is supporting the Fundamental Parameters Initiative and its workshops (<https://www.exsa.hu/fpi.php>), an essential requirement for accurate quantitative X-ray Analysis.

Since its foundation, **EXSA** has supported more than 50 workshops and conferences, among which the IMA Conference 2019.

For more information, please visit **www.exsa.hu**

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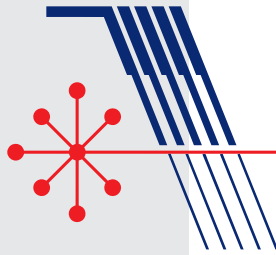
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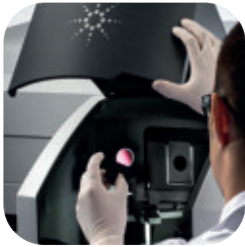
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