



SOCIEDADE
PORTUGUESA
DE QUÍMICA

ANALÍTICA 2018

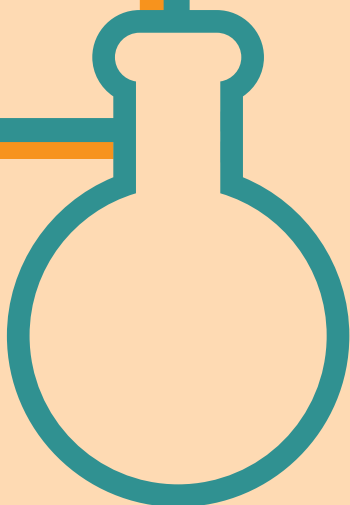
9th Meeting of Division of Analytical Chemistry

26-27 MARCH, PORTO-PORTUGAL

FFUP/ICBAS – UNIVERSITY OF PORTO

www.analitica2018.eventos.chemistry.pt

BOOKLET



ANALÍTICA 2018

9th Meeting of Division of Analytical Chemistry

Organized under the auspices of Sociedade Portuguesa de Química

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EDITION

Sociedade Portuguesa de Química
Av. da República, 45 - 3º Esq
1050-187 Lisboa - Portugal

DATE

March 2018

CONFERENCE SECRETARIAT

Sociedade Portuguesa de Química (Portuguese Chemical Society)
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ORGANIZING ENTITIES



SPONSORING ENTITIES



GENERAL INFORMATION

CONFERENCE VENUE

The Analítica 2018 - 9th Meeting of Division of Analytical Chemistry conference will be held in the FFUP/ICBAS building, University of Porto.

REGISTRATION

All attendees must register at the registration/information desk located at the foyer of the Main Auditorium that will be open from 9H30 and throughout the course of the scientific program.

AUDIO-VISUAL EQUIPMENT

Each conference room is equipped with a computer and standard audio-visual equipment namely a data projector, projection screen, a laser pointer, and a microphone. Each speaker should upload and review his/her presentation as far in advance as possible, being advised for it to be placed in the previous session. Please take note of the following:

All presentations must use a PowerPoint (Microsoft) or PDF format. A USB memory stick should be used for uploading the presentation. Personal laptops cannot be used for presentations.

ORAL PRESENTATIONS

The Plenary Lectures (PL) will last 50 minutes and the Keynote Lectures (KL) will last 30 minutes, including the discussion. Oral Communications (OC) will last 20 minutes. The session moderator will introduce each speaker, monitor time, and assist in facilitating an interactive, educational experience during the question and answer period. All speakers are requested to carefully plan the presentation in order to respect the schedule avoiding delays in the program.

POSTER SESSIONS

Posters should be posted only on the day of the session where they were allocated, preferably before the beginning of the scientific program of the respective day. Members of the organizing committee will be available to assist attendees during the time of poster set-up. Presenting authors are expected to stand by their poster during the poster session to answer questions and discuss their research. Posters must be removed from the poster board at the end of the day of each session by the authors of the communication.

POSTER PITCH SESSIONS

'Poster Pitch' will be presented within the parallel sessions program, and it involves a 2 minute oral presentation. Please note that the presentation will be strictly timed and will be stopped at 2 minutes. 'Poster Pitch' sessions will not include any additional time for questions or discussion within the parallel sessions. Instead, the audience will be encouraged to meet and discuss the work with the author in the poster discussion session or another mutually agreed time.

LUNCHESS AND COFFEE BREAKS

There are several restaurants near the FFUP/ICBAS building, as indicated on the additional documentation present in participants' bag. There is also a canteen and a cafeteria inside the FFUP/ICBAS building (building 2, ground floor). Do not hesitate in contacting committee members for more details and advice.

SOCIAL EVENT

The Conference dinner will be held at Restaurante Terrella (Rua Ofélia Diogo da Costa 105 A, 4149-071 Porto) on 26 of March at 20H00.

WORKSHOP ON SCIENTIFIC WRITING AND PUBLISHING TRAINING

Learn how to get published in top journals by attending the workshop on scientific writing and publishing training. The workshop will be held on the afternoon of March 27, from 17H10. All participants enrolled in the Analítica 2018 have free access to the workshop.

POSTER PRIZES

Two poster prizes are offered by the publishers of the journal Analytical and Bioanalytical Chemistry for the best poster presentations of young researchers. These prizes are vouchers for books from the product range of the Springer publishing house. The Analítica 2018 scientific committee will establish a panel of judges to assess posters. Prizes will be presented in public at the Analítica 2018 closing ceremony.

SCIENTIFIC PROGRAM

26 MARÇO 2018 Monday - Salão Nobre FFUP		27 MARÇO 2018 Tuesday - Salão Nobre FFUP	
9H30-10H40 REGISTRATION IS OPEN		9H00-9H50 PL3 - A.M.O. BRETT	
10H40-11H10 OPENING CEREMONY		9H50-10H20 KL3 - J.M.F. NOGUEIRA	
11H10-12H00 PL1 - M. Miró		10H20-10H40 OC11 - J.L.M. Santos	10H20-10H40 - Anfiteatro 8 OC13 - W.B.S. Machini
12H00-12H30 KL1 - J.P. Conde		10H40-11H00 OC12 - R.B.R. Mesquita	10H40-11H00 - Anfiteatro 8 OC14 - M. David
12H30-14H00 LUNCH BREAK		11H00-11H50 COFFEE BREAK + POSTERS	
14H00-14H50 PL2 - J.A. Lopes		11H50-12H10 OC15 - C.M.A. Brett	11H50-12H10 - Anfiteatro 8 OC17 - L. Zelená
14H50-15H20 KL2 - I.M. Valente		12H10-12H30 OC16 - M.F. Barroso	12H10-12H30 - Anfiteatro 8 OC18 - S.A.P. Pereira
15H20-15H40 OC1 - M.N. Sánchez	15H20-15H40 - Anfiteatro 8 OC2 - M.F. Camões	12H30-14H00 LUNCH BREAK	
15H40-16H20 POSTER PITCH	15H40-16H00 - Anfiteatro 8 OC3 - O. Pellegrino 16H00-16H20 - Anfiteatro 8 OC4 - V.M. Morgado	14H00-14H50 PL4 - R.J. Schneider	
16H20-17H20 COFFEE BREAK + POSTERS		14H50-15H20 KL4 - M.E. Pereira	
17H20-17H40 OC5 - S.J. Mazivila	17H20-17H40 - Anfiteatro 8 OC8 - I.H. Srámková	15H20-15H40 OC19 - R. Cesário	15H20-15H40 - Anfiteatro 8 OC20 - P. Carl
17H40-18H00 OC6 - R.N.M.J. Páscoa	17H40-18H00 - Anfiteatro 8 OC9 - N. Neng	15H40-16H20 POSTER PITCH	15H40-16H00 - Anfiteatro 8 OC21 - J. Narciso 16H00-16H20 - Anfiteatro 8 OC22 - L. Carvalho
18H00-18H20 OC7 - S.M. Ahmad	18H00-18H20 - Anfiteatro 8 OC10 - C.E. Monteiro	16H20-17H10 COFFEE BREAK + POSTERS	
18H30-19H30 MEETING DAC-SPQ		17H10-17H40 WORKSHOP (M. MIRÓ)	
20H00 CONFERENCE DINNER		17H40-18H00 CLOSING CEREMONY	

SCIENTIFIC PROGRAM DETAILED ORAL PRESENTATION SCHEDULE

MONDAY, MARCH 26TH, 2018

9H30	REGISTRATION MAIN AUDITORIUM
10H40	OPENING SESSION
11H10	PL1 Novel approaches for in-vitro bioaccessibility & bioavailability of nutrients and contaminants in solids using flow approaches: pros and cons Manuel Miró
12H00	KL1 Lab-on-chip platforms for chemical and biological analysis João Pedro Conde
12H30	LUNCH BREAK
MAIN AUDITORIUM	
14H00	PL2 Chemometrics for (bio)pharma process analytics João Almeida Lopes
14H50	KL2 An analytical chemistry perspective over animal science Inês M. Valente
15H20	OC1 Quantitative and qualitative analysis of polycyclic aromatic hydrocarbons in urine samples using a non-separative method based on mass spectrometry Miguel del Nogal Sánchez, Patricia Martín Santos, José Luis Pérez Pavón, Bernardo Moreno Cordero
15H40	POSTER PITCH
ROOM ANFITEATRO 8	
15H20	OC2 The kilogram and the mole - redefinition and metrological traceability Maria Filomena Camões
15H40	OC3 What is the new SI and what does it change for analytical chemistry? Andreia Furtado, Raquel Quendera, Florbela A. Dias, Olivier Pellegrino
16H00	OC4 Monte Carlo method for uncertainty evaluation: a simple & reliable method for complex measurements Vanessa M. Morgado, Carla Palma, Ricardo B. Silva

16H20	POSTER SESSION + COFFEE BREAK
MAIN AUDITORIUM	
17H20	OC5 In-line monitoring of green synthesis of novel lamivudine-theophylline co-crystal using FT-IR spectroscopy and MCR-ALS Sarmiento J. Mazivila, Ricardo A.E. Castro, João M.M. Leitão, Joaquim C.G. Esteves da Silva
17H40	OC6 Application of near- and mid-infrared spectroscopy coupled with chemometrics for the discrimination of <i>Humulus lupulus</i> varieties Julio C. Machado Jr., Miguel A. Faria, Isabel M.P.L.V.O. Ferreira, Ricardo N.M.J. Páscoa, João A. Lopes
18H00	OC7 High throughput bar adsorptive microextraction (HT-BAµE) - a new effective approach to screen benzodiazepines in biological matrices Samir M. Ahmad, J.M.F. Nogueira
ROOM ANFITEATRO 8	
17H20	OC8 Sequential injection analysis in screening of extraction properties of nanofibers Ivana H. Šrámková, Laura Carbonell Rozas, Burkhard Horstkotte, Dalibor Šatínský
17H40	OC9 Determination of benzophenone & related compounds by tape adsorptive microextraction Nuno Neng, J.M.F. Nogueira
18H00	OC10 Environmental relevance of platinum and rhodium in tagus estuary Carlos E. Monteiro, Margarida C. dos Santos, Antonio Cobelo-García, Pedro Brito, Miguel Caetano
MAIN AUDITORIUM	
18H30	GENERAL ASSEMBLY Division of Analytical Chemistry - SPQ
20H00	CONFERENCE DINNER

TUESDAY, MARCH 27TH, 2018

MAIN AUDITORIUM	
9H00	<p>PL3 Electrochemical approaches to analytical sensing of biomolecules Ana Maria Oliveira - Brett</p>
9H50	<p>KL3 Back to basics: recent trends in microextraction techniques José Manuel F. Nogueira</p>
10H20	<p>OC11 Ternary semiconductor quantum dots for chemical analysis João L. M. Santos, José X. Soares, S. Sofia M. Rodrigues, Rafael C. Castro, David S. M. Ribeiro</p>
10H40	<p>OC12 Microfluidic paper-based devices as disposable, easy-to-use, real-time quantification methods Raquel B.R. Mesquita, António O.S.S. Rangel</p>
ROOM ANFITEATRO 8	
10H20	<p>OC13 In situ sensing of DNA-antileishmanial drug miltefosine interaction using a DNA-electrochemical biosensor Wesley B.S. Machini, Ana M. Oliveira-Brett</p>
10H40	<p>OC14 Layer-by-layer label-free biosensor for improved glucose sensing using poly(3,4-ethylene-dioxythiophene) conducting polymer Melinda David, Madalina M. Barsan, Monica Florescu, Christopher M.A. Brett</p>
11H00	POSTER SESSION + COFFEE BREAK
MAIN AUDITORIUM	
11H50	<p>OC15 Electrochemical enzyme inhibition biosensor platforms for the detection of toxic species Christopher M.A. Brett, Mariana Emilia Ghica</p>
12H10	<p>OC16 Electrochemical genosensing of the maize endogenous gene using Fe₃O₄@Au nanoparticles as magnetoplatfom M. Fátima Barroso, Juliana Sousa, J. Ramos-Jesus, C. Pereira, C. Freire, N. de-los-Santos-Álvarez, R. Fonseca, J. Ribeiro Junior, C. Delerue-Matos</p>

ROOM ANFITEATRO 8	
11H50	<p>OC17 Automated approach for the sequential injection determination of the herbicide 2,4-D based on online pre-concentration using a polymer inclusion membrane Lucie Zelená, M. Inês G. S. Almeida, Robert W. Catrall, Hana Sklenářová, Petr Solich, Spas D. Kolev</p>
12H10	<p>OC18 Antipsychotics' degradation obtained through chemical and biochemical oxygen demand levels Sarah A.P. Pereira, Susana P.F. Costa, Edite Cunha, Marieta L.C. Passos, André R.S.T. Araújo, M. Lúcia M.F.S. Saraiva</p>
12H30	LUNCH BREAK
MAIN AUDITORIUM	
14H00	<p>PL4 Immunoanalytical methods for screening and monitoring in environmental analysis Rudolf J. Schneider</p>
14H50	<p>KL4 Mercury monitoring in waters: is it possible to measure easily at trace levels? Maria Eduarda Pereira, Daniela S. Tavares, Cláudia B. Lopes, Tito Trindade, Carlos Vale</p>
15H20	<p>OC19 Tidal effect on dissolved gaseous mercury formation and mercury volatilization in intertidal sediments Rute Cesário, Laurier Poissant, Martin Pilote, Nelson J. O'Driscoll, Ana M. Mota, João Canário</p>
15H40	POSTER PITCH
ROOM ANFITEATRO 8	
15H20	<p>OC20 Environmental screenings of bioactive compounds in wastewater using a novel multiplex suspension array fluorescence immunoassay Peter Carl, Dominik Sarma, Inês I. Ramos, Ana Machado, Andreas Lehmann, Kristin Hoffman, Knut Rurack, Marcela A. Segundo, Adriano A. Bordalo, Rudolf J. Schneider</p>
15H40	<p>OC21 Validation and uncertainty evaluation of the identification of doping agents in sport by GC-MS/MS José Narciso, Susana Luz, Ricardo B. Silva</p>
16H00	<p>OC22 Method validation for metals quantification in water intended for human consumption Lina Carvalho, Eugénio Soares, Paula Figueira, Eduarda Pereira</p>

16H20 | POSTER SESSION + COFFEE BREAK

MAIN AUDITORIUM

17H10 | WORKSHOP How to write a scientifically sound article: tips & tricks
Manuel Miró

17H40 | CLOSING CEREMONY

SCIENTIFIC PROGRAM POSTER PRESENTATION SCHEDULE

Poster areas:

- A) Biosensors
- B) Biotechnological Applications
- C) Chemometrics
- D) Electroanalysis
- E) Examinology and metrology
- F) Flow Analysis
- G) Method Validation
- H) Modern Analytical Methodologies
- I) Separation Processes

Posters from areas A, B, C, D, E, F, and I will be presented on Monday, 26th March.

Posters from areas G and H will be presented on Tuesday, 27th March.

A) BIOSENSORS

PA 1. Evaluation of the molecular architecture of fluorescent calix[4]arene-based sensors in detection of toxic metals
Alexandra I. Costa, Patrícia D. Barata, Carina B. Fialho, José V. Prata

PA 2. Characterization of glucose biosensor comprising glucose oxidase immobilized in a pencil graphite electrode
Álvaro Torrinha, Maria C. B. S. M. Montenegro, Alberto N. Araújo

PA 3. Metal ion recognition-induced by calix[4]arene-carbazole-containing polymers
Patrícia D. Barata, Alexandra I. Costa, Carina B. Fialho, José V. Prata

PA 4. Amperometric biosensor for pyruvate determination based on carbon nanotubes and prussian blue-chitosan nanoparticles
Ricardo J. B. Leote, Mariana Emilia Ghica, Christopher M. A. Brett

PA 5. Development of a thyroxine immunosensor using screen-printed electrodes
Rosa A. S. Couto, Luís Moreira Gonçalves, Marcio Sousa Góes, Cecília M. P. Rodrigues, M. Beatriz Quinaz, José A. Rodrigues

B) BIOTECHNOLOGICAL APPLICATIONS

PB 1. Optimization and characterization of 2D lipid models for the assessment of acetylcholinesterase inhibitors – membrane interactions
Nuno Guedes, Ana F. Pinheiro, Cláudia Nunes, Salette Reis

PB 2. Development and characterization of nanoagents loaded with carbon monoxide to treat rheumatoid arthritis
Andreia Marinho, Cláudia Nunes, Teresa Santos-Silva

PB 3. Evaluation of the stability and phototoxicity of deet, a common active ingredient of commercial insect repellents
Emmely Gelaude, E. Manuela Garrido, Patrícia Moreira, Helena Carmo, Isabel F. Almeida, Jorge Garrido

PB 4. Evaluation of the antioxidant potential of ascorbic acid derivatives used in skin care products
Cristina Correia, E. Manuela Garrido, Jorge Garrido, Paulo C. Costa, Isabel F. Almeida

PB 5. Polyphenolic composition and in vitro antioxidant activity of chamaerops *Humilis L.*
José Coelho, Jerson Veiga, Ruben Elvas-Leitão, Manuel Matos, M. Conceição Oliveira, Amadeu Brigas

PB 6. Antioxidant activities and antioxidant components of aqueous extracts of mushrooms strains
Magda C. Semedo, Sónia Martins, Amin Karmali

PB 7. Nanostructured lipid carriers as a versatile oral delivery vehicle of streptomycin
Soraia Pinto, Sara Pinheiro, Joana Magalhães, Alexandre Vieira, Marina Pinheiro, Salette Reis

PB 8. Protein-phenolic interaction as a strategy to reduce the precursors of volatile phenols in wine
Susana S. M. P. Vidigal, Francisco M. Campos, José A. Couto, António O. S. S. Rangel, Tim Hogg

PB 9. Ultrasound assisted extraction of triterpenoids from *Ganoderma lucidum*
Oludemi Taofiq, Lillian Barros, M. A. Prieto, M. Filomena Barreiro, Isabel C. F. R. Ferreira

PB 10. Cosmeceutical potential of ergosterol and use of microencapsulation to ensure controlled release
Oludemi Taofiq, Sandrina A. Heleno, Ricardo C. Calhelha, Isabel P. Fernandes, Maria José Alves, Ana M. González-Paramás, Lillian Barros, Isabel C. F. R. Ferreira, M. Filomena Barreiro

C) CHEMOMETRICS

PC 1. Coupling of on-column trypsin digestion-peptide mapping and principal component analysis for stability and biosimilarity assessment of recombinant human growth hormone
Basma M. Eltanany, Sara M. Shatat, Abeer A. Mohamed, Medhat A. Al-Ghobashy, Faten A. Fathalla, Samah S. Abbas

PC 2. Monitoring grapevine leaves variability with infrared spectroscopy
E. Martín-Tornero, R. N. M. J. Páscoa, A. R. Graça, J. A. Lopes

D) ELECTROANALYSIS

PD 1. Electrochemical characterization of cefadroxil and amoxicillin in aqueous media
Caroline G. Sanz, Sílvia H. P. Serrano, Christopher M. A. Brett

PD 2. Development of a novel redox polymer-film modified electrochemical sensor using deep eutectic solvents
Hugo C. Novais, Melinda David, Vanessa Baião, Luciana I. N. Tomé, Christopher M. A. Brett

PD 3. Electrochemical behaviour of lercanidipine at carbon black modified electrodes
Isabel P. G. Fernandes, Ana Maria Oliveira-Brett

PD 4. Antidiabetic drug metformin voltammetric evaluation in the presence of Cu(II)
Isabel P. G. Fernandes, Ana Maria Oliveira-Brett

PD 5. A two year survey on fluoride concentration in mineral waters and teas consumed by the Portuguese population
Nelson A. F. Silva, Hugo F. F. A. Silva, Manuel J. Matos

PD 6. Impedimetric sensor based on gold nanoparticle doped - poly-(8-anilino-1-naphthalene sulphonic acid) modified gold electrodes for tyramine detection
Wanderson da Silva, M. Emilia Ghica, Rachel F. Ngece, Emmanuel Iwuoha, Christopher M. A. Brett

E) EXAMINOLOGY AND METROLOGY

PE 1. Total hardness in seawater samples of the Portuguese coast
Bárbara Anes, Cristina Oliveira, Ricardo B. Silva, Maria Filomena Camões

PE 2. Comparative analysis of fatty acid composition of wild vs. farmed salmon
Liliana Grazina, Maria A. Nunes, Isabel Mafra, M. Beatriz P. P. Oliveira, Joana S. Amaral

PE 3. ExaminoLOGY for analytical chemistry?
Olivier Pellegrino

PE 4. Cumulative standard addition method for electrochemical measurements of biological fluids
Tony R. L. Dadadmos, Airton J. Damaceno, Fernando L. Fertoni, Ricardo J. N. Bettencourt da Silva

F) FLOW ANALYSIS

PF 1. Development of a sequential injection method for bromate determination in soil leachates
Ana S. G. Cerqueira, Raquel B. R. Mesquita, António O. S. S. Rangel

PF 2. Monitoring glucose, calcium, and magnesium levels in saliva as a non-invasive analysis by sequential injection multiparametric determination
Ana Machado, Rui Maneiras, Adriano A. Bordalo, Raquel B. R. Mesquita

PF 3. Automated bead-based immunoassay for the determination of carbamazepine in wastewater
Inês I. Ramos, Peter Carl, Rudolf J. Schneider, Marcela A. Segundo

PF 4. Study of 3,4-hydroxypyridinones functionalized beads for iron(III) determination in a microsequential injection solid phase spectrometry mode
Joana L. A. Miranda, Raquel B. R. Mesquita, Andreia Leite, André Silva, Maria Rangel, António O. S. S. Rangel

PF 5. Monitoring soil/water interface: development of an integrated sequential injection system applied to laboratory scale soil core column and micro soil column
Leticia S. Mesquita, Raquel B. R. Mesquita, Maria Rangel, Andreia Leite, Tânia Moniz, António O. S. S. Rangel

PF 6. Bioaccessibility of zinc in pet food determined by a dynamic leaching method
Sara R. Fernandes, Ana Margarida Pereira, Elisabete Matos, Francisco Castanheira, Cláudia S. Baptista, Ana Rita J. Cabrita, Marcela A. Segundo

PF 7. Polymer inclusion membranes (PIMS) as an alternative for on-line solid phase extraction (SPE) in flow analysis
Tânia C. F. Ribas, Charles F. Croft, Raquel B. R. Mesquita, M. Inês G. S. Almeida, Spas D. Kolev, António O. S. S. Rangel

G) METHOD VALIDATION

PG 1. Measurement uncertainties in platinum and rhodium quantification by adsorptive cathodic stripping voltammetry
Carlos E. Monteiro, Miguel Caetano, Antonio Cobelo-García, Margarida C. dos Santos

PG 2. Lipid oxidation assessment in lotions using the thiobarbituric acid reaction
Verónica Costa, Cristina Soares, Maria João Ramalhosa, Valentina F. Domingues, Cristina Delerue-Matos

PG 3. Quantification of tranexamic acid in human plasma: development and validation of UHPLC-MS/MS method
Luisa Barreiros, Júlia L. Amoreira, Sandia Machado, Sara R. Fernandes, Eduarda M. P. Silva, Paula Sá, Sibylle Kietzai, Marcela A. Segundo

PG 4. HPLC analytical method development for apomorphine hydrochloride quantification
João Campos, João Cunha, Domingos Ferreira, Paulo Costa

PG 5. Validation of HPLC method for quantification of bosentan on two different oral vehicles
João Cunha, João Campos, Domingos Ferreira, Paulo Costa

PG 6. HPLC-MS/MS method for quantification of the neuropeptide Y Y1 receptor antagonist BIBP 3226 in cell extracts
Luisa Barreiros, Eduarda M. P. Silva, Inês S. Alencastre, Meriem Lamghari, Marcela A. Segundo

PG 7. Inclusion complex of *p*-chloro-thio-nor-b-lapachone in 2-hydroxypropyl- β -cyclodextrin and development of UV spectrophotometric analytical methodology-
Marcella de Sá Haddad Queiroz, Caroline Deckmann Nicoletti, Débora Omena Futuro, Vitor Francisco Ferreira

PG 8. Simultaneous determination of dapsone and clofazimine in nanoformulations by HPLC
Sandia Machado, Sara R. Fernandes, Luíse L. Chaves, Sofia A. C. Lima, Eduarda M. P. Silva, Luisa Barreiros, Salette Reis, Marcela A. Segundo

PG 9. Process characterization of ultrasonic welding of electrical wires
Sandra Matos, Fernando Veloso, Carlos Santos, Emanuel Carvalho, Leonardo Gonçalves

PG 10. Analytical microsystem for the spectrophotometric determination of titratable acidity in wines
Natalia Sandez, Antonio Calvo-López, Susana S. M. P. Vidigal, Julian Alonso-Chamorro, António O. S. S. Rangel

H) MODERN ANALYTICAL METHODOLOGIES

PH 1. Hollow fiber microextraction (HF μ E) for ultra-trace analysis of polycyclic aromatic hydrocarbons in real matrices
A. H. Ide, J. M. F. Nogueira

PH 2. Comparison of an automatic chemiluminescence assay and closed bottle test for the determination of deep eutectic solvents' biodegradability
Ana F. D. C. Neves, André G. Vilaranda, Ana M. O. Azevedo, Susana P. F. Costa, Edite Cunha, M. Lúcia M. F. S. Saraiva

PH 3. Bioactive compounds, antioxidant activity and cell viability of *Actinidia arguta* infusions and decoctions
Ana Margarida Silva, Diana Pinto, Francisca Rodrigues, M. Beatriz P. P. Oliveira

PH 4. Toxicity assessment of low melting organic salts towards *Saccharomyces cerevisiae*
Ana M. O. Azevedo, Ana F. D. C. Neves, André G. Vilaranda, João L. M. Santos, Maria João Sousa, M. Lúcia M. F. S. Saraiva

PH 5. Metal accumulation in native flora: biodiversity prospecting for phytoremediation of contaminated aquatic environments
Cristina M. C. M. Couto, Cláudia Ribeiro, Ana Rita Ribeiro, Alexandra Maia, Mariana Santos, Maria Elizabeth Tiritan, Edgar Pinto, Agostinho A. Almeida

PH 6. Elemental impurities in lipsticks: a comparative study of Portuguese and Brazilian products
Edgar Pinto, Cristina M. C. M. Couto, Agostinho Almeida

PH 7. Photoluminescent nanohybrid probe based on distinct sized quantum dots for simultaneous determination of Hg²⁺, Pb²⁺ and Cu²⁺ using multivariate chemometric tools
David S. M. Ribeiro, José X. Soares, S. Sofia M. Rodrigues, Ricardo N. M. J. Páscoa, Rafael C. Castro, João L. M. Santos

PH 8. Flours of melon seeds: effect of the oil extraction process on their nutritional composition and antioxidant activity
Diana Pinto, Anabela Costa, Manuel Alvarez-Orti, Adrián Rabadán, Francisca Rodrigues, José E. Pardo, M. Beatriz P. P. Oliveira

PH 9. Determination of moisture and protein content in banana "*nanica*" cultivated on Santa Cruz * Santiago island
Elba Monteiro, Sandra Freire

PH 10. Development of a UHPLC-MS/MS methodology for the determination of phenolic compounds in vine shoots
Manuela Moreira, M. Fátima Barroso, João Vasconcellos Porto, Simone Morais, Cristina Delerue-Matos

PH 11. Evaluation of enzymatic digestion conditions for determination of immunoglobulins by tandem mass spectrometry
Gabriela S. Guerra, Inês I. Ramos, Luísa Barreiros, Eduarda M. P. Silva, Marcela A. Segundo

PH 12. In vitro dissolution testing of an itraconazole amorphous solid dispersion: sink vs. non-sink-conditions
Inês Almeida, Filipe Vultos, Teresa Marta, Mafalda Paiva

PH 13. Tandem mass spectrometry characterization of nitrated cardioplin
Javier-Fernando Montero-Bullón, Tânia Melo, M. Rosário M. Domingues, Pedro Domingues

PH 14. Green and chiral quantum dots
José X. Soares, David S. M. Ribeiro, Rafael C. Castro, S. Sofia M. Rodrigues, Ute Resch-Genger, João L. M. Santos

PH 15. Design and development of a microfluidic paper-based analytical device for calcium determination in saliva
Karina C. Acciainoli, Mafalda T. S. Silva, Raquel B. R. Mesquita, António O. S. S. Rangel

PH 16. Teaching analytical chemistry in Portugal, a new reality
Manuel Matos, Nelson A. Silva, Hugo F. Silva, José Coelho, Cristina Oliveira

PH 17. Screening of lipids by differential scanning calorimetry (DSC) for the production of lipid nanoparticles
Maria Inês Teixeira, Carla Martins Lopes, Maria Helena Amaral, Paulo Costa

PH 18. A fast and simple approach for screening sulfonamides in water
Patrícia S. Peixoto, Sandia Machado, Luisa Barreiros, Ana Machado, Adriano A. Bordalo, José L. F. C. Lima, Marcela A. Segundo

PH 19. Determination of trigonelline in coffee using low pressure ion pair chromatography with amperometric detection
Manuela Sousa, João Rodrigo Santos, Paulo Almeida, José A. Rodrigues

PH 20. Free formaldehyde determination in cosmetics containing formaldehyde donors
Pedro Francisco Brandão, Rui Miguel Ramos, José António Rodrigues

PH 21. Nanohybrid quantum dots probes for the determination of different metals in water
Rafael C. Castro, David S. M. Ribeiro, José X. Soares, S. Sofia M. Rodrigues, João L. M. Santos

PH 22. Proximal composition and vitamin E profile of germinated leguminous seeds
Rita C. Alves, Cátia Araújo, Anabela S. G. Costa, Sílvia Bessada, Clícia M. J. Benevides, Graça Soveral, M. Beatriz P. P. Oliveira

PH 23. Comparison of different plant infusions regarding total phenolics, total flavonoids and antioxidant activity
Juliana Peixoto, Anabela S. G. Costa, Rita C. Alves, M. Beatriz P. P. Oliveira

PH 24. Coffee silverskin potentialities as ingredient for diverse industries – state of the art
Rita Teixeira, Rita C. Alves, Francisca Rodrigues, M. Beatriz P. P. Oliveira

PH 25. Gas phase fragmentation confirms plastidial glycolipids in photosynthetic animals

Felisa Rey, Elisabete da Costa, Ana M. Campos, Paulo Cartaxana, Elisabete Maciel, Pedro Domingues, M. Rosário M. Domingues, Ricardo Calado, Sónia Cruz

PH 26. Comparison of biomimetic models of oxidized phosphatidylethanolamines using mass spectrometry analysis

Simone Colombo, Pedro Domingues, M. Rosário Domingues

PH 27. Fatty acids analysis to differentiate nutritional quality of similar bakery products

Tânia Gonçalves Albuquerque, Helena S. Costa, M. Beatriz P. P. Oliveira

PH 28. Contribution of nuts for the daily intake of salt, fat and fatty acids

Tânia Gonçalves Albuquerque, Helena S. Costa, M. Beatriz P. P. Oliveira

PH 29. Optimization of collision energy in tandem mass spectrometry for improving the identification of nitrated phospholipids

Bruna Neves, Tânia Melo, Pedro Domingues, Rosário Domingues

PH 30. Microfluidic paper-based analytical device (μ PAD) for salivary ammonia/ammonium

Yanisa Thepchuay, Raquel B. R. Mesquita, Duangjai Nacapricha, António O. S. S. Rangel

I) SEPARATION PROCESSES

PI 1. Profiling biogenic amines in ruminal content

Liliana Cordeiro, Inês Maria Valente, Margarida R. G. Maia, António J. M. Fonseca, Ana Rita J. B. Cabrita, José António Rodrigues

PI 2. Chromatographic method for the assessment of vitamin B₁ and B₆ derivatives in whole blood

Jaroslav Jenčo, Lenka Kujovská Krčmová, Luboš Sobotka, Petr Solich

PI 3. A SALLE methodology for biogenic amines determination in food products of animal origin

Karen C. Almeida, Pedro F. Brandão, Rui Ramos, Luís M. Gonçalves, Arnaldo A. Cardoso, José A. Rodrigues

PI 4. Preparation of polysulfone membrane with α -tocopherol and α -lipoic acid to reduce oxidative stress

Michaela Kohlová, Célia Amorim, Alberto Araújo, Lucie Zelená, Petr Solich, Alice Santos-Silva, Conceição Montenegro

PI 5. Validated RP-HPLC and TLC - densitometry methods for the simultaneous determination of sulfacetamide sodium and two of its official impurities; sulfanilamide and dapsone

Nariman A. El Ragehy, Maha A. Hegazy, Ghada A. Sedik, Samia A. Tawfik

PI 6. Evaluation of encapsulation efficiency in methotrexate-loaded nanoparticles using separative methods

Sara S. Marques, Inês I. Ramos, Luísa Barreiros, Sofia A. C. Lima, Salette Reis, Maria R. Domingues, Marcela A. Segundo

