

*II Reunión Científica del Grupo
Especializado en Ciencia y Tecnologías
(Bio)Analíticas
Zaragoza, 27-28 de junio de 2023*



Programa Científico

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**II Reunión Científica del Grupo
Especializado de Ciencia y Tecnologías
(Bio)Analíticas (GCTbA 2023).**

**Facultad de Educación de la Universidad de
Zaragoza, 27-28 de junio 2023**

Comité Organizador

Presidencia:

María Luisa Marina Alegre

Secretaría técnica:

María Castro Puyana

Vocales:

Martín Resano Ezcaray

Susana Campuzano Ruiz

Ángel Maquieira Catalá

Ángel Ríos Castro

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Jesús Alberto Escarpa Miguel

Samuel Bernardo Bermejo

Ester Hernández Corroto

Sandra Salido Fortuna

Eduardo Bolea Fernández

Ana Rúa Ibarz

Flávio Venancio Nakadi

Comité Científico

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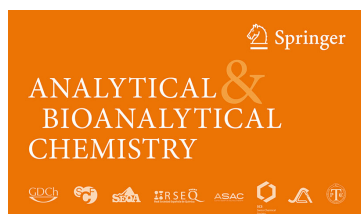
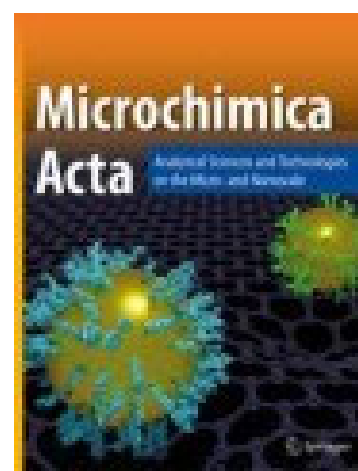
Martín Resano Ezcaray

Alfonso Salinas Castillo

Organizado por:



Patrocinadores:



Programa Científico

MARTES 27 DE JUNIO DE 2023

8:30 h	Acreditación, entrega de documentación y colocación de pósters
8:45	INAGURACIÓN DE LA II REUNIÓN DEL GCTbA
9:00	<p>CONFERENCIA PLENARIA Moderadores: M.L. Marina y A. Maquieira</p> <p>PL1 Electrocatalytic palladium nanoclusters for sensitive bioassay detection: immunoassay of a stroke biomarker and detection of isothermal amplification of SARS-COV-2 genetic material <i>M.T. Fernández-Abedul, A. Rodríguez Penedo, P. Rioboó Legaspi, M.M. García Suárez, M.D. Cima Cabal, C. García-Cabo, L. Benavente Fernández, S. Calleja Puerta, R. Pereiro, E. Costa-Rama, B. Fernández</i></p>
9:45	<p>CONFERENCIAS ORALES: SESIÓN 1 Moderadores: S. Campuzano, J.M. Costa</p>
9:45	O1 Supramolecular solvents: making comprehensive sample treatment in multiclass analytical methods <i>N. Caballero-Casero, S. Rubio</i>
10:05	O2 Molecularly Imprinted Polymers as versatile Materials for analytical applications <i>J. González-Rodríguez</i>
10:25	O3 G-quadruplex-based DNAzyme for sensitive biomarker detection with the naked eye <i>B. Martín, L.A. Tortajada-Genaro, A. Maquieira</i>
10:45	O4 Tetrahedral DNA nanostructures combined with few-layer bismuthene for rapid and sensitive virus detection <i>E. Lorenzo, L. Gutiérrez-Gálvez, D. García-Fernández, M. del Barrio, M. Luna, I. Torres, F. Zamora, M. Castellanos, A. Somoza, F. Pariente, T. García-Mendiola</i>
11:05	Café + Exhibición Póster
12:00	<p>CONFERENCIAS ORALES: SESIÓN 2 Moderadores: A. Ríos, M. Castro-Puyana</p>
12:00	O5 Early and differential diagnosis of chronic diseases by multiplexed electrochemical interrogation of the humoral immune response <i>V. Serafín, B. Arévalo, A. Montero-Calle, M. Garranzo-Asensio, R. Barderas, P. Yáñez-Sedeño, J.M. Pingarrón, S. Campuzano</i>
12:15	O6 Matrix metalloproteinases and tissue inhibitors of metalloproteinases influence in breast cancer <i>S. Escudero-Cernuda, R. González de Vega, M. Fraile, N. Eiró, F. Vizoso, M.L. Fernández Sánchez</i>
12:30	O7 Tetrazole hybrids targeting beta-amyloid and metal ions in Alzheimer's disease <i>D. Vicente-Zurdo, M. Cubo-Pareja, S. Rodríguez-Blázquez, N. Rosales-Conrado, M.E. de León González, J. Domingo Sánchez, J.C. Menéndez, J.F. González, Y. Madrid</i>
12:45	O8 Salivary estradiol as biomarker for the evaluation of the menstrual cycle: fact or MYTH? <i>D. Fabregat-Safont, J. Fabregat-Nabás, A. Gomez-Gomez, N. Haro, E.R. Velasco, R. Andero, O.J. Pozo</i>
13:00	<p>CONFERENCIAS ORALES-JÓVENES Moderadores: A. Escarpa, M.T. Fernández-Abedul</p>
13:00	OJ1 Tracking lesser-known allergenic proteins and carbohydrates with electrochemical bioplatfroms <i>M. Blázquez-García, V. Serafín, V. Ruiz-Valdepeñas Montiel, S. Benedé, E. Molina, M. Gamella, B. Arévalo, L. Mata, P. Galán-Malo, I. Segura-Gil, J.M. Pingarrón, S. Campuzano</i>
13:10	OJ2 Nanoparticle-based enhancement in nanochannel sensors for monitoring enzymatic cleavage: application to MMP-9 detection <i>D. Valero-Calvo, C. Toyos-Rodríguez, F.J. García-Alonso, A. de la Escosura-Muñiz</i>

13:20	OJ3 Rapid screening of novel antimicrobial compounds with a nanoporous-based electrochemical platform <i>C. Toyos-Rodríguez, D. Valero-Calvo, K. Ivanova, T. Tzanov, L. Vilaplana, M. Pilar-Marco, A. de la Escosura-Muñiz</i>
13:30	OJ4 Use of gold nanoparticles to develop a smartphone-based point-of-care biosensor for prostate specific antigen ultrasensitive quantification <i>G. Redondo-Fernández, L. Cid-Barrio, M.T. Fernández-Argüelles, A. de la Escosura-Muñiz, A. Soldado, J.M. Costa-Fernández.</i>
13:40	OJ5 Using complementary analytical techniques for the study of protein corona formation onto PtNPs in different biological media <i>A. López Gutiérrez, N. Rodríguez-Fariñas, R.C. Rodríguez Martín-Doimeadios</i>
13:50	OJ6 Enzymatic synthesis of nanomaterials as indicators in optical biosensors <i>J. Camacho-Aguayo, S. de Marcos, J. Galbán</i>
14:00	OJ7 Characterization of extracellular vesicles from human uterine cervix for its implementation as alternative therapy <i>S. Escudero-Cernuda, M. Fraile, N. Eiró, F. Vizoso, M.L. Fernández Sánchez</i>
14:10	Comida + Exhibición Póster
16:15	CONFERENCIAS ORALES: SESIÓN 3 <i>Moderadores: M. Resano, T. García-Mendiola</i>
16:15	O9 Determination of the exogenous and endogenous metal contents inside cells via single-cell ICP-Mass Spectrometry (SC-ICP-MS): an overview through case studies <i>E. Bolea-Fernandez, T. Liu, R. Dejonghe, M. Nicolíć, A. Bazo, M. Aramendía, O. De Wever, K. Braeckmans, M. Resano, F. Vanhaecke</i>
16:35	O10 Disturbances in <i>mus musculus</i> mice plasma selenoproteome caused by the diclofenac exposure. Antagonistic interaction with selenium <i>G. Rodríguez-Mor, N. Garrido, N. Abril, T. García-Barrera</i>
16:55	O11 Fast and innovative microextraction technique μspeed® combined with UHPLC-MS/MS for the multicomponent determination of pyrrolizidine alkaloids in edible flower infusions <i>N. Casado, B. Fernández-Pintor, S. Morante-Zarcelo, I. Sierra</i>
17:10	O12 Neuroprotective potential of bioactive compounds from avocado residues <i>E. Gómez-Mejía, D. Vicente-Zurdo, N. Rosales-Conrado, M.E. León-González, Y. Madrid</i>
17:25	CONFERENCIAS ORALES-JÓVENES <i>Moderadores: J. González, N. Caballero</i>
17:25	OJ8 Determination of chiral thyroid hormones in human milk by solid-phase microextraction and hollow fiber liquid phase microextraction followed by an analytical multiplatform combining IMMS, UHPLC-QTOF and ICP-QQQ-MS <i>R.F. Vélez-Pérez, A. Arias-Borrego, I. Velasco, T. García-Barrera</i>
17:35	OJ9 Study of titanium dioxide nanoparticles in fish, mussels, and seaweed samples from the atlantic area <i>J.J. López-Mayán, E. Peña-Vázquez, M.C. Barciela-Alonso, A. Moreda-Piñeiro, P. Bermejo-Barrera</i>
17:45	OJ10 Gas Chromatography-Combustion-Mass Spectrometry, a powerful tool to simultaneous universal and quantitative elemental detection <i>J. García-Bellido, M. Redondo Velasco, L. Freije-Carreló, M. Piparo, P. Giusti, M. Moldovan, J. Ruiz Encinar</i>
17:55	OJ11 High-performance voltametric sensor based on chitosan/γ-cyclodextrin-graphene quantum dots for global estimation of fluoroquinolones in commercial food daily products from animal source <i>M. Bartolomé, M.J. Villaseñor, A. Ríos</i>
18:05	OJ12 Nano-liquid chromatography after dispersive liquid-liquid microextraction for the simultaneous chiral analysis of drugs in water samples <i>S. Salido-Fortuna, C. Dal Bosco, A. Gentili, M. Castro-Puyana, M.L. Marina, G. D'Orazio, S. Fanali</i>
18:15	OJ13 Quantification of ultra-trace graphene oxide in real water samples by SERS <i>E. Briñas, V.J. González, M. Zougagh, A. Ríos, M.A. Herrero, E. Vázquez</i>
18:25	Café + Exhibición de Póster
19:00	II Asamblea del GCTbA

MIÉRCOLES 28 DE JUNIO DE 2023

9:00	<p align="center">CONFERENCIA PLENARIA Moderadores: <i>A. Maquieira, A. Ríos</i></p> <p>PL2 Screening of emerging contaminants in waters by combined use of Gas and Liquid Chromatography hyphenated to HRMS <i>F. Hernández</i></p>
9:45	<p align="center">CONFERENCIAS ORALES: SESIÓN 4 Moderadores: <i>M. Resano, E. Benito-Peña</i></p>
9:45	<p>O13 Single-cell-ICP-MS for studying the association of inorganic nanoparticles with cells derived from aquaculture species <i>C. Suárez-Oubiña, N. Mallo, M. Vázquez, S. Cabaleiro, L. Rodríguez-Lorenzo, B. Espiña, P. Bermejo-Barrera, A. Moreda-Piñeiro</i></p>
10:05	<p>O14 Authenticating bee pollen origin by using different analytical techniques <i>A.M. Ares, B. Martín-Gómez, J.A. Tapia, L. Toribio, M.T. Martín, J. Bernal</i></p>
10:25	<p>O15 Fluorescein-gold nanoparticles fret-based detection of miRNA using nucleic acid enzymes as amplification tool <i>M.T. Fernández-Arquelles, A. Sánchez-Visedo, A. Soldado, L. Royo, F.J. Ferrero, J.M. Costa-Fernández</i></p>
10:45	<p align="center">CONFERENCIA INVITADAS-PREMIOS GCTbA Moderadores: <i>M.L. Marina, M. Castro-Puyana</i></p>
10:45	<p>O11 Knowledge transfer within atomic spectroscopy. Is it possible? <i>J.L. Todolí</i></p>
11:05	<p>O12 MAD-SAN round trip: 9393 km powered by state-of-the-art electrochemical biosensors <i>V. Ruiz-Valdepeñas Montiel, A.J. Reviejo, J.M. Pingarrón, J. Wang, S. Campuzano</i></p>
11:20	<p>O13 Toward biosensing systems based on fluorescent perovskite nanoparticles <i>W. Teixeira, C. Collantes, P. Martínez-Herrero, V. González-Pedro, M.J. Bañuls, A. Maquieira</i></p>
11:35	<p>FI4 Analytical nanoscience and nanotechnology applied to the food industry: desining nanomicelles to increase vitamin D3 bioavailability <i>N. Villamayor, M.J. Villaseñor, A. Ríos</i></p>
11:40	<p align="center">MESA REDONDA: INFORMACIÓN QUÍMICO-ANALÍTICA: CALIDAD E IMPACTO CIENTÍFICO Y SOCIAL. Moderadores: <i>A. Ríos, P. Marco, F. Hernández</i></p>
12:20	<p align="center"><i>Entrega de Premios</i> <i>Clausura de la Reunión</i></p>
13:00	<p align="center"><i>Aperitivo Despedida</i></p>