



# SIQUIMAR

XXII SEMINARIO IBÉRICO DE QUÍMICA MARINA

## PROGRAMME

[ISMSVALENCIA.ES/SIQUIMAR](https://ISMSVALENCIA.ES/SIQUIMAR)

### Organiza



Universidad  
Católica de  
Valencia  
San Vicente Mártir

### Colabora



AJUNTAMENT  
DE VALÈNCIA



### Coorganiza



Universitat d'Alacant  
Universidad de Alicante



UNIVERSITAT DE  
BARCELONA



UCA Universidad  
de Cádiz



ULPGC  
Universidad de  
Las Palmas de  
Gran Canaria

UniversidadeVigo

### Patrocina



AXFLOW

CIM  
Centro de Investigación Mariña  
UniversidadeVigo



ocean net s1  
DEEP KNOWLEDGE - QUALITY INSTRUMENTS

# SIQUIMAR XXII SEMINARIO IBÉRICO DE QUÍMICA MARINA



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XXII SEMINARIO IBÉRICO DE QUÍMICA MARINA

## PROGRAMME

WEDNESDAY, 10TH JULY 2024

TIME	SESSIONS	PLACE
09:00 - 10:00 h	Registration at the Technical Secretariat	VELES E VENTS BUILDING (Ground floor)
10:00 - 10:45 h	Opening Ceremony	VELES E VENTS BUILDING Main conference room (3rd floor)
10:50 - 11:50 h	<b>Plenary Session 1</b> "THE HISTORY OF UNDERWATER HABITATS" Roger García Florida International University (USA)	VELES E VENTS BUILDING Main conference room (3rd floor)
11:50 - 12:30 h	Poster session and coffee	VELES E VENTS BUILDING Terrace (3rd floor)
12:30 - 13:15 h	<b>Oral Session 1a</b> Biogeochemical processes Moderator: David González	VELES E VENTS BUILDING Conference room (Ground floor)
12:30 - 12:45 h	DISSOLVED REEs IN THE RIVER ULLA BASIN: SOURCES AND TRANSPORT TO THE RIA OF AROSA (NW IBERIAN PENINSULA) Ricardo Prego, Gonzalo Farinango and Miguel Ángel Álvarez Vázquez	
12:45 - 13:00 h	GREENHOUSE GAS DYNAMICS (CO <sub>2</sub> , CH <sub>4</sub> AND N <sub>2</sub> O) IN COASTAL SYSTEMS OF SOUTHWEST SPAIN: RIO SAN PEDRO TIDAL CREEK AND BARBATE ESTUARY. T. Ortega, J. Sánchez-Rodríguez, V. Vizcaíno, A. Cuadros, A. Sierra, R. Ponce and J. Forja	
13:00 - 13:15 h	ENHANCING ALKALINITY IN RIA FORMOSA BY DEPLOYMENT OF ALKALINE SUBSTRATES: VARIABILITY IN NUTRIENT CONCENTRATION AND FLUXES A. Cravo, C. Correia, J. Lábbers, J. Schonfeld, and I. Mendes	
13:15 - 14:00 h	<b>Oral Session 1b</b> Biogeochemical processes Moderator: David González	VELES E VENTS BUILDING Conference room (Ground floor)
13:15 - 13:30 h	DISTRIBUTION OF GREENHOUSE GASES (CH <sub>4</sub> AND N <sub>2</sub> O) IN SOUTH AMERICAN ATLANTIC COASTAL LAGOONS (URUGUAY) Amaral, V., Ortega T., Sánchez-Rodríguez, J., Sierra, A., Lescano C., Rodríguez-Gallego, L., Forja, J.	

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TIME	SESSIONS	PLACE
13:30 - 13:45 h	MICROBIAL PROCESSES IN A DEOXYGENATING OCEAN: COEXISTENCE AND DOMINANCE AT LOW O <sub>2</sub> LEVELS Emilio Garcia-Robledo, Irene Ramirez-Hernandez, Marika Mecca, Julio Bohórquez, Jose Calderón-Caro and Julia Huggins	
13:45 - 14:00 h	INFLUENCE OF DISSOLVED ORGANIC MATTER ON THE QUANTIFICATION OF WATER-ATMOSPHERE CO <sub>2</sub> FLUXES IN ESTUARINE SYSTEMS J. Forja, J. Sánchez-Rodríguez, A. Sierra, B. Vallejo, R. Ponce and T. Ortega	
14:00 - 15:30 h	Lunch	Local restaurants
15:30 - 16:30 h	<b>Oral Session 2a</b> Chemical oceanography Moderator: Rocío Ponce	<b>VELES E VENTS BUILDING</b> Conference room (Ground floor)
15:30 - 15:45 h	REACTIVITY AND FLUXES OF INORGANIC NUTRIENTS FROM AN AGRICULTURALLY AFFECTED ESTUARY (GUADALQUIVIR ESTUARY) A. Sierra, J. Sánchez-Rodríguez, S. Sirviente, J.J. Gomiz-Pascual, M. Bolado-Penagos, M. Bruno, J. Forja and T. Ortega	
15:45 - 16:00 h	VARIABILITY AND VERTICAL FLUXES OF CARBON DIOXIDE IN THE GUADALQUIVIR ESTUARY J. Sánchez-Rodríguez, A. Sierra, J. Forja and T. Ortega	
16:00 - 16:15 h	ISOTOPIC CHARACTERIZATION OF DISSOLVED INORGANIC CARBON IN ESTUARY WATERS Capilla Eva, Sierra Ana, Vallejo Beatriz, Teodora Ortega, Forja Jesús	
16:15 - 16:30 h	ASSESSMENT OF THE MAIN DRIVERS CONTRIBUTING TO pCO <sub>2</sub> AND pH GRADIENT FORMATION ALONG THE GALICIAN RIAS BAIXAS (NW PENINSULA) Castro-Olivares. A, Clerencia. M, Alcaraz-Rocha. P, Fuentes-Lema. A, Des. M, Sobrino. C	
16:30 - 17:30 h	<b>Oral Session 2b</b> Chemical oceanography Moderator: Aridane González	<b>VELES E VENTS BUILDING</b> Conference room (Ground floor)

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16:30 - 17:30 h	<b>Oral Session 2b</b> Chemical oceanography Moderator: Aridane González	<b>VELES E VENTS BUILDING</b> Conference room (Ground floor)
16:30 - 16:45 h	DISSOLVED IRON CYCLING IN THE MAR MENOR (SE SPAIN) UNDER DIFFERENT SINGULAR ENVIRONMENTAL EVENTS: LEVELS AND ORGANIC SPECIATION Juan Santos-Echeandía*, Maria Pilar Ponce Roa, Aridane G. González, Geraldine Sarthou, Paula Sánchez-Marín	
16:45 - 17:00 h	RECENT ADVANCES IN THE BIOGEOCHEMISTRY OF PLATINUM-GROUP ELEMENTS IN IBERIAN ECOSYSTEMS Carlos E. Monteiro, Melina Abdou, Clara Almécija, Miguel Caetano, Miguel Santos, Margarida M. Correia dos Santos and Antonio Cobelo-García	
17:00 - 17:15 h	UNVEILING THE COMPLEXATION DYNAMICS OF PLATINUM WITH DISSOLVED ORGANIC MATTER IN ESTUARINE ENVIRONMENTS Mendoza-Segura, C. and Cobelo-García, A	
17:15 - 17:30 h	ARE RARE EARTH ELEMENTS CLIMBING THE FOOD CHAIN? A CLOSER LOOK AT THE RÍA DE VIGO Mendoza-Segura, C., Cobelo-García, A and Planas, M.	
17:45 - 18:30 h	Poster session and coffee	<b>CLOCK BUILDING</b>
19:30 h	Welcome Cocktail	<b>CLOCK BUILDING</b>

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THURSDAY, 11TH JULY 2024

TIME	SESSIONS	PLACE
09:00 - 10:00 h	<b>Plenary Session 2</b> UNRAVELLING THE ATLANTIC OCEAN CONVEYOR: INSIGHTS AND CHALLENGES FROM OBSERVATIONS Eleanor Frakja-Williams Universität Hamburg (Germany)	<b>VELES E VENTS BUILDING</b> Main conference room (3rd floor)
10:00 - 11:45 h	<b>Oral Session</b> Chemical Oceanography Moderator: Melchor González and Magdalena Santana	<b>VELES E VENTS BUILDING</b> Conference room (Ground floor)
10:00 - 10:15 h	EVOLUTION OF IRON SIZE FRACTIONATION IN SURFACE WATERS DURING AN AERIAL VOLCANIC ERUPTION David González-Santana, Melchor González-Dávila, Aridane G. González and J. Magdalena Santana-Casiano	
10:15 - 10:30 h	EVOLUTION OF THE Fe(II) OXIDATION KINETIC CONSTANTS AFTER THE 2021 LA PALMA ERUPTION. Adrián Bullón-Téllez, J. Magdalena Santana-Casiano, Melchor González-Dávila, Aridane G. González and David González-Santana.	
10:30 - 10:45 h	Fe(III) REDUCED TO Fe(II) BY TRYPTOPHAN IN SEAWATER L. Suárez-Betancor, D. González-Santana, A.G. González, M. González-Dávila, J. M. Santana-Casiano	
10:45 - 11:00 h	INTERANNUAL AIR-SEA CO <sub>2</sub> FLUXES IN THE NW IBERIAN UPWELLING SYSTEM Marcos Fontela and Xosé Antonio Padín	
11:00 - 11:15 h	IRON BINDING LIGANDS IN THE SOUTHERN OCEAN, WINTER, AND SPRING (SCALE CRUISE 2019) V. Coussy, J. M. Santana-Casiano, M. González-Dávila, D. González-Santana, T. Mtshali, T. Ryan-Keogh, A. González González	
11:15 - 11:30h	SPONTANEITY OF THE DISSOLUTION REACTION OF BTEX COMPOUNDS IN A DEEP SPILL Andrés Rodríguez	
11:30 - 11:45h	COMPARISON OF VOLTAMMETRIC METHODS TO DETERMINE THE CHEMICAL SPECIATION OF DISSOLVED COPPER IN SEAWATER María Sol Hernández-Conesa, Xosé Antón Alvarez-Salgado, Mar Nieto-Cid, Juan Santos-Echeandía, Paula Sánchez-Marín	

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TIME	SESSIONS	PLACE
11:45 - 12:15 h	Poster session and coffee	VELES E VENTS BUILDING Terrace (3rd floor)
12:15 - 13:15 h	<b>Oral Session</b> Ecotoxicology and Marine Pollution Moderator: Javier Torres	VELES E VENTS BUILDING Conference room (Ground floor)
12:15 - 12:30 h	ALTERATIONS IN THE MICROBIOME OF THE CLAM DIGESTIVE GLAND AFTER EXPOSURE TO DRUGS Barbudo-Lunar, Marina; Trombini, Chiara; Blasco, Julián; Alhama, José; Michán, Carmen.	
12:30 - 12:45 h	COMPARATIVE STUDY Pb, Cd AND Cu CONCENTRATIONS IN SCYLIORHINUS CANICULA (LINNAEUS, 1758) AND MERLUCCIIUS MERLUCCIIUS (LINNAEUS, 1758) FROM THE WESTERN MEDITERRANEAN FOR FUTURE XENOBIOTIC MONITORING Alejandro J. Molera, Ana M. Hernández Martínez, Jose Rafael García March, Jose Tena Medialdea	
13:00 - 13:15 h	THE UNPREDICTABLE RESPONSE OF IN VIVO AND IN VITRO BIOLOGICAL MODELS TO MIXTURES OF POLYCYCLIC AROMATIC HYDROCARBONS Matos. B., Diniz. M., Branco. V., Martins. M.	
13:15 - 14:00 h	<b>Oral Session</b> Ecotoxicology and Marine Pollution Moderator: Javier Torres	VELES E VENTS BUILDING Conference room (Ground floor)
13:15 - 13:30 h	EVALUATION OF TBT CONTAMINATION BY PASSIVE SAMPLERS IN THE BIDASOA ESTUARY (BAY OF BISCAY - NORTHEAST SPAIN) IN THE CONTEXT OF THE WATER FRAMEWORK DIRECTIVE Maria Jesus Belzunce Segarra, Natalia Montero Ruíz, Javier Franco San Sebastián	

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13:30 - 13:45 h	IMPACT OF NATURAL UV RADIATION ON THE TOXICITY OF PLASTIC LEACHATES TO MARINE ZOOPLANKTON Mina Vassvik, Olalla Alonso, Rodrigo Almeda	
14:00 - 15:30 h	Lunch	Local restaurants
15:30 - 17:00 h	<b>Oral Session</b> Ecotoxicology and Marine Pollution Moderator: Ana Hernández	<b>VELES E VENTS BUILDING</b> Conference room (Ground floor)
15:30 - 15:45 h	VERTICAL DISTRIBUTION OF ORGANIC MICROPOLLUTANTS IN SEDIMENTS FROM EUROPEAN BAYS AND ESTUARIES Rubén Rios-Quintero, Daniel González-Fernández, Pablo Lara-Martín and Marina G. Pintado-Herrera	
15:45 - 16:00 h	OPTIMIZING (PHOTO)-FENTON FOR EFFLUENT DECONTAMINATION: SALINITY, pH & PHENOLIC LIGANDS J. Moreno-Andrés, I. Vallés, I. Sciscenko, E. Nebot, A. Arques	
16:00 - 16:15 h	PHYSIOLOGICAL RESPONSES OF P. ELEGANS TO ANTHROPOGENIC STRESSORS: SYNERGISTIC IMPACTS OF HEATWAVES AND UV FILTERS FROM SUNSCREENS Autiero A., Martínez I., Montesdeoca S., Gómez M., Vinagre C., Herrera A.	
16:15 - 16:30 h	POTENTIAL HAZARDS OF OCTINOXATE (ETHYLHEXYL METHOXYCINNAMATE) EXPOSURE IN THE SEAGRASS POSIDONIA OCEANICA (L.) DELILE: EXPERIMENTAL EVIDENCE Manuela Gertrudis García-Márquez, Daniel García-Veira and Nona S.R. Agawin	

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TIME	SESSIONS	PLACE
16:30 - 16:45 h	DETECTION BY STABLE ISOTOPES OF THE INFLUENCE OF MARINE AQUACULTURE ON UNDERWATER NATURAL HERITAGE: THE CASE OF THE ROMAN BOU-FERRER FISHERY ON THE COAST OF VILA JOIOSA (ALICANTE, SPAIN) Laia Roda Lluch, Jose Antonio Moya Montoya, Adoración Carratalá Gimenez y Pablo Sánchez Jerez.	
16:45 - 17:00 h	FROM NECROPSIES TO CONSERVATION: INVESTIGATING MASS MORTALITY EVENTS IN ALCID SEABIRDS	
17:00 - 17:15h	EFFECTS OF UV-C EXPOSURE ON LARVAL PERFORMANCE: IMPLICATIONS FOR BALLAST WATER TREATMENTS AND INVASIVE SPECIES MANAGEMENT	
18:00 - 19:00 h	Poster session and coffee	CLOCK BUILDING
21:00 h	Conference Dinner	Submarine Restaurant, Oceanogràfic



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FRIDAY, 12TH JULY 2024

TIME	SESSIONS	PLACE
09:00 - 10:00 h	<b>Plenary Session 3</b> MICRO AND NANOPLASTICS TOXICITY: THE KNOWN AND UNKNOWN Marta Martins Universidade NOVA de Lisboa (Portugal)	<b>VELES E VENTS BUILDING</b> Main conference room (3rd floor)
10:00 - 11:00 h	<b>Oral Session</b> Global Change and Tracers in Oceanography Moderator: Juan Santos	<b>VELES E VENTS BUILDING</b> Conference room (Ground floor)
10:00 - 10:15 h	pH AND CO <sub>2</sub> COASTAL MONITORING IN THE CANARY ISLANDS A.G. González, A. Aldrich-Rodríguez, D. González-Santana, M. González-Dávila, J.M. Santana-Casiano	
10:15 - 10:30 h	SEASONAL VARIABILITY OF GREENHOUSE GASES (CO <sub>2</sub> , CH <sub>4</sub> AND N <sub>2</sub> O) AT THE EDGES OF RIA FORMOSA COSTAL LAGOON, SOUTH PORTUGAL Correia C., Sierra A., Ortega, T., Forja J. and Cravo A.	
10:30 - 10:45 h	GEOCHEMICAL TRACERS OF MEDITERRANEAN OUTFLOW WATERS: ND ISOTOPES, CARBON CYCLE AND NEW EXPORT CONSTRAINTS Pena, L.D., Campderrós, S., Garcia-Solsona, E., Paredes-Paredes, E., Frigola, J., Rodríguez-Díaz, C.N., Lucas, A., Espinosa, S., Torner, J., Calvo, E., Pelejero, C., Cacho, I.	
10:45 - 11:00 h	THE IMPRINT OF ANTHROPOGENIC CLIMATE CHANGE IN THE SW IBERIAN UPWELLING SYSTEM: A WARMER, MORE ACIDIC AND LESS OXYGENATED OCEAN Marcos Fontela, Antje Voelker, María Jesús Álvarez-Fernández, Carmen G. Castro, David Curbelo, Aline Mega, Sofía Nieto, Paulo Relvas, Dunia Rios-Yunes, Antón Velo, Fátima Abrantes	
11:00 - 11:15 h	IMPACT OF OCEAN WARMING AND ACIDIFICATION ON THE STATOLITHS OF THE MEDITERRANEAN JELLYFISH RHIZOSTOMA PULMO Manuel Jesús León-Cobo, Angélica Enrique-Navarro, Ana Bartual, Laura Prieto	
11:15 - 12:00 h	<b>Oral Session</b> Coastal Management (ISMS)	<b>VELES E VENTS BUILDING</b> Conference room (Ground floor)

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12:00 - 12:30 h	Poster session and coffee	VELES E VENTS BUILDING Terrace (3rd floor)
12:30 - 13:40 h	Companies/Institutions Session	VELES E VENTS BUILDING Main conference room (3rd floor)
13:30 - 14:15 h	Closing Ceremony	VELES E VENTS BUILDING Main conference room (3rd floor)
14:15 - 15:45 h	Lunch	Local restaurants
19:30 h	City Tour	