

DETAILED SCIENTIFIC PROGRAM

MONDAY 20 OCTOBER 2025

8:00 – 9:00 **Welcome of Participants** – Room Faro Evangelistas

9:00 – 9:30 **Opening Ceremony** – Room Faro Evangelistas

9:30 – 10:30 **Plenary Talk 01** – Room Faro Evangelistas

Chairs: Christopher Bolch (USA), Jorge Diogéne (SPAIN)

“Ciguatera Poisoning: Risk management option in light of contributions from science and traditional knowledge”

Mireille Chinain (French Polynesia)

10:30 – 11:00 **Coffee Break** – Place Covered Terrace

11:00 – 12:30 **Parallel Sessions**

Parallel Session 1: Ciguatera and Benthic HABs

Room: Faro San Isidro

Chairs: Elisa Berdalet (Spain), Lisbet Díaz-Asencio (CUBA)

11:00 **O-001** Giant moray eel, a long living apex predator that poses a food safety risk in the Pacific

Sam Murray

11:15 ---

11:30 **O-003** Ciguatera poisoning in Australian waters: Investigating environmental, biological, and sociological drivers of risk

Greta Gaiani

11:45 **O-004** New biogeographic records of *Gambierdiscus* spp. in subtropical Eastern Atlantic: From the tropical Gulf of Guinea to the temperate Azores Islands

Miguel Barbosa

12:00 **O-005** A high ciguatoxin-producing *Gambierdiscus* clade (Gonyaulacales, Dinophyceae) as a major source of ciguatera in the Pacific

Christopher Bolch

12:15 **O-006** Advancing knowledge on Caribbean ciguatoxin chemistry and development of critical reference materials

Elizabeth M. Mudge

Parallel Session 2: Ichthyotoxic HABs

Room: Faro Posesión

Chairs: Gustaaf Hallegraeff (AUSTRALIA), Lixia Shang (CHINA)

- 11:00 **O-007** *Chrysochromulina leadbeateri* strikes again killing ≥ 2 mill fish in Northern Norway spring 2025
Ingunn A. Samdal
- 11:15 **O-008** The cytotoxicity of the haptophyte *Chrysochromulina leadbeateri* towards gill cell lines
Anita Solhaug
- 11:30 **O-009** Structure elucidation of Leadbeaterin-1: The main fish-killing toxin from *Chrysochromulina leadbeateri* blooms in Northern Norwegian fjords
Thomas O. Larsen
- 11:45 **O-010** Sterolysin diversity during fish-killing *Chrysochromulina leadbeateri* blooms in Northern Norway
Christopher O. Miles
- 12:00 **O-011** From morphology to toxicity: First characterization of the fish-killing *Fibrocapsa japonica* (Raphidophyceae) from Argentina
Delfina Aguiar Juárez
- 12:15 **O-012** Fish mortality event associated with harmful algal bloom in a Northern Tunisian Lagoon: A multifaceted crisis
Afef Fathalli

Parallel Session 3: Microbiomes, Biological & Chemical Interactions

Room: Faro Isla Magdalena

Chairs: Don Anderson (USA), Christine Band-Schmidt (MEXICO)

- 11:00 **O-013** Phenology of the toxic dinoflagellate *Dinophysis* along European coasts: Long-term observation networks reveal different phenoregions and confirm the key role of prey availability
Victor Pochic
- 11:15 **O-014** The functional diversity of bacterial microbiota associated with toxigenic *Prorocentrum* species
Lorena María Durán Riveroll
- 11:30 **O-015** A systematic quantitative review of the effects of PST toxins from *Alexandrium* on the copepod *Acartia*
Aldo Barreiro
- 11:45 **O-016** Nitrogen acquisition from co-occurring phytoplankton by the dinoflagellate *Alexandrium ostenfeldii*
Elin Lindehoff
- 12:00 **O-017** How toxins and allelochemicals can shape phytoplankton communities, and example with Baltic *Synechococcus*
Zofia Konarzewska

12:15 **O-018** Exopolymers and mucus in harmful algae: Composition, properties, and roles
Ian R. Jenkinson

12:30 – 14:00 **Lunch Break** – Place Covered Terrace

12:30 – 14:00 **Workshop 01** – Room Sala de Truco
“HAB Early Warning Systems”
Bengt Karlson

14:00 – 15:30 **Parallel Sessions**

Parallel Session 4: Ciguatera and Benthic HABs

Room: Faro San Isidro

Chairs: Sam Murray (NEW ZEALAND), Catharina Alves-de-Souza (CHILE)

14:00 **O-019** The emerging threat of Ciguatera in Brazil
Silvia Nascimento

14:15 **O-020** Spatio-temporal dynamics of *Gambierdiscus* in the Balearic Islands
Jorge Diogène

14:30 **O-021** Comparative transcriptomic analysis of polyketide synthase genes from *Gambierdiscus polynesiensis* and *Gambierdiscus holmesii* to identify candidate genes potentially involved in ciguatoxin biosynthesis
Amna Ashfaq

14:45 **O-022** Sampling *Ostreopsis* cf. *ovata* along the Campania coastline (Italy). An unprecedented combination of sample preparation and LC-MS to mitigate ovatoxin-related health risks
Chiara Melchiorre

15:00 **O-023** A study on the temporal dynamics and environmental drivers of harmful marine microalgae in Mauritius
Manisha Curpen Mahadoo

15:15 **O-024** SURVEY-TOX – A Pilot study on the monitoring of ciguatera poisoning and other emerging toxin risks for safer lagoon fisheries
Hélène Taiana Darius

Parallel Session 5: Ichthyotoxic HABs

Room: Faro Posesión

Chairs: Thomas O. Larsen (DENMARK), Kristoff Möller (MONACO)

14:00 **O-025** Understanding the fish-killing mechanisms of harmful algal blooms (HABs) from multifaceted perspectives: Insights from observations of multiple dinoflagellate species
Lixia Shang

- 14:15 **O-026** Turbulence tames toxicity: Controlling the growth and toxicity of the rust tide alga, *Margalefidinium polykrikoides*
Jiyeon Sung
- 14:30 **O-027** *Heterosigma akashiwo* blooms and fish kills in San Francisco Bay, CA, USA: Remote sensing and lab-based experiments to understand the ecology and impacts
Raphael Kudela
- 14:45 **O-028** Large scale bloom of *Karenia* species in South Australia associated with extensive deaths of marine life
Shauna Murray

Parallel Session 6: Modeling, Early Warning, and Forecasting

Room: Faro Isla Magdalena

Chairs: Michael Brosnahan (USA), Oscar Espinoza-González (CHILE)

- 14:00 **O-029** A decade of HABreports: early warning of HABs and biotoxins for the aquaculture industry
Keith Davidson
- 14:15 ---
- 14:30 **O-031** A three-dimensional mechanistic model for predicting *Karenia brevis* blooms on the West Florida Shelf
Ming Li
- 14:45 **O-032** Empirical dynamic modeling applied to Chilean fjords phytoplankton assemblages: An approach to identify causal relationships among harmful algal species and other microalgae species
Matias Volke
- 15:00 ---
- 15:15 **O-034** A machine-learning based, shellfish biotoxin forecasting method: Successes from Maine, USA and opportunities for other regions
Johnathan Evanilla

15:30 – 16:00 **Break**

15:45 – 17:00 **Ignite Talk Sessions**

Ignite Talks Session 1

Room Faro San Isidro

Chairs: Silvia Nascimento (BRAZIL), Kirsty Smith (NEW ZEALAND)

- 15:45 **P-007** Dead or alive? Assessing viability and recovery of rounded *Karenia brevis* cells induced by putrescine and temperature stress
Devin Burris

- 15:50 **P-009** Ecosystem service trade-offs driven by eutrophication and socioeconomic pressures in reservoir cascade
Sheila Cardoso
- 15:55 **P-012** Toxicity and bioluminescence in *Pyrodinium bahamense* blooms: The luminous lies of cheats
Kathleen Cusick
- 16:00 **P-013** Mixotrophic strategies and habitat influences on dinoflagellate blooms in the Coastal Baltic Sea
Johanna Exner
- 16:05 **P-016** Linking organic matter sources to diarrhetic shellfish toxin accumulation in coastal mussels during a harmful algal bloom
João Paulo Felizardo
- 16:10 **P-017** Succession of *Ostreopsis* blooms: Community structure of zoosporic parasites associated with dinoflagellates on the Basque coast
Alan Denis Fernández Valero
- 16:15 **P-027** Biogeography and toxin diversity of *Alexandrium* along Chilean Pacific Coast
Javier Paredes-Mella
- 16:20 **P-030** Assessment of potentially toxigenic benthic dinoflagellates in two Cuban coral reefs: abundance patterns across sites and substrates
Gabriel Livan Rojas Abrahantes
- 16:25 **P-040** Complex viral and bacterial interactions revealed for the harmful bloom forming dinoflagellate *Karenia brevis*
Joaquín Martínez Martínez
- 16:30 ---
- 16:35 **P-045** First Observation of *Ostreopsis fattorussoi* Accoroni, Romagnoli & Totti in benthic mucilage in the Eastern Mediterranean: A new risk for coastal ecosystems?
Yelda Aktan
- 16:40 **P-055** The influence of abiotic and biotic factors on the succession of *Ostreopsis* spp. along the Basque coast (South-East Bay of Biscay)
Yago Laurenn-Balparda
- 16:45 ---
- 16:50 **P-071** Monitoring microcystins-producing *Microcystis* in the Tobari Bay, Mexico
Pamela Helué Morales Sandoval

- 16:55 **P-073** Adaptive role of extracellular vesicles in phosphorus-limited *Microcystis aeruginosa*
Cezar Nascimento

Ignite Talks Session 2

Room Faro Posesión

Chairs: Greta Gaiani (AUSTRALIA), Pamela Carbonell (CHILE)

- 15:45 **P-075** *Didymosphenia geminata* blooms in freshwater ecosystems from central to austral Chile (~ 35.4°–54.6° S): Latitudinal distribution and environmental correlates
David Andrés Opazo Vega
- 15:50 **P-079** First report of potentially microcystin-producing *Microcystis* in the Dominican Republic
Alfaniris Vargas Fernandez
- 15:55 **P-081** Application of non-thermal plasma technologies as an eco-friendly strategy for the treatment of cyanobacteria and health-relevant cyanometabolites
Luciana Tartaglione
- 16:00 **P-086** Why are some blooms of the haptophyte *Prymnesium parvum* harmful but others not?
Jan Köhler
- 16:05 **P-087** Autecology and impacts of *Heterosigma akashiwo* in low-inflow estuaries: From research to management
Daniel Lemley
- 16:10 ---
- 16:15 **P-091** Flexible feeding in changing fjords: Trophic plasticity of bivalves facing harmful algal blooms and glacial influences in Southern Chile
Claudia Andrade Diaz
- 16:20 **P-094** Initial assessments of nitrogen-induced ‘tipping points’ for harmful algal bloom development in New York/Connecticut (USA) estuaries
Dianne Greenfield
- 16:25 **P-095** Multi-stressor dynamics: Effects of marine heatwave stress and harmful algal blooms on juvenile mussel (*Perna canaliculus*) survival and physiology
Hannah Greenhough
- 16:30 **P-098** CyanoHABs transfer along a freshwater-marine continuum and potential associated risks: Case of the Jacarepaguá Lagoon System (RJ, Brazil)
Mauro Cesar Palmeira Vila

- 16:35 **P-099** Implication of nitrogen and sulfur limitation on resources allocation and dimethylsulfoniopropionate (DMSP) production in toxic dinoflagellates
Laura Pezzolesi
- 16:40 **P-103** How will rising ocean temperatures affect growth rates and toxigenicity of *Protoceratium reticulatum*, a yessotoxin-producing dinoflagellate
Megan Schulz
- 16:45 **P-108** Occurrence of phycotoxins and toxic microalgae in the Sea of Marmara, Türkiye
Fuat Dursun
- 16:50 **P-109** Culture optimisation of *Vulcanodinium rugosum* for biomass production and purification of portimine
Philipp Hess
- 16:55 **P-115** Toxic dinoflagellate *Ostreopsis* cf. *ovata* recorded for the first time in the area of Boka Kotorska Bay (South Adriatic Sea)
Dragana Drakulovic

Ignite Talks Session 3

Room Faro Isla Magdalena

Chairs: Andrea Budisa (NETHERLANDS), Pablo Salgado (CHILE)

- 15:45 **P-117** Mitochondria as environmental sensors: Unravelling the link between *Prymnesium parvum* biotoxins and Mitochondrial Network
Zsuzsanna Neer
- 15:50 **P-126** Advancing HABs monitoring in Ireland: an in-house qPCR-based toolkit for detecting *Pseudo-nitzschia* species
Nicolè Caputo
- 15:55 **P-127** A loop-mediated isothermal amplification method (LAMP) for detecting toxic *Microcystis*
Carolina Croci
- 16:00 **P-130** Survey of cyanotoxins from various isolates from around the United States
Stuart Oehrle
- 16:05 **P-135** Phytoplankton integrated multiscale monitoring in the English Channel and North Sea: Automated/high throughput approaches for characterizing changes in phytoplankton assemblies and harmful algal blooms
Luis Felipe Artigas

16:10	P-136 Next generation sequencing applied to toxic algae monitoring in Adriatic Sea in Italy, the experience of Emilia Romagna and Marche Regions Barbara Bertasi
16:15	P-140 Development of a satellite-based algorithm for green <i>Noctiluca</i> discrimination in the upper Gulf of Thailand using in-situ bio-optical observations Jutarak Luang-on
16:20	P-144 Adaptive governance for sustainable fisheries: Insights from the scallop fishery of the Eastern English Channel (France) faced with HAB and emerging challenges. Sarra Chenouf
16:25	P-150 Local perceptions of the HABs' impacts in Chilean Patagonia Rodolfo Sapiains
16:30	---
16:35	P-164 Specification for field control of HABs in different scenarios by using modified clay Yongquan Yuan
16:40	---
16:45	P-167 BloomPredictor: Integrating AI and ecological data for harmful algal bloom risk prediction Alvaro Jorquera
16:50	P-168 Algal bloom prevention and management through end-user driven forecasting and seasonal planning apps Lisa Krimsky
16:55	P-169 Forecasting cyanobacteria cell counts for inland water: A hybrid approach Duy Nguyen
17:00 – 17:45	Coffee Break – Place Covered Terrace
17:45 – 18:45	Poster Session 1 – Room Tierra del Fuego
18:45 – 19:00	Break
19:00 – 20:30	ISSHA General Assembly – Room Faro Evangelistas General Assembly is accessible to all up-to-date members of their dues

TUESDAY 21 OCTOBER 2025

- 8:00 – 8:30 **Welcome of Participants** – Room Faro Evangelistas
- 8:30 – 9:30 **Plenary Talk 02** – Room Faro Evangelistas
Chairs: Mitsunori Iwataki (JAPAN), Lorena Durán-Riveroll (MEXICO)
“After 25 years of the WHO guideline on toxic cyanobacteria, what real advances have been achieved globally, and what are the main challenges from a public policy perspective?”
Sandra Azevedo (Brazil)
- 9:30 – 10:30 **Plenary Talk 03** – Room Faro Evangelistas
Chairs: Shauna Murray (AUSTRALIA), Sher Khan (PAKISTAN)
“Environmental drivers of neurotoxin BMAA production in marine diatoms and its biosynthesis pathway”
Aifeng Li (China)
- 10:30 – 11:00 **Coffee Break** – Place Covered Terrace
- 11:00 – 12:30 **Parallel Sessions**

Parallel Session 7: Modeling, Early Warning, and Forecasting

ROOM FARO SAN ISIDRO

Chairs: Alves-de-Souza (CHILE), Emily Dorne (USA)

- 11:00 **O-035** A pilot program towards an early warning system for harmful algal blooms in Bahía de La Paz, Gulf of California, Mexico
Christine Johanna Band-Schmidt
- 11:15 **O-036** Early warnings and predictions according to *Alexandrium catenella* abundances, mussels’ toxicity by paralytic toxins and hydrographical and meteorological conditions in Chilean fjords
Leonardo Guzmán
- 11:30 **O-037** Modeling anthropogenic and oceanographic drivers of domoic acid production in the Southern California Bight
Marco Sandoval-Belmar
- 11:45 **O-038** Influences of bottom temperature on *Alexandrium catenella* cyst dynamics in the Gulf of Maine
David Ralston
- 12:00 **O-039** Ocean warming reduces risk of paralytic shellfish toxin events from *Alexandrium catenella* in Tasmania, Australia
Lael Wakamatsu
- 12:15 **O-040** Bridging morphological traits and model attention for improved phytoplankton classification and forecasting
Paul Samuel Ignacio

Parallel Session 8: Ecology, Biology, and Biogeography

Room Faro Posesión

Chairs: Patricia Glibert (USA), Gemita Pizarro (CHILE)

- 11:00 **O-041** Evolutionary insights into polyketide synthases in *Amphidinium carterae*
Armando Mendoza-Flores
- 11:15 **O-042** Intra- and inter-specific transcriptomic profiling of *Alexandrium* strains from Irish waters and the North Sea to identify novel molecular markers associated with toxin production
Francesca Cucchi
- 11:30 **O-043** Comparison of microscopy and metabarcoding for long-term monitoring of harmful algae taxa in the Western English Channel
Keelan Lawlor
- 11:45 **O-044** Phylogenetic diversity and yessotoxin variation of the marine dinoflagellate *Lingulaulax polyedra* from a western Sweden (Skagerrak) fjord system
Allan Cembella
- 12:00 **O-045** Domoic acid biosynthesis and genome expansion in *Nitzschia navis-varingica*
Steffaney Wood-Rocca
- 12:15 **O-046** Comparative genomics of harmful bloom-forming diatoms *Pseudo-nitzschia*
Zoltan Fuessy

Parallel Session 9: Prevention, Control and Mitigation (PCM-HABs)

Room Faro Isla Magdalena

Chairs: Zhiming Yu (CHINA), Inés Súnesen (ARGENTINE)

- 11:00 **O-047** A sustainable and innovative management system for toxic cyanobacteria blooming of surface waters with combined energy production, sustainable agriculture, and food safety (CYANOTECH)
Maria G. Antoniou
- 11:15 **O-048** Novel light-guided photocatalytic treatment for in situ control of harmful algal blooms
Diana S. Moura
- 11:30 **O-049** Towards scalable photocatalytic water treatment: Simplified preparation of g-C₃N₄ coated glass beads for microcystin-LR removal
Indira Menezes

11:45	O-050 Development of surfactant-based foams for targeted control of harmful algal blooms Vincent Lovko
12:00	O-051 Harmful algal bloom mitigation of dinoflagellate, <i>Karenia brevis</i> , using Lake Guard® Oxy Jessica R. Frost
12:15	---
12:30 – 14:00	Lunch Break – Place Covered Terrace
12:30 – 14:00	Workshop 02 – Room Sala de Truco “Planning the next ten years of GlobalHAB Science” Clarissa Anderson
12:30 – 14:00	Workshop 03 – Room Faro Punta Santa Ana “IFCB networks panel: Managing multiple instruments” Michael Brosnahan, Thomas Farrugia, Deo Onda
Parallel Sessions	
14:00 – 15:30	Parallel Session 10: Toxins & Other Microalgal Metabolites Room Faro San Isidro Chairs: Christopher O. Miles (NORWAY), Pearse McCarron (CANADA)
14:00	---
14:15	O-054 Isolation of polyketide toxins from free-living symbiotic Symbiodiniaceae Emily Jolly
14:30	O-055 Untargeted metabolomics of cytotoxic extracts of the benthic dinoflagellate <i>Amphidinium eilatiense</i> María del Carmen Osorio-Ramírez
14:45	O-056 Acquisition and evolution of the neurotoxin domoic acid biosynthesis genes in diatoms Nansheng Chen
15:00	O-057 Lipophilic cholinergic ligands from the marine cyanobacterium <i>Oscillatoria</i> cf. <i>bonnemaisonii</i> Rómulo Aráoz
15:15	O-058 Chemical stability of prymnesins Tobias Mueller

Parallel Session 11: Ecology, Biology, and Biogeography
Room Faro Posesión
Chairs: Ian R. Jenkinson (FRANCE), Máximo Frangopulos (CHILE)

- 14:00 **O-059** Blue holes and red tides: Underwater sink holes on the West Florida Shelf serve as a nutrient source for *Karenia brevis*
Patricia Glibert
- 14:15 **O-060** Dead or alive? How dinoflagellate HABs shift the coastal hypoxia paradigm
Christopher Gobler
- 14:30 ---
- 14:45 ---
- 15:00 **O-063** Microplastics and microalgae-phyco toxins: A synergistic toxicological risk in marine aquaculture environments
Jorge I. Mardones
- 15:15 **O-064** Realized Niche of *Pseudo-nitzschia* spp. in a coastal upwelling center off Central Chile
Catharina Alves-de-Souza

Parallel Session 12: Cyanobacteria & Freshwater HABs

Room Faro Isla Magdalena

Chairs: Detmer B. Van de Wall (NETHERLANDS), Aldo Barreiro (PORTUGAL)

- 14:00 **O-065** Uncovering intraspecific trait plasticity in harmful cyanobacteria: A functional trait approach to understand bloom dynamics
Arnaud P. Louchart
- 14:15 **O-066** Microdiversity of *Microcystis aeruginosa* complex shows an incredible diversity of ecotypes
Gabriela Martínez de la Escalera
- 14:30 **O-067** Functional and genetic diversity of bloom-forming cyanobacteria in the Laurentian Great Lakes
Carol Waldmann Rosenbaum
- 14:45 **O-068** Characterizing the freshwater cyanobacterium, *Microcystis aeruginosa*, using digital holography
Madison Bennett
- 15:00 **O-069** Silent stress: Iron limitation suppresses cyanobacterial growth but elevates toxin risk
Charlie Trick
- 15:15 **O-070** Salinity thresholds drive nonlinear cyanobacterial toxin responses in prairie lakes
Irena Creed

15:30 – 16:00 **Break**

15:45 – 16:00 **Parallel Sessions**

Parallel Session 13: Toxins & Other Microalgal Metabolites

Room Faro San Isidro

Chairs: Per Juel Hansen (DENMARK), Rómulo Aráoz (FRANCE)

- 15:45 **O-071** Cyanotoxins in marine and freshwater cyanobacteria from LEGE-CC, Portugal
Flavio Luis de Oliveira
- 16:00 **O-072** Toxin profiles of *Alexandrium ostenfeldii* (Dinophyceae) strains isolated from the Beagle channel: Spirolide diversity
Luis Norambuena
- 16:15 **O-073** Prevalence and distribution of dissolved phycotoxins in seawater in the Yellow Sea and the Bohai Sea, China
Jiangbing Qiu
- 16:30 ---
- 16:45 **O-075** 10-year study of the occurrence and distribution of lipophilic marine toxins in shellfish from production areas in Chile
Fernanda Barrera

Parallel Session 14: Taxonomy and Phylogeny

Room Faro Posesión

Chairs: Lisa Campbell (USA), Yolanda Pazos (SPAIN)

- 15:45 **O-076** Revisiting the taxonomy of *Prymnesium parvum*: Historical Challenges
Urban Tillmann
- 16:00 **O-077** The critical role of biological sample curation in advancing research on *Eutreptiella* (Euglenophyceae/Euglenozoa)
Sinuhé Hernández Márquez
- 16:15 **O-078** Intracellular ultrastructure comparison of seven toxigenic and non-toxigenic *Amphidoma* and *Azadinium* species (Amphidomataceae, Dinophyceae) isolated from the North Pacific
Koyo Kuwata
- 16:30 **O-079** Species diversity of amphidomatacean dinoflagellates in Japan based on morphological and molecular identification
Mitsunori Iwataki
- 16:45 **O-080** New toxins and harmful species. Updates from the IOC-taxonomic task team
Catarina Churro

Parallel Session 15: Cyanobacteria & Freshwater HABs

Room Faro Isla Magdalena

Chairs: Dail Laughinghouse (USA), Arnaud P. Louchart (NETHERLANDS)

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| 15:45 | O-081 Cyanobacterial toxin profiling of 40 lakes in a temperate northern region
Malin Olofsson |
| 16:00 | O-082 Predicting cyanobacteria blooms in U.S. Lakes using national scale data
Kendall Ash |
| 16:15 | O-083 Recovery and characterization of potentially toxin-producing cyanobacteria from a century-old reservoir
Katelyn McKindles |
| 16:30 | O-084 Global change impacts on cyanobacterial bloom toxicity: Scaling from traits to threats
Dedmer B. Van de Waal |
| 16:45 | O-085 A freestream in situ digital holographic imaging system for monitoring cyanobacterial blooms in freshwater lakes
Aditya R. Nayak |
| 17:00 | O-086 Cyanotoxins diversity and their biotechnological potential
Vitor Vasconcelos |
| 17:15 – 17:45 | Coffee Break – Place Covered Terrace |
| 17:45 – 18:45 | Poster Session 2 (only exhibition) – Room Tierra del Fuego |
| 18:45 – 19:00 | Break |
| 19:00 – 20:30 | Welcome Party – Room Faro San Isidro |

WEDNESDAY 22 OCTOBER 2025

- 8:00 – 8:30 **Welcome of Participants** – Room Faro Evangelitas
- 8:30 – 9:30 **Plenary Talk 04** – Room Faro Evangelistas
Chairs: Vera Trainer (USA), Jorge I. Mardones (CHILE)
“The secret lives of plankton”
Manu Prakash (USA)
- 9:30 – 10:30 **Plenary Talk 05** – Room Faro Evangelistas
Chairs: Clarissa Anderson (USA), Rima Beesoo (FRANCE)
“Environmental drivers of neurotoxin BMAA production in marine diatoms and its biosynthesis pathway”
Elisa Berdalet (Spain)
- 10:30 – 11:00 **Coffee Break** – Place Covered Terrace
- 11:00 – 12:30 **Parallel Sessions**

Parallel Session 16: Ecology, Biology, and Biogeography

Room Faro San Isidro

Chairs: Raphael Kudela (USA), Daniel Lemley (SOUTH AFRICA)

- 11:00 **O-087** The role of G protein-coupled receptors in red tide dinoflagellate bioluminescence
Libin Ye
- 11:15 **O-088** Rapid sexual reproduction in *Dinophysis acuminata* revealed through temporal partitioning of cellular processes
Serena Sung-Clarke
- 11:30 ---
- 11:45 **O-090** Distribution dynamics of vitamin B12, *Pseudo-nitzschia* sp. and domoic acid in the Northwest Passage
Elisabeth Rosselli
- 12:00 ---
- 12:15 **O-092** A year long in situ survey of HAB species and their respective metabolic activities in the Northern Adriatic Sea
Daniela Maric Pfannkuchen

Parallel Session 17: Prevention, Control, and Mitigation (PCM-HABs)

Room Faro Posesión

Chairs: Yongquan Yuan (CHINA), Leila Basti (JAPAN)

- 11:00 **O-093** Controlling harmful algal blooms (HABs) in marine waters: Current status and future prospects
Vera Trainer

- 11:15 **O-094** In situ impacts of modified clay on *Karenia brevis* cell concentrations, water quality, and microbial communities
John Kristoffer Andres
- 11:30 **O-095** Using modified clay to mitigate fjord HAB taxa: Laboratory results using species from Chile, Scotland, and Norway
Anita Flores Leñero
- 11:45 **O-096** Synchronous removal of the potent marine algal toxins in mitigating harmful algal blooms using modified clay
Lianbao Chi
- 12:00 **O-097** Development of HAB mitigation using modified clays in China
Zhiming Yu
- 12:15 **O-098** Enhancing carbon sequestration through flocculation of harmful algal blooms by modified clay
Xiuxian Song

12:30 – 13:00 **Installation poster (Session 2) – Room Tierra del Fuego**

13:00 – 20:30 **Half-day Excursions**

THURSDAY 23 OCTOBER 2025

8:00 – 8:30 **Welcome of Participants** – Room Faro Evangelistas

8:30 – 9:30 **Plenary Talk 06** – Room Faro Evangelistas

Chairs: Phillip Hess (FRANCE), Miriam Seguel (CHILE)

“Spatio-temporal expansion of HABs and marine biotoxins in Chile: 30 years of a country response through science, early warning strategies and management?”

Benjamin Suárez (Chile)

9:00 – 9:30 **Poster Session 2** – Room Tierra del Fuego

10:30 – 11:00 **Coffee Break** – Place Covered Terrace

11:00 – 12:30 **Parallel Sessions**

Parallel Session 18: Ecology, Biology, and Biogeography

Room Faro San Isidro

Chairs: Cynthia Heil (USA), Marcelo Hernando (ARGENTINE)

11:00 **O-099** Are we in an unprecedented era of HAB-driven marine mammal mortality events in coastal California?

Clarissa Anderson

11:15 **O-100** Investigation of phytoplankton blooms at a reference station in Algoa Bay, South Africa

Brishan Kalyan

11:30 **O-101** Characterization of HAB-associated microplankton around Karachi coast and the Indus River Estuary (IRE)

Sher Khan

11:45 **O-102** Distribution patterns of phytoplanktonic assemblages associated with harmful dinoflagellates in the Chilean fjord system based on a 16-year time series

Gemita Pizarro Nova

12:00 **O-103** Pollution dynamics and sustainable management of toxic elements associated with harmful algal blooms in coastal Bangladesh

M. Safiur Rahman

12:15 **O-104** Changing microalgal communities: Approaches for holistic monitoring of harmful algal blooms

Kirsty Smith

Parallel Session 19: Cyanobacteria & Freshwater HABs

Room Faro Posesión

Chairs: Vitor Vasconcelos (PORTUGAL), Luciana Tartaglione (ITALY)

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|-------|---|
| 11:00 | O-105 Transforming cyanobacteria biomass into sustainable biofertiliser: A review
Jabulani Gumbo |
| 11:15 | O-106 Cyanobacterial community responses to nutrient reduction and warming: Insights from 45 years of monitoring
Jordan Facey |
| 11:30 | O-107 Three-dimensional analysis of <i>Microcystis</i> colonies: What controls size during blooms in North American lakes?
Ronojoy Hem |
| 11:45 | O-108 The fate of toxic cyanobacteria in soil and impacts on food safety: Application of drinking water treatment residuals in CyanoHAB-impacted regions in US
Lee Jiyoung |
| 12:00 | O-109 Is it time to integrate molecular cyanobacterial assays into water monitoring programs?
Mark Van Asten |
| 12:15 | O-110 Latitudinal expansion of toxin cyanobacterial blooms in continental aquatic ecosystems of Southern Chile: Evidence from recent records
Claudia Pérez |

Parallel Session 20: New Methods & Technology

Room Faro Isla Magdalena

Chairs: Dave Clarke (IRELAND), Greta Gaiani (AUSTRALIA)

- | | |
|-------|--|
| 11:00 | O-111 Non-target analysis by liquid chromatography-high-resolution mass spectrometry: Application in algal and cyanobacterial toxin measurement
Pearse McCarron |
| 11:15 | O-112 Mining discarded molecular data for HAB gold
Martin Pfannkuchen |
| 11:30 | --- |
| 11:45 | O-114 Assessment of novel molecular tools for the early detection of <i>Alexandrium minutum</i> in Italian coastal waters (Mediterranean Sea)
Giorgia Zoffoli |
| 12:00 | O-115 A rapid molecular assay for discrimination of potentially toxic <i>Pseudo-nitzschia</i> spp. using recombinase polymerase amplification and nanopore sequencing
Robert Hatfield |

- 12:15 **O-116** Ammonium concentrations limiting HAB species growth cannot be accurately determined using the traditional indolphenol blue colorimetric method – The fluorometric ortho-phthaldialdehyde method is recommended instead
R. Wayne Litaker
- 12:30 – 14:00 **Lunch Break** – Place Covered Terrace
- 12:30 – 14:00 **Workshop 04** – Room Sala de Truco
“Emerging toxins: Bringing knowledge to tackle a global challenge”
Lucía Soliño Alonso
- 12:30 – 14:00 **Workshop 05** – Room Faro Punta Santa Ana
“IAEA Meeting: TC Project INT7022 ‘Strengthening Ocean Health for Sustainable Development: A Global Approach Using Nuclear and Isotopic Techniques’”
Kristof Moeller
- 14:00 – 15:30 **Parallel Sessions**

Parallel Session 21: Ecology, Biology, and Biogeography

Room Faro San Isidro

Chairs: Allan Cembella (GERMANY), Máximo Frangopulos (CHILE)

- 14:00 **O-117** Recurrent co-occurrence of *Pseudo-nitzschia australis* and *Eucampia zodiacus* in Baja California coastal waters: Evidence of emerging harmful phytoplankton assemblages
Mary Carmen Ruiz de la Torre
- 14:15 **O-118** *Gymnodinium catenatum* in the shellfish production areas of the northeastern Atlantic
Yolanda Pazos
- 14:30 **O-119** Long term salinity adaptation in *Nodularia spumigena* supports northwards expansion potential in the Baltic Sea
Carolin Peter
- 14:45 **O-120** First record of a *Trichodesmium* sp. bloom in waters of the Argentine Continental Shelf and its possible relationship with the outbreak of *Alexandrium* spp.
María Guillermina Ruiz
- 15:00 **O-121** Intensification and spread of inshore *Alexandrium catenella* blooms in Cape Cod, Massachusetts
Michael Brosnahan
- 15:15 **O-122** Spatiotemporal dynamics of the 2018 *Alexandrium catenella* bloom in Aysén, Southern Chile
David Cassis

Parallel Session 22: HABs in a Changing World & Emerging Issues

Room Faro Posesión

Chairs: Kathi Lefebvre (USA), Elena Fabro (ARGENTINE)

- 14:00 **O-123** Dynamics of the massive cyst beds of the toxic dinoflagellate *Alexandrium catenella* in the rapidly warming Pacific Arctic
Donald Anderson
- 14:15 **O-124** Summertime heat waves in the lower Chesapeake Bay and their effects on blooms of the harmful algae *Margalefidinium polykrikoides*
Margaret Mulholland
- 14:30 **O-125** Combined effects of warming and nitrogen availability on harmful algal blooms in the Dutch coastal North Sea
Andrea Budiša
- 14:45 ---
- 15:00 **O-127** The role of harmful dinoflagellate blooms in controlling the temporal and spatial dynamics of hypoxia and acidification in Northwest Atlantic estuaries
Ryan Wallace
- 15:15 **O-128** The impact of environmental change on long-term trends in harmful algal blooms in a southeastern Australian estuary
Dora Vig

Parallel Session 23: New Methods & Technology

Room Faro Isla Magdalena

Chairs: Katherine Hubbard (USA), Chiara Melchiorre (ITALY)

- 14:00 **O-129** Non-Targeted mass spectrometry-based metabolomics for comprehensive annotation of cyanobacterial metabolites in Greek Lakes
Sevasti-Kiriaki Zervou
- 14:15 ---
- 14:30 **O-131** Metabolomic insights in the basal metabolism of *Amphidinium* and *Coolia* species associated with biofilms
Nadia Valeria Herrera Herrera
- 14:45 **O-132** Strengthening marine toxin surveillance: Implementing isotopic techniques on ciguatoxin quantitation in the Philippines
Ma. Llorina Mestizo

15:00 **O-133** Optimization of the extraction protocol for Pacific ciguatoxins from marine products prior to analysis using the neuroblastoma cell-based assay
Mélanie Roué

15:15 **O-134** An electrochemical immunosensor for tetrodotoxin and saxitoxin detection: A step towards integrated seafood toxin monitoring
Jaume Reverté

15:30 – 16:00 **Break**

15:45 – 16:00 **Parallel Sessions**

Parallel Session 24: Toxicity

Room Faro San Isidro

Chairs: Jordi Molgó (FRANCE), Estela Pires (BRAZIL)

15:45 ---

16:00 **O-136** Reversal of nondepolarizing nicotinic acetylcholine receptor block induced by 6- or 7-membered cyclic imine toxins using 3,4-diaminopyridine in isolated mouse diaphragm preparations
Jordi Molgó

16:15 **O-137** Disclosing the functions of nuclear receptors NR1J1 in bivalves and toxin metabolism. New insights from in vitro and in vivo studies
Alexandre Campos

16:30 **O-138** Cytotoxic and membrane-disruptive properties of *Prymnesium parvum* extracts
Elisabeth Varga

16:45 **O-139** Combined toxicity of co-occurring harmful algal bloom species: Cellular and molecular effects on gametes of the Pacific oyster (*Crassostrea gigas*)
Rima Beesoo

17:00 **O-140** Toxicity of *Karenia* species on Greenshell mussel reproduction: Insights into the potential bloom impact on aquaculture in New Zealand
Mathilde Madre

Parallel Session 25: HABs in a Changing World & Emerging Issues

ROOM FARO POSESIÓN

Chairs: Alejandro Murillo (CHILE), Kowo Kuwata (JAPON)

- 15:45 **O-141** Effects of temperature and light on the growth and domoic acid production of the diatom *Pseudo-nitzschia multiseries* from the California Current System
William P. Cochlan
- 16:00 **O-142** Evaluating 37 years of harmful algal blooms in Southern Chile
Alejandro Clément
- 16:15 **O-143** The emerging risks of toxic benthic dinoflagellates in the Magellan Subantarctic ecoregion under climate change scenarios: Is migration to the south an option?
Máximo Frangopulos
- 16:30 **O-144** Increasing presence of harmful algal bloom toxins in Arctic food webs linked to ocean warming
Kathi Lefebvre
- 16:45 ---
- 17:00 **O-146** The IOC Harmful Algal Information System – The value of the global long-time series database HAEDAT
Dave Clarke

Parallel Session 26: HABs and Social Dimensions

Room Faro Isla Magdalena

Chairs: Rodolfo Sapiains (CHILE), Mathias Alberto Schramm (BRAZIL)

- 15:45 **O-147** HABs and human affairs: Lessons from our interactions with bacterial and viral pathogens
Gustaaf Hallegraef
- 16:00 **O-148** Harmful Algal Bloom perceptions among school students in Southern Chile: Insights into a preventive education and communication approach
Pamela Carbonell
- 16:15 **O-149** Investigating the association between Harmful Algal Blooms and asthma incidence in coastal Madagascar: A multi-year remote sensing analysis
Kira Hülsdünker
- 16:30 **O-150** A preliminary study on the method of economic loss evaluation of marine ecosystems caused by HABs: Based on the impact of hypoxic environment on ecosystems
Yingze Xu
- 16:45 **O-151** Assessment of national policies on Harmful Algal Blooms in the Latin American and Caribbean (LAC): Challenges for policy makers towards 2030 Agenda for Sustainable Development

17:00 **Leon Vergara**
O-152 What does an average recreator know about harmful algal blooms? Communication takeaways from a Utah, USA public perception survey
Hannah Bonner

17:00 – 17:45 **Coffee Break** – Place Covered Terrace

Parallel Session 27: Toxicity

Room Faro San Isidro

Chairs: Elisabeth Varga (AUSTRIA), Ambbar Aballay González (CHILE)

17:45 **O-153** Histological damage and mortality rates in juveniles of the oyster *Magallana gigas* due to exposure to cells and cell lysates of *Alexandrium* spp.
Ismavy de la Caridad Castillo Quintana

18:00 **O-154** Pathological fingerprint of harmful algal blooms in farmed salmon from Southern Chile
Diego Caro

18:15 **O-155** Effects of the antibiotic azithromycin on *Daphnia*-cyanobacteria interaction: Revealing the impacts of environmentally relevant concentrations
Michael Celano

18:30 **O-156** Combined biotoxin exposure in the smalltooth sawfish, *Pristis pectinata*: Clues to an unusual mortality event throughout the Florida Keys, United States
Sarah Dietrick

18:45 **O-157** Saxitoxin linked to deaths of Northern fur seals in the Southeast Bering Sea
Chelsea Campbell

Parallel Session 28: HABs in a Changing World & Emerging Issues

Room Faro Posesión

Chairs: Urban Tillman (GERMANY), Margaret Mulholland (USA)

17:45 **O-158** Extreme flood event triggers a massive toxic bloom of *Dinophysis* cf. *acuminata* in Southern Brazil
Luiz Mafra Jr.

18:00 **O-159** Turbulence, temperature and termination: Another role for climate change in *Karenia brevis* blooms
Cynthia Heil

18:15 ---

- 18:30 **O-161** Global occurrence of mixed blooms of harmful algae: Toxicity and impacts on marine resources
Leila Basti
- 18:45 **O-162** Baseline dataset of harmful algal blooms (2024-2025) for Saudi Arabian Red Sea coast
Afrah Al Othman

Parallel Session 29: In Situ Monitoring and Remote Observing Systems
ROOM FARO ISLA MAGDALENA

Chairs: Bengt Karlson (SWEDEN), Karla Paz (GUATEMALA)

- 17:45 **O-163** Aqusens: A field-deployable holographic imaging system for HAB cell detection
Holly Bowers
- 18:00 **O-164** Real-Time Monitoring of Harmful Algae: SAMS Validation Against Optical Microscopy and FlowCam Technologies
Nicole Correa
- 18:15 **O-165** Developing an AI-assisted model to differentiate *Pseudo-nitzschia* morphotypes from warm tropical waters using IFCB-generated images
Gian Carlo Gaetos
- 18:30 **O-166** Developing an Imaging FlowCytobot monitoring program to detect harmful algal blooms in Alaska
Thomas Farrugia
- 18:45 **O-167** From pixels to patterns: Automated in situ imaging reveals diel vertical migration among phytoplankton
Karin Garefelt
- 19:00 – 20:30 **ISSHA Auction**

FRIDAY 24 OCTOBER 2025

- 8:00 – 8:30 **Welcome of Participants** – Room Faro Evangelistas
- 8:30 – 9:30 **Poster Section 2 (only exhibition)** – Room Tierra del Fuego
- 9:30 – 10:30 **Plenary Talk 07** – Room Faro Evangelistas
Chair: Benjamín Suárez (CHILE), Lucia Soliño (SPAIN)
“What we know about ichthyotoxic microalgal species and their toxins”.
Bernd Krock (Germany)
- 10:30 – 11:00 **Coffee Break** – Place Covered Terrace
- 11:00 – 12:30 **Parallel Sessions**

Parallel Session 30: HABs in a Changing World & Emerging Issues ROOM FARO SAN ISIDRO

Chairs: William P. Cochlan (USA), Luiz Mafra Jr. (BRAZIL)

- 11:00 **O-168** Aerosol particles in the Western Philippines increase the growth of *Alexandrium minutum* in batch cultures
Richard Redil
- 11:15 **O-169** Harmful algal blooms in South-Central Chile: Impacts, challenges, and research perspectives
Oscar Espinoza-González
- 11:30 ---
- 11:45 **O-171** Mussels under stress: Okadaic acid accumulation from toxin-coated microplastics and its molecular and histological consequences
Estela Pires
- 12:00 **O-172** HABs watch: Developing and implementing an integrated in situ observation network for HAB monitoring under disaster risk reduction (DRR) framework
Deo Florence L. Onda

Parallel Session 31: In Situ Monitoring and Remote Observing Systems Room Faro Posesión

Chairs: Holly Bowers (USA), Thomas Farrugia (USA)

- 11:00 **O-173** Improved strategies for tracking *Karenia brevis* across bloom stages
Katherine Hubbard
- 11:15 **O-174** An early warning system for detecting harmful algal blooms in the English Channel
Gavin Tilstone

- 11:30 **O-175** Development of an early detection, warning, and prediction system for cyanobacteria in the Baltic Sea
Bengt Karlson
- 11:45 **O-176** Monitoring of potentially harmful microalgae in the coastal area of the Magdalena Department, Colombian Caribbean coast
Julian Franco Angulo
- 12:00 **O-177** Harmful algal bloom detection in small, inland water bodies using machine learning and satellite imagery
Emily Dorne
- 12:15 ---

- 12:30 – 14:00 **Lunch Break – PLACE: COVERED TERRACE**
- 12:30 – 14:00 **Workshop 06 – Room Sala de Truco**
“Post-Project Progress of SATREPS-MACH: Sustainable Management of Harmful Algal Blooms in Chile”
Fumito Maruyama, Milko A. Jorquera
- 12:30 – 14:00 **Workshop 07 – Room Faro Punta Santa Ana**
“Game of Traits: A card game about trait-based ecology”
Arnaud Louchart, Andrea Budiša
- 14:00 – 15:00 **Closing Ceremony – Room Faro San Isidro**
- 15:00 – 16:00 **Takeshi Yasumoto and Patrick Gentien Awards**
- 16:00 – 17:00 **Presentation of the next ICHA2027 venue**
- 17:00 – 19:00 **Break**
- 19:00 – 19:30 **Transfer to Gala Dinner**
- 19:30 – 20:30 **Gala Dinner – Place Asmar Magallanes Facilities**

POSTER LIST

Poster Section 1

Taxonomy

- P-001** Phylogeny and ultrastructure of a novel marine *Gymnodinium* species (Gymnodiniales, Dinophyceae) isolated from Hokkaido, Japan
Koyo Kuwata
- P-002** Identification of *Pseudo-nitzschia* species using rRNA (Nanopore technology) in Southern Chile
Laura Latorre-Melín
- P-003** Catalog of planktonic dinoflagellates from the Guatemalan Pacific: New records and paralytic shellfish poisoning events
Karla Paz
- P-004** Harmful algae: 17 years of research in Buenos Aires coastal waters (Argentina)
Inés Sunesen

Ecology, Biology, and Biogeography

- P-005** Trophic transfer of paralytic shellfish toxin: impact on biochemical composition and reproduction of the carnivorous snail *Chorus giganteus*
Paola Andrade
- P-006** Diversity of benthic dinoflagellates in the Magellan Subantarctic ecoregion: morphological characterization in intertidal habitats with special emphasis on toxic species
Francisco Bahamonde Mihovilovich
- P-007** IT Dead or alive? Assessing viability and recovery of rounded *Karenia brevis* cells induced by putrescine and temperature stress
Devin Burris
- P-008** *Alexandrium catenella* in Chilean fjords: Characteristics of its genome and effect of temperature on core genes (sxtA4 and sxtG) of the synthesis cluster.
Pamela Carbonell
- P-009** IT Ecosystem service trade-offs driven by eutrophication and socioeconomic pressures in reservoir cascade
Sheila Cardoso
- P-010** Morphological landmarks in *Prorocentrum koreanum* showed consistency in varying salinity conditions as revealed by Imaging Flow CytoBot coupled with machine learning
Gerard Paul Chan
- P-011** First report of the marine dinoflagellate *Tripos furca* bloom in a warm temperate bay (South Africa)
Phumlile Cotiyane-Pondo

- P-012** Toxicity and bioluminescence in *Pyrodinium bahamense* blooms: the luminous lies of cheats
Kathleen Cusick
- P-013** IT Mixotrophic strategies and habitat influences on dinoflagellate blooms in the coastal Baltic Sea
Johanna Exner
- P-014** Bloom of *Heterocapsa circularisquama* in Mar del Plata harbor, Southwest Atlantic Ocean: Description of two strains with lytic activity against other plankton components
Elena Fabro
- P-016** IT Linking organic matter sources to diarrhetic shellfish toxin accumulation in coastal mussels during a harmful algal bloom
João Paulo Felizardo
- P-017** IT Succession of *Ostreopsis* blooms: Community structure of zoosporic parasites associated with dinoflagellates on the Basque coast
Alan Denis Fernández Valero
- P-018** Southernmost detection of Pectenotoxins-2 in Antarctic waters using SPATT
Máximo Jorge Frangopulos Rivera
- P-019** Spatial distribution of harmful algal blooms in Nuevo Gulf and their likely negative effects on the environment during spring 2022
Leilén Gracia Villalobos
- P-020** Genetic diversity and vertical distribution of amphidomatacean dinoflagellates off the coast of Hokkaido, Japan, detected by metabarcoding and quantitative PCR analyses
Koyo Kuwata
- P-021** Harmful algal blooms in Latin America and Caribbean
Ana Martínez Goicoechea
- P-022** Amphidomataceae blooms in the Río De La Plata Continental Shelf, Southwest Atlantic
Ana Martínez Goicoechea
- P-023** Seasonal and spatial distribution of three dominant diatom genera: *Chaetoceros*, *Skeletonema*, and *Pseudo-nitzschia* in Singapor waters
Aye Aye Mon
- P-024** Comparison of growth and toxin production of *Vulcanodinium rugosum* strains grown under two different conditions: Batch and agitated cultures
Angel Ramón Moreira González
- P-025** A spatio-temporal analysis of the occurrence of harmful algal blooms in Chile: A review between 1956 and 2021
Doris Oliva

- P-026** Experimental exposure of harmful microalgae *Alexandrium catenella*, *Prorocentrum lima* and *Heterosigma akashiwo* on the Chilean mussel *Mytilus chilensis*
Doris Oliva
- P-027** IT Biogeography and toxin diversity of *Alexandrium* along Chilean Pacific coast
Javier Paredes-Mella
- P-029** Phytoplankton assemblages associated with a bloom of *Pseudo-nitzschia pseudodelicatissima* complex and *Phaeocystis* spp. in subantarctic fjords of southern Chile during the austral spring 2021
Gemita Pizarro Nova
- P-030** IT Assessment of potentially toxigenic benthic dinoflagellates in two Cuban coral reefs: Abundance patterns across sites and substrates
Gabriel Livan Rojas Abrahantes
- P-031** Spatial distribution of harmful algal bloom in Nuevo Gulf and its effects on a coastal ecosystem with anthropogenic impact
Leilén Luciana Gracia Villalobos
- P-032** Harmful microalgae (motile cells and cysts) and marine toxins on the southern Chilean continental shelf between the Chacao Channel (41°S) and Cape Horn (56.2°S)
Pablo Salgado
- P-033** Spatial and temporal variability of dinoflagellate assemblages in relation to water quality parameters in Singapore waters
Shereen S. P. Yim

Microbiomes, Biological & Chemical Interactions

- P-034** Zooplankton community responses to harmful algal blooms induced by non-indigenous and indigenous dinoflagellates *Lingulodinium polyedra* and *Tripos furca*
Mfundo Bizani
- P-035** Identification of potential luxR homologs related to the quorum-sensing system in *Microcystis aeruginosa*
Ana Paula Blanco Ortiz
- P-036** Genomic signatures of HAB phytoplankton growth-promoting microbiome bacteria
Christopher Bolch
- P-037** Do toxic dinoflagellates host distinctive bacteria in their phycospheres?
Yunyan Deng
- P-038** Exploring the 16S rRNA- and 18S rRNA-based microbial communities in coastal seawater during harmful algal blooms in Chilean coasts
Milko Jorquera
- P-039** Functional shifts in aquatic plant-associated bacterial communities during *Microcystis* suppression

Hayoung Lee

- P-040** IT Complex viral and bacterial interactions revealed for the harmful bloom forming dinoflagellate *Karenia brevis*
Joaquín Martínez Martínez
- P-041** Do extracellular vesicles has a role in the allelopathic interaction of saxitoxin-producing *Raphidiopsis raciborskii* with other phytoplankton?
Cezar Nascimento
- P-042** Assessment of the allelopathic potential of *Ulva* sp. and *Macrocystis pyrifera* against the toxic microalga *Alexandrium catenella*
Yugreisy Polanco
- P-043** HALOBISE. Platform to understand the effects of the harmful algal bloom holobiont in a changing environment to predict their impact on aquatic ecosystem services
Jesús Romalde

Ciguatera and Benthic HABs

- P-045** IT First observation of *Ostreopsis fattorussoi* Accoroni, Romagnoli & Totti in benthic mucilage in the Eastern Mediterranean: A new risk for coastal ecosystems?
Yelda Aktan
- P-046** Hotspots and hideouts: comparative study of the annual cycle of *Ostreopsis* spp. blooms in NW Mediterranean and in El Hierro (Canary islands)
Elisa Berdalet
- P-047** *Ostreopsis* spp. and benthic diatom interactions in contrasting sites: NW Mediterranean and El Hierro (Canary Islands)
Elisa Berdalet
- P-048** Taxonomic and Metabolomic Diversity of Benthic Cyanobacterial Mats on Caribbean Coral Reefs
David Berthold
- P-049** Working together to address a global challenge: Towards a harmonized standard operating procedure for detecting ciguatoxins using the neuroblastoma cell-based assay
Rosa María Ceinos
- P-050** Presence, diversity, and toxicological characterization of benthic dinoflagellates *Gambierdiscus* spp. in the Mediterranean Sea
Joan Josep Cervera-Piñana
- P-051** Toxicological profile of *Gambierdiscus* strains from different species and origins
Joan Josep Cervera-Piñana
- P-052** Diversity, toxicity, and toxin profile of *Gambierdiscus* in Cuba
Lisbet Díaz Asencio

- P-053** Integrated monitoring of toxic benthic dinoflagellates on the Spanish Levantine coast
Jorge Diogène Fadini
- P-054** PACIFIC CIGUAWATCH: A regional initiative to improve Ciguatera surveillance and mitigation in the South Pacific
Clémence Gatti Howell
- P-055** IT The influence of abiotic and biotic factors on the succession of *Ostreopsis* spp. along the Basque coast (South-East Bay of Biscay)
Yago Laurenn-Balparda
- P-056** Identifying the cause of acute mortality in naïve *Mytilus* sp. from Great Britain, experimentally exposed to the potentially future invasive microalgal species, *Ostreopsis* cf. *ovata*
Adam Lewis
- P-057** Changes in benthic dinoflagellates abundance and species composition associated with organic pollution in an oceanic island of the Atlantic Ocean
Silvia Nascimento
- P-058** New molecular and morphological data of *Ostreopsis* species from Brazil
Silvia Nascimento
- P-059** Benthic dinoflagellates from the oceanic Trindade island, South Atlantic Ocean
Silvia Nascimento
- P-061** Distinct ciguatoxin profiles in fish involved in poisoning events from the Indian Ocean
Jaume Reverté
- P-062** Harmful microalgae on the move: First detection of *Gambierdiscus australes* in western continental Mediterranean waters
Eva S. Fonfría

Cyanobacteria & Freshwater HABs

- P-064** Environmentally relevant concentrations of the antibiotic azithromycin stimulate growth and increase microcystin content in *Microcystis aeruginosa*
Michael Celano
- P-065** IAEA regional initiative on the assessment and management of saxitoxin-producing freshwater cyanobacteria in Latin America and the Caribbean
Lisbet Díaz Asencio
- P-066** Plant growth-promoting rhizobacteria mitigate cyanobacterial microcystin toxicity in *Vicia faba*: Health risk assessment
Nadia Elidriissi El Yallouli
- P-067** Understanding the drivers of toxic cyanobacterial blooms in the Río de la Plata, Argentina
Marcelo Hernando

- P-068** The dynamics of a phytoplankton community in microcosms during a *Microcystis aeruginosa* bloom managed with allelopathy
Marie Jamroszczyk
- P-069** Algae-on-a-chip: Understanding cyanobacterial bloom toxicity using microfluidic technology
Chaohong Lin
- P-070** Integrating sentinel-2 satellite, in-situ sensor, and nutrient data for enhanced monitoring of cyanobacterial blooms in Lake Mattamuskeet, North Carolina
Todd Lundell
- P-071** IT Monitoring microcystin producing *Microcystis* in the Tobarí Bay, Mexico
Pamela Helué Morales Sandoval
- P-072** Harmful cyanobacterial blooms associated to the storm Alberto in Cienfuegos Bay, Cuba
Angel Ramón Moreira González
- P-073** IT Adaptive role of extracellular vesicles in phosphorus-limited *Microcystis aeruginosa*
Cezar Nascimento
- P-074** Immunoaffinity magnetic beads for microcystins capture and concentration in biological samples
Stuart Oehrle
- P-075** IT *Didymosphenia geminata* blooms in freshwater ecosystems from Central to Austral Chile (~ 35.4°–54.6° S): Latitudinal distribution and environmental correlates
David Andrés Opazo Vega
- P-076** First report of the saxitoxin-producing benthic *Microseira* (*Lyngbya*) *wollei* in South America: Emerging concern for cyanobacterial monitoring strategies in the region
Mauro Cesar Palmeira Vilar
- P-077** Blind spots in toxin monitoring: Freshwater cyanotoxins in marine species of the Salish Sea
Misty Peacock
- P-078** Toxic cyanobacteria in Brazil: New records and geographic distribution
Taís Poletti
- P-079** IT First report of potentially microcystin-producing *Microcystis* in the Dominican Republic
Patri Isamir Ramirez Ramirez
- P-080** Exploring microcystin-LR and its transformation products in waters by a comprehensive LC-HRMS target and suspect screening approach
Vasileios Alampanos

- P-081** IT Application of non-thermal plasma technologies as an eco-friendly strategy for the treatment of cyanobacteria and health-relevant cyanometabolites
Luciana Tartaglione
- P-082** The technology behind the RBRtridente and how it is ideal for the detection of harmful algal blooms
Jon Taylor
- P-083** The development, calibration, and in vivo characterisation of a phycocyanin and phycoerythrin fluorometer
Jon Taylor
- P-084** Genetic variability in the microcystin (mcy) operon in both toxin and non-toxin producing *Microcystis* solates
Rebecca Tietze
- P-085** Molecular and toxicological characterization of cyanobacteria harmful algal blooms (CyanoHABs) in recreational waters of southern Chilean lakes
Tamara Villalobos

Poster Section 2

Ichthyotoxic HABs

- P-086** IT Why are some blooms of the haptophyte *Prymnesium parvum* harmful but others not?
Jan Köhler
- P-087** IT Autecology and impacts of *Heterosigma akashiwo* in low-inflow estuaries: From research to management
Daniel Lemley
- P-088** Intraspecific differences in the effects of salinity on growth and prymnesin production in *Prymnesium parvum*
Fredrik Ryderheim

HABs in a Changing World & Emerging Issues

- P-090** Interannual variability of *Alexandrium catenella* in the Sub-Antarctic Magallanes Region: Links to ENSO events
César Alarcón
- P-091** IT Flexible feeding in changing fjords: Trophic plasticity of bivalves facing harmful algal blooms and glacial influences in Southern Chile
Claudia Andrade Diaz
- P-092** Harmful Algae in Spanish Ports: eDNA metabarcoding and microscopy reveal emerging risks in high-traffic maritime hubs associated with ballast waters
Jone Bilbao
- P-093** Harmful algal blooms (HABs) in the Tohoku region of Japan: A Scoping Review
Sang Bobbitt Hanna

- P-094** IT Initial assessments of nitrogen-induced ‘tipping points’ for harmful algal bloom development in New York/Connecticut (USA) estuaries
Dianne Greenfield
- P-095** IT Multi-stressor dynamics: Effects of marine heatwave stress and harmful algal blooms on juvenile mussel (*Perna canaliculus*) survival and physiology
Hannah Greenhough
- P-096** *Pseudo-nitzschia* in Icelandic waters: insights from long-term monitoring and sedimentary ancient DNA
Sara Harðardóttir
- P-097** Coastal wildfires as a cause of increases in marine harmful algal blooms and phytoplankton
Shauna Murray
- P-098** IT CyanoHABs transfer along a freshwater-marine continuum and potential associated risks: Case of the Jacarepaguá Lagoon system (RJ, Brazil)
Mauro Cesar Palmeira Vila
- P-099** IT Implication of nitrogen and sulfur limitation on resources allocation and dimethylsulfoniopropionate (DMSP) production in toxic dinoflagellates
Laura Pezzolesi
- P-100** Plastisphere, the plastic “microcities” colonized by harmful microalgae
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- P-101** Adapting to a changing Arctic: Investigating eco-physiological responses of the diatom *Pseudo nitzschia delicatissima* to projected climate-driven pH and temperature shifts
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- P-102** Unusual algal blooms during winter 2025 followed by accumulation of okadaic acid in molluscs in a lagoon of the Northern Adriatic Sea (Italy)
Silva Rubini
- P-103** IT How will rising ocean temperatures affect growth rates and toxigenicity of *Protoceratium reticulatum*, a yessotoxin-producing dinoflagellate
Megan Schulz
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Bruna Sobrinho
- P-105** Evaluating the co-occurrence of marine toxins and anthropogenic contaminants in marine sediment in a Ciguatera endemic region
Katherine Yang

Toxins & Other Microalgal Metabolites

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Mónica Cid Moure
- P-108** IT Occurrence of phycotoxins and toxic microalgae in the Sea of Marmara, Türkiye
Fuat Dursun
- P-109** IT Culture optimisation of *Vulcanodinium rugosum* for biomass production and purification of portimine
Philipp Hess
- P-110** Searching for the cylindrospermopsin producer in a Dutch estuarine shellfish production area
Mirjam Klijnstra
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Galina Nugumanova
- P-112** Mussels in fish feed – Are algal toxins a concern?
Ingunn A. Samdal
- P-113** Quantification of azaspiracid-2 and characterization of analogous variability in mussels from the Central Adriatic Sea
Ivana Ujevic
- P-114** Characterization of allelochemicals from *Nitzschia closterium* and their allelopathic effects on *Prorocentrum donghaiense*
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Toxicity

- P-115** IT Toxic dinoflagellate *Ostreopsis* cf. *ovata* recorded for the first time in the area of Boka Kotorska Bay (South Adriatic Sea)
Dragana Drakulovic
- P-117** IT Mitochondria as environmental sensors: Unravelling the link between *Prymnesium parvum* biotoxins and mitochondrial network
Zsuzsanna Neer
- P-118** Controlled cultivation and anticancer activity of *Karlodinium veneficum* supernatant extracts on human tumor cell lines
Alejandra Rivera
- P-119** Further evidence for the persistent presence of yessotoxins in the Eastern Adriatic Sea
Romana Roje-Busatto
- P-120** Investigation into paralytic shellfish toxins and microcystins in seabirds from Portugal
Lucía Soliño Alonso
- P-121** Toxicity of *Ostreopsis* spp. strains from the Basque coast (France) using in vitro bioassays on diatom, oyster gametes and fish gill cells
Lucie Souvignet

- P-122** Bloom events of the *Alexandrium tamarense* species complex along the coast of Chubut Province (Argentina): Health risks and ecological impacts (2022-2024)
Noelia Mariel Uyua

New Methods & Technology (OMICS, chemical, bioassays, etc)

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Ambbar Aballay González
- P-125** Towards a method for accelerating the discovery of unanticipated neurotoxins targeting nicotinic acetylcholine receptors to build functional molecular networks
Rómulo Aráoz
- P-126** IT Advancing HABs monitoring in Ireland: An in-house qPCR-based toolkit for detecting *Pseudo-nitzschia* species
Nicolè Caputo
- P-127** IT A loop-mediated isothermal amplification method (LAMP) for detecting toxic *Microcystis*
Carolina Croci
- P-128** Validating the use of high-throughput digital PCR methods for monitoring the presence of *Alexandrium* species in environmental samples
Amanda Curtin
- P-129** Development, validation, and application of automated SPE-based LC-MS/MS method for quantification of microcystins in water samples
Dimitra Lambropoulou
- P-130** IT Survey of cyanotoxins from various isolates from around the United States
Stuart Oehrle
- P-131** Digital PCR for detection of *Alexandrium* saxitoxin genes in Icelandic waters
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In Situ Monitoring and Remote Observing Systems

- P-132** Seasonal dynamics of HAB-forming phytoplankton communities across coastal habitats in the Philippines
Hazel Alvarez
- P-133** Hyperspectral characterization of phytoplankton species: Effect of algal species and cell concentration
Pilar Aparicio-Rizzo
- P-134** Decoding the hyperspectral signals from phytoplankton species and non-biological particles
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- P-135** IT Phytoplankton integrated multiscale monitoring in the English Channel and North Sea: Automated/high throughput approaches for characterizing changes in phytoplankton assemblies and Harmful Algal Blooms
Luis Felipe Artigas
- P-136** IT Next generation sequencing applied to toxic algae monitoring in Adriatic Sea in Italy, the experience of Emilia Romagna and Marche Regions
Barbara Bertasi
- P-138** Operational and functional evaluation of the SuiteCase Lab System for molecular detection of *Alexandrium catenella* using LAMP
Gonzalo Icaza Zuleta
- P-139** Evolution of toxic ban management affecting *Aequipecten tehuelchus* and *Mytilus edulis* in the San José Gulf, Valdés Peninsula, Chubut, Argentina
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- P-140** IT Development of a satellite-based algorithm for green *Noctiluca* discrimination in the upper Gulf of Thailand using in-situ bio-optical observations
Jutarak Luang-on
- P-141** Strengthening harmful algal blooms monitoring in the Subantarctic Region: The CHIC Red Tide Laboratory as a model for integrated environmental surveillance in Cape Horn, Chile
Vanessa Monge
- P-142** Monitoring, detection and control of *Alexandrium catenella* in NW Patagonia: A program overview (2018-2025)
Miriam Seguel
- P-143** Enhancing automated detection of HABs in Alaskan and Atlantic waters: evaluation of strategies for improving CNN model accuracy
Cristian Swift

HAB's Social Dimensions

- P-144** IT Adaptive Governance for sustainable fisheries: Insights from the Scallop fishery of the Eastern English Channel (France) faced with HAB and emerging challenges
Sarra Chenouf
- P-145** Microalgae for kids: Storytelling as a tool for harmful algal bloom outreach in Chile
Anita Flores Lenero
- P-146** Enhancing marine and coastal resilience through scientific communication on stressors: The case of harmful algal blooms in Latin America and the Caribbean
Isabela Katime
- P-147** Inhalation of microcystin-producing cyanobacteria associated with pulmonary toxicity

Dail Laughinghouse

- P-148** A book with two women in an ocean of stories in the Southeastern Pacific coast
Vivian Montecino
- P-149** ADICFito: A platform for public engagement and ai-supported taxonomic awareness in HAB monitoring
Stephanie Sáez
- P-150** IT Local perceptions of the HABs impacts in Chilean Patagonia
Rodolfo Sapiains
- P-151** Advances in monitoring harmful algae and phycotoxins in Santa Catarina – Brazil: from mouse bioassay to mass spectrometry
Mathias Alberto Schramm
- P-152** Harmful algae and phycotoxin research in Brazil: 35 years of advances and challenges.
Mathias Alberto Schramm
- P-153** Spatiotemporal patterns of lipophilic toxins in filter-feeding from NW Patagonia
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- P-154** CYANOACTION: COST action CA23160, effective lake management: Reducing cyanobacteria by actions in the catchment
Maria G. Antoniou
- P-155** National surveillance and control program of poisoning by harmful algal blooms “Red Tide” – Role of the Institute of Public Health of Chile
Lorena Delgado
- P-157** Integrated evaluation of nanobubble ozone for cyanobacterial bloom control: From ecosystem impact to molecular mechanisms
H. Dail Laughinghouse
- P-158** United States harmful algal bloom control technologies incubator
Lizabeth Longstreet
- P-159** Overview of IAEA capacity building and collaborative projects on HABs and biotoxins: Technical cooperation (TC) and coordinative research projects (CRPS)
Kristof Möller
- P-161** The efficacy of solubilized curcumin for mitigation of *Alexandrium* and *Pseudo-nitzschia* species
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- P-162** IT Cyanobacteria disruption with ozone: Insights into dose-dependent and culture age effects
Nikoletta Tsiarta
- P-163** Mitigation of *Karenia brevis* using natural products
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- P-164** IT Specification for field control of HABs in different scenarios by using Modified Clay
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- P-165** IT AlgicideDB: A comprehensive database enhanced by large language models for algicide management and discovery
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Modeling, Early Warning and Forecasting

- P-166** Application of a quantitative PCR method to characterize abundance and distribution of *Alexandrium* cysts in three regions: Gulf of Maine, Puget Sound and Kodiak, Alaska
Cheryl Greengrove
- P-167** IT BloomPredictor: Integrating AI and ecological data for harmful algal bloom risk prediction
Alvaro Jorquera
- P-168** IT Algal bloom prevention and management through end-user driven forecasting and seasonal planning apps
Lisa Krinsky
- P-169** IT Forecasting cyanobacteria cell counts for inland water: A hybrid approach
Duy Nguyen
- P-170** Seasonality of cyanobacterial toxins in and associated with farmed mussels from the Baltic Sea
Manuela Seehauser
- P-171** Observations from Scotland's monitoring programme support the Dinophysis trigger level as an effective early warning for diarrhetic shellfish toxin accumulation in mussels
Sarah Swan
- P-172** A study on the prediction model of cyanobacterial cell counts in the Nakdong river basin using public data
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Biotechnology & Natural Products

- P-173** Toxicity and miscibility study of algae carrageenan blends as effective Tolterodine L-Tartrate release carriers
Dimitrios Bikiaris
- P-174** Synthesis and characterization and properties of isocyanate-modified red seaweed carrageenans
Nikos Bikiaris
- P-175** Sodium alginate-chitosan hydrogel sponge: A multifunctional biopolymer matrix for hemostasis and wound healing
Rizos Evangelos Bikiaris
- P-176** Investigation of carrageenan blend miscibility and their potential as sustained release carriers
Evi Christodoulou

P-177 Taxonomic and biochemical characterization of a novel *Altericista* cyanobacterial strain from the Mondego River, Portugal
Flavio Luis de Oliveira