



❁ PUNTA ARENAS • CHILE 2025 ❁

21<sup>st</sup>  
International Conference on  
HARMFUL ALGAE  
October 19 - 24, 2025

# General Program

(Updated on september 29, 2025)

From HAB Science to  
Environmental Resilience

Hotel Dreams. Punta Arenas, CHILE.

❁ PUNTA ARENAS • CHILE 2025 ❁

[www.icha2025.org](http://www.icha2025.org)

# DETAILED SCIENTIFIC PROGRAM

## SUNDAY 19 OCTOBER 2025

- |               |  |
|---------------|--|
| 14:00 – 15:00 | <b>Welcome of Participants – Room: Faro Evangelistas</b>               |
| 15:00 – 19:00 | <b>ISSHA Council Meeting – Room: Faro Punta Delgada</b>                |
| 16:00 – 17:30 | <b>Young Investigator Networking Session –<br/>Room: Sala de Truco</b> |
| 19:00 – 21:00 | <b>Ice Breaker – Room: Faro San Isidro</b>                             |

## 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: Wayne Litaker (to be confirmed), 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 **O-002** Expanding marine toxin monitoring to dried fish: Ciguatoxicity screening of Philippine sun-dried rabbitfish using isotopic techniques.  
**Tammara Grace C. Angeles**
- 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  $\geq 2$  mill fish in Northern Norway spring 2025.  
Ingunn A. Samdal
- 11:15 **O-008** Structure elucidation of leadbeaterin-1: The main fish-killing toxin from *Chrysochromulina leadbeateri* blooms in Northern Norwegian fjords.  
Thomas O. Larsen
- 11:30 **O-009** Sterolysin diversity during fish-killing *Chrysochromulina leadbeateri* blooms in Northern Norway.  
Christopher O. Miles
- 11:45 **O-010** Genomic evolution of polyketide synthases in haptophytes.  
Uwe John
- 12:00 **O-011** From morphology to toxicity: First characterization of the fishkilling *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*.

	<b>Elin Lindehoff</b>
12:00	<b>O-017</b> How toxins and allelochemicals can shape phytoplankton communities, and example with Baltic <i>Synechococcus</i> . <b>Zofia Konarzewska</b>
12:15	<b>O-018</b> Exopolymers and mucus in harmful algae: composition, properties and roles. <b>Ian R. Jenkinson</b>
12:30 – 14:00:	<b>Lunch Break – Place: Covered Terrace</b>
12:30 – 14:00	<b>Workshop 01</b> – Room: Sala de Truco <b>“HAB Early Warning Systems”</b> <b>Bengt Karlson</b>
14:00 – 15:30	<b>Parallel Sessions</b>

#### Parallel Session 4: Ciguatera and Benthic HABs

**Room: Faro San Isidro**

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

14:00	<b>O-019</b> The emerging threat of Ciguatera in Brazil. <b>Silvia Nascimento (Brazil)</b>
14:15	<b>O-020</b> Spatio-temporal dynamics of <i>Gambierdiscus</i> in the Balearic Islands. <b>Jorge Diogène</b>
14:30	<b>O-021</b> Comparative transcriptomic analysis of polyketide synthase genes from <i>Gambierdiscus polynesiensis</i> and <i>Gambierdiscus holmesii</i> to identify candidate genes potentially involved in ciguatoxin biosynthesis. <b>Amna Ashfaq</b>
14:45	<b>O-022</b> Sampling <i>Ostreopsis</i> cf. <i>ovata</i> along Campania coasts (Italy). An unprecedented combination of sample treatment and LC-MS to mitigate health risks associated to ovatoxins in seawater. <b>Melchiorre Chiara</b>
15:00	<b>O-023</b> A study on the temporal dynamics and environmental drivers of harmful marine microalgae in Mauritius. <b>Manisha Curpen Mahadoo</b>



- 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.  
**Sauna 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 HAB reports: early warning of HABs and biotoxins for the aquaculture industry.  
**Keith Davidson**
- 14:15 **O-030** Evolution of harmful algal blooms in the East China Sea under eutrophication and warming scenarios.  
**Zhengxi Zhou**
- 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 **O-033** Integrating in-situ and satellite data to predict biotoxin contamination in shellfish using artificial neural networks.  
**Fabien Guegan**
- 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), Dave Clarke (IRELAND)**

- 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-013** Mixotrophic Strategies and Habitat Influences on Dinoflagellate Blooms in the Coastal Baltic Sea.  
**Johanna Exner**
- 16:00 **P-015** *Alexandrium catenella* population dynamics in the Pacific Arctic region: characterizing connectivity using toxin profiles and microsatellite markers.  
**Evangeline Fachon**
- 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
- 16:30 **P-044** Allelopathic interactions between *Pseudo-nitzschia* cf. *australis* and *Skeletonema japonicum* from the coastal upwelling system off central Chile  
**Flavio A. Solis-Mundaca**
- 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 Laurenns-Balparda**
- 16:45 **P-060** Ciguatoxin detection in the jewel damselfish, *Stegastes lacrymatus*, on Lihou Reef, Coral Sea Marine Park, Australia.  
**Joseph Perkins**
- 16:50 **P-071** Monitoring microcystins-producing *Microcystis* in the Tobari Bay, Mexico.  
**Pamela Helu  Morales Sandoval**
- 16:55 **P-073** Adaptive role of extracellular vesicles in phosphorus-limited *Microcystis aeruginosa*.  
**Cezar Nascimento**

## Ignite Talks Session 2

**Room: Faro Posesi n**

**Chairs: Aletta Y niguez (to be confirmed), 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 Andr s 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 **P-089** The cytotoxicity of the haptophyte *Chrysochromulina leadbeateri* towards gill cell lines.  
**Anita Solhaug**
- 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 *Noctiluca* 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	<b>P-150</b> Local perceptions of the HABs' impacts in Chilean Patagonia. <b>Rodolfo Sapiains</b>
16:30	<b>P-162</b> Cyanobacteria disruption with ozone: Insights into dose-dependent and culture age effects. <b>Nikoletta Tsiarta</b>
16:35	<b>P-164</b> Specification for field control of HABs in different scenarios by using modified clay. <b>Yongquan Yuan</b>
16:40	<b>P-165</b> AlgicideDB: A comprehensive database enhanced by large language models for algicide management and discovery. <b>Zhangqi Zuo</b>
16:45	<b>P-167</b> BloomPredictor: Integrating AI and ecological data for harmful algal bloom risk prediction. <b>Alvaro Jorquera</b>
16:50	<b>P-168</b> Algal bloom prevention and management through end-user driven forecasting and seasonal planning apps. <b>Lisa Krinsky</b>
16:55	<b>P-169</b> Forecasting cyanobacteria cell counts for inland water: A hybrid approach <b>Duy Nguyen</b>
17:00 – 17:45	Coffee Break
17:45 – 18:45	<b>Poster Session 1 – Room: Tierra del Fuego</b>
18:45 – 19:00	Break
19:00 – 20:30	<b>ISSHA General Assembly – Room: Faro Evangelistas</b> 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 (to be confirmed), Sher Khan (Pakistan).  
**PT03** “From GEOHAB to GlobalHAB and beyond: 30 years of international coordination of research on Harmful Algal Blooms, lessons learnt and next steps”.  
**Elisa Berdalet (Spain)**
- 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:** Keith Davidson (UK), 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 toxins 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 (Argentina)**

- 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-C<sub>3</sub>N<sub>4</sub> 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, *Karenia brevis*, Using Lake Guard® Oxy  
**Jessica R. Frost**
- 12:15 **O-052** Sustainable mitigation revealing the ecophysiological response of cyanobacteria and its associated microbiome.  
**Allan Santos**

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, Keith Davidson**

14:00 – 15:30 **Parallel Sessions**

### Parallel Session 10: Toxins & Other Microalgal Metabolite

**Room: Faro San Isidro**

**Chairs: Christopher O. Miles (Norway), Pearse McCarron (Canada)**

- 14:00 **O-053** Cellular location of mmphidinol implicates a role in guanine crystal formation in *Amphidinium carterae* Hulburt.  
**Allen R. Place**
- 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 *Amphidinium eilatiense*.  
**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 *Oscillatoria* cf. *bonnemaisonii*.  
**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), Ying Zhong Tang (China)

- 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 **O-061** Influence of biotic stressors on the toxicity of two species of harmful dinoflagellates in Chilean fjords: *Alexandrium catenella* and *Protoceratium reticulatum*.  
**Rodrigo Martínez**
- 14:45 **O-062** Realized niche analysis of a phytoplankton community in relation to toxic HABs due to *Pyrodinium bahamense*.  
**Aletta Yñiguez**
- 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 (Chile)**

## 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 **O-074** Fatty acid esters of okadaic acid group toxins and pectenotoxins in filter-feeders at a hot spot from NW Patagonia.  
**Mélany Sepúlveda Villarraga**
- 16:45 **O-075** 10-year study of the occurrence and distribution of lipophilic marine toxins in shellfish from production areas in Chile.  
**M. 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 of seven marine dinoflagellates of the Amphidomataceae, comparing azaspiracid-producing and non-toxicogenic species.  
**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: Vitor Vasconcelos (Portugal), Arnaud P. Louchart (Netherlands)**

- 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.

**Alex Hoke**

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** Cyanotoxins diversity and their biotechnological potential.

**Vitor Vasconcelos**

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

17:45 – 18:45 **Poster Session 1 (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	<b>Welcome of Participants – Room: Faro Evangelistas</b>
8:30 – 9:30	<b>Plenary Talk 04 – Room: Faro Evangelistas</b> Chairs: Vera Trainer (USA), Jorge Mardones (Chile) “The secret lives of plankton” Manu Prakash (USA)
9:30 – 10:30	<b>Plenary Talk 05 – Room: Faro Evangelistas</b> Chairs: Clarissa Anderson (USA), Rima Beesoo (France) “Environmental drivers of neurotoxin BMAA production in marine diatoms and its biosynthesis pathway” Aifeng Li (China)
10:30 – 11:00	<b>Coffee Break – Place: Covered Terrace</b>
11:00 – 12:30	<b>Parallel Sessions</b>

### Parallel Session 16: Ecology, Biological & Chemical Interactions

Room: Faro San Isidro

Chairs: Raphael Kudela (USA), Zhaoyang Chai (China)

11:00	<b>O-086</b> The role of G protein-coupled receptors in red tide dinoflagellate bioluminescence. Libin Ye
11:15	<b>O-087</b> Rapid sexual reproduction in <i>Dinophysis acuminata</i> revealed through temporal partitioning of cellular processes. Serena Sung-Clarke
11:30	<b>O-088</b> Evidence for the production of asexual resting cysts in a freeliving species of Symbiodiniaceae (Dinophyceae). Zhaoyang Chai
11:45	<b>O-089</b> Distribution dynamics of vitamin B12, <i>Pseudo-nitzschia</i> sp. and domoic acid in the Northwest Passage. Elisabeth Rosselli
12:00	<b>O-090</b> Probing molecular processes regulating the dormancy of dinoflagellate resting cysts buried in marine sediments: Broad active metabolic pathways and functions of autophagy and phytohormones. Ying Zhong Tang

- 12:15 **O-091** 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 & Mitigation of HABs

**Room: Faro Posesión**

**Chairs: Yongquan Yuan (China), Leila Basti (Japan)**

- 11:00 **O-092** Controlling harmful algal blooms (HABs) in marine waters: current status and future prospects.  
**Vera Trainer**
- 11:15 **O-093** In situ Impacts of modified clay on *Karenia brevis* cell concentrations, water quality, and microbial communities.  
**John Kristoffer Andres**
- 11:30 **O-094** Using modified clay to mitigate fjord HAB taxa: Laboratory results using species from Chile, Scotland, and Norway.  
**Anita Flores Leñero**
- 11:45 **O-095** Synchronous removal of the potent marine algal toxins in mitigating harmful algal blooms using modified clay.  
**Lianbao Chi**
- 12:00 **O-096** Development of HAB mitigation using modified clays in China.  
**Zhiming Yu**
- 12:15 **O-097** 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-Isla (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: Modeling, Early Warning, and Forecasting

**Room: Faro San Isidro**

**Chairs: Cynthia Heil (USA), Marcelo Hernando (Argentina)**

- 11:00 **O-098** Are we in an unprecedented era of HAB-driven marine mammal mortality events in coastal California?  
**Clarissa Anderson**
- 11:15 **O-099** Investigation of phytoplankton blooms at a reference station in Algoa Bay, South Africa.  
**Brishan Kalyan**
- 11:30 **O-100** Characterization of HAB-associated Microplankton around Karachi coast and the Indus River Estuary (IRE).  
**Sher Khan**
- 11:45 **O-101** 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-102** Pollution dynamics and sustainable management of toxic elements associated with harmful algal blooms in coastal Bangladesh.  
**M. Safiur Rahman**
- 12:15 **O-103** Changing microalgal communities: approaches for holistic monitoring of harmful algal blooms.  
**Kirsty Smith**

## Parallel Session 19: Ecology, Biology, and Biogeography

Room: Faro Posesión

Chairs: Dail Laughinghouse (USA), Luciana Tartaglione (Italy)

- 11:00 **O-104** Transforming cyanobacteria biomass into sustainable biofertiliser: A review.  
**Jabulani Gumbo**
- 11:15 **O-105** Cyanobacterial community responses to nutrient reduction and warming: Insights from 45 years of monitoring.  
**Jordan Facey**
- 11:30 **O-106** Three-dimensional analysis of *Microcystis* colonies: what controls size during blooms in North American lakes?  
**Ronojoy Hem**
- 11:45 **O-107** The fate of toxic cyanobacteria in soil and impacts on food safety: Application of drinking water treatment residuals in CyanoHAB-impacted regions in US  
**Yuehan Ai**
- 12:00 **O-108** Is it time to integrate molecular cyanobacterial assays into water monitoring programs?  
**Mark Van Asten**
- 12:15 **O-109** 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: Kirsty Smith (New Zealand), Greta Gaiani (Australia)

- 11:00 **O-110** Non-target analysis by liquid chromatography–high-resolution mass spectrometry: application in algal and cyanobacterial toxin measurement.  
**Pearse McCarron**
- 11:15 **O-111** Mining discarded molecular data for HAB gold.  
**Martin Pfannkuchen**
- 11:30 **O-112** Portable RNA-Based Detection of Toxin-Producing Microalgae for Rapid HAB Monitoring.  
**Martha Valiadi**
- 11:45 **O-113** Assessment of novel molecular tools for the early detection of *Alexandrium minutum* in Italian coastal waters (Mediterranean Sea).  
**Giorgia Zoffoli**

- 12:00 **O-114** A Rapid molecular assay for discrimination of potentially toxic *Pseudo-nitzschia* spp. using recombinase polymerase amplification and nanopore Sequencing.  
**Robert Hatfield**
- 12:15 **O-115** 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 Frangópulos (Chile)**

- 14:00 **O-116** 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-117** *Gymnodinium catenatum* in the shellfish production areas of the northeastern Atlantic.  
**Yolanda Pazos**
- 14:30 **O-118** *Nodularia spumigena* – a threat to the Bothnian Sea due to its adaptive capabilities?  
**Carolin Peter**
- 14:45 **O-119** 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-120** Intensification and spread of inshore *Alexandrium catenella* blooms in Cape Cod, Massachusetts.  
**Michael Brosnahan**
- 15:15 **O-121** 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:** Alison Robertson (USA), Elena Fabro (Argentina)

- 14:00 **O-122** Dynamics of the massive cyst beds of the toxic dinoflagellate *Alexandrium catenella* in the rapidly warming Pacific Arctic.  
**Donald Anderson**
- 14:15 **O-123** Summertime heat waves in the lower Chesapeake Bay and their effects on blooms of the harmful algae *Margalefidinium polykrikoides*.  
**Margaret Mulholland**
- 14:30 **O-124** Combined effects of warming and nitrogen availability on harmful algal blooms in the Dutch coastal North Sea.  
**Andrea Budiša**
- 14:45 **O-125** Can *Ostreopsis* cf. *ovata* become a threat to marine aquaculture under warmer climate scenarios?  
**Kaianan Rosa**
- 15:00 **O-126** 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-127** 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-128** Non-Targeted Mass Spectrometry-Based Metabolomics for Comprehensive Annotation of Cyanobacterial Metabolites in Greek Lakes.  
**Sevasti-Kiriaki Zervou**

- 14:15 **O-129** Untargeted detection of emerging yessotoxin analogs in *Argopecten purpuratus* from Chile Using LC-MS and Molecular Networking.  
**Alexander Brevis**
- 14:30 **O-130** Metabolomic insights in the basal metabolism of *Amphidinium* and *Coolia*, species associated with biofilms.  
**Nadia Valeria Herrera Herrera**
- 14:45 **O-131** Strengthening marine toxin surveillance: Implementing isotopic techniques on ciguatoxin quantitation in the Philippines.  
**Ma. Llorina Mestizo**
- 15:00 **O-132** 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-133** 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 (Barzil)**

- 15:45 **O-134** An update on the need to understand the mode of action of diarrheic toxins.  
**Luis M. Botana**
- 16:00 **O-135** 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 Molgo**
- 16:15 **O-136** 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-137** Cytotoxic and membrane-disruptive properties of *Prymnesium parvum* extracts.  
**Elisabeth Varga**
- 16:45 **O-138** 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-139** 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 (Japan)**

- 15:45 **O-140** 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-141** Evaluating 37 years of harmful algal blooms in Southern Chile.  
**Alejandro Clément**
- 16:15 **O-142** The emerging risks of toxic benthic dinoflagellates in the Magellan Subantarctic ecoregion under climate change scenarios: Is migration to the south an option?  
**Máximo Frangópulos**
- 16:30 **O-143** Increasing presence of harmful algal bloom toxins in Arctic food webs linked to ocean warming.  
**Kathi Lefebvre**
- 16:45 **O-144** Warming and freshening coastal waters impact harmful algal bloom frequency in high latitudes.  
**Misty Peacock**
- 17:00 **O-145** 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),

- 15:45 **O-146** HABs and human affairs: Lessons from our interactions with bacterial and viral pathogens.  
**Gustaaf Hallegraef**
- 16:00 **O-147** Harmful algal bloom perceptions among school students in Southern Chile: insights into a preventive education and communication approach.  
**Pamela Carbonell**
- 16:15 **O-148** Investigating the association between harmful algal blooms and asthma incidence in coastal Madagascar: A multi-year remote sensing analysis.  
**Kira Hülisdünker**
- 16:30 **O-149** 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-150** 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.  
**Leon Vergara**
- 17:00 **O-151** 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: Luis M. Botana (Spain), Elisabeth Varga (Austria)

- 17:45 – 18:00 **O-152** 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 – 18:15 **O-153** Pathological fingerprint of harmful algal blooms in farmed salmon from southern Chile  
**Diego Caro**

- 18:15 – 18:30 **O-154** Effects of the antibiotic azithromycin on *Daphnia*-Cyanobacteria interaction: revealing the impacts of environmentally relevant concentrations  
**Michael Celano**
- 18:30 – 18:45 **O-155** Combined biotoxin exposure in the smalltooth sawfish, *Pristis pectinata*: Clues to an unusual mortality event throughout the Florida Keys, United States  
**Alison Robertson**
- 18:45 – 19:00 **O-156** 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 – 18:00 **O-157** Extreme flood event triggers a massive toxic bloom of *Dinophysis* cf. *acuminata* in Southern Brazil.  
**Luiz Mafra Jr.**
- 18:00 – 18:15 **O-158** Turbulence, temperature and termination: Another role for climate change in *Karenia brevis* blooms.  
**Cynthia Heil**
- 18:15 – 18:30 **O-159** Harmful algae in the Holocene history of the Baltic Sea.  
**Anke Kremp**
- 18:30 – 18:45 **O-160** Global occurrence of mixed blooms of harmful algae: Toxicity and impacts on marine resources.  
**Leila Basti**
- 18:45 – 19:00 **O-161** Baseline dataset of harmful algal blooms (2024-2025) for Saudi Arabian Red Sea coast.  
**Hassan Kateb**

### Parallel Session 29: In Situ Monitoring and Remote Observing Systems

**Room: Faro Isla Magdalena**

Chairs: Bengt Karlson (Sweden), Karla Paz (Guatemala)

- 17:45 – 18:00 **O-162** Aqusens: A field-deployable holographic imaging system for HAB cell detection.  
**Holly Bowers**
- 18:00 – 18:15 **O-163** A freestream in situ digital holographic imaging system for monitoring cyanobacterial blooms in freshwater lakes.  
**Ahammad Abdullah**

18:15 – 18:30	<b>O-164</b> Developing an AI-assisted model to differentiate <i>Pseudo-nitzschia</i> morphotypes from warm tropical waters using IFCB-generated images. <b>Gian Carlo Gaetos</b>
18:30 – 18:45	<b>O-165</b> Developing an Imaging FlowCytobot monitoring program to detect harmful algal blooms in Alaska. <b>Thomas Farrugia</b>
18:45 – 19:00	<b>O-166</b> From pixels to patterns: Automated in situ imaging reveals diel vertical migration among phytoplankton. <b>Karin Garefelt</b>
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**  
**Chairs: 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-167** Aerosol particles in the Western Philippines increase the growth of *Alexandrium minutum* in batch cultures.  
**Richard Redil**
- 11:15 **O-168** Harmful algal blooms in South-Central Chile: Impacts, challenges, and research perspectives.  
**Oscar Espinoza-González**
- 11:30 **O-169** Role of plastics (PVC and plasticizers) as potential vectors of harmful algae and their toxins: a case study of *Vulcanodinium rugosum* and *Alexandrium pacificum*.  
**Amandine Caruana**
- 11:45 **O-170** Mussels under stress: Okadaic acid accumulation from toxin-coated microplastics and its molecular and histological consequences.  
**Estela Pires**
- 12:00 **O-171** HABs watch: Developing and implementing an integrated in situ observation network for HABs monitoring under disaster risk reduction (DRR) framework  
**Deo Florence L. Onda**
- 12:15 **O-172** The IOC harmful algal information system – The value of the global long-time series database HAEDAT.  
**Dave Clarke**

### 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 **O-178** SPATT in action: Multi-purpose passive sampling of toxins, chemical signals, and natural products with solid phase adsorption toxin tracking in Monterey Bay, CA.  
**Aubrey Trapp**

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 Dúngenes**

15:00 – 16:00 Takeshi Yasumoto and Patrick Gentien Awards.

16:00 – 17:00 Presentation of the next ICHA2027 venue.

20:00 – 00:00 Gala Dinner - **Place: Hotel Dreams, Punta Arenas, Faro Isla Magdalena Room.**





❁ PUNTA ARENAS - CHILE 2025 ❁

21<sup>st</sup>  
International Conference on  
HARMFUL ALGAE

© Local Organizing Committee  
of ICHA2025

Punta Arenas, Chile  
2025

[info@icha2025.org](mailto:info@icha2025.org)



@icha\_2025

❁ PUNTA ARENAS - CHILE 2025 ❁

[www.icha2025.org](http://www.icha2025.org)