

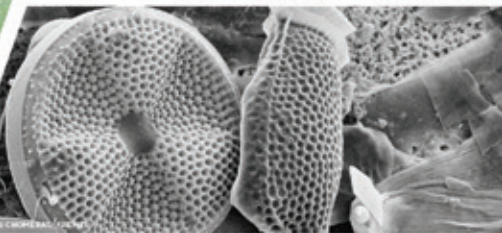
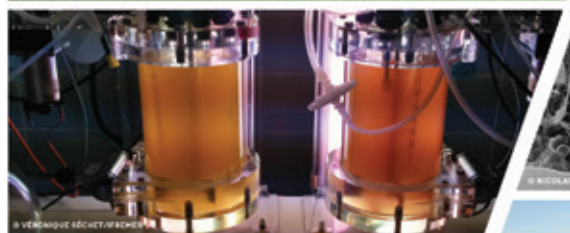
THE 18TH INTERNATIONAL CONFERENCE ON HARMFUL ALGAE

FROM ECOSYSTEMS TO SOCIO-ECOSYSTEMS



**ICHA
2018**
21 - 26 OCTOBER
NANTES, FRANCE

CONFERENCE PROGRAM



ORGANIZED BY



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TOXIC AND HARMFUL MICROALGAE OF THE WORLD OCEAN

*Patrick Lassus, Nicolas Chomérat, Philipp Hess, Elisabeth Nézan.
International Society for the Study of Harmful Algae/Intergovernmental Oceanographic
Commission of UNESCO, Denmark (2016).*



**DON'T MISS THE OPPORTUNITY
TO MEET THE FIRST AUTHOR
PATRICK LASSUS, AND HAVE
YOUR COPY SIGNED!**

SIGNING SESSION ON **THURSDAY 25 OCTOBER**
DURING THE MORNING COFFEE BREAK,
FROM 11.00 TO 11.30. BOOTH IFREMER N°11

UNESCO has published the first ever global compendium on major harmful algal blooms (HABs), micro-organisms that deplete fish stocks, destroy fish farms and bring disease and death both to humans and to marine mammals.

This compendium includes 523 pages and has been developed by marine biologists and toxin chemists Patrick Lassus, Nicolas Chomérat, Philipp Hess, and Elisabeth Nézan. It provides data identifying 174 algal species of which 100 are toxin-producing species. Toxins are grouped in 24 chemically different classes responsible for 11 different human health conditions and the book is available in English and French.

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WIFI

Free Wi-Fi internet connection is available in all conference spaces.

NETWORK: ICHA2018

PASSWORD: NANTES2018

WELCOME MESSAGE FROM ICHA 2018 CHAIR

DEAR COLLEAGUES AND GUESTS,



On behalf of the local organizing committee and Ifremer, the hosting institution, it is my great pleasure to welcome you to Nantes, France, for the 18th International Conference on Harmful Algae.

The idea to host the ICHA in Nantes again was born from within the French research network on toxic and harmful micro-algae GdR PHYCOTOX, created in 2013 as an initiative of Ifremer and CNRS. The GdR PHYCOTOX team was rapidly joined by the scientific interest group on cyanobacteria, GIS Cyano, to form a strong national scientific committee assisting the local organising committee in more scientific matters. Together, these scientific communities represent around 40 research and official laboratories working on HAB themes in France. Early on in 2014, commitment was obtained in principle from Ifremer, La Cité Nantes Events Center, the City of Nantes and the Regional Council of the Pays de la Loire Region. Twenty-five years after the last edition of this conference in Nantes both the city and our scientific community have changed much. After a long-standing history on the theme of journeys and imagination (Jules Verne's novels were inspired by his early life in Nantes), the city has re-affirmed its reputation in this area with the creation of the "Machines de l'île" in 2007. Nantes was elected "European Green Capital" in 2013 and the City and surrounding attractions should fulfil your curiosity during the Wednesday tours.

We are delighted to present you the ICHA 2018 scientific program, under the conference theme *From Ecosystems to Socio-ecosystems*, with a rich set of 623 contributions from 58 countries for which I thank all authors. This edition should be an interesting event with over 700 participants. The program contains 9 plenary

and 255 oral presentations in 45 parallel sessions, as well as 45 ignite and 359 poster presentations. The three lunch-time seminars are dedicated to recent techniques developed to detect harmful algae and cyanobacteria (drones, microscopic and molecular techniques). The thematic parallel sessions will showcase important scientific advances and highlight impacts of harmful algae in a World of fast changes and complex interactions. We welcome all of you to attend the plenaries and oral presentations of your choice and invite you to interact with the conference participants during breaks and the early evening poster sessions, conveniently followed by our social activities. As for previous editions, the posters will be displayed throughout the whole week, allowing you multiple opportunities to have in-depth discussions on topics of your interest. We thank the local staff, participants, session chairs, keynote and plenary speakers for helping us to build this very exciting conference program.

Last but not least, I would also like to thank the senior directorate of Ifremer for taking on the financial risk of such an event, an increasingly difficult decision in our society so hard pushed by economic crises and regulatory restrictions. Thanks to the dedication of close colleagues, I believe we have come to an event I hope all will enjoy!

The Local Organizing Committee, the Scientific Committee and our myriad of volunteers will make any possible effort to ensure that your participation will be scientifically rewarding and a pleasurable experience throughout the week.

Philipp Hess,
Chair of ICHA 2018,
Nantes, France

ABOUT ISSHA

The International Society for the Study of Harmful Algae (ISSHA) was founded in 1997, in response to a request from the Intergovernmental Oceanographic Commission (IOC) of UNESCO for an international program on harmful algae. The Society is affiliated to the ICSU family of organizations as a constituent part of the International Union of Biological Sciences (IUBS) through the International Association of Biological Oceanography (IABO). The overall mandate of the Society is to promote and foster research and training programs on harmful algae, and to co-sponsor meetings on this topic at the national, regional, and international level.

Since 2006, the International Conferences on Harmful Algae (ICHA) have been convened by ISSHA and organized every two years in different countries around the world. ISSHA supports the local (host) Organizing Committee and edits the conference proceedings through the activities of specific Council Committees (Publications, Travel Awards, Achievement Awards, Finances).

www.isssha.org



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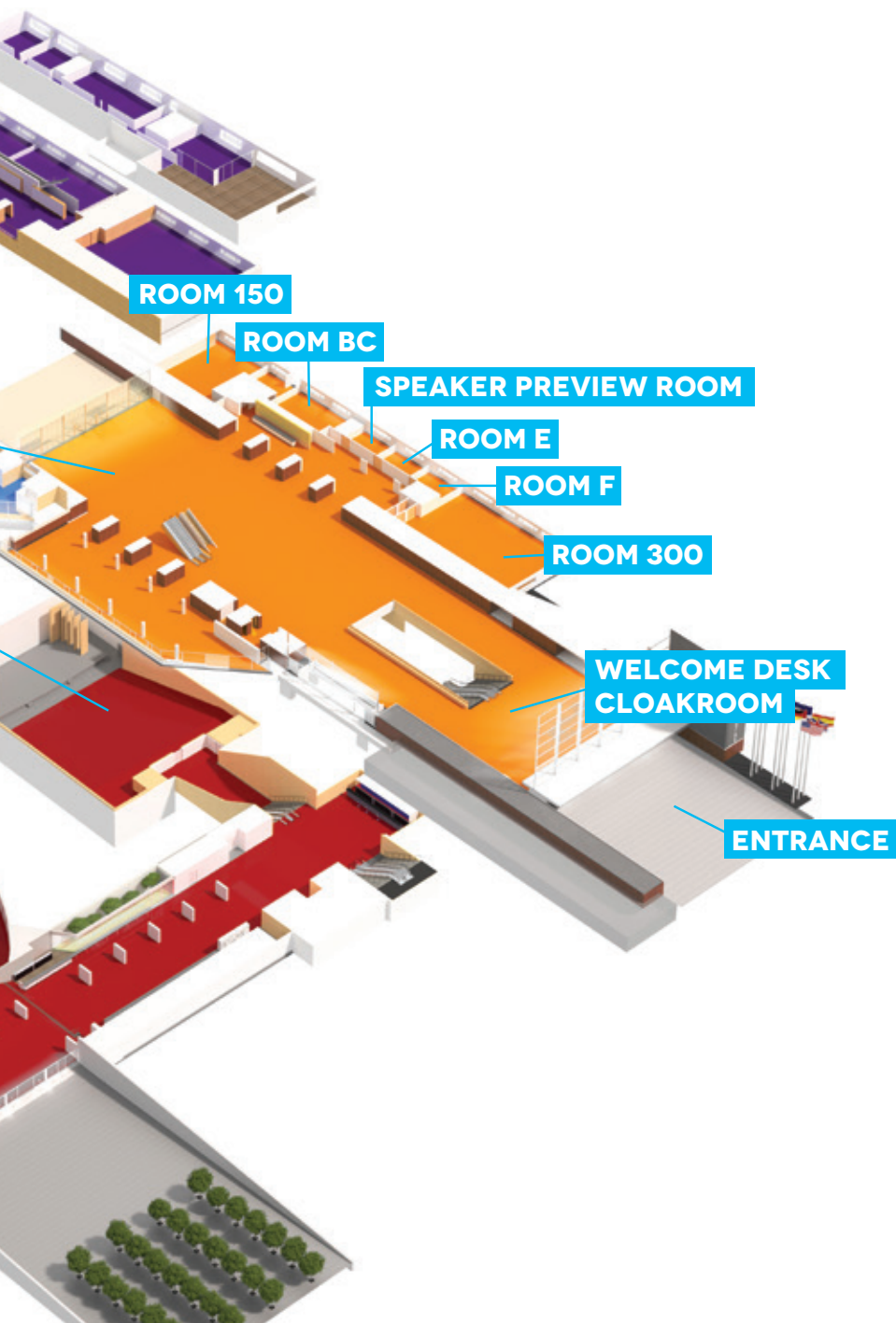
CONFERENCE VENUE FLOORPLAN

La Cité, Nantes Events Center
5, rue de Valmy
44000 Nantes - France
+33 (0)2 51 88 20 00
www.lacite-nantes.com



EXHIBITION / POSTERS AREA

AUDITORIUM 800



SCHEDULE AT A GLANCE

SUNDAY 21 OCTOBER	
14.00 15.00	<div> <div>Welcome of participants</div> <div> 15.00-18.00 ISSHA Council Meeting Room F </div> </div>
15.00 15.30	
15.30 15.45	
15.45 16.00	
16.00 16.15	
16.15 16.30	
16.30 17.00	
17.00 17.30	
17.30 18.00	
18.00 18.30	
18.30 18.45	<div> 17.00-19.00 Young Investigator Networking Session Room BC </div>
18.45 19.00	
19.00 20.00	<div> Ice Breaker Exhibition area </div>

SESSION CODES:

OL: Opening Lecture

PL: Plenary Session

PS: Parallel Session

IT: Ignite Talk Session

YL: Yasumoto Award 2016 Lecture

MONDAY 22 OCTOBER			
08.00 09.00	Welcome of participants		
09.00 09.45	Opening Ceremony <i>Auditorium 800</i>		
09.45 10.15	OL: Anna Michalak Exploring climate impacts on inland and coastal eutrophication <i>Auditorium 800</i>		
10.15 10.45	Coffee break <i>Exhibition area</i>		
10.45 12.15	PS01 Eco-physiology & cellular biology of harmful algae and cyanobacteria <i>Room 300</i>	PS02 Biological oceanography and limnology of HABs <i>Room 150</i>	PS03 Optical sensors and drone systems for the monitoring of harmful blooms Session sponsored by French Research Project ANR OSS-CYANO <i>Auditorium 800</i>
12.15 12.30	Lunch break <i>Exhibition area</i>		
12.30 13.15			
13.15 13.45	Satellite session on sensors for cyanobacteria and other HABs <i>Room 300</i>		
13.45 14.15	PL1: Thomas Hartung 21 st century alternative methods for 21 st century safety sciences <i>Auditorium 800</i>		
14.15 15.45	PS04 Socio-economic impacts of HABs <i>Auditorium 800</i>	PS05 Biological oceanography and limnology of HABs <i>Room 150</i>	PS06 Human Toxicology <i>Room 300</i>
15.45 16.15	Coffee break <i>Exhibition area</i>		
16.15 17.30	IT1 Ignite Talks <i>Auditorium 800</i>	IT2 Ignite Talks <i>Room 300</i>	IT3 Ignite Talks <i>Room 150</i>
17.30 18.30	Poster Session 1 <i>Poster area</i>		
18.30 20.00	ISSHA General Assembly <i>Auditorium 800</i>		
20.00 20.30	Presentation of the ICHA 2022 venue <i>Auditorium 800</i>		

TUESDAY 23 OCTOBER

08.30
09.00

Welcome of participants

09.00
09.30

PL2: Elena Litchman

A trait-based framework for understanding and predicting harmful algal blooms
Auditorium 800

09.30
11.00

PS07

Ecology - from the ecological niche to population dynamics and biogeography
Auditorium 800

PS08

Eco-physiology & cellular biology of harmful algae and cyanobacteria
Room 300

PS09

Medical applications of algae, cyanobacteria and their toxins
Room 150

11.00
11.30

Coffee break
Exhibition area

11.30
13.00

PS10

Ecology - from the ecological niche to population dynamics and biogeography
Auditorium 800

PS11

Eco-physiology & cellular biology of harmful algae and cyanobacteria
Room 300

PS12

Accumulation and biotransformation of algal, bacterial and cyanobacterial toxins in aquatic trophic chains
Room 150

13.00
13.30

13.30
14.15

Lunch break
Exhibition area

Satellite session: In-situ instrumentation for phytoplankton, the IFCB
Room 300

14.15
14.30

14.30
15.00

PL3: Erik Jeppesen

Cyanobacteria in Danish and Florida lakes and their response to nutrient loading reduction, biomanipulation and climate warning
Auditorium 800

15.00
16.30

PS13

Ecology - from the ecological niche to population dynamics and biogeography
Room 300

PS14

Mitigation of HABs and water treatment technologies
Auditorium 800

PS15

Accumulation and biotransformation of algal, bacterial and cyanobacterial toxins in aquatic trophic chains
Room 150

16.30
17.00

Coffee break
Exhibition area

17.00
18.45

PS16

Ecology - from the ecological niche to population dynamics and biogeography
Room 300

PS17

Mitigation of HABs and water treatment technologies
Auditorium 800

PS18

New tools (omics, lab-on-a-chip, ecotron...)
Room 150
Session sponsored by



18.45
19.45

Poster Session 2
Poster area

20.00
21.30

Party «Bretonne»
Exhibition area

SESSION CODES:

OL: Opening Lecture
PL: Plenary Session

PS: Parallel Session
IT: Ignite Talk Session

YL: Yasumoto Award 2016 Lecture

	WEDNESDAY 24 OCTOBER		
08.00 08.30	Welcome of participants		
08.30 09.00	PL4: Mireille Chinain Ciguatera risk assessment and management: where to from here? <i>Auditorium 800</i>		
09.00 10.30	PS19 Ciguatera and related benthic HAB organisms and toxins <i>Auditorium 800</i>	PS20 Taxonomy <i>Room 150</i>	PS21 New major events & exploitation of longtime series (monitoring & case studies) <i>Room 300</i>
10.30 11.00	Coffee break <i>Exhibition area</i>		
11.00 12.30	PS22 Ciguatera and related benthic HAB organisms and toxins <i>Auditorium 800</i>	PS23 Taxonomy <i>Room 150</i>	PS24 New major events & exploitation of longtime series (monitoring & case studies) <i>Room 300</i>
12.30 13.00			
13.00 19.30	Half-day excursions (Cultural Tours)		

	THURSDAY 25 OCTOBER		
08.30 09.00	Welcome of participants		
09.00 09.30	PL5: William Gerwick Chemical Studies on Toxic Cyanobacteria: Poisons as Pharmaceutical Leads Auditorium 800		
09.30 11.00	PS25 «Omic» technologies: genomics, transcrip- tomics, proteomics & metabolomics of HABs Auditorium 800	PS26 HABs causing aerosol and/or direct contact toxicity Room 150	PS27 Ecology - harmful algae and global change Room 300
11.00 11.30	Coffee break Exhibition area		
11.30 13.00	PS28 «Omic» technologies: genomics, transcrip- tomics, proteomics & metabolomics of HABs Auditorium 800	PS29 Microbial interactions (allelopathy, parasites...) Room 150	PS30 Ecology - harmful algae and global change Room 300
13.00 13.30	Lunch break Exhibition area		
13.30 14.15			
14.15 14.30			
14.30 15.00	PL6: Laure Guillou Can we use parasites to control HABs? Auditorium 800		
15.00 16.30	PS31 «Omic» technologies: genomics, transcrip- tomics, proteomics & metabolomics of HABs Room 150	PS32 Microbial interactions (allelopathy, parasites...) Auditorium 800	PS33 Ecology - harmful algae and global change Room 300
16.30 17.00	Coffee break Exhibition area		
17.00 18.45	PS34 Biotechnology or adding value to toxic and harmful algae Room 150	PS35 Microbial interactions (allelopathy, parasites...) Auditorium 800	PS36 Ciguatera and related benthic HAB organisms and toxins Room 300
18.45 19.45	Poster Session 3 Poster area		
19.45 22.00	ISSHA auction Auditorium 800		

SESSION CODES:

OL: Opening Lecture

PL: Plenary Session

PS: Parallel Session

IT: Ignite Talk Session

YL: Yasumoto Award 2016 Lecture

FRIDAY 26 OCTOBER			
08.30 09.00	Welcome of participants		
09.00 09.30	YL1: Allan Cembella Emerging chemical Ecology Paradigm or New Plankton Paradox: Phycotoxins as Allelochemical Drivers of Harmful Algal Dynamics <i>Auditorium 800</i>		
09.30 11.00	PS37 Risk assessment for algal and cyanobacterial toxins <i>Room 150</i>	PS38 Toxin analysis – Novel detection methods <i>Room 300</i>	PS39 Impact of microalgae/ cyanobacteria on aquatic organisms (incl. fish kills and shellfish mortalities) <i>Auditorium 800</i>
11.00 11.30	Coffee break <i>Exhibition area</i>		
11.30 13.00	PS40 Networking activities around HABs : global HAB, global HAB status report, ICES-WGs and other initiatives <i>Room 150</i>	PS41 Toxin analysis – Novel detection methods <i>Room 300</i>	PS42 Impact of microalgae/ cyanobacteria on aquatic organisms (incl. fish kills and shellfish mortalities) <i>Auditorium 800</i>
13.00 14.30	Lunch break <i>Exhibition area</i>		
14.30 15.00	YL2: Michael A. Quilliam The evolution of Algal Toxin Measurement Science <i>Auditorium 800</i>		
15.00 16.30	PS43 Networking activities around HABs : global HAB, global HAB status report, ICES-WGs and other initiatives <i>Room 300</i>	PS44 Toxin analysis – Novel detection methods <i>Auditorium 800</i>	PS45 Mitigation of HABs and water treatment technologies <i>Room 150</i>
16.30 17.00	Coffee break <i>Exhibition area</i>		
17.00 18.00	Closing Ceremony <i>Auditorium 800</i>		
19.15 00.00	Gala dinner <i>Château de La Poterie - La Chapelle-sur-Erdre</i>		

SATURDAY 27 OCTOBER			
09.30 12.30	ISSHA Council Meeting (External - Maison des Chercheurs Etrangers)		

DETAILED SCIENTIFIC PROGRAM

*The session co-chairs are typically members of the ICHA 2018 Scientific committee

MONDAY 22 OCTOBER 2018

9.00-9.45 | **Opening Ceremony** AUDITORIUM 800

9.45-10.15 | **Opening Lecture** AUDITORIUM 800

OL | Exploring climate impacts on inland and coastal eutrophication
Anna Michalak (USA)

10.15-10.45 | **Coffee break** EXHIBITION AREA

10.45-12.15 | **Parallel Sessions**

Parallel Session 1: Eco-physiology & cellular biology of harmful algae and cyanobacteria ROOM 300

Session chair: Véronique Martin-Jezequel (Université de Nantes, France)

Session co-chair*: Véronique Séchet

10.45 | **O-001** | Exploring the molecular basis of responses to light in marine diatoms
Angela Falciatore (France)

11.15 | **O-002** | Proofs for production of sexual resting cyst by the toxic dinoflagellate *Karenia mikimotoi* from clonal cultures and marine sediments
Yingzhong Tang (China)

11.30 | **O-003** | Influence of light intensity, inorganic nutrients and prey concentration on toxin production and release in *Prymnesium parvum* strains
Nikola Medić (Denmark)

11.45 | **O-004** | Physiological, genomic and transcriptomic variation between co-occurring strains of *Raphidiopsis raciborskii*
Anusuya Willis (Australia)

12.00 | **O-005** | Differences in nutrient physiology and toxin production among three *Pseudo-nitzschia* species: influence of life cycle stages
Aurore Sauvey (France)

Parallel Session 2: Biological oceanography and limnology of HABs

ROOM 150

Session chair: Felipe Artigas (Université Littoral Côte d'Opale, France)

Session co-chair*: Myriam Bormans

10.45 | **O-006A** | Harmful algal blooms in the Baltic Sea and in the Kattegat-Skagerrak area investigated using novel in situ and remote sensing methods
Bengt Karlson (Sweden)

11.00 | **O-006B** | Automated in vivo approaches for characterizing HAB in coastal waters: the JERICO-Next European Research Infrastructure.
Luis Felipe Artigas (France)

11.15 | **O-007** | Diversity and toxicity of Pseudo-nitzschia species in Monterey Bay, California (USA): perspectives from targeted and adaptive sampling

Holly Bowers (USA)

11.30 | **O-008** | New insights into the diversity of Azadinium spp. and distribution of azaspiracids along the South and West coasts of Ireland

Stephen Michael McGirr (United Kingdom)

11.45 | **O-009** | Operational tools to improve the prediction capacity of the HABs in Galician mollusc production areas

Yolanda Pazos (Spain)

12.00 | **O-010** | Dinoflagellate cysts distribution in recent sediment of a southern Atlantic coastal zone (Oualidia lagoon, Morocco)

Karima Chaira (Morocco)

Parallel Session 3: Optical sensors and drone systems for the monitoring of harmful blooms **AUDITORIUM 800**

Session chair : Jean-François Humbert (INRA, Institut d'Ecologie et des Sciences de l'Environnement de Paris, UPMC)

Session co-chair: Kamel Soudani

Session sponsored by: French Research Project ANR OSS-CYANO

10.45 | **O-011** | Development of a low cost optical sensor and of a drone system for the monitoring of cyanobacteria in freshwater ecosystems

Jean-François Humbert (France), Kamel Soudani (France), Gabriel Hmimina (France)

11.15 | **O-012** | Coupling high-frequency measurements and predictive modelling in a monitoring and early warning system of cyanobacteria blooms

Brigitte Vinçon-Leite & Yi Hong (France)

11.30 | **O-013** | Being in the right place at the right time: reflections on a decade of in-situ HAB sensor deployments

Don Anderson (USA)

11.45 | **O-014** | BloomAlert: early detection and monitoring of algal blooms in small lakes and rivers

Christopher John Stanley Bolch (Australia)

12.00 | **O-015** | High-resolution satellite remote sensing of coastal red tides using laboratory measurements of Mesodinium rubrum optical properties

Pierre Gernez (France)

12.15-13.45 | Lunch break **EXHIBITION AREA**

12.30-13.15 | **Satellite Session on sensors for cyanobacteria and other HABs**

ROOM 300

New tools and approaches for the monitoring of harmful blooms

13.45-14.15 | **Plenary Session** **AUDITORIUM 800**

PL1 | 21st century alternative methods for 21st century safety sciences

Thomas Hartung (USA)

14.15-15.45 | **Parallel Sessions**

Parallel Session 4: Socio-economic impacts of HABs **AUDITORIUM 800**

Session chair: Patricia Tester (Ocean Tester LLC, USA)

Session co-chair: Pascal Raux*

14.15 | **O-016** | Socioeconomic impacts of the 2015 U.S. West Coast domoic acid event in fishing communities

Stephanie Moore (USA)

14.30 | **O-017** | Understanding the preferences of water users in a context of cyanobacterial blooms in Quebec

Chloé L'Ecuyer-Sauvageau (Canada)

14.45 | **O-018** | Integrated management of Harmful Algal Blooms (HABs) along the French Channel area. A system approach to assess and manage socio-economic impacts of HABs.

Pascal Raux (France)

15.00 | **O-019** | Socio-economic determinism of cyanobacterial blooms in Victoria Lake (Uganda)

Mark Olokotum (Uganda)

15.15 | **O-020** | Co-producing knowledge and local empowerment for managing harmful algae. A citizen science experience on Aghien Lagoon in Ivory Coast

Veronica Mitroi (France)

15.30 | **O-021** | Saxitoxin and the Cold War

Patricia Tester (USA)

Parallel Session 5: Biological oceanography and limnology of HABs

ROOM 150

Session chair: Bengt Karlson (SMHI, Sweden)

Session co-chair: Felipe Artigas*

14.15 | **O-022** | Local atmospheric and oceanographic factors mediating a *Alexandrium catenella* bloom in Southern Chile

Oscar Espinoza-González (Chile)

14.30 | **O-023** | Population level dynamics of PSP toxin production by an inshore bloom of *Alexandrium catenella*

Michael Brosnahan (USA)

14.45 | **O-024** | Atmospheric and oceanographic processes on the distribution and abundance of *Alexandrium catenella* in the North of Chilean fjords

Leonardo Guzmán (Chile)

15.00 | **O-025** | Predicting bloom initiation on the Texas coast: Combining satellite imagery with an individual-based model

Darren Henrichs (USA)

15.15 | **O-026** | Tracking the floating ecotype of *Ulva prolifera*, the causative species of green tide in the Yellow Sea

Peng Jiang (China)

15.30 | **O-027** | Spatial distribution of *Microcystis* and microcystins in lake sediment

Barbara Maria Weisbrod (Germany)

Parallel Session 6: Human Toxicology **ROOM 300**

Session chair: *Kathi Lefebvre (NOAA, USA)*

Session co-chair*: *Valérie Fessard*

14.15 | **O-028** | Potential Biomarkers of Recent and Long-term Domoic Acid Exposure in Human Seafood Consumers

Kathi Lefebvre (USA)

14.45 | **O-029** | HAB toxins and their effect on mammalian thioredoxin reductase

Kathleen Rein (USA)

15.00 | **O-030** | Combined toxicity of mycotoxins and phycotoxins on fish and human cell line models

Aiko Hayashi (Australia)

15.15 | **O-031** | Hepatotoxic and non-hepatotoxic cyanopeptides influence cytoskeleton organization in normal and tumor astrocytes in vitro

Bojan Sedmak (Slovenia)

15.30 | **O-032** | Portimine toxicity on human neuronal nicotinic acetylcholine receptors and human cell lines

Romulo Araoz (France)

15.45-16.15 | Coffee break **EXHIBITION AREA**

16.15-17.30 | Ignite Talk Sessions

Ignite Talks Session 1 AUDITORIUM 800

Session chairs: Cécile Bernard / Allen Place

16.15 | **P-348** | Biosynthetic enzymes related to marine polyethers in dinoflagellate extracts

Masayuki Satake (Japan)

16.20 | **P-146** | Neuroblastoma cell-based assay optimization for harmonized marine biotoxin detection: reducing ouabain and veratridine oversensitivity.

Christopher R. Loeffler (Germany)

16.25 | **P-155** | The occurrence of and effects of processing on 40+ azaspiracids in British shellfish

Alison O'Neill (United Kingdom)

16.30 | **P-141** | Quantitation and ichthyotoxicity of karmitoxin, a Karlodinium armiger metabolite

Elisabeth Varga (Austria)

16.35 | **P-190** | Annual variation in bloom-forming *Microcystis* genotypes from an Australian wastewater lagoon

Caitlin Romanis (Australia)

16.40 | **P-191** | Validation of a sandwich hybridization assay for detecting the harmful cyanobacteria microcystis

Dianne Greenfield (USA)

16.45 | **P-175** | Transcriptomic study to unravel molecular mechanism of ciguatoxin production in *Gambierdiscus balechii*

Zhen Wu (China)

16.50 | **P-216** | Characterization of bioactive metabolites from benthic dinoflagellate *Gambierdiscus balechii*

Wai Hin Lee (Hong Kong)

16.55 | **P-085** | Impact of global change (irradiance and temperature) on growth and ovatoxins production of *Ostreopsis cf. ovata*

Marin-Pierre Gémén (France)

17.00 | **P-230** | *Gambierdiscus* from Seychelles: morphology, molecular identification and toxicity

Laura Lavenu (Monaco)

17.05 | **P-286** | Recombinant nanobodies as cheap and customizable reagents for unicellular algae detection

Elisa Mazzega (Slovenia)

17.10 | **P-200** | Metabolism of the lipophilic phycotoxin 13-desmethylspirolide

Valerie Fessard (France)

17.15 | **P-199** | In vitro toxicological assessment of lipophilic phycotoxins on in vitro enteric glial cells

Océane Réale (France)

17.20 | **P-203** | LPS from cyanobacterial water blooms induces inflammatory responses in intestinal epithelial cells

Lenka Švihálková Šindlerová (Czech Republic)

17.25 | **P-193** | Cyanobacterial toxins and the intestines - Are we missing the first site-of-action for specific organ toxicity?

Barbara Kubickova (Czech Republic)

Ignite Talks Session 2 **ROOM 300**

Session chairs: Marie-Yasmine Dechraoui Bottein / Ronel Biré

- 16.15 | **P-318** | **The Algal Resources Collection: an asset for the cultivation, maintenance, and identification of toxic microalgae**
Charles Wingert (USA)
- 16.20 | **P-269** | **Co-occurrence of green tide, golden tide and red tide in the Yellow Sea in spring and summer of 2017**
Tian Yan (China)
- 16.25 | **P-024** | **Improving the predictability of HABs around the Shetland Islands, Scotland**
Paul Dees (United Kingdom)
- 16.30 | **P-044** | **An exceptional summer bloom of *Dinophysis acuta* in a Chilean fjord**
Patricio A. Díaz (Chile)
- 16.35 | **P-008** | **Influence of temperature, irradiance and pH on the growth of *Teleaulax amphioxeia*, trophic chain member of the toxic genus *Dinophysis***
Sylvain Gaillard (France)
- 16.40 | **P-074** | **Analysis of trace levels of domoic acid in seawater and plankton net samples from the Golden Horn Estuary (Sea of Marmara, Turkey)**
Fuat Dursun (Turkey)
- 16.45 | **P-101** | **Investigation of germination characteristics of *Lingulodinium polyedra* cysts from Loch Creran, Scotland**
Cathy Winterton (United Kingdom)
- 16.50 | **P-208** | **Sand-dwelling Dinoflagellates from different types of sediment in the North-Western Waters of the Arabian Gulf**
Wafa'a Abdullah Al-Rashed (Kuwait)
- 16.55 | **P-238** | **Summer bloom of *Vulcanodinium rugosum* in Cienfuegos Bay (Cuba) associated to dermatitis in swimmers**
Angel Ramon Moreira Gonzalez (Cuba)
- 17.00 | **P-327** | **Surveillance of changing bloom conditions through the application of optical remote sensing and ecological associations**
Michelle C. Tomlinson (USA)
- 17.05 | **P-351** | **Evidence of *Noctiluca scintillans* grazing during a bloom of toxic *Dinophysis acuminata* complex, south Brazil**
Bruna Sobrinho (Brazil)
- 17.10 | **P-322** | **Traditional preparation methods to examine the distribution of Paralytic Shellfish Toxins in whole and partial butter clams**
Melissa Peacock (USA)
- 17.15 | **P-357** | **Experimental exposure of *Mytilus* sp. to two toxic UK *Alexandrium* species, implications for English monitoring programmes**
Adam Lewis (United Kingdom)
- 17.20 | **P-319** | **Records of Harmful algal poisoning symptoms in coastal communities of Nigeria, West Africa**
Medina Omo Kadiiri (Nigeria)
- 17.25 | **P-321** | **The impact of algae bloom on drinking water treatment and distribution**
Louise Vanyacker (Belgium)

Ignite Talks Session 3 ROOM 150

Session chairs: *Claudia Wiegand and Raffaele Siano*

16.15 | P-120 | Morphological and phylogenetic characterization of Amphidinium (Dinophyceae) strains from the Bay of Biscay and the Mediterranean Sea

Louis-Josselin Lavier-Aydat (France)

16.20 | P-006 | Carbon and light availability influence microcystin production by PCC 7806

Declan John Hunter Maxwell (United Kingdom)

16.25 | P-007 | Effects of nutrient deficiency and high light on growth, photosynthesis and motility in a red tide dinoflagellate *Karenia mikimotoi*

Koki Yuasa (Japan)

16.30 | P-071 | Cyanobacteria in the guarapari lagoons (es, brazil): unknown beings in ecosystems also unknown

Fabiola Chrystian Oliveira Martins (Brazil)

16.35 | P-081 | Mediterranean long-term study shows correlation between *Ostreopsis cf. ovata* bloom timing and spring temperature»

Kévin Drouet (France)

16.40 | P-225 | Biodiversity, distribution and toxicity of benthic dinoflagellates in a subtropical reef: the first comprehensive study in Hong Kong

Veronica T.T. Lam (Hong Kong)

16.45 | P-169 | Transcriptomic responses of bay scallop (*Argopecten irradians*) larvae exposed to harmful algae and other coastal zone stressors

Andrew Griffith (USA)

16.50 | P-174 | How are related the content in DMSP, saxitoxin and gene copies of *sam* and *sxtA4* in *Alexandrium* spp strains ?

Solène Geffroy (France)

16.55 | P-244 | Species specific interactions among microalgae and parasitic marine alveolates

Ingrid Sassenhagen (France)

17.00 | P-247 | Potential influence of cyanobacterial blooms on the bacterial community assemblages in two Algerian freshwater ecosystems

Fatma Zohra Guellati (Algeria)

17.05 | P-252 | Host range and viability under anoxic conditions of parvilucifera corolla (alveolata, perkinsozoa)

Francisco Rodríguez Rodríguez (Spain)

17.10 | P-258 | Metabolic and physiological responses of the marine mussel *Mytilus galloprovincialis* fed with freshwater toxic cyanobacteria

Alexandre Campos (Portugal)

17.15 | P-263 | Cyanobacteria as common producers of teratogenic retinoid-like compounds into aquatic ecosystems

Klára Hilscherová (Czech Republic)

17.20 | P-306 | First Evaluation of Antialgal activity of Macrophytes extracts against *Microcystis aeruginosa* and *Chlorella* sp. in solid medium

Zakaria Tazart (Morocco)

17.25 | P-312 | Effects of immobilized algicidal bacteria on harmful dinoflagellates

Yanfei Wang (USA)

17.30-18.30 | **Poster Session 1** POSTER AREA

18.30-20.00 | **ISSHA General Assembly** AUDITORIUM 800
General Assembly accessible to all up-to-date members of their dues

20.00-20.30 | **Presentation of the ICHA 2022 venue** AUDITORIUM 800

TUESDAY 23 OCTOBER 2018

9.00-9.30 | **Plenary Session** AUDITORIUM 800

PL2 | **A trait-based framework for understanding and predicting harmful algal blooms**

Elena Litchman (USA)

9.30-11.00 | **Parallel Sessions**

Parallel Session 7: Ecology – from the ecological niche to population dynamics and biogeography AUDITORIUM 800

Session chair: Mohamed Laabir (Université de Montpellier, France)

Session co-chair: Adriana Zingone*

09.30 | **O-033** | Induction of domoic acid production: kinetics and types of grazers and diatom species

Nina Lundholm (Denmark)

09.45 | **O-034** | Chemical diversity of prymnesins and do the structural changes in allelochemical toxins drive evolution?

Thomas Ostenfeld Larsen (Denmark)

10.00 | **O-035** | Toxicity and toxin content of *Alexandrium catenella* natural populations in channels of Southern Chile

Pamela Carbonell (Chile)

10.15 | **O-036** | The ichthyotoxic dinoflagellate *Cochlodinium polykrikoides* in Indonesia: resting cyst distribution and molecular identification

Estelle Masseret (France)

10.30 | **O-037** | The dynamics of *Alexandrium pacificum* blooms in the Marlborough Sounds, New Zealand

Lincoln Mac Kenzie (New Zealand)

10.45 | **O-038** | Diversity and seasonal distribution of *Pseudo-nitzschia* from the Gulf of Trieste with insights in toxicity and potential introductions

Timotej Turk Dermastia (Slovenia)

Parallel Session 8: Eco-physiology & cellular biology of harmful algae and cyanobacteria ROOM 300

Session chair: Dedmer Van De Waal (NIOO-KNAW, The Netherlands)

Session co-chair: Véronique Martin-Jézéquel*

09.30 | **O-039** | How harmful algae compete for limited nutrient resources. Lessons from the northern Adriatic Sea

Martin Pfannkuchen (Croatia)

09.45 | **O-040** | The role of phosphatase activities during a bloom of *Ostreopsis cf. ovata* in the northern Adriatic Sea

Stefano Accoroni (Italy)

10.00 | **O-041** | Autecology studies of bloom forming algae from the Gulf of California, Mexico. A review

Christine Johanna Band-Schmidt (Mexico)

10.15 | **O-042** | Discovery of cyanotoxin diversity and ecology in Green Bay using a combination of molecular biology and mass spectrometry

Todd Miller (USA)

10.30 | **O-043** | Seasonal gene expression and the ecophysiological implications of toxic *Microcystis aeruginosa* blooms in Lake Taihu, China

Xaingming Tang (China)

10.45 | **O-044** | Metabolic interactions between *d. magna* and microcystin producing and non-producing *m. aeruginosa* pcc7806

Gorenka Bojadzija (France)

Parallel Session 9: Medical applications of algae, cyanobacteria and their toxins **ROOM 150**

Session chair: *Luis Botana (Univ. Santiago Compostella, Spain)*

Session co-chair*: *Jordi Molgó*

09.30 | **O-045** | Marine Toxins as Drug Leads

Luis Botana (Spain)

10.00 | **O-046** | Gambierol and analogs reverse paralysis caused by d-tubocurarine and botulinum type-A neurotoxin at vertebrate neuromuscular junctions

Jordi Molgó (France)

10.15 | **O-047** | Microalgae-derived phycotoxins: medical applications

Néstor Lagos (Chile)

10.30 | **O-048** | Beneficial activities from cyanobacteria towards obesity, diabetes and cancer – screening and mechanism of action

Ralph Urbatzka (Portugal)

10.45 | **O-049** | In vitro and In vivo anticancer activity of stressed *Dunaliella* sp. aqueous extract against breast cancer

Fatma Elleuch (France)

11.00–11.30 | Coffee break **EXHIBITION AREA**

11.30-13.00 | Parallel Sessions

Parallel Session 10: Ecology – from the ecological niche to population dynamics and biogeography **AUDITORIUM 800**

Session chair: Ian Jenkinson (France)

Session co-chair*: Mohamed Laabir

11.30 | **O-050** | Vertical migrations of *Dinophysis acuta* and *D. acuminata*: the problems of being in the right place at the right time
Beatriz Reguera (Spain)

11.45 | **O-051** | The turbulent life of dinophysis
Maria García Portela (Spain)

12.00 | **O-052** | Dynamics and primary causes of *Aureococcus anophagefferens* brown tide occurrence in the Qinhuangdao coastal waters of China
Qing-Chun Zhang (China)

12.15 | **O-053** | Intraspecific trait variation and trade-offs within and across populations of a toxic dinoflagellate
Karen Brandenburg (Netherlands)

12.30 | **O-054** | Morphological, molecular and ecological insights on *Kryptoperidinium foliaceum* strains from two Mediterranean lagoons (Sardinia, Italy)
Cecilia Teodora Satta (Italy)

12.45 | **O-055** | Diversity, optimal conditions and tolerance of planktonic cyanobacteria to different environmental conditions in Chile, South America
Viviana Patricia Almanza (Chile)

Parallel Session 11: Eco-physiology & cellular biology of harmful algae and cyanobacteria **ROOM 300**

Session chair: Angela Falciatore (UPMC-Sorbonnes Universités, France)

Session co-chair*: Véronique Séchet

11.30 | **O-056** | Impacts of CO₂ and nitrogen availability on the eco-physiology of harmful cyanobacteria
Dedmer Van de Waal (Netherlands)

12.00 | **O-057** | Impact of salinity variation on growth, physiology and domoic acid production of two strains of *Pseudo-nitzschia australis*
Nour Ayache (France)

12.15 | **O-058** | Nitrogen uptake of the benthic toxic dinoflagellates *Ostreopsis fattorussoi* of the Eastern Mediterranean Sea
Laury Açaf (Lebanon)

12.30 | **O-059** | The role of nutrient-related genes in understanding the saxitoxin production of *Alexandrium minutum*
Kieng Soon Hii (Malaysia)

12.45 | **O-060** | A multi-traits approach reveals physiologic impacts of Cu on *Alexandrium minutum* and their exudates
Marc Long (France)

Parallel Session 12: Accumulation and Biotransformation of algal, bacterial and cyanobacterial toxins in aquatic trophic chains **ROOM 150**

Session chair: Tim Harwood (Cawthron Institute, New Zealand)

Session co-chair*: Pedro Reis Costa (IMPA, Portugal)

11.30 | **O-061** | Accumulation and biotransformation of algal toxins in the marine food web: case studies from the Portuguese coast

Pedro Reis Costa (USA)

12.00 | **O-062** | Dynamic variation of paralytic shellfish toxins and metabolites during the exposure of scallops and mussels to *Alexandrium pacificum*

Aifeng Li (China)

12.15 | **O-063** | Saxitoxin Uptake, Assimilation, Depuration, and Analogue Changes of the Southeast Asian Green-Lipped Mussel (*Perna viridis*) toxin

John Kristoffer Quintos Andres (Philippines)

12.30 | **O-064** | Multiple climate drivers affect physiological health and toxin load of the tropical filter-feeding clam *Meretrix meretrix*

Anna Godhe (Sweden)

12.45 | **O-065** | Drivers of Ciguatera Prevalence in Herbivorous Reef Fish from the Caribbean

Jessica Gwinn (USA)

13.00–14.30 | Lunch break **EXHIBITION AREA**

13.30–14.15 | **Satellite Session: In-situ instrumentation for phytoplankton, the IFCB** **ROOM 300**

The allure of automated microscopy for monitoring programs – from promise to reality, with a few road bumps

Dr Raphael Kudela (USA)

14.30–15.00 | **Plenary Session** **AUDITORIUM 800**

PL3 | Cyanobacteria in Danish and Florida lakes and their response to nutrient loading reduction, biomanipulation and climate warning

Eric Jeppesen (Denmark)

15.00-16.30 | Parallel Sessions

Parallel Session 13: Ecology – from the ecological niche to population dynamics and biogeography **ROOM 300**

Session chair: Adriana Zingone (Stazione Zoologica Anton Dohrn, Italy)

Session co-chair*: Rodolphe Lemée

15.00 | **O-066** | Revealing the Hybrid Zone and Genetic Polymorphisms within *Pseudo-nitzschia pungens* – the Cosmopolitan Diatom Species

Jin Ho Kim (Republic of Korea)

15.15 | **O-067** | Evaluation of DNA extraction kits for assessing harmful algal community from fish farm sediments

Chetan Chandrakant Gaonkar (Japan)

15.30 | **O-068** | The role of lateral gene transfer for bioactive tetrapeptides (aeruginosins) among the bloom-forming cyanobacteria *Planktothrix*

Elisabeth Entfellner (Austria)

15.45 | **O-069** | *Pseudo-nitzschia* biogeography combining qPCR analysis and oceanographic models to investigate long term trends of ASP toxicity

Rafael Salas (Ireland)

16.00 | **O-070** | Environmental entrainment of the endogenous circannual clock of *Alexandrium catenella* cysts from the Gulf of Maine

Alexis Dal Fischer (USA)

16.15 | **O-071** | The anchoring effect- long-term dormancy and genetic population structure

Josefin Sefbom (Sweden)

Parallel Session 14: Mitigation of HABs and water treatment technologies **AUDITORIUM 800**

Session chair: Triantafyllos Kaloudis (EYDAP SA, Greece)

Session co-chair*: Jean-François Humbert

15.00 | **O-072** | Prevention, control and mitigation of cyanobacterial blooms in lakes and reservoirs

Petra Miranda Visser (Netherlands)

15.30 | **O-073** | Toxicity of the cyanocide hydrogen peroxide to zooplankton and macrofauna

Erik Weenink (Netherlands)

15.45 | **O-074** | Harmful algal blooms suppression by a conventional water circulation system

Bokjin Lee (Republic of Korea)

16.00 | **O-075** | Biocontrol essays of *Microcystis* sp dominated in harmful algal blooms by medicinal plant extracts

Lamiaa Tebaa (Morocco)

16.15 | **O-076** | Algal Taste & Odor compounds: Advanced methods for detection and control

Triantafyllos Kaloudis (Greece)

Parallel Session 15: Accumulation and Biotransformation of algal, bacterial and cyanobacterial toxins in aquatic trophic chains ROOM 150

Session chairs : Pedro Reis Costa (IPMA, Portugal)

Session co-chair*: Tim Harwood (Cawthron Institute, New Zealand)

15.00 | **O-077** | Persistent Domoic Acid in the California Current Food Web: An Emerging Threat?

Raphael Kudela (USA)

15.15 | **O-078** | Universal detection of the neurotoxin -N-methylamino-L-alanine in marine mollusks in China

Yang Hu (China)

15.30 | **O-079** | Food web transfer of biotoxins as part of a suite of multiple contaminants: a case study of brevetoxins and metals

Rachel Clausing (France)

15.45 | **O-080** | Kinetics of microcystin accumulation and detoxification by the freshwater bivalves *Anodonta anatina* and *Dreissena polymorpha*

Alexandra Lepoutre (France)

16.00 | **O-081** | Microbial degradation of microcystins in central european waterbodies

Dariusz Dziga (Poland)

16.15 | **O-082** | Is the density of potentially toxic phytoplankton a reliable indicator for the presence of toxins in Dutch marine bivalves?

Els Faassen (Netherlands)

16.30-17.00 | Coffee break EXHIBITION AREA

17.00-18.45 | Parallel Sessions

Parallel Session 16: Ecology – from the ecological niche to population dynamics and biogeography **ROOM 300**

Session chair: Rodolphe Lemée (Observatoire Océanologique de Villefranche sur Mer, France)

Session co-chair*: Ian Jenkinson

17.00 | **O-083** | Amphidomataceae in the Labrador Sea and western Greenland waters
Urban Tillmann (Germany)

17.15 | **O-084** | The response of harmful algae to environmental and community changes along the French coast
Stéphane Karasiewicz (France)

17.30 | **O-085** | Modeling harmful algal blooms in interspecific competition
Samuelson Nzeneri (France)

17.45 | **O-086** | Influence of nutrient pulses on the bloom persistence of *Lingulodinium polyedra*
Anneke K. Kristin Purz (Germany)

18.00 | **O-087** | Decadal and bi-decadal distribution of harmful species in the Magellan region: South-North or North-South dispersion?
Gemita Pizarro (Chile)

18.15 | **O-088** | Toxic dinoflagellates in the Mediterranean ecosystems facing global change, LAGUNOTOX project
Mohamed Laabir (France)

18.30 | **O-089** | Tracing the deposition region of massive floating green algae in the Yellow Sea
Hui-Xia Geng (China)

Parallel Session 17: Mitigation of HABs and water treatment technologies **AUDITORIUM 800**

Session chair: Petra Visser (Free University of Amsterdam, The Netherlands)

Session co-chair*: Triantafyllos Kaloudis

17.00 | **O-090** | Impact of eutrophication on adsorption efficiency during water treatment: reactivity of organic matter & Microcystin
Helene Thuret Benoist (France)

17.15 | **O-091** | Plant vs cyanobacteria. Searching for a plant capable of preventing Cyan-HABs and eliminating cyanotoxins in water
Ariel Jacek Kaminski (Poland)

17.30 | **O-092** | Advanced Oxidation Treatment of Cyanotoxins: Elucidation of Degradation Pathways
Anastasia Hiskia (Greece)

17.45 | **O-093** | Interaction between *Microcystis*, microcystin and lytic phage Ma-LMM01
Nur Hanisah Sukarji (Singapore)

18.00 | **O-094** | www.HABreports.org Early warning of Harmful Algae and Their Biotoxins for the Aquaculture Industry

Keith Davidson (United Kingdom)

18.15 | **O-095** | Round table discussion JF Humbert - chemical methods for combatting cyanobacterial HABs

Parallel Session 18: New tools (omics, lab-on-a-chip, ecotron...)

ROOM 150

Session sponsored by:



Session chair: Raphael Kudela (Univ. California Santa Cruz, USA)

Session co-chair*: Catherine Dreanno

17.00 | **O-096** | The application of the phytoXigene cyanodtec qPCR assays as a screening tool monitoring inland water systems for harmful algal blooms

Mark Van Asten (Australia)

17.30 | **O-097** | Advanced characterisation of cyanobacterial bloom using spectral fluorescence at an extended wavelength

Arash Zamyadi (Canada)

17.45 | **O-098** | Characterization of oceanic Noctiluca blooms not associated with hypoxia in the Northeastern Arabian

Vera Trainer (USA)

18.00 | **O-099** | Microfluidic devices to evaluate phototaxis, chemotaxis, and gravitaxis for motile micro-algae

Kazunari Ozasa (Japan)

18.15 | **O-100** | Colorimetric and electrochemical DNA-based tools for the rapid detection and quantification of toxic marine microalgae

Anna Toldrà (Spain)

18.30 | **O-101** | Exploring benefits of combined microscopy & next-generation sequencing to identify cyanobacteria water treatment critical points

Arash Zamyadi (Canada)

18.45-19.45 | **Poster Session 2** POSTER AREA

WEDNESDAY 24 OCTOBER 2018

8.30-9.00 | **Plenary Session** AUDITORIUM 800

PL4 | Ciguatera risk assessment and management: where to from here?
Mireille Chinain (French Polynesia)

9.00-10.30 | **Parallel Sessions**

Parallel Session 19: Ciguatera and related benthic HAB organisms and toxins AUDITORIUM 800

Session chair: *Patricia Tester (Ocean Tester LLC, USA)*

Session co-chair*: *Marie-Yasmine Dechraoui-Bottein*

09.00 | **O-102** | Modeling ciguatoxin flux into multiple vectors in the coral reef benthic food web

Michael Parsons (USA)

09.30 | **O-103** | Toxicity, chemistry, and implications of *Gammarus silvae*: A ciguatoxin superbug in the Greater Caribbean Region

Alison Robertson (USA)

09.45 | **O-105** | Ciguatera risk assessment in a hot spot in south central Cuba

Lisbet Díaz Asencio (Cuba)

10.00 | **O-106** | Are macroalgae a reliable method for the quantification of bhab?

Juan Fernandez Zabala (Spain)

10.15 | **O-107** | Diversity of Epibenthic Dinoflagellates from Brazilian Waters

Silvia Mattos Nascimento (Brazil)

Parallel Session 20: Taxonomy ROOM 150

Session chair: *Mitsunori Iwataki (Univ. Tokyo, Japan)*

Session co-chair*: *Nicolas Chomerat*

09.00 | **O-108** | The use of High-Throughput Sequencing in the study of the diversity of toxigenic cyanobacteria

Nico Salmaso (Italy)

09.30 | **O-109** | Towards a stable classification of Cyanobacteria?

Muriel Gugger (France)

09.45 | **O-110** | Phylogenomic diversity and co-dominance of *Arthrospira fusiformis* (Cyanobacteria) and *Picocystis salinarum* (Chlorophyta) in a soda lake

Cécile Bernard (France)

10.00 | **O-111** | An undescribed karenian dinoflagellate harboring peridinin-type chloroplast with an eyespot

Kazuya Takahashi (Japan)

10.15 | **O-112** | Characterizing the raphidophyte, *Chattonella* sp. associated with massive fish mortality on the east coast of Peninsular Malaysia

Chui Pin Leaw (Malaysia)

Parallel Session 21: New major events & exploitation of longtime series (monitoring & case studies) **ROOM 300**

Session chair: Dariusz Dziga (Jagiellonian Univ., Poland)

Session co-chair*: Maud Lemoine

09.00 | **O-113** | The REPHY monitoring network in France: thirty years of data on phytoplankton, associated physico-chemistry, and phycotoxins

Catherine BELIN (France)

09.30 | **O-114** | Ichthyotoxic skeleton-forming silicoflagellates in British Columbia, Canada; Data from the Harmful Algae Monitoring Program, 1999–2017

Nicola Haigh (Canada)

09.45 | **O-115** | HAB monitoring in Okhotsk Sea in Japan by the metagenetic approach

Satoshi Nagai (Japan)

10.00 | **O-116** | Regional changes in harmful algal events in the North Atlantic area over the last two decades documented using the HAEDAT database

Eileen Bresnan (United Kingdom)

10.15 | **O-117** | Analysis of Phytoplankton bloom phenology by identification of gaussian mixture in the southern bight of the North Sea (1989–2014).

Alain Lefebvre (France)

10.30–11.00 | Coffee break **EXHIBITION AREA**

11.00-12.30 | Parallel Sessions

Parallel Session 22: Ciguatera and related benthic HAB organisms and toxins AUDITORIUM 800

Session chair: Michael Parsons (Florida Gulf Coast University, USA)

Session co-chairs*: Mélanie Roue

11.00 | O-118 | Gambierdiscus and Ciguatera Poisoning: A Retrospective to Inform the Future

Patricia Tester (USA)

11.15 | O-119 | Habitat complexity affects benthic harmful dinoflagellate assemblages in the fringing reef of Rawa Island, Malaysia

Po Teen Lim (Malaysia)

11.30 | O-120 | What we have learned from the challenges of assessing ciguatoxin risk in South Eastern Australia

Hazel Farrell (Australia)

11.45 | O-121 | Diversity and habitat associations of Gambierdiscus and Fukuyoa spp. in the Pacific Island nation of Tonga

Phoebe Argyle (Australia)

12.00 | O-122 | Water quality, Gambierdiscus species, ciguatoxins and maitotoxins in lagoon fish in a ciguatera hotspot, Rarotonga, Cook Islands

Shauna Murray (Australia)

12.15 | O-123 | Contribution of marine invertebrates to Ciguatera

Hélène Taïana Darius (French Polynesia)

Parallel Session 23: Taxonomy ROOM 150

Session chair: Nico Salmaso (IASMA-FMACH, Italy)

Session co-chair*: Nicolas Chomerat

11.00 | O-124 | Genetic diversity, distribution, and DSP toxin production of *Proocentrum caipirignum* and *P. lima* complex in Japanese coastal areas

Masao Adachi (Japan)

11.15 | O-125 | Semiautonomous, image-based identification of *Gambierdiscus* spp.

Carlos Eduardo Tibirica (Brazil)

11.30 | O-126 | Genetic relatedness of Japanese isolates of *Alexandrium ostenfeldii* with global isolates

Sirje Sildever (Japan)

11.45 | O-127 | Sympatric occurrence of two *Azadinium poporum* ribotypes in the Eastern Mediterranean Sea

Haifeng Gu (China)

12.00 | O-128 | Morphological, molecular and toxicological data on *Ostreopsis* cf. *siamensis* (Dinophyceae): proposal of *Ostreopsis rinoi* sp. nov.

Helena David (Portugal)

12.15 | O-129 | *Ostreopsis* cf. *ovata* and *Ostreopsis lenticularis* in the Galápagos Islands

Olga Carnicer (Spain)

Parallel Session 24: New major events & exploitation of longtime series (monitoring & case studies) **ROOM 300**

Session chair: Catherine Quiblier (Muséum National d'Histoire Naturelle, France)

Session co-chair*: Maud Lemoine

11.00 | **O-130** | Cyanobacterial community and a description of the cases of the Huff disease on Lake Kotokel located near Lake Baikal

Zorigto Namsaraev (Russian Federation)

11.15 | **O-131** | Increasing occurrence of the proliferations of toxic benthic cyanobacteria in French rivers, a state of knowledge

Catherine Quiblier (France)

11.30 | **O-132** | Dog fatalities associated with tychoplanktic, anatoxin-a producing *Tychonema* sp. in a Berlin lake recovering from eutrophication

Jutta Fastner (Germany)

11.45 | **O-133** | Novel DSP-Like Toxins Associated with a Bloom of *Dinophysis norvegica* in Maine, USA with Implications for Shellfish Management

Jonathan Deeds (USA)

12.00 | **O-134** | An increase in the numbers of the genus *Pseudo-nitzschia* in the North Sea will have implications for the aquaculture industry

Callum Whyte (United Kingdom)

12.15 | **O-135** | Comprehensive study of the occurrence and distribution of lipophilic marine toxins in shellfish from production areas in Chile

Benjamin A Suarez-Isla (Chile)

THURSDAY 25 OCTOBER 2018

9.00-9.30 | **Plenary Session** AUDITORIUM 800

PL5 | Chemical studies on toxic cyanobacteria: poisons as pharmaceutical leads
 William Gerwick (USA)

9.30-11.00 | **Parallel Sessions**

Parallel Session 25: «Omic» technologies: genomics, transcriptomics, proteomics & metabolomics of HABs AUDITORIUM 800

Session chair: Gurjeet Kohli (Nanyang Technological University - SCELSE, Singapore)

Session co-chair*: Philipp Hess

09.30 | **O-136** | Beyond the Transcriptomes: Biochemical and Proteomic Validation of the PKS Machinery Involved in Sterolysin Production
 Allen Richard Place (USA)

10.00 | **O-137** | The biosynthesis of potent neurotoxin domoic acid in Pseudo-nitzschia multiseries diatoms
 Shaun McKinnie (USA)

10.15 | **O-138** | Exploring domoic acid biosynthesis in a heterologous diatom host, Phaeodactylum tricornutum
 John K Brunson (USA)

10.30 | **O-139** | Transcriptomic and physiological responses of dolichospermum sp. 54, an anatoxin-producing cyanobacterium, to different nutrient regimes
 Benjamin J Kramer (USA)

10.45 | **O-140** | Gene expression in Pseudo-nitzschia reveals the methylerythriol phosphate metabolic pathway in the synthesis of domoic acid
 Sara Hardardottir (Denmark)

Parallel Session 26: HABs causing aerosol and/or direct contact toxicity ROOM 150

Session chair: Elisa Berdalet (CSIC, Spain)

Session co-chair*: Rodolphe Lemée

09.30 | **O-141** | HABs causing aerosol and/or direct contact toxicity
 Elisa Berdalet (Spain)

10.00 | **O-142** | Toxicity and Pathophysiology of Palytoxin Congeners After Intraperitoneal and Aerosol Administration in Rats
 Mark Poli (USA)

10.15 | **O-143** | An update on the in vitro toxicity and detection of ovatoxin-a
 Aurelia Tubaro (Italy)

10.30 | **O-144** | Mixotrophy of the toxic benthic dinoflagellate Ostreopsis
 Bora Lee (Republic of Korea)

10.45 | **O-145** | Assessing human exposure to background levels of algal toxins via sea spray aerosols
 Maarten De Rijcke (Belgium)

Parallel Session 27: Ecology - harmful algae and global change ROOM 300

Session chair: Gustaaf Hallegraeff (Univ. Tasmania, Australia)

Session co-chair*: Raffaele Siano

09.30 | **O-146** | Spatial and temporal abundance of ichthyotoxic microalgae in Todos Santos Bay, Baja California, Mexico

Michelle Fimbres-Martinez (Mexico)

09.45 | **O-147** | Dinoflagellate adaptation to coastal ecosystem variations revealed through metabolomic analyses of revived strains

Raffaele Siano (France)

10.00 | **O-148** | How does climate change affect the physiological ecology of *Karlodinium veneficum* and its consequences on trophic transfer?

Nayani Vidyarthna (USA)

10.15 | **O-149** | Physiological responses and toxins production of *Microcystis aeruginosa* acclimated to different salinities.

Maxime Georges Des Aulnois (France)

10.30 | **O-150** | Effects of elevated water temperatures on the abundance of *Alexandrium catenella* in Kachemak bay and lower Cook inlet, Alaska

Wayne Litaker (USA)

10.45 | **O-151** | First report of *Gambierdiscus* and *Ostreopsis* genera from São Vicente island, Cape Verde

Emilio Soler Onís (Spain)

11.00-11.30 | Coffee break EXHIBITION AREA

11.30-13.00 | Parallel Sessions

Parallel Session 28: «Omic» technologies: genomics, transcriptomics, proteomics & metabolomics of HABs AUDITORIUM 800

Session chair: Allen Place (Univ. Maryland, USA)

Session co-chair*: Muriel Gugger

11.30 | **O-152** | Gene expression variation provides key insights into trait evolution in *Alexandrium ostenfeldii* populations

Sylke Wohlrab (Germany)

12.00 | **O-153** | Unraveling the molecular mechanism in response to changing phosphorus in a dinoflagellate *Alexandrium catenella* with proteomics

Shu-Feng Zhang (China)

12.15 | **O-154** | De novo assembly and characterisation of transcriptomes from *Amphidinium* species

Gurjeet Singh Kohli (Germany)

12.30 | **O-155** | Polyketide synthase gene clusters in cryptic sub-tropical *Ostreopsis* species

Arjun Verma (Australia)

12.45 | **O-156** | Molecular mechanisms regulating sexual reproduction and mating type determination in the diatom *Pseudo-nitzschia multistriata*

Maria Immacolata Ferrante (Italy)

Parallel Session 29: Microbial interactions (allelopathy, parasites...)

ROOM 150

Session chair: Esther Garcès (Institut de Ciències del Mar, Spain)

Session co-chair*: Hélène Hégaret

11.30 | **O-157** | From the lab to the real world: issues and challenges in detecting parasite-mediated HAB dynamics in natural populations

Catharina Alves-de-Souza (USA)

12.00 | **O-158** | Viral infection process in dinoflagellate cells

Keizo Nagasaki (Japan)

12.15 | **O-159** | Prey cells and extraction trigger DSP toxin production by *Dinophysis acuminata*

Han Gao (China)

12.30 | **O-160** | Ubiquity and critical role of phagotrophy in phytoplankton community

Nansheng Chen (China)

12.45 | **O-161** | The cost of toxicity in microalgae: evidence from light-limited growth of *Alexandrium* species (Dinophyceae)

Hannah Blossom (Denmark)

Parallel Session 30: Ecology - harmful algae and global change ROOM 300

Session chair: Myriam Bormans (Université de Rennes 1, France)

Session co-chairs: Gustaaf Hallegraeff

11.30 | **O-162** | Large-scale climatic patterns and relationship with Harmful Algal Blooms (HABs) in fjords and canals of Southern Chile

Rodrigo Martínez (Chile)

11.45 | **O-163** | Toxic Cyanobacteria Blooms in the Finger Lakes of Central New York - New Climate, New Rules

Gregory Boyer (USA)

12.00 | **O-164** | The implementation of different tools for understanding and managing harmful algal blooms: case studies in the Mediterranean Sea

Antonella Penna (Italy)

12.15 | **O-165** | A continental scale multilake survey of cyanobacteria, toxin synthetase genes and toxins during a heatwave summer

Kristel Panksep (Estonia)

12.30 | **O-166** | Three Decades of Canadian Marine Harmful Algal Events- Reviewed and Evaluated Using Information from the HAEDAT Database

Cynthia Hipp Mckenzie (Canada)

12.45 | **O-167** | Early detection and monitoring of HABs through a regional network in Latin American and Caribbean countries

Tomas del Carmen Cuellar Martinez (Mexico)

13.00-14.30 | Lunch break EXHIBITION AREA

13.30-14.15 | **Satellite session on biomolecular methods for HAB species**

ROOM 300

Workshop on morpho-molecular methods to study harmful algae

14.30-15.00 | **Plenary Session** AUDITORIUM 800

PL6 | Can we use parasites to control HABs?

Laure Guillou (France)

15.00-16.30 | Parallel Sessions

Parallel Session 31: «Omic» technologies: genomics, transcriptomics, proteomics & metabolomics of HABs ROOM 150

Session chair: Muriel Gugger (Institut Pasteur, France)

Session co-chair*: Philipp Hess

15.00 | **O-168** | Identification of seven possible biosynthetic intermediates of tetrodotoxin in marine environments isolated from pufferfish

Mari Yotsu-Yamashita (Japan)

15.15 | **O-169** | Studying the regulation of secondary metabolites in cyanobacteria using targeted and untargeted metabolomic approaches

Sandra Kim Tiam (France)

15.30 | **O-170** | Untargeted metabolomics-based analysis of HAB-forming dinoflagellate cultures

Wendy Strangman (USA)

15.45 | **O-171** | Combining genomic and metabolomic approaches to study the diversity of cyanobacterial secondary metabolites

Benjamin Marie (France)

16.00 | **O-172** | Metabolic profiles of cyanobacteria isolated from Italian perialpine lakes

Leonardo Cerasino (Italy)

16.15 | **O-173** | Associated bacteria of the bloom-forming cyanobacterium *Microcystis*: challenging the concept of axenic culture»

Yves Terrat (Canada)

Parallel Session 32: Microbial interactions (allelopathy, parasites...)

AUDITORIUM 800

Session chair: Catharina De Souza (Univ. North Carolina Wilmington, USA)

Session co-chair*: H       H      

15.00 | **O-174** | Marine toxic dinoflagellate release extracellular vesicles

Esther Garc       (Spain)

15.15 | **O-175** | Chemically mediated interactions between *Microcystis* and *Planktothrix*: impact on their physiology and metabolic profiles

Enora Briand (France)

15.30 | **O-176** | Release of allelochemicals facilitates nutrient uptake from co-occurring phytoplankton in dinoflagellate *Alexandrium ostenfeldii*

Elin Lindehoff (Sweden)

15.45 | **O-177** | Allelopathic interactions within a benthic community: effects of polyunsaturated aldehydes on the dinoflagellate *ostreopsis cf. ovata*

Laura Pezzolesi (Italy)

16.00 | **O-178** | Compositional and functional dynamics of *Microcystis* bloom associated microbiomes in response to nutrient and temperature elevation

Jennifer Jankowiak (USA)

16.15 | **O-179** | Effects of allelochemical in *Phaeodactylum tricornutum* filtrate on typical marine microalgae growth, morphological and physiological
Qiaona Xue (China)

Parallel Session 33: Ecology - harmful algae and global change **ROOM 300**

Session chair: Raffaele Siano (Ifremer, France)

Session co-chair*: Delphine Latour

15.00 | **O-180** | The role of decadal surface water warming in the intensification of marine and freshwater harmful algal blooms

Christopher J. Gobler (USA)

15.15 | **O-181** | Cyanobacterial dominance challenges the integrity and functioning of phytoplanktonic communities in periurban lakes

Arthur Escalas (France)

15.30 | **O-182** | Dynamics of large-scale dinoflagellate blooms in association with the branch of Kuroshio in the East China Sea

Ren-Cheng Yu (China)

15.45 | **O-183** | Use of three-dimensional modelling to assess the spatial and temporal dynamics of cyanobacteria in a Mediterranean reservoir

Najwa Sharaf (Lebanon)

16.00 | **O-184** | Modelled distribution of the toxin-producing dinoflagellate *Alexandrium ostenfeldii* in the Baltic Sea under current and future climates

Anke Kremp (Germany)

16.15 | **O-185** | Modeling current and future habitat of *Karlodinium veneticum* and *Procentrum minimum* in Chesapeake Bay, USA

Patricia Glibert (USA)

16.30-17.00 | Coffee break **EXHIBITION AREA**

17.00-18.45 | Parallel Sessions

Parallel Session 34: Biotechnology or adding value to toxic and harmful algae **ROOM 150**

Session chair: Sarah d'Adamo (Wageningen University Research, The Netherlands)

Session co-chair*: Gaël Bougaran

17.00 | **O-186** | Fluorescence activated cell-sorting as valuable tool for microalgal biotechnology

Sarah D'Adamo (The Netherlands)

17.30 | **O-187** | Anaesthetic bioactives production in bioreactors with *Heterosigma akashiwo*

Juan José Gallardo (Chile)

17.45 | **O-188** | Effects of Light, Temperature and Nutrients on Growth and Toxin Production of *A. spinosum*, *P. lima*, and *P. australis*

Jane Kilcoyne (Ireland)

18.00 | **O-189** | Metabolic modelling of microalgae during nitrogen starvation

Francis Mairet (France)

18.15 | **O-190** | An innovative photobioreactor technology for the mass culturing of high value, slow growing toxic microalgae

Bob York (USA)

18.30 | **O-191** | Enhanced accumulation of radioactive cesium (Cs) by a novel microalga with nanomagnetic composite

Byung-Gon Ryu (Republic of Korea)

Parallel Session 35: Microbial interactions (allelopathy, parasites...)

AUDITORIUM 800

Session chair: Hélène Hégaret (Université de Brest, France)

Session co-chairs*: Esther Garcès

17.00 | **O-192** | Response of bacterial community during succession of a *Mesodinium rubrum* bloom to a *Dinophysis acuminata* bloom in laboratory microcosm

Tong Mengmeng (China)

17.15 | **O-193** | Structure and function of the microbiome of the toxic dinoflagellate *alexandrium tamarensis*

Cecile Jauzein (USA)

17.30 | **O-194** | Co-occurrence pattern of phytoplankton and microbiota in coastal water of Korea based on recurrent association network analysis

Seong-Jun Chun (Republic of Korea)

17.45 | **O-195** | Effects of repeated dosing with bacterial algicide IRI-160AA on microbial community composition in the Delaware Inland Bays

Kathryn Coyne (USA)

18.00 | **O-196** | Associated bacterial flora and toxicity of cultured benthic isolates from the genus *Prorocentrum* from Mexican coasts

Lorena María Durán-Riveroll (Mexico)

18.15 | **O-197** | Specific microbiome members are associated with toxic *Pseudo-nitzschia* blooms from a 2-year time series at a coastal Pacific site

Marilou Sison-Mangus (USA)

18.30 | **O-198** | Elucidation of bacterial composition throughout the toxic dinoflagellate *Gambierdiscus balechii* growth cycle

Ki Chun Yip (Hong Kong)

Parallel Session 36: Ciguatera and related benthic HAB organisms and toxins **ROOM 300**

Session chair: Mireille Chinain (Institut Louis Malardé, France)

Session co-chair*: Patricia Tester

17.00 | **O-199** | Highly Sensitive and Practical Fluorescent Sandwich ELISA for Ciguatera toxins

Takeshi Tsumuraya (Japan)

17.15 | **O-200** | A single validation study on matrices-insensitive test procedure for quantitative analysis of the Pacific type ciguatera toxins in fish

Tomoji Igarashi (Japan)

17.30 | **O-201** | A contribution for establishing a specific, simple, fast and sensitive cell-based assay for ciguatera toxin screening

Raquel A. F. Neves (Brazil)

17.45 | **O-202** | Solid Phase Adsorption Toxin Tracking (SPATT) technology as a useful tool for the passive field-monitoring of *Gambierdiscus* toxins

Mélanie Roué (French Polynesia)

18.00 | **O-203** | Maitotoxin-3: Structural insights and production by co-habiting marine dinoflagellates

J. Sam Murray (New Zealand)

18.15 | **O-204** | Ciguatera Fish Poisoning: A 25-year experience of the Marseille Poison Centre

Luc De Haro (France)

18.30 | **O-205** | Ciguatera Fish Poisoning: Healthcare workers knowledge and practice assessment in an endemic region

Clémence Mahana iti Gatti (French Polynesia)

18.45-19.45 | **Poster Session 3** **POSTER AREA**

FRIDAY 26 OCTOBER 2018

9.00-9.30 | **Yasumoto-award 2016 Lecture** **AUDITORIUM 800**

YL1 | Emerging chemical ecology paradigm or new plankton paradox: phyco-toxins as allelochemical drivers of harmful algal dynamics

Allan Cembella (Germany)

9.30-11.00 | **Parallel Sessions**

Parallel Session 37: Risk assessment for algal and cyanobacterial toxins

ROOM 150

Session chair: Emanuela Testai (Istituto Superiore di Sanità, Italy)

Session co-chair: Nathalie Arnich*

09.30 | **O-206** | Toxic cyanobacteria in a water reservoir in Sicily: Considerations for monitoring programs and risk assessment

Emanuela Testai (Italy)

10.00 | **O-207** | Environmental assessment of cyanobacteria and cyanotoxins in European temperate freshwater systems - The Portuguese situation

Cristiana Moreira (Portugal)

10.15 | **O-208** | Interest of bivalves to evaluate the transfer of cyanobacteria and cyanotoxins from fresh to estuarine waters

Emilie Lance (France)

10.30 | **O-209** | ANSES opinion on acute and chronic toxicity of BMAA

Nathalie Arnich (France)

10.45 | **O-210** | Probabilistic risk assessment model of potential PSP intoxication during a bloom of *Alexandrium Catenella*: monitoring's application

Anne Thebault (France)

Parallel Session 38: Toxin analysis – Novel detection methods **ROOM 300**

Session chair: Michael Quilliam (National Research Council of Canada, Canada)

Session co-chair: Ronel Biré*

09.30 | **O-211** | Trends in the analysis of marine biotoxins: Confirmatory methods and analytical challenges

Ana Gago-Martinez (Spain)

10.00 | **O-212** | LC-High resolution MS and LC-tandem MS as complementary tools for a comprehensive toxin analysis in environmental and food matrices

Luciana Tartaglione (Italy)

10.15 | **O-213** | Targeted and non-targeted analysis of marine toxins in shellfish by LC-HRMS

Inès Dom (France)

10.30 | **O-214** | A fiber passive sampling device (fPSD) with nanopore sorbents for monitoring microcystins in water

Damian Shea (USA)

10.45 | **O-215** | On-line detection of algal toxins in sea water

Sergio Bodini (Italy)

Parallel Session 39: Impact of microalgae/cyanobacteria on aquatic organisms (incl. fish kills and shellfish mortalities) **AUDITORIUM 800**

Session chair: Leila Basti (Tokyo Univ. Mar Sci Technol, Japan)

Session co-chair*: Jean-Luc Rolland

09.30 | **O-216** | Exploring growth dynamics and ichthyotoxicity of the Chilean *Pseudochattonella verruculosa*

Jorge I. Mardones (Chile)

09.45 | **O-217** | *Prymnesium parvum* blooms and DMSP: production, metabolism and its impact to the environment»

Peter Paolo Lanzarote Rivera (United Kingdom)

10.00 | **O-218** | Feeding responses of *perna viridis* & *magallana bilineata* when exposed to harmful algae, *pyrodinium bahamense*

Jennifer Maister (Philippines)

10.15 | **O-219** | Diversity and occurrence of harmful algal blooms in Kuwait's marine environment, NW Arabian Gulf

Igor Polikarpov (Kuwait)

10.30 | **O-220** | Abalone farms suffer devastating mortalities attributed to yesso-toxin-producing dinoflagellates

Grant Colborne Pitcher (South Africa)

10.45 | **O-221** | Acute effects on *Danio rerio* exposed to extracts of *Sphaerospermopsis torques-reginae* (Cyanobacteria) (ITEP-24) producing anatoxin-a(s)

Ernani Pinto (Brazil)

11.00-11.30 | Coffee break **EXHIBITION AREA**

11.30-13.00 | Parallel Sessions

Parallel Session 40: Networking activities around HABs : Global HAB, Global HAB Status report, ICES-WGs and other initiatives ROOM 150

Session chair: Elisa Berdalet (CSIC, Spain)

Session co-chair*: Adriana Zingone

11.30 | **O-222** | Towards consensus reporting on the Global Status of Harmful Algal Blooms

Gustaaf Marinus Hallegraeff (Australia)

11.45 | **O-223** | Overview of HABs in the Mediterranean Sea: a contribution to the Global HAB Status Report

Adriana Zingone (Italy)

12.00 | **O-224** | Development of an inter-agency Global Ciguatera Strategy: FAO, IAEA, IOC-UNESCO and WHO joint initiative to address Ciguatera Poisoning

Marie-Yasmine Dechraoui Bottein (Monaco)

12.15 | **O-225** | Harmful Algae Networking with ICES Working Groups on Introduction / Transfer of Marine Organisms and Ballast Water / Other Ship Vectors

Cynthia Hipp Mckenzie (Canada)

12.30 | **O-226** | The Global HAB Status Report: the FANSA update based on OBIS and HAEDAT maps and databases

Inés Sunesen (Uruguay)

12.45 | **O-227** | International phytoplankton intercomparison (IPI) exercises in the abundance and composition of marine microalgae 2011-2017

Rafael Salas (Ireland)

Parallel Session 41: Toxin analysis – Novel detection methods ROOM 300

Session chair: Ana Gago (Univ. Vigo, Spain)

Session co-chair*: Ronel Biré

11.30 | **O-228** | Boronate techniques for clean-up and concentration of diol-containing algal toxins

Christopher Owen Miles (Canada)

11.45 | **O-229** | Simultaneous monitoring of maitotoxin and ciguatoxins in algal cultures and fish extracts

D. Tim Harwood (New Zealand)

12.00 | **O-230** | Characterising the performance of the ciguatoxin-radioligand receptor binding assay using a brevetoxin as standard

Ma Llorina Ranada (Philippines)

12.15 | **O-231** | The zebrafish animal model as a tool for detecting marine unidentified biotoxins and toxins' metabolites

Sandra Rainieri (Spain)

12.30 | **O-232** | Enzymatic biosensor for the detection of paralytic shellfish poisoning toxins

Alisa Rudnitskaya (Portugal)

12.45 | **O-233** | First insights into the biosynthesis of ovatoxins, palytoxin analogues from the dinoflagellate *Ostreopsis cf. ovata*.

Eva Ternon (France)

Parallel Session 42: Impact of microalgae/cyanobacteria on aquatic organisms (incl. fish kills and shellfish mortalities) **AUDITORIUM 800**

Session chair: *Claudia Wiegand (Université de Rennes 1, France)*

Session co-chairs*: *Vera Trainer*

11.30 | **O-234** | Synergistic and antagonistic effects of multi-specific HAB on reproduction of Japanese pearl oyster

Leila Basti (Japan)

12.00 | **O-235** | Bioactive extracellular compounds produced by *Alexandrium minutum* affect oyster gametes

Justine Castrec (France)

12.15 | **O-236** | The Paralytic Shellfish Saxitoxin induces apoptosis of oyster immune cells via a caspases-dependent pathway

Jean-Luc Rolland (France)

12.30 | **O-237** | Tropical waters: Cyanobacterial dynamics and impact of their toxins over 3 generations on the tropical *Daphnia lumholtzi*

Claudia Wiegand (France)

12.45 | **O-238** | Can the blue diatom *Haslea ostrearia* with strong biological activity be considered as a harmful alga?

Charlotte Falaise (France)

13.00-14.30 | Lunch break **EXHIBITION AREA**

14.30-15.00 | **Yasumoto-award 2016 Lecture** **AUDITORIUM 800**

YL2 | The evolution of algal toxin measurement science

Michael A. Quilliam (Canada)

15.00-16.30 | Parallel Sessions

Parallel Session 43: Networking activities around HABs: Global HAB, Global HAB Status report, ICES-WGs and other initiatives ROOM 300

Session chair: *Adriana Zingone (SZN, Italy)*

Session co-chair*: *Elisa Berdalet*

15.00 | **O-239** | GlobalHAB (IOC-UNESCO and SCOR): International coordination for sound knowledge of HABs to manage their impacts

Elisa Berdalet (Spain)

15.30 | **O-240** | Incorporation of state and local fishery and health managers in the formulation of national HAB policy

Daniel Ayres (USA)

15.45 | **O-241** | Looking for HABs along the East Coast of the United States

Elizabeth Fensin (USA)

16.00 | **O-242** | Intercalibration activity of the Italian Regional Environmental Protection Agencies network for *Ostreopsis* bloom managements

Valentina Giussani (Italy)

16.15 | **O-243** | UniEuk: time to speak a common language in protistology

Raffaele Siano (France)

Parallel Session 44: Toxin analysis – Novel detection methods

AUDITORIUM 800

Session chair: *Ronel Biré (Anse, France)*

Session co-chair*: *Ana Gago*

15.00 | **O-244** | Preparation of qNMR calibrated standards for metabolite ciguatoxins and brevetoxins

Takeshi Yasumoto (Japan)

15.15 | **O-245** | Reference Materials and Analytical Methods for Analysis of Tetrodotoxin in Seafood

Pearse McCarron (Canada)

15.30 | **O-246** | Portable System for Early Detection of Harmful Algal Bloom Toxins

Sarah Bickman (USA)

15.45 | **O-247** | Micro-distribution of tetrodotoxin in the New Zealand clam *Paphies australis*

Laura Biessy (New Zealand)

16.00 | **O-248** | Microcystins Toxicity Equivalent

Dorothy Yu Huang (Canada)

16.15 | **O-249** | Spirolides from *Alexandrium ostenfeldii* Isolated from Greenland

Joyce Nieva (Germany)

Parallel Session 45: Mitigation of HABs and water treatment technologies ROOM 150

Session chairs: Jean-François Humbert (INRA, France)

Session co-chair*: Triantafyllos Kaloudis

15.00 | **O-250** | Feasibly successful trials of sediment perturbations as prevention strategies for *Chattonella* red tides in the Seto Inland Sea, Japan

Ichiro Imai (Japan)

15.15 | **O-251** | The mechanism of modified clay controlling harmful algal blooms revealed by physio-biochemistry and transcriptome analysis

Zhiming Yu (China)

15.30 | **O-252** | Impacts and transcriptomic effects of algicidal compounds produced by *Shewanella* sp. IRI-160 on *Karlodinium veneticum*

Yanfei Wang (USA)

15.45 | **O-253** | Effects of a bacteria-produced algicide on non-target marine animal species

Victoria Elizabeth Simons (USA)

16.00 | **O-254** | Can macroalgae be used to mitigate harmful effects of *Cochlodinium polykrikoides* and other HABs on coastal marine aquaculture?

Peter Sylvers (USA)

16.15 | **O-255** | One model to help them all? Challenges facing harmful algal bloom prediction in the coastal zone

Clarissa Anderson (USA)

16.30-17.00 | Coffee break EXHIBITION AREA

17.00-18.00 | Closing Ceremony AUDITORIUM 800

SATELLITE SESSIONS

SATELLITE SESSION ON SENSORS FOR CYANOBACTERIA AND OTHER HABS

MONDAY 22 OCTOBER 2018 | 12.30-13.15 | Room 300

NEW TOOLS AND APPROACHES FOR THE MONITORING OF HARMFUL BLOOMS

Chairs : Jean-François Humbert (France), Kamel Soudani (France)

DETAILED PROGRAM :

Presentation of the drone system developped in the framework of the OSS-Cyano research program

Gonzague Six (IFSTTAR, France)

Presentation of a movie on the OSS-Cyano research program

Catherine Freissinet (ARTELIA, France)

Open discussion on the new tool allowing performing continuous monitoring of cyanobacteria (including water and aerial sensors) and on drone systems

- Limited number of seats, priority access to pre-registered participants on a « first come, first served » basis
- Lunch boxes will be distributed to participants at the end of the session

SATELLITE SESSION: IN-SITU INSTRUMENTATION FOR PHYTOPLANKTON, THE IFCB

TUESDAY 23 OCTOBER 2018 | 13.30-14.15 | Room 300

THE ALLURE OF AUTOMATED MICROSCOPY FOR MONITORING PROGRAMS FROM PROMISE TO REALITY, WITH A FEW ROAD BUMPS

Dr Raphael Kudela, Professor of ocean sciences (University of California, Santa Cruz, USA)

- Limited number of seats, priority access to pre-registered participants on a « first come, first served » basis

SATELLITE SESSION ON BIOMOLECULAR METHODS FOR HAB SPECIES

THURSDAY 25 OCTOBER 2018 | 13.30-14.15 | Room 300

WORKSHOP ON MORPHO-MOLECULAR METHODS TO STUDY HARMFUL ALGAE

Chairs: Kenneth Mertens (France), Lincoln MacKenzie (New Zealand), Urban Tillmann (Germany), Nicolas Chomérat (France)

DETAILED PROGRAM:

State of the art and new challenges for qPCR assays for Amphidomataceae

Urban Tillmann (Germany)

Use of molecular probes for the PCR detection of ASP, DSP, PSP, & AZP toxigenic producing phytoplankton in Irish waters

Dave Clarke (Ireland)

Field deployable qPCR assays for Alexandrium cells and cysts

Lincoln MacKenzie (New Zealand)

- Limited number of seats, priority access to pre-registered participants on a « first come, first served » basis

YOUNG INVESTIGATOR NETWORKING SESSION

**CALLING DOCTORAL STUDENTS,
POSTDOCS & EARLY CAREER SCIENTISTS!**

SUNDAY 21 OCTOBER, 2018 17:00 – 19:00
ROOM BC



Come attend the Young Investigator Networking Session to meet your peers and get comfortable talking with established scientists in government, academia and industry.

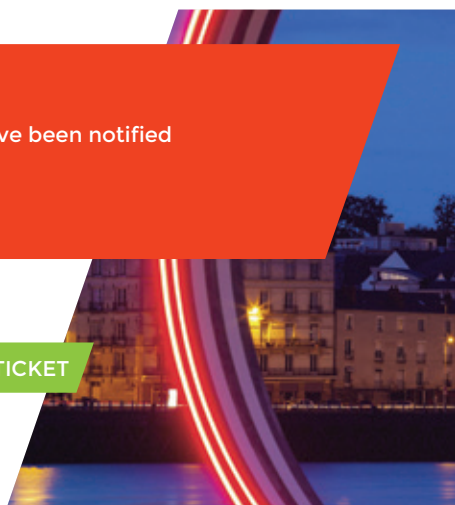
Drs. Kathi Lefebvre and Stephanie Moore (pictured here) will lead the session and have planned interactive activities designed to teach networking skills to young scientists.

Snacks and beverages will be provided courtesy of Fluid Imaging Technologies, the maker of the FlowCam.



Only for participants who pre-registered and who have been notified of their acceptance for participating in the session.

PLEASE MAKE SURE YOU BRING YOUR ADMISSION TICKET



POSTERS

359 posters have been successfully accepted. Posters will be displayed continuously from Sunday 21 October to Friday 26 October in the Poster area on the ground floor.

Three poster sessions have been scheduled (please refer to the following section for assigning of posters in Poster sessions)

- POSTER SESSION 1 – MONDAY 22 OCTOBER / 17.30–18.30
- POSTER SESSION 2 – TUESDAY 23 OCTOBER / 18.45–19.45
- POSTER SESSION 3 – THURSDAY 25 OCTOBER / 18.45–19.45

Mounting materials will be supplied by the Conference and available at the welcome desk. Conference staff will be present to assist you for finding your board and mounting your poster (during mounting hours).

Presenting authors are kindly requested to be present throughout the official Poster Sessions in order to explain their research and to answer questions from the delegates. In addition, participants will also have the possibility to view posters during the breaks and lunches therefore authors are encouraged to be present at their posters during those times as well.

Mounting (Poster area)	Sunday 21 October 2018	From 14.00 to 19.00
Removing (*)	Friday 26 October 2018	From 15.00 to 18.00

(*) Poster should be removed at the stated times.

The organizers are not responsible for loss or damage of those posters which are not removed by authors within the times of dismantling as indicated above. Authors will not be able to retrieve posters they have not removed in time.



LIST OF POSTERS

ASSIGNING OF POSTERS IN POSTER SESSIONS:

Poster 1: Poster Session 1: Monday 22 October 2018, 17.30 – 18.30

Poster 2: Poster Session 2: Tuesday 23 October 2018, 18.45 – 19.45

Poster 3: Poster Session 3: Thursday 25 October 2018, 18.45-19.45

(*) : The poster will also be presented during an Ignite Talk Session

ECO-PHYSIOLOGY & CELLULAR BIOLOGY OF HARMFUL ALGAE AND CYANOBACTERIA

P-001 | Adaptation of phycocyanin and phycoerythrin concentration in *Microcystis* spp. under low and elevated light conditions

Dominique Suzanne Derminio, (USA) - **Poster 1**

P-002 | Paralytic shellfish toxin content and sxtA gene copy number of *Gymnodinium catenatum* in different growth phases

Armando Mendoza Flores (Mexico) - **Poster 2**

P-003 | An effective method for detecting prey DNA from the genera *Dinophysis* and *Phalacroma* by using two specific primer sets

Coh Nishitani (Japan) - **Poster 3**

P-004 | Chemical factors affecting the growth of *Karenia mikimotoi* in the Bungo Channel, Japan

Setsuko Sakamoto (Japan) - **Poster 1**

P-005 | From growth to aging, roles and fates of lysosomes (orange-red bodies) in benthic dinoflagellate cells

Cécile Jauzein (France) - **Poster 2**

P-006 | Carbon and light availability influence microcystin production by PCC 7806^(*)

Declan John Hunter Maxwell (United Kingdom) - **Poster 3**

P-007 | Effects of nutrient deficiency and high light on growth, photosynthesis and motility in a red tide dinoflagellate *Karenia mikimotoi*^(*)

Koki Yuasa (Japan) - **Poster 1**

P-008 | Influence of temperature, irradiance and pH on the growth of *Teleaulax amphioxieia*, trophic chain member of the toxic genus *Dinophysis*^(*)

Sylvain Gaillard (France) - **Poster 2**

P-009 | Effects of strong light and high temperature on photosystem II in red tide-forming algae *Karenia mikimotoi* and *Chattonella antiqua*

Yoshitaka Nishiyama (Japan)- **Poster 3**

P-010 | Differences in xanthophyll de-epoxidase activity in high and low toxic strains of *K. brevis*

Ricardo Colon (USA) - **Poster 1**

P-011 | Immunolocalization of microcystins and the photoprotective OCP (orange carotenoid protein) in *Planktothrix* during high-light stress

Chakib Djediat (France) - Poster 2

P-012 | Salt stress response of brackish and freshwater strains of *Microcystis aeruginosa*

Maxime Georges Des Aulnois (France) - Poster 3

P-013 | Different strategies of attachment to substrate of the toxic benthic dinoflagellate *Ostreopsis cf. ovata*

Giorgio Honsell (Italy) - Poster 2

P-014 | Physiological changes induced by salinity in filamentous cyanobacteria producing saxitoxins

Emilie Houlié (France) - Poster 1

P-015 | Optimization of laboratory cultures of two dinophysis species

Maria García-Portela (Spain) - Poster 2

P-016 | Characterization and comparison of toxin-producing strains of *Dinophysis acuta*, *Dinophysis caudata* and *Dinophysis sacculus*

Véronique Séchet (France) - Poster 3

P-017 | Cyanobacterial seasonal fluctuation and the presence of the microcystin producing genes in Billings Reservoir (Diadema/SP – Brazil)

Cristina Souza Freire Nordi (Brazil) - Poster 1

P-018 | Is Cell Division Time a Constant for *Karlodinium veneticum*? Strain and Temperature Effects with Implications for In Situ Growth

Allen R. Place (USA) - Poster 2

P-019 | *Nitzschia bizertensis*: Distribution, toxicity and eco-toxicology

Asma Sakka Hlaili (Tunisia) - Poster 3

P-020 | Study of the neurotoxic dinoflagellate *Gymnodinium catenatum*, responsible of PSP outbreaks in the Mediterranean waters of Morocco

Hicham Aboualaalaa (Morocco) - Poster 1

P-021 | *Karenia mikimotoi*'s inability adapting to fluctuating light may control their migration to mid-deep layer

Kazuhiko Koike (Japan) - Poster 2

P-022 | Characterization of *Chattonella* spp. of Todos Santos Bay, and the effects on early-stages of the Pacific oyster *Crassostrea gigas*

Norma Valeria Ahumada (Mexico) - Poster 1

P-023 | Effect of bacteria in the germination biochemical composition of growth of *Gymnodinium catenatum*

Dulce Valeria Ramírez Rodríguez (Mexico) - Poster 2

P-023B | The control of microcystin content in low water intake by using the intracellular dynamics of blue green-algae

Yuji Yahagi (Japan) - **Poster 1**

BIOLOGICAL OCEANOGRAPHY AND LIMNOLOGY OF HABS

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Paul Dees (United Kingdom) - **Poster 3**

P-025 | Algal blooms: how are they harming models used for climate management?

Ian R. Jenkinson (France) - **Poster 1**

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M.A. Pinto-Torres (Chile) - **Poster 2**

P-027 | The origin of Dinophysis acuta blooms which impact Irish aquaculture

Robin Raine (Ireland) - **Poster 1**

P-028 | Imaging phytoplankton – analyzing the Baltic Sea phytoplankton communities using Imaging FlowCytobot

Kaisa Kraft (Finland) - **Poster 2**

P-029 | Distribution and abundance of toxic HABS and oceanographic conditions during summer 2017 in sub antarctic waters of Southern Chile

Maximo Frangopulos (Chile) - **Poster 3**

P-030 | Combination of “machine learning” methodologies and imaging-in-flow system to detect Harmful Algae semi-automatically

Guillaume Wacquet (France) - **Poster 1**

P-031 | Automated techniques to follow the spatial distribution of Phaeocystis globosa and diatoms spring blooms in the Channel and North Sea

Arnaud Louchart (France) - **Poster 2**

P-032 | Micro-phytoplankton and Alexandrium catenella abundances, in relation to climatic-oceanographic indices in the Magellan region, Chile

Gemita Pizarro (Chile) - **Poster 3**

P-033 | Forecasting ‘every beach, every day’ to improve public health information during karenia brevis blooms

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Katherine Perri (USA) - **Poster 3**

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Mary Carmen Ruiz-de la Torre (Mexico) - **Poster 2**

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P-316 | Evaluation of the total extract of *Heterosigma Akashiwo* on the model copepod *Tisbe longicornis*: Applications in salmon industry
Allisson Astuya (Chile) - **Poster 3**

P-317 | Stable isotopic labelling of marine biotoxins through small scale culturing using ¹³C labelled sodium bicarbonate and carbon dioxide
Stephen Burrell (Ireland) - **Poster 2**

P-318 | The Algal Resources Collection: an asset for the cultivation, maintenance, and identification of toxic microalgae^(*)
Charles Wingert (USA) - **Poster 1**

EPIDEMIOLOGY, REPORTS OF HUMAN OUTBREAK CASES

P-319 | Records of Harmful algal poisoning symptoms in coastal communities of Nigeria, West Africa^(*)
Medina Omo Kadiri (Nigeria) - **Poster 2**

P-320 | HAB in the Aysen region of Chile: a challenge for public health
Andrea Rivera Belmar (Chile) - **Poster 3**

SOCIO-ECONOMIC IMPACTS OF HABs

P-321 | The impact of algae bloom on drinking water treatment and distribution^(*)
Louise Vanysacker (Belgium) - **Poster 1**

P-322 | Traditional preparation methods to examine the distribution of Paralytic Shellfish Toxins in whole and partial butter clams^(*)
Melissa Peacock (USA) - **Poster 3**

INTEGRATED ECOSYSTEM ASSESSMENT AND FORESIGHT PLANNING (SCENARIO BUILDING, HABS AND MULTI-USE OFFSHORE PLATFORMS, HABS AND DESALINATION...)

P-323 | Integrating various data products to predict risk and impact of HAB events on the Aquaculture Sector (PRIMROSE)

Joe Silke (Ireland) - **Poster 1**

OPTICAL SENSORS AND DRONE SYSTEMS FOR THE MONITORING OF HARMFUL BLOOMS

P-324 | Detection by drone of eutrophication of freshwater

Luc Brient (France) - **Poster 1**

P-325 | A platform for real time observation of the diversity, dynamics, and vertical distribution of harmful algae

Michael Brosnahan (USA) - **Poster 2**

P-326 | Application of Current Technologies for the Detection and Monitoring of Toxins in Marine Environments

Jeyan Sreekumar (United Kingdom) - **Poster 1**

P-327 | Surveillance of changing bloom conditions through the application of optical remote sensing and ecological associations^(*)

Michelle C. Tomlinson (USA) - **Poster 2**

NETWORKING ACTIVITIES AROUND HABS : GLOBALHAB, GLOBAL HAB STATUS REPORT, ICES-WGS AND OTHER INITIATIVES

P-328 | Harmful algal bloom events in the Philippines: temporal and spatial trends

Aletta Yñiguez (Philippines) - **Poster 2**

P-329 | Blooms of *Gymnodinium catenatum* and *Cochlodinium catenatum* in Santa Elena Bay, Ecuador: importance of implementing monitoring programs

Olga Carnicer (Spain) - **Poster 3**

P-330 | CIGUA-PIRE Advancing Global Networks for Ciguatera in Tropical Oceans through Partnerships in International Research and Education

Alison Robertson (USA) - **Poster 2**

P-331 | Overview of New Zealand HAB species and HAEDAT Events, with a comparison to Australian events

Enora Jaffrezic (France) - **Poster 1**

P-332 | «RAMOGE, an International Agreement in the NW Mediterranean Sea with a working group dedicated to *Ostreopsis* sp.»

Rodolphe Lemée (France) - **Poster 2**

P-333 | Summary Report on Harmful Algal Blooms in Latin America and The Caribbean (1956-2018)

Silvia Méndez (Uruguay) - Poster 3

P-334 | The power of comparative ecosystem approaches by the North Pacific Marine Science Organization

Nicky Haigh (USA) - Poster 1

P-335 | CoCliME: Co-development of CLimate services for adaptation to changing Marine Ecosystems – focus on the North Sea Case Study

Kerstin Toebe (Germany) - Poster 3

ACCUMULATION AND BIOTRANSFORMATION OF ALGAL, BACTERIAL AND CYANOBACTERIAL TOXINS IN AQUATIC TROPHIC CHAINS

P-336 | Paralytic shellfish toxin accumulation and metabolization in Sydney Rock Oysters (*Saccostrea glomerata*) selected for growth

Malwenn Lassudrie (France) - Poster 1

P-337 | Fatty acid esters of gymnodimine in some field shellfishes and mussels (*Mytilus galloprovincialis*) fed with *Karenia selliformis*

Ying Ji (China) - Poster 2

P-338 | Distribution and differences of diarrhetic shellfish toxins in Japanese scallops

Ryoji Matsushima (Japan) - Poster 3

P-339 | The effects of water depths and geographical distances on toxicity variability of paralytic shellfish toxins accumulated in bivalves

Ryuichi Watanabe (Japan) - Poster 1

P-340 | Response of CYP450 to exposure of the DSP toxins-producing dinoflagellate *Procentrum lima* in *Perna viridis*

Wei-Dong Yang (China) - Poster 2

P-341 | Target screening for potential dioxin-like compounds in Japanese bivalves using GCxGC-TOFMS

Akitoshi Goto (Japan) - Poster 3

P-342 | Analysis of tetrodotoxin in flesh of a pufferfish, *Takifugu flavipaterus*, collected from the Seto Inland Sea, Japan

Naomasa Oshiro (Japan) - Poster 1

P-343 | YTX and HOMOYTX accumulation in mussels as footprint, respectively, of *Prorocentrum reticulatum* and *Gonyaulax spinifera* blooms

Rossella Pistocchi (Italy) - Poster 2

P-344 | Toxin accumulation in benthic marine fauna and exposure of juvenile green turtles to potentially toxic microalgae in southern Brazil

Angel Ramon Moreira Gonzalez (Cuba) - Poster 3

P-345 | *Prorocentrum lima*, a new diarrhetic shellfish toxins producer in northern Chile
Gonzalo Alvarez (Chile) - **Poster 1**

P-346 | Biodilution of cyanobacterial toxin microcystin in small fish from eutrophic Nyanza Gulf, Lake Victoria, Kenya
Benard Simiyu (Austria) - **Poster 2**

P-347 | Ciguatoxin kinetics of a reconstructed coral reef food web: a controlled multi-pathway feeding study with caridean shrimp and damselfish
Clayton Bennett (USA) - **Poster 3**

P-348 | Biosynthetic enzymes related to marine polyethers in dinoflagellate extracts^(*)
Masayuki Satake (Japan) - **Poster 1**

P-349 | Combined effects of warming and acidification on PSP toxins accumulation and genotoxicity in mussels *Mytilus galloprovincialis*
Pedro R Costa (Portugal) - **Poster 2**

P-350 | Presence and persistence of the amnesic shellfish poisoning toxin, domoic acid, in octopus and cuttlefish brains
Pedro R Costa (Portugal) - **Poster 3**

P-351 | Evidence of *Noctiluca scintillans* grazing during a bloom of toxic *Dinophysis acuminata* complex, south Brazil^(*)
Bruna Sobrinho (Brazil) - **Poster 1**

P-352 | High uptake and slow elimination of diarrhetic toxins by scallops (*Nodipecten nodosus*) under simulated bloom conditions
Isabel Leite (Brazil) - **Poster 2**

P-353 | Depuration and anatomical distribution of domoic acid in the scallop *Argopecten purpuratus*
Gonzalo Alvarez (Chile) - **Poster 2**

P-354 | Lipophilic Toxins profiles in cockle and smooth clam from the central Adriatic Sea (Croatia)
Ivana Ujevic (Croatia) - **Poster 1**

P-355 | Kinetics of BMAA accumulation and detoxification by the freshwater bivalves *Anodonta anatina* and *Dreissena polymorpha*
Alexandra Lepoutre (France) - **Poster 2**

P-356 | Lipophilic toxins in three bivalve species from Bahía de La Paz, Mexico
Ignacio Leyva (Mexico) - **Poster 3**

P-357 | Experimental exposure of *Mytilus* sp. to two toxic UK *Alexandrium* species, implications for English monitoring programmes^(*)
Adam Lewis (United Kingdom) - **Poster 2**

P-358 | Multiple toxins determined in shellfish collected from the north Bering Sea and Chukchi Sea shelf and its northern area
Chunlei Gao (China) - **Poster 3**

SOCIAL PROGRAM

EVENING PROGRAM

ICE-BREAKER AT LA CITÉ, NANTES EVENTS CENTER

SUNDAY 21 OCTOBER 2018
FROM 19:00 TO 20:00



Let's kick-off the 18th International Conference on Harmful Algae with a convivial ice-breaker drink in the welcome area of the conference center.

- No registration needed. Free and open to all registered participants, sponsors and exhibitors.

PLEASE MAKE SURE YOU BRING YOUR NAME BADGE

PARTY «BRETONNE» AT LA CITÉ, NANTES EVENTS CENTER

TUESDAY 23 OCTOBER 2018
FROM 20:00 TO 21:30



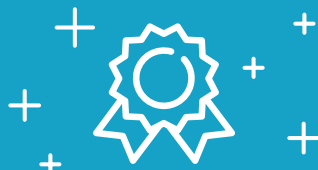
In the heart of the exhibition area at La Cité conference center, join us to discover the highlights of the «Bretonne» gastronomy and traditions. Come taste the seafood products in all their forms, the local products and of course the famous Breton crêpes.

- Upon registration (15 € per participant, 30 € per accompanying person – gives also access to the ice-Breaker)
- Onsite request cannot be guaranteed.
- Exhibitors are cordially invited.

PLEASE MAKE SURE YOU BRING YOUR ADMISSION TICKET

ISSHA AUCTION AT LA CITÉ, NANTES EVENTS CENTER

THURSDAY 25 OCTOBER 2018
FROM 19:45 TO 22:00
AUDITORIUM 800



The ISSHA auction is always a highlight of the meeting and we are encouraging everyone to donate items and participate in the event.

- No registration needed. Free and open to all registered participants, sponsors, exhibitors and accompanying persons.

PLEASE MAKE SURE YOU BRING YOUR NAME BADGE

Payment by cash and credit card accepted.



ICHA 2018 GALA DINNER CHÂTEAU DE LA POTERIE, LA CHAPELLE-SUR-ERDRE

FRIDAY 26 OCTOBER 2018
 FROM 19:15 TO 24:00

DRESS CODE: SMART CASUAL
 (COMFORTABLE SHOES)



Start your evening with a romantic aperitif cruise on board a boat along the Erdre River to reach the Château de la Poterie.

The Pottery, elegant and only Folie Nantaise on the banks of the Erdre river, was built at the gates of Nantes at the end of the 18th century on the site of a former Roman tile factory.

For nearly 30 years, stables and outbuildings have been fully restored to welcome guests in this natural setting on the banks of the Erdre classified as a major national environmental site. The Erdre, «the most beautiful river of France», said François 1st, winds tenderly on 35 kms between wooded slopes and properties of charm.

Come and enjoy a friendly and memorable evening with the ICHA 2018 other participants around a gourmet dinner with musical entertainment and dance.

- Upon registration (65 € per participant)
- Limited number of seats - Onsite request cannot be guaranteed.

PLEASE MAKE SURE YOU BRING YOUR ADMISSION TICKET

SCHEDULE:

19.15 | Meeting at Bateaux Nantais river station (see after for details)

19.30 | Departure of boats and aperitif cruise along the Erdre River

20.15 | Arrival at Château de la Poterie for a seated dinner

Return transfers to Nantes will be organized by buses at the following times:
22.30, 23.30, 00.30

BOATS LEAVE ON TIME, THANK YOU FOR BEING PUNCTUAL

GALA DINNER – CHÂTEAU DE LA POTERIE

MEETING POINT:

GARE FLUVIALE – BATEAUX NANTAIS
PLACE WALDECK ROUSSEAU
44000 NANTES

SCHEDULE

19:15 | MEETING AT GARE FLUVIALE
BATEAUX NANTAIS
19:30 | DEPARTURE OF BOATS



HOW TO REACH THE GARE FLUVIALE – BATEAUX NANTAIS

BY TRAMWAY

MOTTE ROUGE STATION (LINE 2)

From La Cité des Congrès (20 minutes)

- Take the tramway Line 1 at Duchesse Anne Château (on the map)
- Change for Line 2 at Commerce Station.
- Get down at Motte Rouge station, and cross Pont de la Motte Rouge.

BY BUS

CAMBRONNE BUS STOP (LINE C6)

From Cambronne bus stop (on the map) walk on Rue du 65ème regiment d'infanterie until you reach Place Waldeck Rousseau (5 minutes)



Getting to the tramway station Duchesse Anne Château from la Cité des Congrès

BY WALK

25 minutes walk from La Cité des Congrès

CULTURAL TOURS

A specific optional tours program has been tailor-made for registered participants and accompanying persons.

These visits will be an excellent opportunity to discover some of the most outstanding historic, artistic and heritage highlights of Nantes and its region.

- All tours will be conducted in English by a licenced guide.
- All tours depart from and return to La Cité, Nantes Events Center
- Means of transportation: walking, public transport, private coach

- **Upon registration**
- Limited number of seats - Onsite request cannot be guaranteed.

Participants are expected 15 minutes prior to the departure time in the welcome area of ICHA2018, La Cité Nantes Events Center

PLEASE MAKE SURE YOU BRING YOUR ADMISSION TICKET

E1 / WALKING TOUR OF NANTES: THE HISTORY OF THE CITY FROM THE MIDDLE AGES TO THE 19TH CENTURY

- Wednesday 24 October 2018
- Departure from La Cité, Nantes Events Center, at 14:30
- Return to La Cité at 17:30
- Walking tour (way back with public tram)
- Price per person: 25.00 €, VAT included

E2/ LES MACHINES DE L'ÎLE

- Wednesday 24 October 2018
- Departure from La Cité, Nantes Events Center, at 15:30
- Return to La Cité at 18:30
- Walking visit & Return transfer La Cité/Les Machines de l'île with public tram
- Price per person: 28.00 €, VAT included

E3/ FROM NANTES TO CLISSON, THE WINE ROUTE

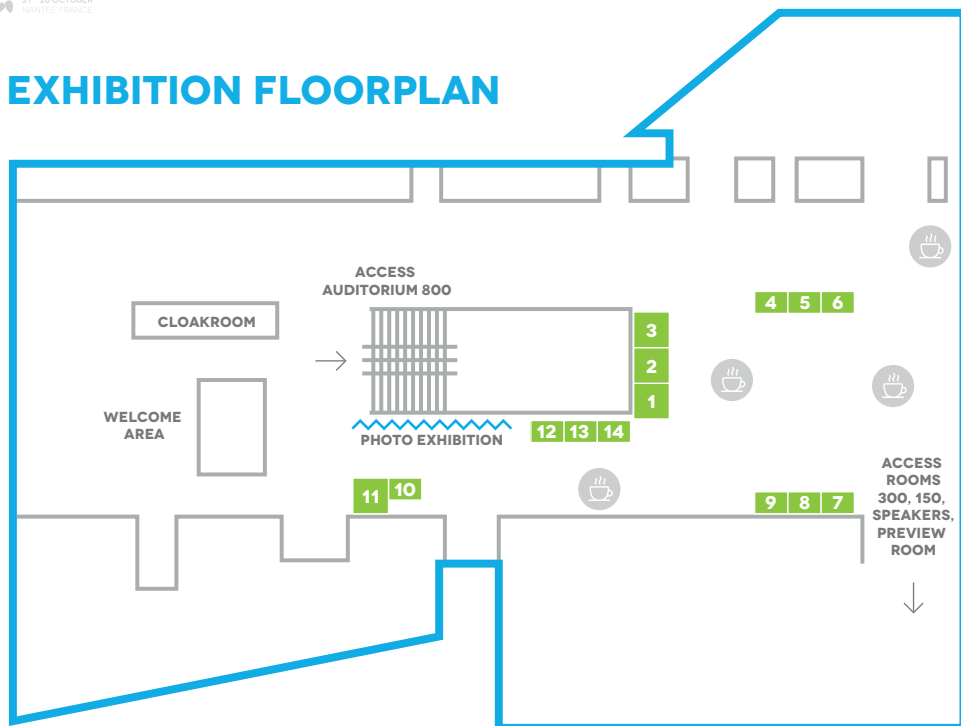
- Wednesday 24 October 2018
- Departure from La Cité, Nantes Events Center, at 14:00
- Return to La Cité at 18:00
- Bus tour & village walking tour
- Price per person: 35.00 €, VAT included

E5/ GUÉRANDE, THE WHITE LAND

- Wednesday 24 October 2018
- Departure from La Cité, Nantes Events Center, at 13:00
- Return to La Cité at 19:30
- Bus tour and walking visit
- Price per person: 37.00 €, VAT included

For more information on the tours, please visit www.icha2018.com

EXHIBITION FLOORPLAN



EXHIBITORS LIST (BY BOOTH NUMBER)	BOOTH(S)
MCLANE RESEARCH LABORATORIES	1
SYNOXIS	2
FLUID IMAGING TECHNOLOGIES	3
CYTOBUOY B.V.	4
CAMBRIDGE ISOTOPE LABORATORIES	5
IKA WERKE GMBH & CO. KG	6
CIFGA	7
STATERA ENVIRONMENTAL	8
NOVAKITS ABRAXIS	9
JERICO-NEXT	10
IFREMER	11
INTERNATIONAL SOCIETY FOR THE STUDY OF HARMFUL ALGAE (ISSHA)	12
MARINE INSTITUTE	13
PHOTON SYSTEMS INSTRUMENTS	14

LIST OF EXHIBITORS / PROFILES

CAMBRIDGE ISOTOPE LABORATORIES

BOOTH N° 5

Contact person: Ben PRIEST

Address: 3 Highwood Road - 01876 Tewksbury - USA

Phone: +19782961931 - **Fax:** +19787492768 - **E-mail:** benp@isotope.com

Website: isotope.com

CIL offers high-quality analytical standards for environmental, food, water, and human exposure analysis. CIL recently introduced a series of native and ¹⁵N-isotopically labeled cyanotoxin standards. Visit us at Booth #5 to learn about our full range of products and discuss your standard needs.

CIFGA

BOOTH N° 7

Contact person: Eva CAGIDE

Address: Plaza de Santo Domingo, 20 - 5 Planta - 27001 Lugo - Spain

Phone: +34608073245 - **E-mail:** cifga.std100@cifga.es

Website: www.cifga.com

CIFGA develops biotoxins standards and reference materials for marine and freshwater toxins, and mycotoxins. They are obtained in-house, and recently CIFGA became the first company in the world externally accredited for the production of certified reference materials of certain marine biotoxins.

CYTOBUOY B.V.

BOOTH N° 4

Contact person: Tina SILOVIC

Address: Johan de Wittlaan 11 - 3445 AG Woerden - Netherlands

Phone: +31348688101 - **E-mail:** info@cytobuoy.com

Website: www.cytobuoy.com

Cytobuoy is a leading manufacturer of flow cytometers for scanning, imaging and analysis of particles in a fluid. Cytosense instruments enable researchers to continuously monitor phytoplankton community dynamics in-situ and in high frequency providing online warning for target (HAB) species.

FLUID IMAGING TECHNOLOGIES

BOOTH N° 3

Contact person: Harry NELSON

Address: 200 Enterprise Dr - 04074 Scarborough ME - USA

Phone: +12072893200 - **E-mail:** harry.nelson@fluidimaging.com

Website: www.fluidimaging.com

FlowCam technology combines the benefits of digital imaging, flow cytometry, and microscopy into a single instrument. FlowCam. Quickly measure the size and shape of microscopic particles in a fluid medium. Automatically analyzes thousands of particles per minute, ranging in size from 1µm - 5mm.

IFREMER

BOOTH N° 11

Contact person: Sophie PILVEN

Address: 155 rue Jean-Jacques Rousseau - 92138 Issy-Les-Moulineaux cedex - France

Phone: +33 (0)1 46 48 21 00 - **E-mail:** communication@ifremer.fr

Website: www.ifremer.fr

As organiser, IFREMER is honoured to welcome you at ICHA 2018 in Nantes. IFREMER is a French institute that undertakes research and expert assessments to advance knowledge on the oceans and their resources, monitor the marine environment and foster the sustainable development of maritime activities.

IKA WERKE GMBH & CO. KG

BOOTH N° 6

Contact person: Isabella ANTOSIK

Address: Janke & Kunkel Strasse 10 - 79219 Staufen - Germany

Phone: +49 7633 831 -0 - **Fax:** +49 7633 831 - 98 - **E-mail:** sales@ika.de

Website: www.ika.com

Created in 1910, IKA laboratory, analysis and process technology is present on 4 continents and offers a wide range of innovative equipment for applications in research and development.

INTERNATIONAL SOCIETY FOR THE STUDY OF HARMFUL ALGAE (ISSHA)

BOOTH N° 12

Contact person: Vera TRAINER (President), Wayne LITAKER and Gustaaf HALLEGRAEFF (Vice Presidents), Anke KREMP (Secretary), Henrik ENEVOLDSEN (Treasurer)

Address: IOC Science and Communication Centre on Harmful Algae - University of Copenhagen, Marine Biological Section - Universitetsparken 4 - 2100 Copenhagen Ø - Denmark

E-mail: h.enevoldsen@unesco.org

Website: www.issha.org

The International Society for the Study of Harmful Algae (ISSHA) promotes and fosters research and training programs on harmful algae, co-sponsors regional, national and international meetings, and convenes the bi-annual international conference on harmful algae.

JERICO-NEXT

BOOTH N° 10

Contact person: Patrick FARCY

Address: IFREMER CS 10070 - 29280 Plouzane - France

Phone: +33 (0)2 98 22 40 40 - **E-mail:** patrick.farcy@ifremer.fr

Website: www.jerico-ri.eu

JERICO-NEXT is a H2020 project funded by the European Commission and coordinated by Ifremer. The JERICO-NEXT project aims at extending the EU network of coastal observation by adding new innovative infrastructures while integrating biogeochemical and biological observations. We target to provide the researchers with continuous and more valuable coastal data coupling physical and biological information.

MARINE INSTITUTE

BOOTH N° 13

Contact person: Rafael GALLARDO SALAS

Address: Rinville - H91 R673 Oranmore - County Galway - Republic of Ireland

Phone: +353 91 387241 - **Fax:** +353 387237 - **E-mail:** rafael.salas@marine.ie

Website: www.marine.ie

We are the State agency responsible for marine research, technology development and innovation in Ireland. We provide scientific and technical advice to Government to help inform policy and to support the sustainable development of Ireland's marine resource.

MCLANE RESEARCH LABORATORIES

BOOTH N° 1

Contact person: Vinnie FERREIRA

Address: 121 Bernard St. Jean Drive - 02536 East Falmouth, Massachusetts - USA

Phone: +1 (508) 495-4000 - **Fax:** +1 (508) 495-3333 - **E-mail:** mclane@mclanelabs.com

Website: www.mclanelabs.com

McLane Research Laboratories manufactures time-series oceanographic profilers, samplers, and flotation. Our advanced in-situ samplers detect, identify, or collect phytoplankton. These include the Imaging FlowCytobot (IFCB), the Environmental Sample Processor (ESP), and the Phytoplankton Sampler (PPS).

NOVAKITS ABRAXIS

BOOTH N° 9

Contact person: Sylvain ENGUEHARD

Address: Société NOVAKITS - 40 Boulevard Jean Ingres - 44100 Nantes - France

Phone: +33 (0)9 61 58 14 40 - **Fax:** +33 (0)2 40 37 57 95

E-mail: s.enguehard@novakits.com

Website: www.novakits.com

NOVAKITS-ABRAXIS offers ELISA kits including MC ADDA EPA Official Method 546, rapid onsite field tests and a wide range of standards for the determination of freshwater and marine algal toxins : certified marine and freshwater standards, labeled isotopic cyanotoxins, ciguatoxins standards set....

PHOTON SYSTEMS INSTRUMENTS

BOOTH N° 14

Contact person: Katerina SLANINKOVA

Address: Drasov 470 - 664 24 Drasov - Czech Republic

Phone: +420 511 440 038 - **E-mail:** slaninkova@psi.cz

Website: www.psi.cz

Photon Systems Instruments is the world leader in designing and manufacturing state-of-the-art facilities for plant and algae cultivation and monitoring based on small-scale to large-scale analysis of physiological parameters, growth and other phenotypical traits.

STATERA ENVIRONMENTAL

BOOTH N° 8

Contact person: Damian SHEA

Address: 840 Main Campus Drive - 27606 Raleigh - USA

Phone: +19193323878 - **E-mail:** dshea@statera.org

Website: www.statera.org

Statera is an environmental technology and consulting company that develops innovative environmental monitoring products and services for our clients in industry, government, and academic research.

SYNOXIS

BOOTH N° 2

Contact person: Amélie ROBIN

Address: ZI les Relandières - 44850 Le Cellier - France

Phone: +33 (0)7 72 45 82 83 - **E-mail:** a.robin@synoxis.com

Website: www.synoxis-algae.com

«Your new way to cultivate microalgae».

Synoxis Algae designs and builds new generation photobioreactors for microalgae cultivation. Our goal is to "democratize microalgae cultivation" among professionals.

Meet LUCY, our «Plug and Play» photobioreactor on our booth.

INFORMATION FOR CHAIRS AND SPEAKERS

GUIDELINES FOR CHAIRPERSONS

- Locate your session room in due time
 - In Auditorium 800, a Chairperson table is installed on the stage
 - In Room 150 and Room 300, seats are reserved for Chairpersons in the first row
 - Respect the timing allowed for the session and for each presentation
 - All presentations, discussions and questions must be in English
-
- Chair: your main role is to introduce the session, the speakers and to conclude the session.
 - Co-chair: your main role is to be the time-keeper and to make sure there is enough time for discussion after each presentation.

TECHNICAL REQUIREMENTS FOR ORAL AND IGNITE PRESENTATIONS

The official language of the conference is English, which means that all presentations and questions must be delivered in ENGLISH.

Presentations must be downloaded from a notebook in the preview room (follow signage onsite) as far in advance as possible and **ONE HOUR BEFORE THE BEGINNING OF THE SESSION AT THE LATEST** (presentations for early morning sessions should be handed over the evening before).

Presentations received afterward can not be guaranteed audiovisual support. Personal computers cannot be connected to the projector in the session's rooms.

THE PREVIEW ROOM IS AT SPEAKER'S DISPOSAL DURING THE FOLLOWING HOURS:

Sunday 21 October 2018	from 14.00 to 19.00
Monday 22 October 2018	from 08.00 to 17.30
Tuesday 23 October 2018	from 08:30 to 18.45
Wednesday 24 October 2018	from 08:00 to 12:30
Thursday 25 October 2018	from 08:30 to 18.45
Friday 26 October 2018	from 08:30 to 18:00

USEFUL INFORMATION

CONFERENCE OFFICE

ICHA 2018 – MCI France

25, rue Anatole France – CS70139 – 92532 Levallois-Perret Cedex – France

Tel: +33 (0)1 53 85 82 58 – Fax: +33 (0)1 53 85 82 83

info@icha2018.com

CONFERENCE WELCOME DESK – OPENING HOURS

Sunday 21 October	From 14.00 to 20.00	Wednesday 24 October	From 8.00 to 12.30
Monday 22 October	From 8.00 to 18.30	Thursday 25 October	From 8.30 to 19.45
Tuesday 23 October	From 8.30 to 19.45	Friday 26 October	From 8.30 to 18.00

BADGES

A name badge will be provided with your registration documents onsite. For security and regulation purposes, the wearing of this badge is compulsory at all times both inside La Cité Nantes Events center and during all official events organized within the context of the conference.

CONFERENCE LANGUAGE

The conference language is English, no translation provided.

ABSTRACT BOOK

All registered participants will receive an electronic version of the Abstract Book on a USB Key upon arrival (inside the congress bag).

CERTIFICATE OF ATTENDANCE

All registered participants will receive a certificate of attendance upon arrival

AIRPORT INFORMATION

Nantes Atlantique Airport:
www.nantes.aeroport.fr

CLOAKROOM

Cloakroom is located at the main entrance next to the conference welcome desk. Service is provided free of charge to all participants (opened at conference hours).

CLIMATE AND CLOTHING

Nantes has a marine west coast climate that is mild with no dry season, warm summers. Heavy precipitation occurs during mild winters which are dominated by mid-latitude cyclones. Seasonality is moderate (Köppen-Geiger classification: Cfb).

Average temperature in October varies from 10 to 13 °C.

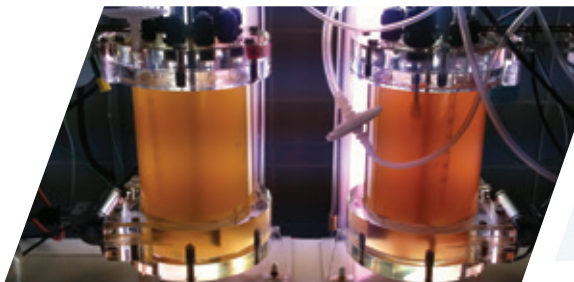
CURRENCY

France adopted the euro currency. These notes and coins can therefore be used in any country belonging to the euro zone.

1 EUR is divided into 100 centimes or cents.

- Notes: EUR 5, 10, 20, 50, 100, 200 and 500.
- Coins: 1, 2, 5, 10, 20 and 50 cents; EUR 1 and 2.

With the Euro in constant flux, please see www.xe.com for up-to-date exchange rates.



ELECTRICITY

In France the norm is 220 volts, with a frequency of 50 Hz. Voltage and sockets vary from country to country and so an adapter may be necessary.

For more information: www.worldstandards.eu/electricity/plug-voltage-by-country/

EMERGENCY NUMBERS

The pan-European emergency number 112 can be called for any type of emergency and an operator will direct you to the appropriate French department.

Alternatively, specific services can be reached as follows:

Fire brigade: 18

Police: 17

Accident and Emergency: 15

FOOD AND BEVERAGES

Coffee breaks and lunches are included in the registration fee and will be served in the exhibition area (ground floor) in allocated time.

HEALTH SERVICES

Chemists (called pharmacie in France) are usually open straight through from 8h30-19h30. They take it in turns to close on Sundays and also sometimes on Mondays. When a chemist is closed, the addresses of the nearest duty chemists are displayed on the door. A few chemists remain open late and even all night.

In case of emergency, the pan-European emergency number 112 can be called for any type of emergency. Or alternatively dial `15` for Accident and Emergency.

For further information on the French Medical system you can visit the «assurance maladie» website www.ameli.fr (website in French).



INSURANCE AND LIABILITY DISCLAIMER

Ifremer and MCI cannot be held liable for any hindrance or disruption of conference proceedings arising from political, social, health or economic events or any other unforeseen incidents beyond their control. The conference cancellation conditions shall apply in any case. Registration of a participant entails acceptance of the cancellation conditions. It is recommended that participants obtain adequate cover for travel, health, accident and cancellation insurance before they depart from their countries.

Ifremer and MCI as organizers will accept no liability for personal injuries sustained by or for loss or damage to property belonging to congress participants during the congress activities.

LOST AND FOUND

Lost & Found service is available at the welcome desk during opening hours.

NATIONAL AND INTERNATIONAL CALLS

The France country code 33 will allow you to call France from another country (use the international access code 00 prior to dialing 33), followed by an area code.

All French numbers have 10 digits and begin with 0. The prefix for Nantes numbers is 02 and mobile numbers start with 06 or 07. 0 800 and 0 804, 0 805, 30 00, 31 44, 36 55 all denote a free service. Other special telephone numbers have specific tariffs from land lines.

Contact your mobile phone operator who will confirm whether or not your mobile is compatible with the French network and also explain how you will be charged for calls received from your own country or that you make while abroad (local and international calls).

METRIC MEASURES

The system of measurement used in France is the metric system, and temperatures are expressed in degrees Centigrade.

It's worth noting too, that in France decimals are indicated by a comma and not a point, as in English-speaking countries.

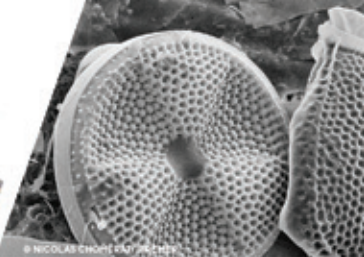
TIME ZONE

Nantes is in the Central European Time Zone. You can see Nantes' time in relation to most cities on the globe by visiting www.TimeAndDate.com

TIPPING

In France, prices shown include tax and service. However, if the service has been particularly good, you may wish to leave a tip in order to show your appreciation. As a general rule, the amount is 5% to 10% of the total bill.

NOTES



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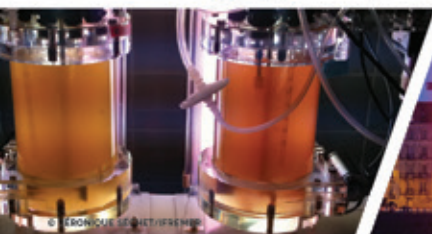


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