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2015 Aquatic Sciences Meeting

AQUATIC SCIENCES: GLOBAL AND REGIONAL PERSPECTIVES – NORTH MEETS SOUTH

22-27 FEBRUARY 2015 · GRANADA CONGRESS AND EXHIBITION CENTRE (PALACIOS DE EXPOSICIONES Y CONGRESOS DE GRANADA) · GRANADA, SPAIN

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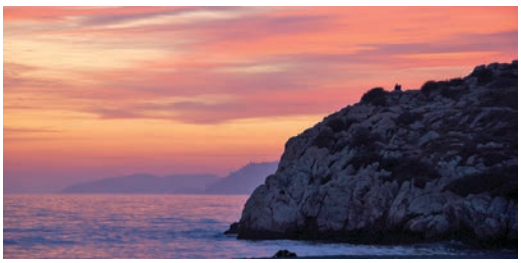

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Changes to the scientific program will also be published on an addendum that will be posted on message boards.

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ASLO 2015 AQUATIC SCIENCES MEETING

AQUATIC SCIENCES: GLOBAL AND REGIONAL PERSPECTIVES — NORTH MEETS SOUTH

The 2015 meeting brings together a diverse group of participants at a site where many cultures have engaged throughout the centuries. Located in the South of Spain, Granada is anchored by the Sierra Nevada Mountains, the highest mountain range of the Iberian Peninsula and the tropical coast of the Mediterranean Sea. With a history deep in diversity to a present rich in culture, vitality, and acceptance, Granada is the perfect setting to bring together scientists, engineers, students, educators, policy makers and other stake holders to engage in an international dialogue.

Plenary talks and sessions focus on global and regional patterns of aquatic systems in diverse northern and southern inland water biomes and oceanographic provinces emphasizing both similarities and differences. This theme is a critical scientific challenge as our discipline moves to understand and confront human accelerated environmental change. Along with ASLO members from North America and Europe, participants include Latin American, African, and Middle Eastern aquatic scientists. This meeting in Granada contributes to the ongoing international development of ASLO by bringing together a diverse group of participants at a site where many cultures have engaged through the centuries.

ASSOCIATION FOR THE SCIENCES OF LIMNOLOGY AND OCEANOGRAPHY

The purpose of ASLO is to foster a diverse, international scientific community that creates, integrates and communicates knowledge across the full spectrum of aquatic sciences, advances public awareness and education about aquatic resources and research, and promotes scientific stewardship of aquatic resources for the public interest. Its products and activities are directed toward these ends.

For more than 50 years, ASLO has been the leading professional organization for researchers and educators in the field of aquatic science. ASLO traces its roots to the Limnological Society of America (LSA), which was established in 1936 to further interest and research in limnological science. While the LSA had members working in both freshwater and marine systems, the name did not reflect this diversity until 1948 when the Oceanographic Society of the Pacific merged with the LSA to become the American Society of Limnology and Oceanography. ASLO is incorporated as a non-stock (non-profit) corporation in the State of Wisconsin. Membership in the society is presently more than 3,800 members. Members are drawn from 58 countries including the United States, and more than a quarter of the members reside outside the U.S. In 2011, ASLO members voted to change its name to the Association for the Sciences of Limnology and Oceanography, reflecting the increasingly international nature of the society.

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Thank you for your cooperation.

QUESTIONS OR COMMENTS?

Have a question about ASLO or the meeting? Members of the organizing committee along with the ASLO board members will be wearing ribbons. Please feel free to ask if you have a question.

CONFERENCE OPENING SESSION, PLENARY LECTURES, AND PRESENTATIONS

SUNDAY, 22 FEBRUARY 2015 – OPENING SESSION

17:00 – 19:00, Auditorium Federico Garcia Lorca (Floor 0)

WELCOME AND PRESIDENTIAL ADDRESSES

Welcome by Meeting Co-Chair - **Isabel Reche,** Departamento de Ecologia, Universidad de Granada, Granada, Spain

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OPENING REMARKS

James J. Elser, ASLO President, School of Life Sciences, Arizona State University

ASLO returns: otra vez en España!

Presentation Description: The world's waters are global, and our community is an increasingly interconnected web of collaboration as we seek to unlock the secrets of Earth's oceans and continental waters and to meet a variety of pressing issues, including climate change, eutrophication, and acidification. Our meeting in Spain represents ASLO's fifth meeting outside of North America and our second in Spain, and this week we celebrate those connections and work to grow them even further and to meet the challenges of this era of accelerating global change.

Biographical Information: James Elser is Regents' Professor and Distinguished Sustainability Scientist in the School of Life Sciences, Arizona State University. He is a Fellow of the American Association for the Advancement of Science and a foreign associate of the Norwegian Academy of Sciences and Letters. Elser holds a BS degree from the University of Notre Dame, an MS degree from the University of Tennessee, and a PhD (in Ecology) from the University of California – Davis. Recipient of ASLO's 2012 G. Evelyn Hutchinson Award for research accomplishment and its 1990 Lindeman Award, he now serves as ASLO's President. Author or co-author of more than 210 scientific articles, of the book *Ecological Stoichiometry,* and co-editor of the recent book *Phosphorus, Food, and Our Future*, Elser is co-founder of ASU's Sustainable Phosphorus Initiative (sustainableP.asu.edu) and leader of the NSF-funded Research Coordination Network (RCN) on Phosphorus Sustainability.

REMARKS

D. Francisco González Lodeiro, Rector Magnífico de la Universidad de Granada

Biographical Information: D. Francisco González Lodeiro received his doctorate from the University of Salamanca in 1981. He has been a professor at the University of Granada in the Department of Geology for many years, where he teaches Regional Geology, Geomorphology, Structural Geology, Fold and Fracturing, Introduction in Country Geology and Geodynamic Country Work and in the Degree of Environmental Science. His research has always been related to Regional Geology of the Alpine Nappes (Baetic-Riff Range) and the Paleozoic (Iberian massif). In addition he has lately studied more thematic things such as the seismic structure of the active Tectonic crust or the Relief Evolution.

He has been a member of the Natural Resources Committee of PAI (Plan Andaluz de Investigación), a board member of the Research National Plan, board member and president of the Nature Science Committee of the CNEAI, president of the External Committees of Evaluation of the Geology studies at the University of Salamanca and Barcelona and Geological Engineering at the University of Barcelona and the Technical College of Catalonia, board member of the Advisor Committee for Sciences of the "Agencia per a la Qualitat del Sistema Universitari a Catalunya," board member of the Executive Committee of the PEACE (Palestinian European Academic Cooperation in Education, UE-UNESCO), member of the ALFA Program for Academic Cooperation between Europe and South America, board member of the Scientific Committee of the MED-CAMPUS Program, board member of the Liaison Committee of the European Rector's Conference (CRE), promoter of the Socrates Program, and a board member of the EU TEMPUS-TACIS Evaluation Commission.

PUBLIC LECTURE

Narcís Prat, Universitat de Barcelona, Barcelona, Spain

Knowing Ramón Margalef: Naturalist and Master of Several Generations of Spanish and Latin-American Ecologists

Presentation Description: Ramón Margalef (1919-2004) was the founder of Spanish Ecology and had a large influence on the development of this science in the Iberian Peninsula and Latin America. He published some influential papers on Theoretical Ecology, Limnology and Oceanography. Even today some of his papers are a reference for ecologist (e.g Oceanologica Acta, 1978, vol 1:4). He received many awards during his life (e.g. Huntsman's medal, Naumann-Thienemann medal). One of the ASLO awards has his name (Educational Award) and the Catalonian government has instituted an annual prize with his name. However, although Margalef's ideas and books are well known in the Iberian Peninsula and Latin America, his extensive work is only in part known among the international non-Spanish speaking community. His last book written in English ("Our Biosphere") is nearly unknown. On the occasion of the 10th anniversary of his death, we have organized a series of events to remember his memory and work and to examine the actuality of his ideas (http://bit.ly/1I4hnrQ). A summary of such activities and the actuality of Margalef's ideas will be presented in this plenary lecture.

Biographical Information: Narcis Prat earned his PhD. in biology at the University of Barcelona (1978) under the direction of Professor Ramon Margalef. He has been a professor at the Department of Ecology at the University of Barcelona since 1981 (full professor from 1987). His work is focused in rivers, lakes and reservoirs, including biomonitoring, the effects of forest fires on Mediterranean streams, intermittent rivers and the taxonomy and ecology of midges. He advised the regional minister of Environment of Catalonia from 2004 to 2010. During 2014 he has been the coordinator of the activities of the 10th anniversary of the death of Professor Margalef.

OPENING PLENARY PRESENTATION

Carlos M. Duarte, KAUST, Red Sea Research Center, Saudi Arabia

Malaspina Expedition: Seafaring on a New Quest

Presentation Description: On 13 December 2010, two Spanish research vessels departed on a seven-month voyage to assess the impacts of global change on the ocean and explore its biodiversity, particularly that of the dark pelagic ocean. The Malaspina

2010 Circumnavigation Expedition completed its global sampling effort on 15 July 2011. For over three years, hundreds of scientists have been busy analyzing samples to yield, once completed, a mosaic describing the status and biodiversity of the world oceans in 2011. With less than a third of the pieces in place, the mosaic is already changing our views on the loads and fluxes of pollutants and nutrients as well as diversity of the pelagic ecosystem. This plenary talk, presented by the coordinator of the Malaspina 2010 Circumnavigation Expedition, will provide a brief outline of results thus far and reflect on how collaborative efforts can accelerate progress in understanding the ocean ecosystem.

Biographical Information: Carlos M. Duarte is the *Tarek Ahmed Juffali* Chair with the Red Sea Research Center at KAUST, Saudi Arabia, which he joined very recently. He was previously a research professor with the Spanish National Research Council (CSIC) and director of the Oceans Institute at The University of Western Australia.

Duarte's research focuses on understanding the effects of global change on aquatic ecosystems, both marine and freshwater. He has conducted research across Europe, South-East Asia, Cuba, México, USA, Australia, the Amazonia, the Arctic, the Southern Ocean, and the Atlantic, Indian and Pacific oceans, spanning most of the marine ecosystem types, from near-shore to the deep sea and tropical to polar. From 2008 to 2014 Duarte led the Malaspina 2010 Expedition, a Spanish circumnavigation expedition that sailed the world's oceans to examine the impacts of global change on ocean ecosystems and explore their biodiversity (http://www.expedicionmalaspina.es). He has published more than 550 scientific papers and two books reporting the outcomes of his research.

Duarte served as member-at-large and subsequently president of ASLO (2009 and 2010) and as member of the Scientific Council of the European Research Council (ERC), the highest-level scientific committee at the European Level (2009-2013). Duarte currently serves as editor-in-chief of *Frontiers in Marine Science* and was editor-in-chief of *Estuaries and Coasts*, as well as associate editor for a number of journals. He was named "Highly-cited researcher" in 2005 and 2014 by Thompson Reuters and has received many honors, including the G. Evelyn Hutchinson Award from the American Society of Limnology and Oceanography in 2001, the National Science Award of Spain (2007) and the King James I Award for Research on Environmental Protection (2009), the Silver Medal Cross of Merit from the Guardia Civil, Spain, for his service to environmental protection (2009), and the Prix d'Excellence (2011), the highest honor awarded by the International Council for the Exploration of the Seas (ICES). He has received honorary doctorates from the Université de Québec a Montrèal (Canada) in 2010 and Utrecht University (The Netherlands) in 2012.

MONDAY PLENARY SESSION

12:00 – 13:30, Auditorium Federico Garcia Lorca (Floor 0)

Jim Elser, ASLO President, School of Life Sciences, Arizona State University, Tempe, Arizona, USA

ASLO 2.0: reinventing ourselves to assure relevance, impact, and sustainability

Presentation Description: Just as aquatic ecosystems are experiencing an unprecedented period of impact and change, so is the scientific community, including its scholarly societies. Our aquatic sciences themselves are changing (becoming global, interdisciplinary, driven by big data) while society's expectations for science and its communication and application are also undergoing radical transformation. The universe of scientific publication is also evolving in unpredictable ways (e.g. open access, journal proliferation) while traditional avenues of support for journals (e.g. library subscriptions) are eroding. To meet these demands, ASLO has undergone an extended series of external and internal reviews and assessments. Growing out of this process is a transformation of ASLO ("ASLO 2.0"). In this talk Elser will describe these exciting changes, some of which are completed, some of which are underway as we speak, and some of which will appear in the near future. ASLO 2.0: yet more powerful, more fun, more rewarding than ever before!

Roman Stocker, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA

The microscale biophysics of ocean microbes

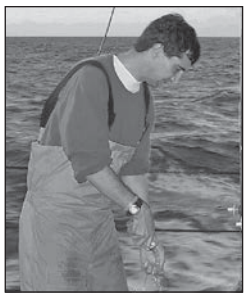
Presentation Description: Aquatic microorganisms live and interact at the microscale. Yet, our knowledge of the exceedingly important ecosystem functions they play is based mostly on human-scale sampling approaches: rarely has their ecology been accessible at the level of single cells and their microenvironment. This barrier is due both to technical difficulties, given the minute scale and dynamic nature of many microbial processes, and to the counterintuitive physics that distinguishes the micro-scale from the macro-scale. Stocker will show how the combination of microfluidic technology to create controlled, realistic microenvironments, with real-time and high-speed microscopic imaging to capture dynamic micro-scale processes, provides a powerful approach to begin to understand the microscale biophysics of aquatic ecosystems. He will illustrate this approach by presenting our recent efforts to directly image and thereby quantify the encounters between cyanobacteria and viruses, the chemotactic clustering of heterotrophic bacteria around individual diatoms, the unexpected micro-flows on a coral surface, and the microbial degradation of oil droplets and marine snow particles.

Biographical Information: Straddling microbial ecology and fluid mechanics, Roman Stocker's research has addressed a long-standing challenge in microbial oceanography: to study marine microbes in the context of their microenvironment. He has pioneered the use of microfluidic technology in microbial oceanography, creating microscale model systems of marine processes by generating controlled nutrient landscapes and flow conditions. Combined with high-resolution dynamic imaging, a focus on fundamental physical processes (diffusion, turbulence, settling, motility), and mathematical modeling, this approach has brought an unprecedented level of resolution and thereby a new perspective to the study of marine microorganisms and their interactions (Stocker, *Science* 2012). Contributions from his group include the first experimental study of particle plume utilization by marine bacteria (Stocker et al, PNAS 2008), a characterization of the signaling role of DMSP within the microbial loop (Seymour et al, *Science* 2010), a mechanism for the formation of thin phytoplankton layers (Durham et al, *Science* 2009), the discovery that fluid flow causes patchiness in the distribution of phytoplankton (Durham et al, *Science*

2010 & Nat Comm 2013) and bacteria (Rusconi et al, Nat Phys 2014), the high-speed imaging of a new motility mode in marine bacteria (Son et al, Nat Phys 2013), and the direct visualization of the fascinating fluid mechanics of a coral surface (Fernandez et al, Science 2014; Shapiro et al, PNAS 2014). His research group, which hinges on interdisciplinary expertise from engineers, microbiologists, physicists and oceanographers, currently focuses on microbial motility, cell growth, viral infection, coral disease, oil degradation, particle consumption, and bacteria-phytoplankton interactions. In his spare time, Stocker has studied the biophysics of how cats lap (Reis et al, Science 2010).

TUESDAY PLENARY SESSION

12:00 – 13:30, Auditorium Federico Garcia Lorca (Floor 0)



Scott Doney, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, USA

Changing coastal and open-ocean biogeochemistry in the Southern Ocean

Presentation Description: The Antarctic continental shelf and surrounding open-ocean waters of the Southern Ocean play important roles in marine biogeochemistry and the global carbon cycle. Seasonally ice-covered coastal waters are often highly productive, exhibiting large spring and summer drawdowns of nutrients and carbon dioxide and supporting high densities of upper trophic level organisms. Off-shore waters are typically more iron limited with lower plankton standing stock and overall productivity. The Southern Ocean as a whole also acts as a large sink from the atmospheric of anthropogenic carbon dioxide, primarily associated with the offshore upwelling of circumpolar deepwater and formation of mode, intermediate and deep waters. Climate change and ocean acidification are projected to substantially alter future sea-ice distributions, seawater chemistry, and ocean/atmosphere circulation patterns that modulate Southern Ocean marine biogeochemistry. The talk will discuss observational, remote sensing and modeling evidence for changing conditions in the Southern Ocean. A specific focus will be on the western continental shelf of the Antarctic Peninsula, which is experiencing some of the most dramatic climate change on the planet, with rapid ocean-atmosphere warming, melting of coastal glaciers, reductions in seasonal ice cover, and shifts in phytoplankton distributions.

Biographical Information: Scott Doney is a Senior Scientist at the Woods Hole Oceanographic Institution (WHOI). His expertise spans oceanography, climate and biogeochemistry, with particular emphasis on the application of numerical models and data analysis methods to global-scale questions. Much of his research focuses on how the global carbon cycle and ocean ecology respond to natural and human-driven climate change, including ocean acidification. He has been a long term contributor to the Community Earth System Model. He is also actively involved in programs, including US Global Ocean Carbon and Repeat Hydrography, the REgional Carbon Cycle Assessment and Processes (RECCAP), and the Palmer (Antarctic) Long Term Ecological Research (LTER). He graduated with a PhD from the MIT/WHOI Joint Program in 1991, and he was at the National Center for Atmospheric Research from 1991 to 2002.

Anthony Turton, University of the Free State, Bloemfontein, South Africa

The Need for Transdisciplinarity Arising from the Holocene/Anthropocene Transition – Some Ideas from Water Conflict Resolution in South Africa

Presentation Description: While there is no consensus yet on the notion of the Anthropocene, there is a growing body of evidence to suggest that such a transition has occurred. This talk will contextualize the notion of water stress and conflict as a logical product of the transition between two geological epochs (Holocene and Anthropocene). It will thus set the scene for a strategic level discourse on the science underpinning management of water biomes and oceanographic provinces, within the context of a major transition in geological timescales that is likely to result in a fundamental shift in all of the major assumptions on which current knowledge is based. Our transition to the Anthropocene has unlocked three key elements that need to be interrogated by academia if the science, engineering and technology community is required to respond appropriately. These three elements are:

- Acceleration in the rate of change to biophysical drivers.
- Increase in the complexity and interconnectedness of previously separate systems.
- Inappropriateness of our current response to the training of science, engineering and technology professionals.

This talk will unpack these three elements using examples from the gold mining industry in South Africa, where it will be argued that Holocenic thinking has shaped a new generation of wicked problems that only an Anthropocenic approach is capable of solving.

Biographical Information: Anthony Turton holds a professorship in the Centre for Environmental Management at the University of Free State and is a founding director of the Ecological Engineering Institute of Africa. His current work is in the mining sector where he specializes in the development of strategies and technologies to mitigate the risk arising from the uranium contamination of Johannesburg and acid mine drainage (AMD) as the gold industry reaches the end of its productive life. He has pioneered the concept of closure mining that makes a business case for the rehabilitation of mining-impacted landscapes.

As a Trustee of the Water Stewardship Council of Southern Africa he encourages behavioral change through positive inducement. He is co-founder of the South African Water and Energy Forum (SAWEF) that introduced the notion of the Water-Energy-Food Nexus to the public domain. He is the past Vice President of the International Water Resource Association (IWRA) and a past Deputy Governor of the World Water Council. He currently serves as Editor of the international journal "Water Policy" and sits on the editorial boards of various technical journals including "Water International," "Water Alternatives," the "International Journal of Water Governance," and the Springer Verlag textbook series on water resource management. He has recently been appointed to the American Society of Mechanical Engineers as a contributing member to the Water and Energy Group Subcommittee on Innovative Water Conservation, Reuse and Recovery Technologies for a term ending in June 2019.

WEDNESDAY PLENARY SESSION

12:00 – 13:30, Auditorium Federico Garcia Lorca (Floor 0)

Tim Lenton, University of Exeter, College of Life and Environmental Sciences, Exeter, United Kingdom

An evolutionary ecology approach to modelling the marine ecosystem and its response to global change

Presentation Description: How should we model the response of ecosystems to global change? Current approaches typically treat organisms as black boxes with no adaptive capacity, yet organisms are continually acclimating to changing environmental conditions and populations are evolving – nowhere more so than in the marine microbial ecosystem. To try and better understand and simulate this, we have developed an evolutionary ecosystem model ('EVE'), which resolves the allocation of resources within individual phytoplankton cells that in turn form populations within the grid cells of a global ocean model. Phytoplankton traits and the crucial trade-offs between them are grounded in laboratory physiological measurements. The simulated physical environment then selects for successful phytoplankton growth strategies. This produces familiar patterns of phytoplankton cell size, and makes predictions of, for example, their N:P composition (the Redfield ratio). Using the model we have been able to test the 'growth rate hypothesis' for variations in phytoplankton cellular N:P composition and identify locations where it is falsified. The approach also enables a closer link between models and 'omics' (molecular genetics) datasets. Specifically, we have examined how the temperature dependence of ribosome activity affects cellular resource allocation and N:P composition, making predictions for how phytoplankton N:P could change in a warming ocean.

Biographical Information: Tim Lenton is Professor of Climate Change and Earth System Science at the University of Exeter. His research focuses on understanding the behavior of the Earth as a whole system, especially through the development and use of Earth system models. He is particularly interested in how life has reshaped the planet in the past, and what lessons we can draw from this as we proceed to reshape the planet now – as detailed in his book with Andrew Watson on the 'Revolutions that made the Earth' (OUP, 2011). Tim's work identifying the tipping elements in the climate system won the Times Higher Education Award for Research Project of the Year in 2008. He has also received a Philip Leverhulme Prize in 2004, a European Geosciences Union Outstanding Young Scientist Award in 2006, the British Association Charles Lyell Award Lecture in 2006, the Geological Society of London William Smith Fund in 2008, and a Royal Society Wolfson Research Merit Award in 2013. Recently Tim has taught over 20,000 people on his massive open online course "Climate Change: Challenges and Solutions."

Amanda Vincent, University of British Columbia, Vancouver, BC, Canada

Imperfect advice or none at all

Presentation Description: There is no chance of perfect advice in ocean conservation and management. The choice is between imperfect advice and none at all. This realization should free ocean scientists to engage meaningfully in the development and implementation of public policy. My talk will address the uncomfortable but pressing need for us to apply existing knowledge immediately, rather than simply calling for more research. My story draws from the journey to develop and implement pioneering global export controls on marine fishes under the Convention on International Trade in Endangered Species (CITES). Along the way, we plunged forward with trade evaluation, establishment of marine protected areas, management recommendations, and policy change. We were often at the very edge of our technical understanding. In the best spirit of adaptive management, however, rapid application of existing knowledge helped both to effect societal change and to guide further research.

Biographical Information: Amanda Vincent (@amandavincent1) is suffering from aqualust and needs to spend more time underwater. She is now Professor in the Fisheries Centre at the University of British Columbia, Canada, after previous stints at Cambridge, Oxford and McGill. She directs Project Seahorse, a marine conservation team committed to conservation and sustainable use of the world's shallow coastal marine ecosystems. Its work includes ecological and social research, establishment of marine protected areas, fisheries and trade management, and development of integrated policy. Vincent holds a Pew Fellowship in Marine Conservation (the top award in the field), a Rolex Award for Enterprise and a Whitley Award, among other lovely honors. She has many international roles with the IUCN and CITES, spends lots of time in Southeast Asia --- and tries to take quick and effective action for the ocean.

THURSDAY PLENARY SESSION

12:00 – 13:30, Auditorium Federico Garcia Lorca (Floor 0)

Thorsten Dittmar, University of Oldenburg, Institute for Chemistry and Biology of the Marine Environment, Oldenburg, Germany

Fire in the ocean: black carbon in aquatic environments

Presentation Description: Fire has been an integral part of global biogeochemical cycles ever since vascular plants evolved on the continents. In the more recent history of Earth, humans have used fire extensively as a tool to shape Earth's vegetation. Wildfires produce a wide suite of black carbon moieties, ranging from slightly altered biopolymers that quickly decompose in soils and waters to charcoal. Today, global biomass burning generates an approximated 40-250 million tons of charcoal every year. Due to its particular chemical and physical properties, charcoal can be preserved over centuries and millennia in soils and sediments. After years of microbial attack in soils, however, charcoal becomes partially soluble, is lost from soils by leaching, and eventually enters the aquatic environment. The global flux of soluble charcoal to the oceans accounts to about 25-28 million tonnes carbon per year, which is ~10% of the global riverine flux of dissolved organic carbon (DOC). At the ocean's surface, dissolved black carbon is susceptible to photo-bleaching, but a fraction survives transport into the dark deep ocean. In the dark ocean, dissolved black carbon is the chemically most stable form of DOC known. It is stable over tens of thousands of years, and has accumulated there to >12,000 million tonnes of carbon. Fire is now recognized as an

important player in global biogeochemical cycles, impacting even the most remote regions of the abyssal ocean.

Biographical Information: Marine dissolved organic matter (DOM) is one of the largest carbon pools on Earth's surface. The stability of DOM over millennia is enigmatic and has fascinated Thorsten Dittmar from early on in his research career. Dittmar's research has revealed an unparalleled molecular diversity of DOM, and he uses this rich molecular archive in the ocean to gain novel insights into marine biogeochemical and microbiological processes. Dittmar is professor at the University of Oldenburg (Germany) and leads the Research Group for Marine Geochemistry that bridges between his home institute (Institute for Chemistry and Biology of the Marine Environment, ICBM) and the Max Planck Institute for Marine Microbiology (MPI Bremen, Germany). Dittmar gained his PhD in Marine Chemistry from the University of Bremen in 1999. Prior to being an Assistant Professor at Florida State University (2003-2008), he was a postdoctoral researcher at the Alfred Wegener Institute for Polar and Marine Research (AWI, Germany), at the Federal University of Pará (Belém, Brazil) and at the University of Washington (Seattle, USA). He returned to Germany in 2008 to lead the Max Planck Research Group for Marine Geochemistry, and became professor at the University of Oldenburg in 2013.

Tamara Galloway, University of Exeter, College of Life and Environmental Sciences, Exeter, United Kingdom

Microscopic Plastic Debris and Its Impact on Aquatic Ecosystems

Presentation Description: Global plastic production has risen rapidly over the past sixty years, and 10% of all discarded plastic waste is thought to end up in the oceans. There it can fragment, but takes centuries to fully degrade. As a result, microplastics (small plastic detritus <1 mm diameter) have become a widespread pollutant, and are increasingly present in aquatic ecosystems (both freshwater and marine) across the globe.

This talk will bring together the latest research documenting the distribution of microplastics in the oceans, on shorelines and in coastal sediments, and provide evidence for bioaccumulation and the biological effects of microplastics ingestion on organisms from across the food web. Finally, it will discuss the potential ecological impacts of predicted increases in marine litter on different aspects of ecosystem function and biogeochemical processes, and how these effects may be influenced by interactions between plastics and biota.

Biographical Information: Tamara Galloway is professor of ecotoxicology at the University of Exeter and also holds an honorary chair at University of Exeter Medical School. Tamara's research focus is in understanding how organisms adapt and survive in polluted environments, and she studies the health effects of some of the most pressing priority and emerging pollutants: including complex organics, plastics and their additives, metals and nanoparticles. She receives funding from a wide range of competitive sources including NERC, BBSRC, Wellcome Trust, medical charities and industry groups both in the UK and internationally. She is an expert member of several (inter)/national committees charged with environmental protection and the promotion of translational research.

FRIDAY PLENARY SESSION

12:00– 13:30, Auditorium Federico Garcia Lorca (Floor 0)

Bess Ward, Princeton University, Department of Geosciences, Princeton, New Jersey, USA

Cryptic pathways of microbial nitrogen transformations in the ocean

Presentation Description: The major pathways of microbial N transformations have been known for more than a century. However, in recent years, recognition of important new pathways and modifications of known pathways have changed our understanding of N cycling in the ocean. These lead to new mysteries and new angles on longstanding questions. For example, nitrate is recognized as the major inorganic N source for phytoplankton, but how phytoplankton manage to obtain and utilize nitrate at the very low concentrations at which it occurs in surface waters is unclear. Using natural abundance stable isotope methods and isotope tracer incubations, we are able to trace the differential utilization of nitrate and ammonium into different fractions of the natural phytoplankton assemblage. We find that the small eukaryotic phytoplankton appear to be nitrate specialists although the mechanisms they use to obtain nitrate are unknown. Another example of a lingering mystery is the distributions of nitrite and nitrous oxide in the oxygen minimum zones of the world oceans. While the processes that produce and consume these intermediate components of the nitrogen cycle are well known, just how they operate to maintain the maxima and minima features that characterize the OMZ water column is unknown. We find using tracer incubations and simple models that even these apparently static distributions are the result of rapid, nearly cryptic, cycling by microbial transformations.

Biographical Information: Bess Ward is a biological oceanographer who works on the microbial biogeochemistry of the marine nitrogen cycle. Her Ph.D. work at the University of Washington was on nitrification, at the time a little studied part of the N cycle. As a post doc and research scientist at Scripps Institution of Oceanography, she measured nitrification rates in many regions of the ocean and began working in oxygen minimum zones. She also investigated the oxidation of methane in seawater associated with the subsurface methane maximum in oxygenated seawater, and detected anoxic methane oxidation in the Cariaco Trench and the Black Sea. At the University of California at Santa Cruz, Ward began working on the molecular ecology of denitrification and established the interdisciplinary approach of molecular biology and isotope tracer biogeochemistry that she continues to this day. In the Department of Geosciences at Princeton University since 1998, she has focused on nitrogen cycling in oxygen gradient environments (oceans, lakes, sediments) and nitrogen utilization by phytoplankton. In both endeavors, she measures rates and distributions of N transformations and links those rates to the community composition and dynamics of the microbes responsible for the rates.

Peter Raymond, Yale School of Forestry and Environmental Studies, New Haven, Connecticut, USA

Drainage Networks as Reactors

Presentation Description: Inland waters are part of a global circulatory system, delivering terrestrial elements and water to the ocean. As early as the 15th century, da Vinci noted that this delivery system has components that are predictable and provide an opportunity for scaling. Precipitation and discharge events have frequency and distribution curves. Drainage networks have self-similar properties that can be simplified using mathematical expressions. Streams have a hydraulic geometry that can be quantified and are similar across landscapes. These relationships will be presented in the context of drainage network biogeochemistry. Specifically, utilization of these relationships will be developed to demonstrate approaches to model DOM dynamics within a basin, including DOC fluxes off the landscape, reactions during transport and coastal export.

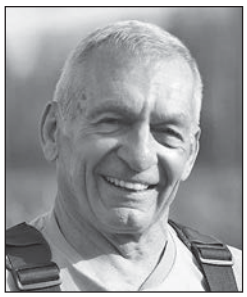
Biographical Information: Pete Raymond started studying carbon in the Hudson River as an undergrad with scientists at the Cary Institute of Ecosystem Studies. He earned a PhD from the Virginia Institute of Marine Science in 1999. He was awarded the CERF Cronin award for young scientists and an NSF CAREER grant. He has been a professor at the Yale School of Forestry and Environmental Studies for the last 12 years, where he is also the director of the Yale Analytical and Stable Isotope Center. His work focuses mainly on the controls of carbon chemistry of inland waters and estuaries. Most recently he is the lead PI on a NSF MacroSystems grant studying DOM dynamics in the Connecticut River.

ASLO SOCIETY AWARD PRESENTATIONS

ASLO 2015 society awards will be presented during the plenary sessions Monday through Friday.

Complete biographical information and award citations will be included in the May issue of the *L&O: Bulletin*.

MONDAY AWARD TALK



2015 A.C. Redfield Lifetime Achievement Award presented to David Schindler, Killam Memorial Chair and Professor of Ecology, Department of Biological Sciences, University of Alberta, Edmonton, Canada

About the Award: The Lifetime Achievement Award recognizes and honors major, long-term achievements in the fields of limnology and oceanography, including research, education and service to the community and society. In 2004, the ASLO Board renamed the Lifetime Achievement Award in honor of Alfred C. Redfield. Emphasis in selection is given to established aquatic scientists whose work is recognized for its importance and long-term influence.

Recipient Biography: David W. Schindler received his doctorate from Oxford University, where he studied as a Rhodes Scholar. He has headed the International Joint Commission's Expert Committee on Ecology and Geochemistry and the US Academy of Sciences' Committee on the Atmosphere and the Biosphere. He has also served as the President of ASLO and as a Canadian National Representative to the International Limnology Society (SIL). Schindler has received many distinguished awards, including: Stockholm Water Prize; Rhodes Scholarship, Oxford University; G.E. Hutchinson Medal, ASLO; Naumann-Thienemann Medal, International Limnological Society; Volvo Environment Prize; Ruth Patrick Award; Tyler Prize for Environmental Achievement; Frank Rigler Award, Canadian Society of Limnologists; Romanowski Medal, Royal Society of Canada; Gerhard Herzberg Canada Gold Medal for Science and Engineering, Natural Sciences and Engineering Research Council (Canada); Killam Prize for Science, Canada Council for the Arts; and Officer of the Order of Canada. He has just recently retired from the University of Alberta where he held the Killam Memorial Professor of Ecology.

TUESDAY AWARD TALK

2015 G. Evelyn Hutchinson Award presented to Craig Carlson, Professor of Microbial Oceanography, Department of Ecology, Evolution and Marine Biology, Marine Science Institute, University of California, Santa Barbara

About the Award: The G. Evelyn Hutchinson Award has been presented annually since 1982 to recognize excellence in any aspect of limnology or oceanography. The award is intended to symbolize the quality and innovations toward which the society strives and to remind its members of these goals. In lending his name to the award, Hutchinson asked that recipients be scientists who had made considerable contributions to knowledge, and whose future work promised a continuing legacy of scientific excellence. The award is given to mid-career scientists for work accomplished during the preceding five to 10 years.

Recipient Biography: Craig Carlson was nominated based on his seminal contributions to the measurement and dynamics of dissolved organic carbon (DOC) and the roles of microbial communities in DOC cycling on short and long time-scales. This is Craig Carlson's second ASLO award, the first honoring him with the inaugural AGU Ocean Sciences Early Career award in 2002. He has developed an accurately mapped DOC variation, as well as linking it to the dynamics of microbial communities. The concepts developed by Carlson have become vital in understanding the ocean carbon cycle. His involvement in the beginning has been crucial as he observed temporal changes in DOC. Carlson started working on DOC early in his career where he began measuring temporal dynamics of DOC at the Bermuda Atlantic Time Series. These early findings for the first time made visible the contribution of DOC to the biological pump. His continued contribution to this research has stirred up invaluable data.

WEDNESDAY AWARD TALKS

2015 Ruth Patrick Award presented to James Cloern, Senior Research Scientist, U.S. Geological Survey, Menlo Park, California, USA

About the Award: The Ruth Patrick Award honors outstanding research by a scientist in the application of basic aquatic science principles to the identification, analysis and/or solution of important environmental problems. The award is given to aquatic scientists who have made either sustained contributions or a single, but critical contribution towards solving an environmental problem.

Recipient Biography: Dr. James Cloern is being acknowledged for his contributions to the scientific understanding and management of the world's estuaries. He has dedicated his career to understanding and elucidating the complexities of coastal ecosystems. His long-term analyses tracked the effects of the 1972 Federal Clean Water Act and informed dissolved oxygen standards for San Francisco Bay. A crowning achievement, Cloern and Jassby's 2012 paper illustrated the estuary's response to six primary agents of change and how detection of these trends catalyzed key policy actions. Dr. Cloern conceived of and organized the first international meeting on "Long Time-Series Observations in Coastal Ecosystems: Comparative Analyses of Phytoplankton Dynamics on Regional to Global Scales" (2007 AGU Chapman). His research has transformed our understanding of coastal ecosystem dynamics and shepherded strong management policies in San Francisco Bay and beyond.

2015 John Martin Award presented to Stephen Carpenter, Director of the Center for Limnology and Stephen Alfred Forbes Professor of Zoology, University of Wisconsin, Madison, Wisconsin, USA

For S. R. Carpenter, J.F. Kitchell, and J.R. Hodgson for transforming our view of food web regulation and making a compelling case for "top-down" regulation of primary productivity. The paper was published in *BioScience*. 1985. 35:634-639.

About the Award: The John Martin Award recognizes a paper in aquatic sciences that is judged to have had a high impact on subsequent research in the field. The model for such a paper is Martin et al (1991), which laid out the case for iron limitation of phytoplankton productivity in the ocean. The Martin Award is for papers at least 10 years old.

Recipient Biography: Stephen Carpenter transformed our views on food web regulations through designing a compelling cased for "top-down" regulations of primary productivity. Carpenter's seminal paper "Cascading trophic interactions and lake productivity" is the root of this influence and has argued that top predators such as fish could regulate the biomass and productivity of lower trophic levels, cascading all the way down to phytoplankton. His paper also gave awareness to the distinction of how consumers regulate the biomass vs. the productivity of lower trophic levels. While the main focus of his paper influenced research on lakes, it would also expand research and studies in streams, coastal and pelagic marine systems, as well as terrestrial ecosystems. The Carpenter et al paper is clearly one of the most important "triggers" responsible for this shift to a new paradigm.

THURSDAY AWARD TALKS

2015 Raymond L. Lindeman Award presented to Hilary G. Close, Assistant Researcher, Department of Geology and Geophysics, University of Hawai'i at Manoa, Honolulu, Hawai'i USA

For important and novel insights about the export of submicron particulate organic matter into the deep ocean, presented in her paper entitled, "Export of submicron particulate organic matter to mesopelagic depth in an oligotrophic gyre." *- Proceedings of the National Academy of Sciences (2013)*

About the Award: This annual award in honor of Raymond L. Lindeman (1915-1942) was first presented in 1987 to recognize an outstanding paper written by a young aquatic scientist 35 years of age or less.

Recipient Biography: This award recognizes the work Hilary conducted in the North Pacific subtropical gyre that was presented in the paper entitled, "Export of submicron particulate organic matter to mesopelagic depth in an oligotrophic gyre," published in Proceedings of the National Academy of Sciences in 2013. This paper makes an important and unique contribution to aquatic sciences for the novel insights it provides about the export of the "extra-small" fraction of particulate organic matter. Hilary has become an emerging intellectual leader in efforts to understand the transformation of POM in the marine carbon and nitrogen cycles. Insights from the study she participated in could have significant implications for the responsiveness of the global carbon cycle to climate change, especially as the ecosystems dominated by picoplankton are expected to expand with warming ocean temperatures.

2015 Ramón Margalef Award for Excellence in Education to Marianne V. Moore, Frost Professor in Environmental Science and Professor of Biological Sciences, Wellesley College, Wellesley, Massachusetts, USA

About the Award: This award is targeted toward ASLO members at any stage in their careers and is presented to the ASLO member who best exemplifies the highest standards of excellence in education. The Ramón Margalef Award for Excellence in Education was first presented in 2009 and is presented annually.

Recipient Biography: Marianne Moore received her Ph.D. in aquatic ecology from Dartmouth and moved to Wellesley College as assistant professor of biological sciences in 1988. At Wellesley, she has taught courses at all levels of the curriculum. Marianne has offered her students the opportunity to gain experience in independent inquiry. She has been the recipient of both of Wellesley's major teaching awards. Moore's research focuses on the effects of abiotic factors altered by humans on communities in freshwater lakes. Her goal for this work is to determine whether the genetic and phenotypic diversity of endemic

plankton species in Lake Baikal will allow them to adapt and persist as climate changes, or whether they will be replaced by warm water cosmopolitan species. Results from this project should help predict the ways in which climate change is likely to affect ecosystems with many endemic species.

FRIDAY AWARD TALK

2015 Yentsch-Schindler Early Career Award presented to Matthew Church, Associate Professor, Department of Oceanography, University of Hawai'i at Manoa, Honolulu, Hawai'i, USA

About the Award: In 2012, the ASLO Board initiated a new annual award in honor of early career scientists. The Yentsch-Schindler Early Career Award honors an aquatic scientist within 12 years of the completion of their terminal degree, for outstanding and balanced contributions to research, science training, and broader societal issues such as resource management, conservation, policy, and public education. The award was presented for the first time in 2013.

Recipient Biography: Matthew Church received his M.S. and Ph.D. degrees from the College of William and Mary. Much of Church's Ph.D. research was conducted at the University of Hawaii in collaboration with the JGOFS-Hawaii Ocean Time-series (HOT) program. In 2004, he joined the HOT program as a staff scientist and a few years later he earned a tenure-track position as Assistant Professor of Oceanography. In 2011, he was promoted to Associate Professor. Since 2009 he has served as lead P.I. of the HOT program. He is also a senior investigator in the Center for Microbial Oceanography: Research and Education (C-MORE) and an inaugural investigator in the recently established Simons Collaboration on Ocean Processes and Ecology (SCOPE).

ABOUT THE CONFERENCE MEETING SITE

All activities will take place at the Granada Congress and Exhibition Centre (*Palacios de Exposiciones y Congresos de Granada*) unless otherwise noted.

CONGRESS CENTRE ADDRESS

The destination address for GPS or online mapping is as follows:

Granada Congress and Exhibition Centre (*Palacios de Exposiciones y Congresos de Granada*)
Paseo del Violón, S/N
18006 - Granada

CONCESSIONS AT THE CONGRESS CENTRE

Food items will be available for cash purchase at the Congress Centre. Cash bars also will be open.

Sunday: ..... Open at 20:00
Monday: ..... 09:00 to 22:00
Tuesday, Wednesday, Thursday: ..... 09:00 to 20:00
Friday: ..... 09:00 to 19:00

INTERNET ACCESS

Complimentary wireless Internet access is limited but is available at the Congress Centre in all public areas. To connect to Wi-Fi at the convention center you should enable your wireless access on your device. You will connect to the network using the following:

SSID: Aslo2015
Password: Aslo2015

TRANSPORTATION AND DRIVING IN GRANADA

The following web site includes good information on transportation options in Granada. This site has maps of Granada, city bus information, tickets and fares, travel cards, timetables, telephone numbers, related web pages, notes on parking, taxis, trains and air travel.

http://www.lovegranada.com/granada-transport/

PARKING

A parking facility is located next door to the Congress Centre. It has a capacity of 350 cars, and the rates are 17 euros per day and 45 euros for a week. One hour of parking is 1,2 euros.

CONFERENCE REGISTRATION AND CHECK IN

Registration and check in for the meeting will be available all week in the foyer area outside the Auditorium Federico Garcia Lorca on Floor 0. Please check in upon your arrival at the meeting in order to receive your name badge and other important materials and information.

In order to facilitate easier check in at the meeting, it is very important that you bring a copy of the email confirmation that you received when you registered and a copy of the email message that you received in February with your name badge information. This will allow us to locate your name badge quickly and efficiently. Badges are filed alphabetically under the last name (family name) as entered and included on those messages.

REGISTRATION DESK HOURS:

Sunday, 22 February 2015 ..... 15:00 to 20:00
Monday, 23 February through Friday, 27 February 2015 .... 08:00 to 18:00

MESSAGE BOARDS

There will be a message board located near the conference registration desk area where you may post or check for messages throughout the conference.

ADA STATEMENT/SPECIAL NEEDS

If you have a disability or limitation that may require special consideration in order to ensure your full participation in this meeting, please see a staff person at the conference registration desk. You also may send an email to business@aslo.org prior to your arrival at the meeting.

COFFEE BREAKS

Coffee breaks are planned Monday through Friday from 10:00 to 10:30 and in the afternoon from 16:30 to 17:00. Complimentary coffee and tea will be served. Water will be provided in coolers, and attendees are encouraged to bring their own water bottles. Breaks will be set on different floors and various locations.

LUNCH AND DINNER IN GRANADA

Restaurants tend to start serving their lunch menu about 13:00 and most close for lunch diners between 15:00 and 16:00. In the evenings, no one in Spain goes out to dinner any earlier than 21:00. Most restaurants will continue serving until approaching midnight, some later. Plan your evening meals to arrive before 23:00 if you want to be sure of not going to bed hungry. The meeting schedule has been planned around the meal times observed by the Spanish culture.

EXHIBITORS

Exhibitors will set up Tuesday, 24 February, from 08:00 to 12:00. The exhibits will be open over the following days and times:

Tuesday, 24 February ..... 12:00 to 20:00
Wednesday, 25 February ..... 12:00 to 20:00
Thursday, 26 February ..... 12:00 to 20:00

Attendees will have access to the exhibit area during the hours listed above. Additionally, morning and afternoon coffee breaks and poster sessions will be set in the area, as well.

Exhibitors will need to tear down on Friday, 27 February, from 08:00 to 12:00.

ASLO 2015 EXHIBITOR ROSTER

(as of 27 January 2015)

ASLO (Stand E1)
5400 Bosque Blvd., Suite 680
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CEI-MAR (Stand E4)
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DHI (Stand E17)
Agern Alle 5
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URL: http://www.jfe-advantech.co.jp/eng/ocean/index.html

McLane Research Laboratories, Inc. (Stand E24)
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Pyro Science GmbH (Stand E19)
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Rockland Scientific (Stand E10)
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SIDMAR, Estudios y Servicios Oceanográficios, S.L. (Stand E20 & E22)
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OPTIONAL EVENTS AND ACTIVITIES

ALHAMBRA NIGHT TIME TOUR

Date: Tuesday, 24 February
Departure Information: Buses will be located between the Congress Centre and the Saray Hotel. Attendees will board buses from this location.
Departure Time: 20:00
Return: Buses will return to Congress Centre at the conclusion of the event.

The Alhambra will be open exclusively to ASLO guests for this very special evening. A walk around the Alhambra, declared a World Heritage by UNESCO, is a required activity for every visitor of the city of Granada. Furthermore, it's a work of art, complete with elaborate rooms, by its monumental and historic position on the landscape or by the special charm of its exquisitely detailed Islamic art and architecture. Visiting the Alhambra at night is truly a unique and memorable experience. There really is something magical about viewing its magnificent architecture fully lit up under a peaceful Andalusian night sky. Walk by the Nasrid Palaces and the Palace of Charles V in the quiet and relaxed atmosphere of the night. With our guided-tour of Alhambra, you'll have at your disposal official tourist guides and expert interpreters of Granada's heritage. You will be guided through the "red fortress," and they will answer any questions that you may have about this spectacular monument. The fee includes transportation to and from the Congress Centre, entrance fees, and tour guides. No food or beverage is included. Price: $40 USD per person. **Advance registration is required.**

Plan to dress warmly for the tour of the Alhambra. Evenings are very cool. We also recommend that you wear comfortable walking shoes.

DINNER AT LA CHUMBERA RESTAURANTE, SACROMONTE, GRANADA

Dates: Wednesday, 25 February, and Thursday, 26 February
Departure Information: Buses will be located between the Congress Centre and the Saray Hotel. Attendees will board buses from this location.
Departure Time: 20:00
Return: Buses will return to Congress Centre at the conclusion of the event.

Each evening is limited. We are not able to offer a refund if you sign up and then later determine that you cannot participate in this activity.

The Sacromonte is a legendary hill with beautiful caves and breathtaking views of the Alhambra. La Chumbera is a large restaurant and offers exquisite Arabo-Adnalusian cuisine. You also will experience the talents of Zambra (the flamenco dancers). This dinner outing will include transportation from the conference center in Granada and return, wine and soft drinks plus a lovely dinner menu. Attendance is very limited, therefore two evenings are offered. Price: $90 USD per person. **Advance registration is required.**

CLOSING BANQUET AT LA MAMUNIA

Date: Friday, 27 February
Departure Information: Buses will be located between the Congress Centre and the Saray Hotel. Attendees will board buses from this location.
Departure Time: 19:45
Return: Buses will return to Congress Centre at the conclusion of the event.

ASLO will close out the 2015 meeting in Granada, Spain, in grand style with a closing banquet at La Mamunia. Once you enter the main gate of La Mamunia you will be transported to the Nazarí Universe where the Galan and Jasmine aroma will mix with a shower of petals accompanied by the charming movements of the Sultan´s belly Dancers. Guests will pass through the fire of the torches for tasting the most varied and exotic flavors of Al - Andalus. Beautifully tented in a garden setting, the venue has been reserved for this optional event. We are sure you will want to join fellow attendees in a wonderful dinner, wine, beer and soft drinks and, of course, a warm welcome by local belly dancers. Transportation to and from the venue from the Congress Centre is included. Price: Professionals: $70 USD per person. Students and children: $40 USD per person**. Advance registration is required.**

OTHER OPTIONAL TOURS AND SOCIAL EVENTS

OPTIONAL TOUR - WINE TASTING AT OLEUM RESTAURANT

Dates: Monday, 23 February, and Wednesday, 25 February, and Thursday, 26 February
Time: 20:30 to 22:00
Location: Off-site

Have a taste of Spanish wines from the most outstanding quality wine regions of Spain. Experience and taste hand-sliced Iberian ham with a cool sherry wine. Three other wine glasses from Granada, Ribera del Duero and Rioja will be served with a high quality tapa by a knowledgeable friendly sommelier. Oleum restaurant is a pleasant place with a lovely atmosphere nearby the Congress Centre. **Each evening is limited to the first 70 requests, and advance sign up was required.** This is a non-seated event that will start by 20:30 and last for an hour and a half. Participants will meet at the restaurant. A map is available at: http://sgmeet.com/aslo/granada2015/social_events.asp

OPTIONAL TOUR – TAPAS TOUR

Dates: Wednesday, 25 February, and Thursday, 26 February
Time: 20:00
Location: Meet at Registration Desk. Tour participants will talk together to spots listed.

Discover the best places in town for tapas while you experience the essence of this enchanting Andalusian city. Students and staff from the University of Granada will guide you to local spots with great character in the coziest neighborhoods of the city. Share tapas and interact with other attendees in a relaxed atmosphere.

Tours both evenings will start at 20:30 in front of the Registration Desk.

- Tour 1-Albaizín. The ancient Moorish quarter, a World Heritage Site by the UNESCO
- Tour 2-Realejo. The Jewish district
- Tour 3-Center. The Arab bazaar and cathedral district
- Tour 4-City hall. Trendy places at the congress surrounding.
- Tour 5-Congress surrounding.

Each tour is limited to a maximum of 10 persons. **Advance sign up was required.**

MEETING SCHEDULE

All events are at the Granada Congress and Exhibition Centre (*Palacios de Exposiciones y Congresos de Granada*) unless otherwise noted.

SATURDAY, 21 FEBRUARY 2015

08:00 to 17:00	ASLO Board Meeting	Saray Hotel-Lindaraja Room

SUNDAY, 22 FEBRUARY 2015

08:00 to 16:00	ASLO Board Meeting	Saray Hotel-Lindaraja Room
08:00 to 17:00	Workshop: East meets West: Trans-Atlantic Aquatic Invasions of North America and Europe (Invitation only)	Andalucia 3 (Floor 1)
09:30 to 17:00	Workshop: Environmental Controls on Marine Nitrogen Fixation (Invitation only)	Seminario 3-4-5 (Floor 1)
09:30 to 14:00	Meeting of the Iberoamerican Limnological Societies	Seminario 6-7 (Floor 1)
10:00 to 13:00	Workshop: CONNECTION: Make Your Science Communication More Effective through "Critical Storytelling" - Part A	Andalucia 2 (Floor 1)
12:00 to 16:00	Workshop: Writing and Publishing a Scientific Paper (Organized by the Youth of the Iberian Limnological Society (J-AIL)	Machado (Floor -2)
14:00 to 17:00	Workshop: CONNECTION: Make Your Science Communication More Effective through "Critical Storytelling" - Part B	Andalucia 2 (Floor 1)
14:00 to 17:00	Workshop: Science Education	Picasso (Floor -2)
12:00 to 17:00	Day Care Room	Seminario 8 (Floor 1)
12:00 to 20:00	Mentor Room	VIP Restaurant (Floor 2)
12:00 to 20:00	Malaspina Circumnavigation Expedition Exhibit	Foyer (Floor -3)
12:00 to 22:30	Literature Tables	Floor 1
15:00 to 21:00	Speaker / Presentation Room	Seminario 1-2 (Floor 1)
15:00 to 20:00	Registration Open	Auditorium Federico Garcia Lorca Foyer (Floor 0)
16:00 to 17:00	ASLO MP Mentor Meeting	Room B (Floor -3)
16:00 to 17:00	Student Volunteer Training #1	Meet at registration desk, Lorca Foyer
17:00 to 19:00	Opening Session Opening Remarks by James J. Elser, ASLO President Welcome Remarks by D. Francisco González Lodeiro, UGR President Public Lecture by Narcis Prat Opening Keynote Address by Carlos M. Duarte	Auditorium Federico Garcia Lorca (Floor 0)
17:00 to 19:00	Plenary Overflow	Auditorium Manuel de Falla (Floor 1)
19:00 to 19:30	Student Volunteer Training #2	Meet at registration desk, Lorca Foyer
19:00 to 20:30	Opening Reception	Foyer Area (Floor 0)

MONDAY, 23 FEBRUARY 2015

07:00 to 19:00	Speaker/Presentation Room	Seminario 1-2 (Floor 1)
07:00 to 20:30	Literature Tables	Floor 1
08:00 to 18:00	Registration Open	Auditorium Federico Garcia Lorca Foyer (Floor 0)
08:00 to 20:00	Mentor Room	VIP Restaurant (Floor 2)
08:00 to 20:00	Day Care Room	Seminario 8 (Floor 1)
08:00 to 20:00	Malaspina Circumnavigation Expedition Exhibit	Foyer (Floor -3)
08:30 to 10:00	Concurrent Sessions	Various Locations
10:00 to 10:30	Coffee Break	Various Locations
10:30 to 12:00	Concurrent Sessions	Various Locations

12:00 to 13:30	ASLO Award Talk and Plenary Speakers Plenary Presentation: Jim Elser Redfield Lifetime Achievement Award: David Schindler Plenary Presentation: Roman Stocker	Auditorium Federico Garcia Lorca (Floor 0)
12:00 to 13:30	Plenary Overflow	Auditorium Manuel de Falla (Floor 1)
12:00 to 18:00	Posters Set Up	Floors 1 & 2
13:30 to 15:00	Lunch (On your own)	
13:30 to 15:00	L&O Editors & Publishers Forum	Auditorium Manuel de Falla (Floor 1)
14:30 to 15:00	Guided Tour of Malaspina Exhibit	Foyer (Floor -3)
15:00 to 16:30	Concurrent Sessions	Various Locations
16:30 to 17:00	Coffee Break	Various Locations
17:00 to 18:30	Concurrent Sessions	Various Locations
18:30 to 20:00	ASLO Business Meeting / ASLO Membership Forum	Auditorium Manuel de Falla (Floor 1) / Foyer
20:00 to 22:00	ASLO Student Mixer	Restaurant Area 1 (Floor 0)
20:00 to 22:00	ASLO Early Career Mixer	Restaurant Area 2 (Floor 0)

TUESDAY, 24 FEBRUARY 2015

06:45 to 07:30	Sunrise Jog Around Granada	Teatro Isabel La Catolicat
07:00 to 19:00	Speaker / Presentation Room	Seminario 1-2 (Floor 1)
07:00 to 20:30	Literature Tables	Floor 1
08:00 to 12:00	Exhibit Set Up	Floor 1
08:00 to 12:00	Poster Set Up	Floors 1 & 2
08:00 to 18:00	Registration Open	Auditorium Federico Garcia Lorca Foyer (Floor 0)
08:00 to 20:00	Mentor Room	VIP Restaurant (Floor 2)
08:00 to 20:00	Day Care Room	Seminario 8 (Floor 1)
08:00 to 20:00	Malaspina Circumnavigation Expedition Exhibit	Foyer (Floor -3)
08:30 to 10:00	Concurrent Sessions	Various Locations
10:00 to 10:30	Coffee Break	Various Locations
10:30 to 12:00	Concurrent Sessions	Various Locations
12:00 to 20:00	Exhibits and Posters Open	Floors 1 & 2
12:00 to 13:30	ASLO Award Talk and Plenary Speakers G. Evelyn Hutchinson Award: Craig Carlson Plenary Presentation: Scott Doney Plenary Presentation: Anthony Turton	Auditorium Federico Garcia Lorca (Floor 0)
12:00 to 13:30	Plenary Overflow	Auditorium Manuel de Falla (Floor 1)
13:30 to 15:00	Lunch (On your own)	
13:30 to 15:00	Workshop: Snap It Up	Albeniz (Floor -2)
13:30 to 15:00	Workshop: Teaching Aquatic Science	Room C (Floor -3)
	(Snap It Up & Teaching Aquatic Science: All attendees invited. These are also Student Career Development Workshops - students encouraged to attend)	
14:00 to 15:00	National Science Foundation Town Hall	Picasso (Floor -2)
14:30 to 15:00	Guided Tour of Malaspina Exhibit	Foyer (Floor -3)
15:00 to 16:30	Concurrent Sessions	Various Locations
16:30 to 17:00	Coffee Break	Various Locations
17:00 to 18:30	Concurrent Sessions	Various Locations

18:30 to 20:00	Poster Session and Reception	Floors 1 & 2
20:00 to 21:00	Workshop: iMicrobe: A Cyberinfrastructure to Support Research in Microbial Ecology	Machado (Floor -2)
20:00 to 22:30	Tour of Alhambra (Optional) (Board buses between Congress Centre and Saray Hotel)	Off-site (Buses depart at 20:00)

WEDNESDAY, 25 FEBRUARY 2015

06:45 to 07:30	Sunrise Jog around Granada	Teatro Isabel La Catolicat
07:00 to 19:00	Speaker / Presentation Room	Seminario 1-2 (Floor 1)
07:00 to 20:30	Literature Tables	Floor 1
08:00 to 18:00	Registration Open	Auditorium Federico Garcia Lorca Foyer (Floor 0)
08:00 to 20:00	Mentor Room	VIP Restaurant (Floor 2)
08:00 to 20:00	Day Care Room	Seminario 8 (Floor 1)
08:00 to 20:00	Malaspina Circumnavigation Expedition Exhibit	Foyer (Floor -3)
08:30 to 10:00	Concurrent Sessions	Various Locations
10:00 to 10:30	Coffee Break	Various Locations
10:30 to 12:00	Concurrent Sessions	Various Locations
12:00 to 20:00	Exhibits and Posters Open	Floors 1 & 2
12:00 to 13:30	ASLO Award Talks and Plenary Speakers Ruth Patrick Award: James Cloern John Martin Award: Stephen Carpenter Plenary Presentation: Tim Lenton Plenary Presentation: Amanda Vincent	Auditorium Federico Garcia Lorca (Floor 0)
12:00 to 13:30	Plenary Overflow	Auditorium Manuel de Falla (Floor 1)
13:30 to 15:00	Lunch (On your own)	
13:30 to 15:00	Early Career Workshop: Marie Curie Fellowships	Room B (Floor -3)
13:30 to 15:00	Panel Discussion: What can you do and should not do to inform the public about environmental problems	Auditorium Manuel de Falla (Floor 1)
14:30 to 15:00	Guided Tour of Malaspina Exhibit	Foyer (Floor -3)
15:00 to 16:30	Concurrent Sessions	Various Locations
16:30 to 17:00	Coffee Break	Various Locations
17:00 to 18:30	Concurrent Sessions	Various Locations
18:30 to 20:00	Poster Session and Reception	Floors 1 & 2
20:00 to 22:00	Town Hall: Expanding the U.S. Network of Coastal Ocean Ecosystem LTER's ?	Andalucia 3 (Floor 1)
20:00 to 23:00	Dinner at La Chumbera (Optional) (Board buses between Congress Centre and Saray Hotel. Return time is approximate.)	Off-site (Buses depart at 20:00)

THURSDAY, 26 FEBRUARY 2015

06:45 to 07:30	Sunrise Jog around Granada	Teatro Isabel La Catolica
07:00 to 19:00	Speaker/Presentation Room	Seminario 1-2 (Floor 1)
07:00 to 20:30	Literature Table	Floor 1
08:00 to 18:00	Registration Open	Auditorium Federico Garcia Lorca Foyer (Floor 0)
08:00 to 20:00	Mentor Room	VIP Restaurant (Floor 2)
08:00 to 20:00	Day Care Room	Seminario 8 (Floor 1)
08:00 to 20:00	Malaspina Circumnavigation Expedition Exhibit	Foyer (Floor -3)
08:30 to 10:00	Concurrent Sessions	Various Locations

10:00 to 10:30	Coffee Break	Various Locations
10:30 to 12:00	Concurrent Sessions	Various Locations
12:00 to 20:00	Exhibits and Posters Open	Floors 1 & 2
12:00 to 13:30	ASLO Award Talks and Plenary Speakers Raymond L. Lindeman Award: Hilary G. Close Ramón Margalef Award for Excellence in Education: Marianne V. Moore Plenary Presentation: Thorsten Dittmar Plenary Presentation: Tamara Galloway	Auditorium Federico Garcia Lorca (Floor 0)
12:00 to 13:30	Plenary Overflow	Auditorium Manuel de Falla (Floor 1)
13:30 to 15:00	Lunch (On your own)	
13:30 to 15:00	Student Workshop: Scientific Speed Networking	Restaurant Area 2 (Floor 0)
14:00 to 15:00	Town Hall: Bioinvasions in the Mediterranean and the Enlargement of the Suez Canal	Andalucia 1 (Floor 1)
14:30 to 15:00	Guided Tour of Malaspina Exhibit	Foyer (Floor -3)
15:00 to 16:30	Concurrent Sessions	Various Locations
16:30 to 17:00	Coffee Break	Various Locations
17:00 to 18:30	Concurrent Sessions	Various Locations
18:30 to 20:00	Poster Session and Reception	Floors 1 & 2
20:00 to 23:00	Dinner at La Chumbera (Optional) (Board buses between Congress Centre and Saray Hotel. Return time is approximate.)	Off-site (Buses depart at 20:00)

FRIDAY, 27 FEBRUARY 2015

07:00 to 19:00	Speaker / Presentation Room	Seminario 1-2 (Floor 1)
07:00 to 20:30	Literature Tables	Floor 1
08:00 to 12:00	Poster and Exhibit Teardown	Floors 1 & 2
08:00 to 18:00	Registration Open	Auditorium Federico Garcia Lorca Foyer (Floor 0)
08:00 to 20:00	Mentor Room	VIP Restaurant (Floor 2)
08:00 to 20:00	Day Care Room	Seminario 8 (Floor 1)
08:00 to 20:00	Malaspina Circumnavigation Expedition Exhibit	Foyer (Floor -3)
08:30 to 10:00	Concurrent Sessions	Various Locations
10:00 to 10:30	Coffee Break	Various Locations
10:30 to 12:00	Concurrent Sessions	Various Locations
12:00 to 13:30	ASLO Award Talk and Plenary Speakers Yentsch-Schindler Early Career Award: Matthew Church Plenary Presentation: Bess Ward Plenary Presentation: Peter Raymond	Auditorium Federico Garcia Lorca (Floor 0)
12:00 to 13:30	Plenary Overflow	Auditorium Manuel de Falla (Floor 1)
13:30 to 15:00	Lunch (On your own)	
14:30 to 15:00	Guided Tour of Malaspina Exhibit	Foyer (Floor -3)
15:00 to 16:30	Concurrent Sessions	Various Locations
16:30 to 17:00	Coffee Break	Various Locations
17:00 to 18:30	Concurrent Sessions	Various Locations
19:45 to 23:00	Closing Banquet at La Mamunia (Optional) (Board buses between Congress Centre and Saray Hotel. Return time is approximate.)	Off-site (Buses depart at 19:45.)

SATURDAY, 28 FEBRUARY 2015

08:00 to 09:00	Sunrise Jog Around Granada	Teatro Isabel La Catolica

OPTIONAL TOUR - VEGETARIAN TASTING AT HICURI ART VEGAN CAFÉ-RESTAURANT

Dates: Wednesday, 25 February, and Thursday, 26 February
Time: 20:30
Location: Off-site

Have a taste of the Spanish gastronomy adapted to the vegan and vegetarian style in the café-restaurant Hicuri (http://www.restaurante-hicuriartvegan.com), located in the Realejo neighborhood, very near to the Alhambra and Gran Vía Street. This place has a charming and delightful atmosphere where, at the time you enjoy the tapas degustation, you can take a look at the art exhibition that decorate the site walls. The tasting will be composed by a selection of "vegan and vegetarian tapas" at the Spanish style made up by national, local and ecological ingredients. We encourage you to try the "star" dishes with tasty national seaweeds, dried tomatoes and the crunchy vegan desserts.

The restaurant holds 40 people, and the dinner event will start at 20:30 at the restaurant. **Each evening is limited to the first requests received, and advance sign up was required.** A map is available at: http://bit.ly/1CTvxav

INFORMATION FOR STUDENTS AND EARLY CAREER PARTICIPANTS

STUDENT VOLUNTEER TRAINING SESSIONS

Date: Sunday, 22 February
Times: 16:00 to 17:00 or 19:00 to 19:30

Students who have signed up to serve as student volunteers must attend one of two training sessions being offered. Attendance of a training session is mandatory. Meet at the registration area in the foyer of the Auditorium Federico Garcia Lorca (Level 0). Please contact Sue Rulla at suer@sgmeet.com for more information or if you have a travel conflict and will not be available to attend either session on Sunday.

STUDENT SOCIAL MIXER

Date: Monday, 23 February
Time: 20:00 to 22:00
Location: Restaurant Area 1 (Floor 0)

An informal student social mixer will be held on Monday evening following the ASLO Membership Meeting. Senior scientists will be invited to attend and meet with students on an informal basis. Beverages and snacks will be available. All students, whether ASLO members or non-members, are invited to attend.

OUTSTANDING STUDENT PRESENTATION AWARDS

Recognition and awards will be provided to the most outstanding posters and talks presented by students at the 2015 Aquatic Sciences Meeting. Presentations will be judged on the basis of innovation/scientific insight, quality of experimental design/methods, and clarity/effectiveness of presentation. Eligible presentations will be evaluated in consideration for the awards. Award winners will be notified via email, and a list will be included in an upcoming issue of the *L&O: Bulletin*.

STUDENT CAREER DEVELOPMENT WORKSHOPS

Students are encouraged to participate in the following workshops. The Connection, Snap It Up, and Teaching Aquatic Science workshops are open to all attendees in addition to students and are informal events led by senior scientists on a variety of topics relating to careers in the aquatic sciences. A range of topics will be covered to address different career paths in the aquatic sciences, skills or expertise important for these careers, and strategies for successfully competing for jobs, grants, or fellowships – all of which are particularly applicable to students. Scientific Speed Networking was first organized for the meeting in Japan. A huge success in New Orleans as well, the student organizers are bringing it back in Granada!

A limited number of box lunches will be provided for students who participate in the workshops.

WORKSHOP: CONNECTION: MAKE YOUR SCIENCE COMMUNICATION MORE EFFECTIVE THROUGH "CRITICAL STORYTELLING" - PART A AND PART B

Date: Sunday, 22 February
Time: 10:00 to 13:00 and 14:00 to 17:00
Location: Andalucia 2 (Floor 1)

For complete information on this workshop, please see Pages 23-24.

WORKSHOP: SNAP IT UP

Date: Tuesday, 24 February 2015
Time: 13:30 to 15:00
Location: Albeniz (Floor -2)

For complete information on this workshop, please see Page 25.

WORKSHOP: TEACHING AQUATIC SCIENCE

Date: Tuesday, 24 February
Time: 13:30 to 15:00
Location: Room C (Floor -3)

For complete information on this workshop, please see Page 25.

WORKSHOP: SCIENTIFIC SPEED NETWORKING

Date: Thursday, 26 February
Time: 13:30 to 15:00
Location: Restaurant 2 (Floor 0)

It can be daunting for a student to try to introduce himself/herself to someone at a large scientific meeting, but given the right opportunity, a quality exchange can have a lasting impression. Scientific speed networking is a twist on the popular singles speed dating phenomenon, but the goal here is to foster an interactive environment between small groups of advanced scientists and students in hopes of creating some short, high-impact exchanges. It's amazing what can be accomplished in five minutes! We hope that participation in this workshop will be a catalyst for improved student engagement throughout the meeting and beyond. The workshop is a structured, though informal meet and greet and is intended to be fun. Please contact Amy Burgess at burgess5@uoregon.edu for more information.

ASLO CAREER CENTER

There will be a Career Center set up near the exhibit area and posters, where students and early career professionals can meet each other and the ASLO Board members in a fun, relaxed setting. This center will host the Career Bulletin Board, where prospective employers are invited to post job announcements, and students and early career professionals are invited to post a one-page CV. Students should also stop by for information on career development workshops, social events, and how to become more involved in ASLO.

CAREER BULLETIN BOARD

There will be a Career Bulletin Board set up at the meeting where prospective employers are invited to post job announcements, and students and early career professionals can post a one-page CV.

EARLY CAREER MIXER

Date: Monday, 23 February
Time: 20:00 to 22:00
Location: Restaurant Area 2 (Floor 0)

A "meet and mix" reception is planned and organized by members of the ASLO Early Career (EC) committee to give early career members an opportunity to provide feedback on various topics relevant to them, including any concerns or expectations as an early career member. This is a social gathering for early career members to get to know each other and to network. Refreshments will be served. Come and meet the ASLO Board and members of the EC committee!

EARLY CAREER WORKSHOP: MARIE CURIE FELLOWSHIPS

Date: Wednesday, 25 February
Time: 13:30 to 15:00
Location: Room B (Floor -3)

The ASLO Early Career committee will convene a workshop planned to benefit "early career" scientists - that is, non-student members of ASLO who have received their highest degree within the last 10 years - all attendees are invited to participate. A limited number of boxed lunches will be served. This year's workshop will provide an overview of Marie Curie Fellowships, grants available to researchers regardless of their nationality and open to all fields of scientific research. Individual fellowships are available for researchers to come to Europe or European researchers to continue their research within another European country or internationally. In this workshop you will be able to learn about the opportunities available to you within the Marie Curie program, find out how and when to apply and pick up tips from a national contact at Marie Curie, grant evaluators and recipients of these fellowships. We will also briefly touch on European Research Council Starting Grants, as another source of funding for early career scientists. Main Speaker: Cristina Gomez Corchete, NCP Marie S. Curie.

ASLO MEETING MENTOR PROGRAM

The ASLO Meeting Mentor Program is open to any participant looking for guidance on navigating the meeting and making new connections. Mentees will be grouped with experienced scientists (mentors) who will provide guidance on navigating the meeting and introduce them to other scientists. The Meeting Mentor Program debuted at the 2013 Aquatic Sciences Meeting in New Orleans. If you would like more information on the Meeting Mentor Program, please contact Adrienne Sponberg (sponberg@aslo.org), ASLO Director of Communications and Science.

Please wear your badge ribbon that identifies you as a participant in the ASLO Meeting Mentor Program. Ribbons will be available at registration when you pick up your badge and meeting materials.

ASLO MULTICULTURAL PROGRAM 2015

Starting in 1990 the ASLO Multicultural Program has brought over 900 diverse undergraduate and graduate students to the annual ASLO meetings. The program features pre-conference dinner and field trip, meeting-mentors to help guide the students, a student-symposium, and various other activities. The goal of the program is to increase the human diversity of aquatic scientists. Please recommend appropriate students to apply for the program. This NSF sponsored effort is designed for US citizens and permanent residents, and does not include international students. The program supports the full cost of participation including travel, hotel, food, and meeting registration. This year's program will feature a special field trip taking advantage of the local environment around Granada, Spain. If you have any questions about the program or the requirements for the next meeting, please contact Benjamin Cuker (benjamin.cuker@hamptonu.edu), ASLO Multicultural Program Director.

ASLO 2015 MULTICULTURAL PROGRAM TRAINING SESSION

Date: Sunday, 22 February
Time: 16:00 to 17:00
Location: Room B (Floor -3)

The success of this program attributes to the many ASLO members who volunteered to be meeting-mentors over the years. By serving as meeting-mentors, ASLO members share themselves with the next generation of ocean and aquatic scientists. Meeting-mentors first meet their charges at 16:00 on Sunday, 22 February.

SPECIAL ACTIVITIES

EXPLORE GRANADA JOGGING

Dates and Times: Tuesday, 24 February, Wednesday, 25 February, and Thursday, 26 February: 06:45 to 07:30; Saturday, 28 February: 08:00 to 09:30

Get to know the city a different way than usual tourists do. Four times per week a group of joggers from Granada go jogging for about one hour in the early morning. They have offered to guide ASLO meeting participants who would like to jog with them by the historical places of Granada.

- Starting/ending point: Teatro Isabel La Católica, Acera del Casino Street
- Number of participants per day: 20
- Registration is on a first-come, first-served basis.
- The final list of participants will be published once the registration period expires.
- Participants may, if they wish, purchase an event T-shirt for 10 Euros. Payment will be accepted at the conference.

For any special requirements or information on this event, please contact Carmen Perez-Martinez at cperezm@ugr.es.

MALASPINA CIRCUMNAVIGATION EXPEDITION EXHIBIT

Dates and Times: Exhibit open throughout the meeting
Guided Tours: Monday, 23 February, through Friday, 27 February
Guided Tour Times: 14:30 to 15:00
Location: Foyer Area (Floor -3 of the Congress Centre)

The Malaspina Circumnavigation Expedition ocean (cf. www.expedicionmalaspina.es) is a large collaborative program conceived and led from Spain, but with a global scope, both in goals and participation. The program was set with the goals to provide an assessment of the state of the oceans in 2011 and to explore, using advanced next-generation sequencing tools, the diversity of life in the ocean with a particular emphasis in the dark ocean. In addition, the project aimed at shifting the interactions among Spanish marine research groups from an excessive focus on competition to a balance between competition and cooperation by demonstrating the power of a cooperative approach and, through this approach, build critical mass and leadership capacity. Furthermore, it aimed at prompting the interest for science by the Spanish public and to foster scientific vocations among its youth. The project involved 35 research groups from Spain and a total of 25 international partners from a total of 18 nations across the world, which continue to grow, with an estimated total of about 400 scientists and a total of 700 persons involved in various capacities, including logistics, outreach and administrative support.

The six-year project, funded by Spanish Ministry of Science and Technology, with additional funds from many other contributors including universities, governmental research organization and private foundations, was provided with a total of 10 months of ship time, distributed between 7 months on board R/V Hespérides, operated by the Spanish navy, which circumnavigated the ocean; and 3 months on board R/V Sarmiento de Gamboa, operated by the Spanish National Research Council (CSIC), the institution organizing the expedition, which conducted a detailed study of a section, along 24.5 N, of the Atlantic Ocean and served as a platform for a floating university in her return to Spain.

The Malaspina Expedition sailed the ocean from December 13, 2010 to July 14, 2011, sampling the tropical and subtropical Atlantic, Indian and Pacific Ocean. The cruise track was designed to sample ocean gyres and poorly sampled areas of the ocean, particularly in the Southern Hemisphere and the Indian Ocean down to about 4,000 m depth, while avoiding adverse weather, all within the boundary conditions imposed by the total seven months of ship time allotted to the circumnavigation.

An update on the key results thus far delivered by the Malaspina 2010 Circumnavigation Expedition will be advanced at the forthcoming ASLO conference in Granada, Spain (22-27 February, 2015, http://sg-meet.com/aslo/granada2015/). Most of the results will be presented in the special session "*The Global Ocean Ecosystem: Patterns, Drivers and Change*" (special session #8), with an overview provided at a plenary talk, opening the conference, on Sunday 22, 2015, delivered by Carlos M. Duarte, coordinator of the expeditions and past ASLO President. In addition, the exhibition "Un mar de datos" with informative panels on the key topics will be displayed during the meeting.

The results published thus far represent, however, only 10% of the total output of the project, which will deliver 70 Ph.D and 35 M.Sc. thesis by the time it be completed. Hence, the mosaic of the state of the ocean in the 21st century the project is depicting only contains 10% of the pieces so far. The rate of publication is accelerating as the results of this great effort emerge from the labs and I anticipate that by the end of 2015 about half of the results would have been submitted for publication. Accordingly, it is difficult as yet to foresee what will be the final aspect of this canvas. Hopefully, these findings will portray a healthier and more resilient ocean than we would have been anticipated.

We have kept one in every ten samples of plankton, genome, gases and water collected in five different sample repositories. These samples will remain in custody to be analyzed only 20 to 30 years after sampling. The Malaspina Collection will, thereby, hand over sample of the ocean in 2010/2011 to a new generation of marine scientists that will use them to quantify ocean change using technology that we cannot yet anticipate and to resolve questions we cannot imagine today.

EVENTS, MEETINGS, AND RECEPTIONS

OPENING SESSION

Date: Sunday, 22 February
Time: 17:00 to 19:00
Location: Auditorium Federico Garcia Lorca (Floor 0)

The meeting will begin Sunday evening, 22 February, with the opening session. This is planned to include a welcome by ASLO president, Jim Elser, School of Life Sciences, Arizona State University, welcome remarks by D. Francisco González Lodeiro, Rector Magnífico de la Universidad de Granada, a public lecture by Narcís Prat, Universitat de Barcelona, Barcelona, Spain, entitled, **Knowing Ramón Margalef: Naturalist, and master of several generations of Spanish and Latin-American ecologists,** and a talk by Carlos M. Duarte, Tarek Ahmed Juffali Chair in Marine Biology, KAUST, Red Sea Research Center, Saudi Arabia.

His talk is entitled, **Malaspina Expedition: Seafaring on a New Quest**. An opening mixer and reception will follow.

OPENING MIXER AND RECEPTION

Date: Sunday, 22 February
Times: 19:00 to 20:30
Location: Foyer Area (Floor 0)

Enjoy this time following the opening session to get caught up with friends and colleagues! This will be a welcome to Granada and great start to the 2015 Aquatic Sciences Meeting.

PLENARY SESSIONS AND AWARD ACCEPTANCE PRESENTATIONS

Dates: Monday, 23 February, through Friday, 27 February
Times: 12:00 to 13:30
Location: Auditorium Federico Garcia Lorca (Floor 0)

Plenary Sessions will be held each day of the meeting and will include brief opening announcements and remarks by committee members, plenary presentations, and award acceptance presentations. Plenary presentations and awardee information is listed in this program. Due to the limited seating in the Auditorium Federico Garcia Lorca, overflow will be accommodated via live streaming in Auditorium Manuel de Falla (Floor 1).

ANNUAL ASLO BUSINESS MEETING AND MEMBERSHIP FORUM

Date: Monday, 23 February
Time: 18:30 to 20:00
Location: Auditorium Manuel de Falla (Floor 1)

The annual ASLO Business Meeting for the membership will be held during the conference on Monday, 23 February 2015, from 18:30 to 20:00 in the Auditorium Manuel de Falla at the Granada Congress and Exhibition Centre (*Palacios de Exposiciones y Congresos de Granada*) in Granada, Spain. A membership forum will follow the business meeting where you can meet and talk to officers and board members. Food and drinks will be served.

We encourage everyone to attend the business meeting and membership forum—especially our new members, early career and student members (before you head over to the student or early career mixer!).

POSTER SESSIONS AND RECEPTIONS

Dates: Tuesday, Wednesday, and Thursday, 24-26 February
Times: 18:30 to 20:00

Location: Posters and exhibit areas are located on Floors 1 and 2 of the Congress Centre. See Diagrams on Pages 31-32.

Though posters will be on display and available for viewing throughout the day, poster presentations will take place during evening sessions. Those who are presenting their research will do so during the receptions on Tuesday, Wednesday, and Thursday evenings. A cash bar will be available, and light reception foods will be served during the poster sessions.

WORKSHOPS, TOWN HALLS, AND AUXILIARY MEETINGS

WORKSHOP: EAST MEETS WEST: TRANS-ATLANTIC AQUATIC INVASIONS OF NORTH AMERICA AND EUROPE

Date: Sunday, 22 February
Time: 08:00 to 17:00
Location: Andalucia 3 (Floor 1)

By Invitation Only. This international workshop of experts and students will address the issue of trans-Atlantic aquatic invasions.

WORKSHOP: ENVIRONMENTAL CONTROLS ON MARINE NITROGEN FIXATION

Date: Sunday, 22 February
Time: 09:30 to 17:00
Location: Seminario 3-4-5 (Floor 1)

Participation is by invitation only. Refreshments will be provided. This one-day, round-table workshop will bring together marine scientists from different disciplines linking to biology, chemistry and physics, and combining expertise in culture and mesocosm studies, ecophysiology, microbiology, molecular biology, hydrography, remote sensing and numerical modeling from cell- to global scales. We plan to have short overview presentations on the current knowledge and open questions, all in plenary and followed by an open discussion about research priorities and strategies for collaborative efforts. The workshop will start at 9:30 a.m. Overview presentations will cover the following issues:

- Current estimates of global ocean N2 fixation rates from observations and numerical models - Angela Landolfi, GEOMAR, Kiel
- What do we know about the global distribution of diazotrophs and the main groups/physiologies - Jonathan Zehr, UCSC, USA
- What do we know about limiting factors (light, iron, various phosphorus forms, temperature…) - C. Mark Moore, University of Southampton, UK
- How is N2 fixation represented in cell-scale and global-scale models? – Sophie Rabouille, LOV, France & Andreas Oschlies, GEOMAR, Germany

A general discussion session (structure to be finalized) will follow to address overarching questions. These include 1) Identify the major obstacles and challenges that limit our understanding of N2 fixation 2) Discuss which are the multidisciplinary actions/strategies needed to make progress. Exchanges on possible ways of organizing efficient collaboration and attracting funding will end the 1-day workshop. A report will be written and iterated with all participants in the following weeks, with the aim to eventually use this for putting together a collaborative research proposal, e.g. in the Horizon2020 framework, in which non-EU partnerships are encouraged. Contact Sophie Rabouille - LOV (CNRS-UPMC),Villefranche sur Mer, France at srabouille@obs-vlfr.fr for more information.

Download the workshop's flyer: http://bit.ly/1zyNVEX

WORKSHOP: CONNECTION: MAKE YOUR SCIENCE COMMUNICATION MORE EFFECTIVE THROUGH "CRITICAL STORYTELLING" - PART A

Date: Sunday, 22 February
Time: 10:00 to 13:00
Location: Andalucia 2 (Floor 1)

Organized by: Jonathan H. Sharp (University of Delaware) jsharp@udel.edu and Adrienne Sponberg (ASLO) Sponberg@aslo.org

Why is it that Much of the Public Does Not Believe in Climate Change and then Another Faction Avoids Vaccinations? Whether interacting with the lay public, local policymakers, or fellow researchers, relaying technical information accurately while keeping an audience engaged is a critical skill. An all too common perception about scientists is that they are tedious, boring, and unlikeable. Since we are experts on societally-important issues, often we assume audiences await our gems of knowledge. In the words of Mark Twain: "with parted lips and bated breath the audience hung upon his words". However, lay public audiences do not hang upon our words, local policy makers are often unimpressed, and even our science peers will tune us out if the presentation is not interesting.

Effective Communication is Needed. For many scientists, presentations are sometimes seen as requirements to suffer through. This is often because you are required to communicate your work, but never taught how to effectively do so.

Sadly, if you cannot impart the results and recommendations of your work in a way that will yield action, your work will have little impact in the world outside of your own lab.

This workshop will help you improve communications skills so you can present your work more effectively. Storytelling/narrative structure is

at the core of virtually all effective broad communication. For obvious commercial reasons, the Hollywood entertainment industry has traditionally been the source of both innovation and perfection of narrative elements, yet their basic approach is equally applicable to the communication of science to all audiences, from the general public to academics. For the past five years, scientist-turned-filmmaker Randy Olson has been developing an approach he calls "critical storytelling," bringing together the broadly creative energy of Hollywood with the rigorous discipline and commitment to accuracy of the science world. He has come to ASLO meetings and brought others from Hollywood to help us develop more interesting and effective communication skills.

The Connection Workshop in Granada. Interested meeting attendees will participate in one of two three-hour workshops scheduled for Sunday before the formal opening of the 2015 Aquatics Sciences Meeting. The format will be similar to workshops held at the 2013 Aquatic Sciences Meeting and the 2014 Ocean Sciences Meeting. The workshop will feature the experienced communication specialist, Brian Palermo. In addition to acting in many Hollywood movies and TV series, he is an instructor at the premier Improv theater in Los Angeles, The Groundlings. Working with Randy Olson and actress/screenwriting consultant, Dorie Barton, he has helped us in 2012 and 2013 with video workshops as well as helping create and then presenting the 2013 Connection workshop. Participation in one of the Connection workshop sessions will be limited and prior registration will be required (no fee).

Brian will facilitate this through a hands-on, experiential workshop where you will participate in exercises designed to help improve your presentational abilities. We will focus on how to "act" throughout your presentation so that your audience remains engaged and how to create a recognizable structure for each presentation so that it tells a relatable story.

Your science does *not* have to be "dumbed down" to be effectively communicated to others outside of your specific discipline. However, there are communication tools—learned through improvisational theatre games—that can be employed as a syringe with which to inject the more challenging aspects of your work into the hearts and minds of your audience. (That is not a mistake. Having your message reach the hearts of your audience is how you will spread your message more effectively. Think of the anti-vaccination movement in America. That is misinformation distributed widely by evoking emotion in the audience. Science communicators could learn much from this paradigm and use it to spread factual information.)

And the workshop has been empirically proven to be fun!

Why Participate? It is our hope that improved communication skills will assist the aquatic science community in reaching out to explain the results of our research. These skills are needed to better reach lay audiences, elected officials, and resource managers. Unless we can learn how to better connect to these groups, the benefits of our research are lost to society. The workshop registration is open to anyone interested; we hope to attract graduate students, early career scientists, and also established scientists. While not everyone can become a super star speaker, almost everyone can improve his/her skills. Financial support for this workshop has been received from the Ocean Sciences Division of the US National Science Foundation.

To Register: There will be two sessions on Sunday, February 22; one from 10:00-13:00 and the other from 14:00-17:00, both in Andalucia 2 (Floor 1) at the Granada Congress Centre. Please register directly using the following (https://www.surveymonkey.com/s/2015Connection). Participation in the workshop is limited, so, please be committed to attend if you register. For more information and updates, periodically check: http://sites.udel.edu/aquaticsciconf/

MEETING OF THE IBEROAMERICAN LIMNOLOGICAL SOCIETIES

Date: Sunday, 22 February
Time: 09:30 to 14:00
Location: Seminario 6-7 (Floor 1)

The meeting will have two parts, one institutional and one interpersonal. In the institutional part (9:30-11:30), representatives of the Iberoamerican Limnological Societies and other Iberoamerican limnologists will discuss proposals for future collaboration, based on a document agreed between the Chilean, Iberian and Brasilian societies (SOCHILIM, AIL and ABlimno, respectively).

The interpersonal part will consist on two parallel sessions.

- Session A will consist of a marketplace-style meeting to establish links and promote interaction between research groups. Participating groups will be given 3 to 5 minute slots to show their work, what they do, what they offer and what they need. Interested groups must contact Arturo Elosegi (arturo.elosegi@ehu.es) or Julia Toja (jtoja@us.es) before 31 January.
- Session B (11:45-14:00) will consist of a workshop on scientific writing organised by AIL young. People willing to participate must contact Verónica Ferreira (veronica@ci.uc.pt) or Núria Catalán (nurcatalga@gmail.com) before 31 January.

More information can be found at http://www.limnetica.com/ail/

WORKSHOP: WRITING AND PUBLISHING A SCIENTIFIC PAPER

Organized by the Youth of the Iberian Limnological Association (J-AIL)

Date: Sunday, 22 February
Time: 12:00 to 16:00
Location: Machado (Floor -2)

This workshop aims to provide students and young researchers key guidelines that will help them to successfully publish their papers. Three selected reseachers working in different fields of Aquatic Ecology and with wide experience in writing and reviewing papers, as well as editorial roles, will talk about successful paper writing, publishing and reviewing. Lunch will be included. There also will be time for questions and discussion. The meeting is organized by the young researchers of the Iberian Limnological Society (J-AIL) and has a symbolic fee of 15 euros. Inscriptions can be made to jovenesail@gmail.com.

WORKSHOP: CONNECTION: MAKE YOUR SCIENCE COMMUNICATION MORE EFFECTIVE THROUGH "CRITICAL STORYTELLING" - PART B

Date: Sunday, 22 February
Time: 14:00 to 17:00
Location: Andalucia 2 (Floor 1)

See Workshop: CONNECTION: Make Your Science Communication More Effective through "Critical Storytelling" - Part A for a complete description of Parts A and B.

WORKSHOP: SCIENCE EDUCATION

Date: Sunday, 22 February
Time: 14:00 to 17:00
Location: Picasso (Floor -2)

Recently, an increased demand around the world for students interested in pursuing careers in science, technology, engineering, and mathematics (STEM) fields has focused attention on science education in and out of the classroom, and across all age groups. At the same time, funding agencies often require scientists to include a broader impacts section in their research proposals. This workshop will focus on helping participants develop ideas for effective education and outreach activities and broaden the impacts of scientific research. This workshop will feature active, hands-on learning, small group discussions, and guided inquiry and will include short presentations on exemplary projects in formal and informal education designed for K-12, undergraduate, graduate, and public audiences to stimulate ideas. Discussions of how people learn, how to assess the effectiveness of outreach activities, and how to develop projects that meet specific goals will help support project development. Participants are welcome to bring ideas that they would like to develop and share, and for which they would like to receive feedback. Please join us for a lively, productive, thought-provoking, and fun afternoon.

Organized by: Bob Chen, University of Massachusetts Boston (bob.chen@umb.edu). Open to all attendees; walk-ins are welcome. While there is no need to register for this workshop, if you have any questions, please do not hesitate to email bob.chen@umb.edu.

ASLO EDITORS AND WILEY DEMONSTRATION FORUM

Date: Monday, 23 February
Time: 13:30 to 15:00
Location: Auditorium Manuel de Falla (Floor 1)

Join President Jim Elser and all the ASLO Publication Editors for an open forum on new developments within their respective publications, and a discussion of editorial objectives and future plans. An open question and answer session will follow. Representatives of Wiley, ASLO's publishing partner, will demonstrate and discuss the enhancements and benefits from the migration of journal content to Wiley Online Library. Refreshments and boxed lunches will be available on a first-come, first-served basis. Contact Teresa Curto (execdir@aslo.org) for more information.

WORKSHOP: SNAP IT UP

Date: Tuesday, 24 February
Time: 13:30 to 15:00
Location: Albeniz (Floor -2)

If you can't explain it simply, you don't understand it well enough – Albert Einstein, 1951

Limnology and Oceanography are very much multi-disciplinary sciences, combining aspects of physics, chemistry, biology, and geology; and often including socio-economics. You can make a presentation at a meeting with very narrow scope, using specialized terminology, not explaining the relevance of your results, and presenting in a boring fashion. This is fine for a small number of specialty peers who will listen raptly for fear of being scooped by your work, or wishing to scoop you. However, if you want to reach and appeal to a broader interdisciplinary audience, you need another approach. Most of us probably know of individuals in our field who give fascinating talks from which a generalist can learn a lot. This workshop will address techniques and approaches that you can use to make presentations that are more exciting and appealing to those outside your specialty as well as more effective in explaining results of your research to those within your specialty. In doing so, you often develop a better understanding of your own work.

This workshop is open to all. It will be held during the lunch break (13:30-15:00) on Tuesday, February 24 in Albeniz (Floor -2) at the Granada Congress Centre. The workshop will run by Jonathan Sharp (Professor Emeritus at the University of Delaware), Adrienne Sponberg (ASLO Director of Communications and Science), and Brian Palermo (Hollywood actor and instructor at the Groundlings Improv Theater in Los Angeles). For more information and updates, periodically check: http://sites.udel.edu/aquaticsciconf/

WORKSHOP: TEACHING AQUATIC SCIENCE

Date: Tuesday, 24 February
Time: 13:30 to 15:00
Location: Room C (Floor -3)

Introductory environmental, ocean, and aquatic science courses provide an excellent opportunity to prepare both majors and non-majors for thinking about some of the largest issues facing society such as climate change and energy needs. Introductory courses can also serve to recruit students into the field. However, students attracted to introductory aquatic science courses often come from highly diverse backgrounds spanning from those that are afraid of mathematics to those that want to become science majors. Sometimes these courses are very large. This workshop will provide strategies to overcome some of the challenges of these introductory courses while making your teaching engaging, relevant, and effective. Come ready to share ideas, to think actively about teaching and learning, and to discuss what works and why. Organized by: Bob Chen (University of Massachusetts Boston) bob.chen@umb.edu

Open to all attendees.

NATIONAL SCIENCE FOUNDATION TOWN HALL

Date: Tuesday, 24 February
Time: 14:00 to 15:00
Location: Picasso (Floor -2)

A town hall to update the community on recent news from the National Science Foundation including the recently released Decadal Survey of Ocean Sciences. Contact Richard Murray (rwmurray@nsf.gov) for more information.

WORKSHOP: IMICROBE: A CYBERINFRASTRUCTURE TO SUPPORT RESEARCH IN MICROBIAL ECOLOGY

Date: Tuesday, 24 February
Time: 20:00 to 21:00
Location: Machado (Floor -2)

Workshop Overview: The iMicrobe workshop provides a comprehensive look at platforms, tools, and services for large-scale data analysis provided by the *iPlant Collaborative*, a cyberinfrastructure project of the National

Science Foundation. The workshop focuses on data and tools for microbial ecology developed in the iPlant cyberinfrastructure through the *iMicrobe* project. Through several hands-on demos and guided exercises, workshop participants will get a comprehensive look at the *iMicrobe Data Commons* and tools for large-scale data analysis in the *iPlant* Cyberinfrastructure. Use cases will draw on topics in microbial ecology, and will enable participants to use tools in *iPlant* ranging from microbial genome assembly and annotation to metagenomics analysis pipelines.

Workshop Description: Participants will get hands-on experience with the following *iPlant* cyberinfrastructure:

Discovery Environment: Simple web portal for managing data, analyses, and workflows. Complex bioinformatics applications can be run without knowing command line programming; users can also integrate their own tools.

Data Store: Scalable, secure, and reliable storage for terabyte-scale data (and community data/metadata in the *iMicrobe Data Commons*). *Atmosphere:* 1-click, on-demand cloud computing for accessing microbial analysis tool suites such as QIIME.

Who Should Attend? Any investigator (PIs, post-docs, grad students, industry users) who are or will be working with large datasets and computation-intensive research questions in microbial oceanography.

What will we do at the workshop? We will cover a variety of hands-on computer demos designed to familiarize you with the major tools and resources freely available to you. The workshop starts with an introduction to *iPlant's* tools to manage, analyze, and share data – then apply these resources to structured use cases in microbial oceanography. The focus will be on tools for microbial genome analysis and metagenomics (developed through the iMicrobe project). All tools and data are freely accessible with an *iPlant* account.

What Should I Bring? This workshop is hands-on so please bring a Wi-Fi enabled laptop.

Contact: Bonnie Hurwitz, PhD, Assistant Professor, Biosystems Engineering, University of Arizona (bhurwitz@email.arizona.edu)

Sign up for the workshop via the following: http://bit.ly/1F0qhl5

PANEL DISCUSSION: WHAT CAN YOU DO AND SHOULD NOT DO TO INFORM THE PUBLIC ABOUT ENVIRONMENTAL PROBLEMS

Date: Wednesday, 25 February
Time: 13:30 to 15:00
Location: Auditorium Manuel de Falla (Floor 1)

We are upset that the public does not better understand environmental problems and become involved with fixing them, yet we do a very poor job of communicating with the public. Sometimes, the wrong approach will actually decrease public interest in the issue being addressed. There is growing awareness in our aquatic science community that we should be doing more, yet most scientists do not know what or how to effectively communicate.

We have organized a panel discussion with a media expert as moderator and three of your colleagues as panelists. All of us have struggled in recent years with ways in which we can more effectively attract the attention of the public and get them involved. We also recognize that some activities to get public interest tend to be alarmist and do the opposite of getting public involvement. In this panel discussion, the focus will be on both successful approaches with warnings about the wrong approaches.

The panel will be moderated by Montserrat Dominguez, Editor of the Spanish Edition of the Huffington Post. The panelists will be Daniel Conley (Professor of Biogeochemistry, Lund University, Sweden), Carlos Duarte (Tarek Ahmed Juffali Chair in Marine Biology, KAUST, Red Sea Research Center, Saudi Arabia, and Jonathan Sharp (Oceanography Professor Emeritus, University of Delaware). The panel will take place in the mid-day break on Wednesday, February 25, in Auditorium Manuel de Falla (Floor 1) at the Granada Congress Centre. For more information and updates, periodically check: http://bit.ly/16ChzxW

TOWN HALL: EXPANDING THE U.S. NETWORK OF COASTAL OCEAN ECOSYSTEM LTER'S?

Date: Wednesday, 25 February
Time: 20:00 to 22:00
Location: Andalucia 3 (Floor 1)

This open town hall will introduce interested people in the ASLO community to the U.S. LTER network of 25 sites, which currently includes 8 coastal marine sites and a number of continental sites where aquatic research is a primary focus. A discussion is currently underway at the U.S. National Science Foundation to add two more coastal marine sites to the LTER network. If resources are available, a competition is expected in late 2015/early 2016 to identify and fund new sites that would be supported by the Ocean Sciences Division. Representatives of NSF and existing LTER's will be present to answer questions about the research, education, and outreach activities at LTER sites; the organization of sites and their relationship to the network; and opportunities for cross-site synthetic science. Contact Mark Ohman (mohman@ucsd.edu) for more information.

TOWN HALL: BIOINVASIONS IN THE MEDITERRANEAN AND THE ENLARGEMENT OF THE SUEZ CANAL

Date: Thursday, 25 February
Time: 14:00 - 15:00
Location: Andalucia 1 (Floor 1)

In August 2014, the Egyptian government announced the enlargement of the Suez Canal, dispensing with environmental impact assessment, risk analysis, and control and mitigation management. On learning this, a group of concerned scientists mobilized and, in September 2014, published a "Letter to the Editor" in the journal "Biological Invasions" expressing their shared concern over Egypt's plan, its potential amplification of an already critical environmental problem, and the apparent lack of any risk assessment (Galil et al. 2014, doi: 10.1007/s10530-014-0778-y). Since then, news outlets with global reach, such as the New York Times and the Guardian, picked up the news and editorialized about it, prompting the drafting of an open letter, signed by concerned scientists, that has been distributed to relevant intergovernmental organizations (UNEP/MAP, IMO, CBD) and bodies/agencies of the European Union. This town hall meeting aims to provide a forum at which to exchange information on the proposed expansion of the Suez canal, the current status of non-indigenous species (NIS) introduced through the canal, their spatial spread and impact across the Mediterranean, and the future of the coastal ecosystems under the influx of thermophilic NIS in a warming sea. Our intention is to follow the insights from this meeting to approach the relevant intergovernmental organizations with a call for action. Anyone

interested in giving a short presentation may contact Angelos Hannides at hannides@hawaii.edu or Bella Galil at bella@ocean.org.il.

ADDITIONAL PARTICIPANT AND ATTENDEE INFORMATION

RECEIPTS

Your registration confirmation that was emailed to you when you registered for the meeting will serve as your receipt. In keeping with our conservation efforts, we will not provide printed receipts to attendees on site at the meeting. If you have misplaced your original receipt and need another copy, you may print your own receipt by going to: https://www.sgmeet.com/aslo/granada2015/userlogon.asp. Select the option to *Re-print/Re-send Your Receipt and Confirmations.* Your username is your email address, and your password is your registration ID number which is printed on your conference name badge.

LETTERS OF PARTICIPATION

Likewise, letters of participation only will be provided to those who are registered for the meeting, and copies cannot be provided on site. If you need a letter of participation, please go to https://www.sgmeet.com/aslo/granada2015/userlogon.asp.

CHILDCARE DURING THE MEETING

ASLO is not able to provide licensed childcare at this meeting. However, we do have several local students who have offered their services for babysitting. Arrangements should have been made in advance between the parents and these students. We suggest you bring whatever your child or children may require for a short stay while you are participating in the meeting. Children may not be left unattended in the room.

Ignacio Peralta: nperalta@correo.ugr.es
Elizabeth Leon Palmero: elileon@correo.ugr.es
Jesus Veiga: veiga.ew@gmail.com

If you have any questions, please feel free to contact Helen Schneider Lemay, ASLO Business Manager, at business@aslo.org.

PRINTING

Printing is not available at the Congress Centre. If you would like to print your poster or have other printing needs while you are in Granada, there is a print shop located very close to the Congress Centre. They can handle a range of printing needs and can do large format printing of posters. The poster size 95 x 125 cm and would be full color on 135 grs. paper. Estimate cost is 14 € per poster (tax included). The preferred format would be a pdf format. Depending on the number of other orders, they normally require to print 1 to 2 days.

Please contact them directly if you are interested in finding out more details. Their contact information is:

Ecoprint, S.L.
Callejón del Angel, 5 Bajo
18006 Granada
958 53 53 44/606 212
Contact: Patricia Velazquez
Web: www.ecoprint.es
Email: ecoprint@ecoprint.es

INSTRUCTIONS FOR ORAL PRESENTERS

ADVANCE SUBMISSION

There will be no advance submission of presentations via an FTP site for this meeting.

ON-SITE SUBMISSION OF ORAL PRESENTATIONS

All oral presentations will need to be submitted to the Speaker/Presentation Room in Seminario 1 & 2 (Floor 1) at the Congress Centre. This room will be staffed and run by the Congress Centre technicians. Presenters may submit their presentations beginning at 15:00 on Sunday, 22 February.

SPEAKER/PRESENTATION ROOM HOURS:

Sunday, 22 February	15:00 to 21:00
Monday, 23 February	07:00 to 19:00
Tuesday, 24 February	07:00 to 19:00
Wednesday, 25 February	07:00 to 19:00
Thursday, 26 February	07:00 to 19:00
Friday, 27 February	07:00 to 19:00

All presenters are required to check in to the Speaker/Presentation Room, Seminario 1-2 (Floor 1) at least **24 hours before your assigned presentation day** to submit your talk. An A/V technician will be available in the room to assist you. Please note: **If your presentation is on Monday**, please plan to go to the presentation room on Sunday during the hours specified to submit your talk.

REVIEWING YOUR PRESENTATION

When reviewing your presentation in the Speaker/Presentation Room, Seminario 1-2 (Floor 1), make sure all fonts, images, and animations appear as expected and that all audio or video clips are working properly.

IF THE PRESENTATION DOES NOT PLAY PROPERLY IN THE SPEAKER/PRESENTATION ROOM, IT WILL NOT PLAY PROPERLY IN THE MEETING ROOM. PERSONAL LAPTOPS CANNOT BE USED IN THE SESSION ROOMS.

When you are finished submitting, reviewing and/or making changes to your presentation, you must tell the A/V technician you have finalized your presentation file before you leave the Speaker/Presentation Room. Be sure to bring a backup copy of your presentation with you to the meeting. USB/Flash drives are preferred. Internet access will not be available in the session rooms. Please make sure you have all power, video, and networking adapters with you.

DURING YOUR PRESENTATION

Each meeting room will have a data projector, screen, laptop computer, audio, lectern, hardwired lectern microphone, timer computer, and laser pointer.

For more information on preparing your presentation, go to: http://bit.ly/18Iww2f

INSTRUCTIONS FOR POSTER PRESENTERS

There will be one (1) poster per side of each panel-board. Therefore posters must be no larger than a maximum 95 cm-wide by a maximum 122 cm-high (37 inches wide by 48 inches high). If your poster exceeds these specifications, it may be subject to removal. Posters will be affixed to the panel-boards using non-residue adhesive foam squares (1 inch x 1 inch). It is suggested that you apply at least one (1) foam square in each of the four corners of your poster. *(Note: An adequate supply of foam squares will be available throughout the poster hall.)*

Please place your poster in the spot designated by the poster ID number assigned to you. Posters will be displayed in session groupings for the entire meeting to maximize opportunities for viewing. Specific times for interaction between the presenters and attendees have been assigned in order not to conflict with oral presentations.

POSTER SET UP

Posters should be put up on Monday, 23 February, from 12:00 to 18:00 or on Tuesday, 24 February, between 08:00 and12:00 on Floor 1 in the area outside the Auditorium Manuel de Falla and on Floor 2.

POSTER SESSIONS

The poster sessions are on Tuesday, Wednesday, and Thursday, 24-26 February 2015, from 18:30 to 20:00 Refreshments and snacks will be available during the poster sessions.

POSTER TEAR DOWN

Posters must be removed on Friday, 27 February 2015, between 08:00 and 12:00 or following the conclusion of the poster session on Thursday evening.

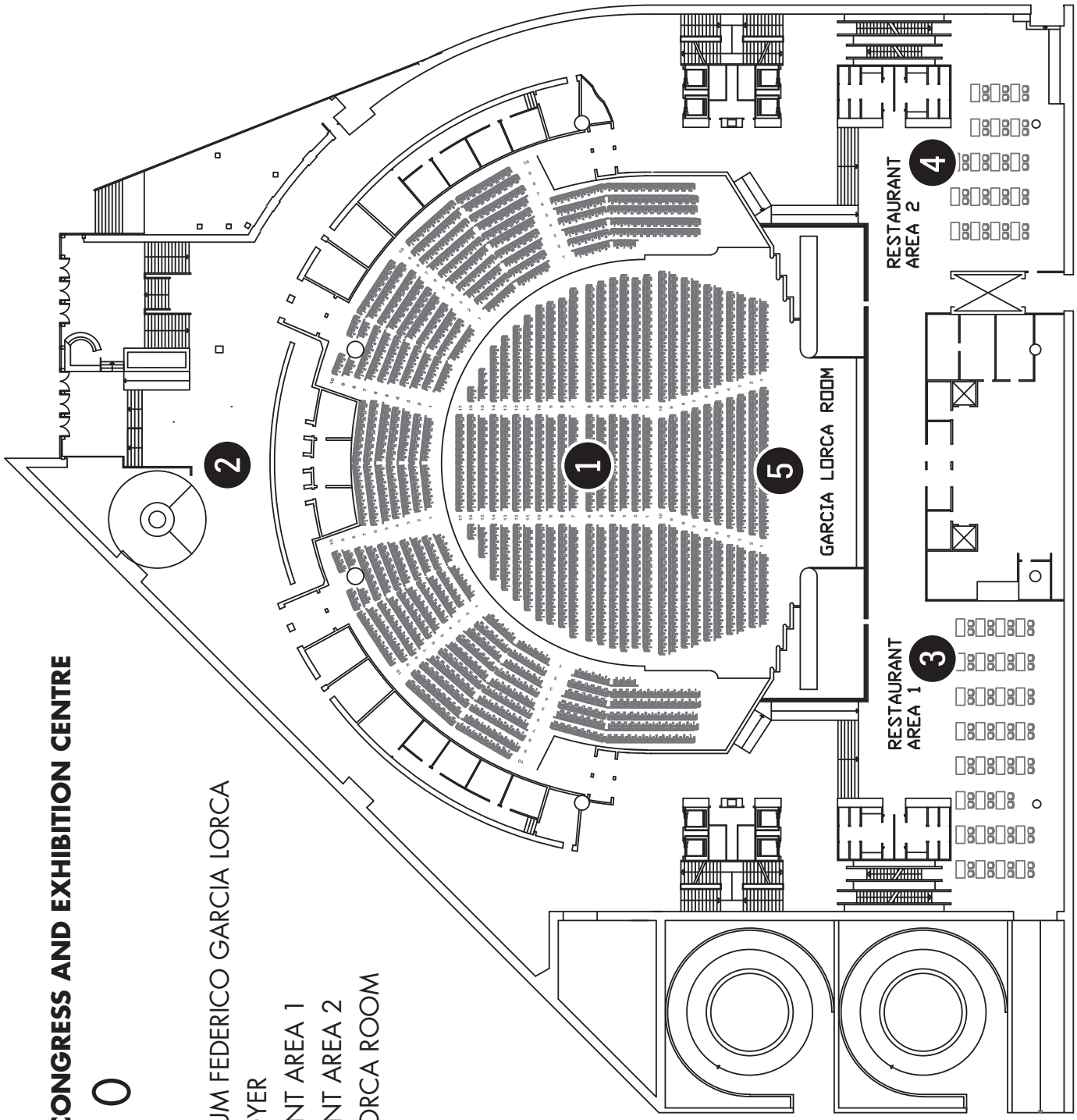
Aquatic Sciences

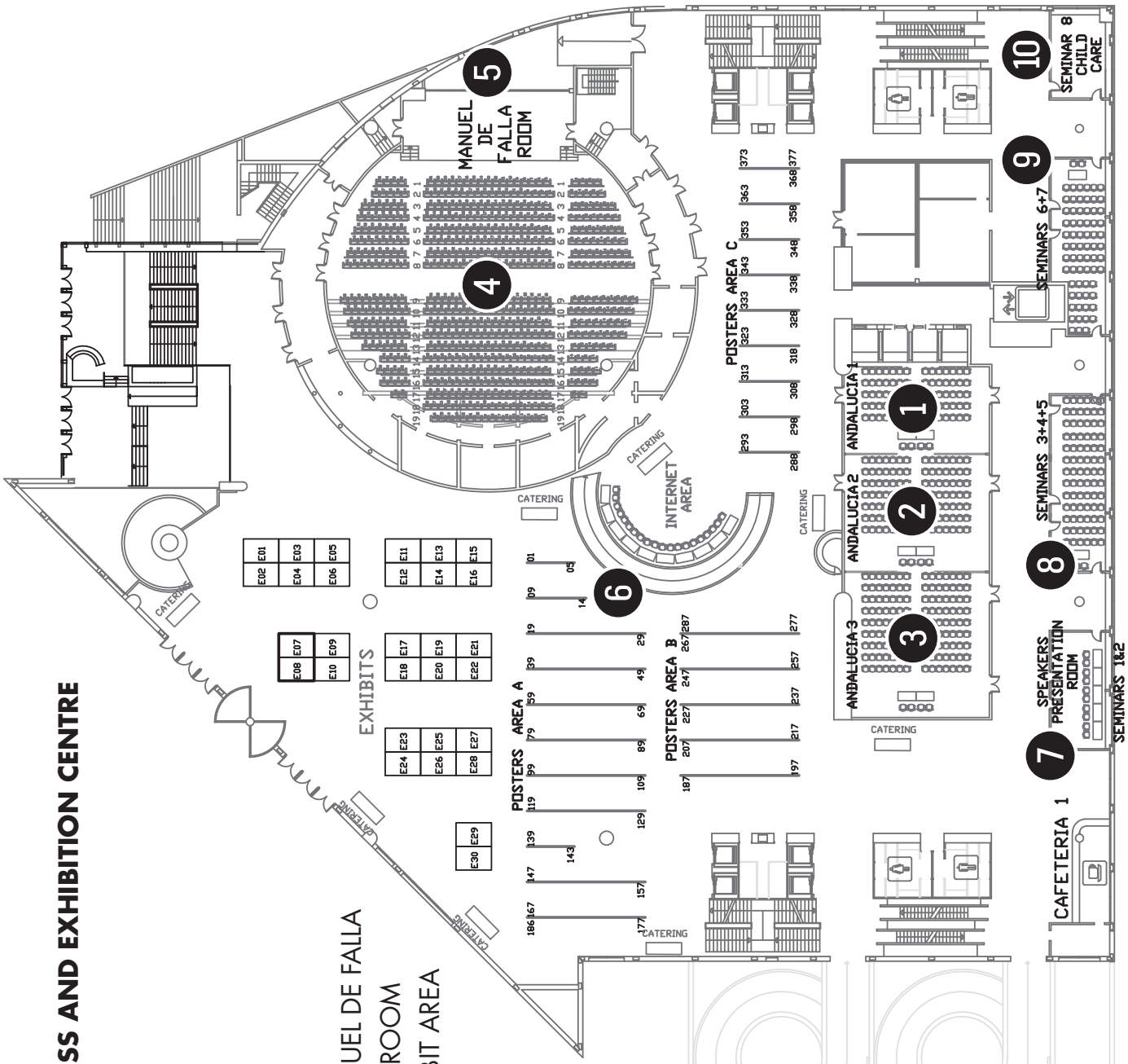
GLOBAL AND REGIONAL PERSPECTIVES:
NORTH MEETS SOUTH

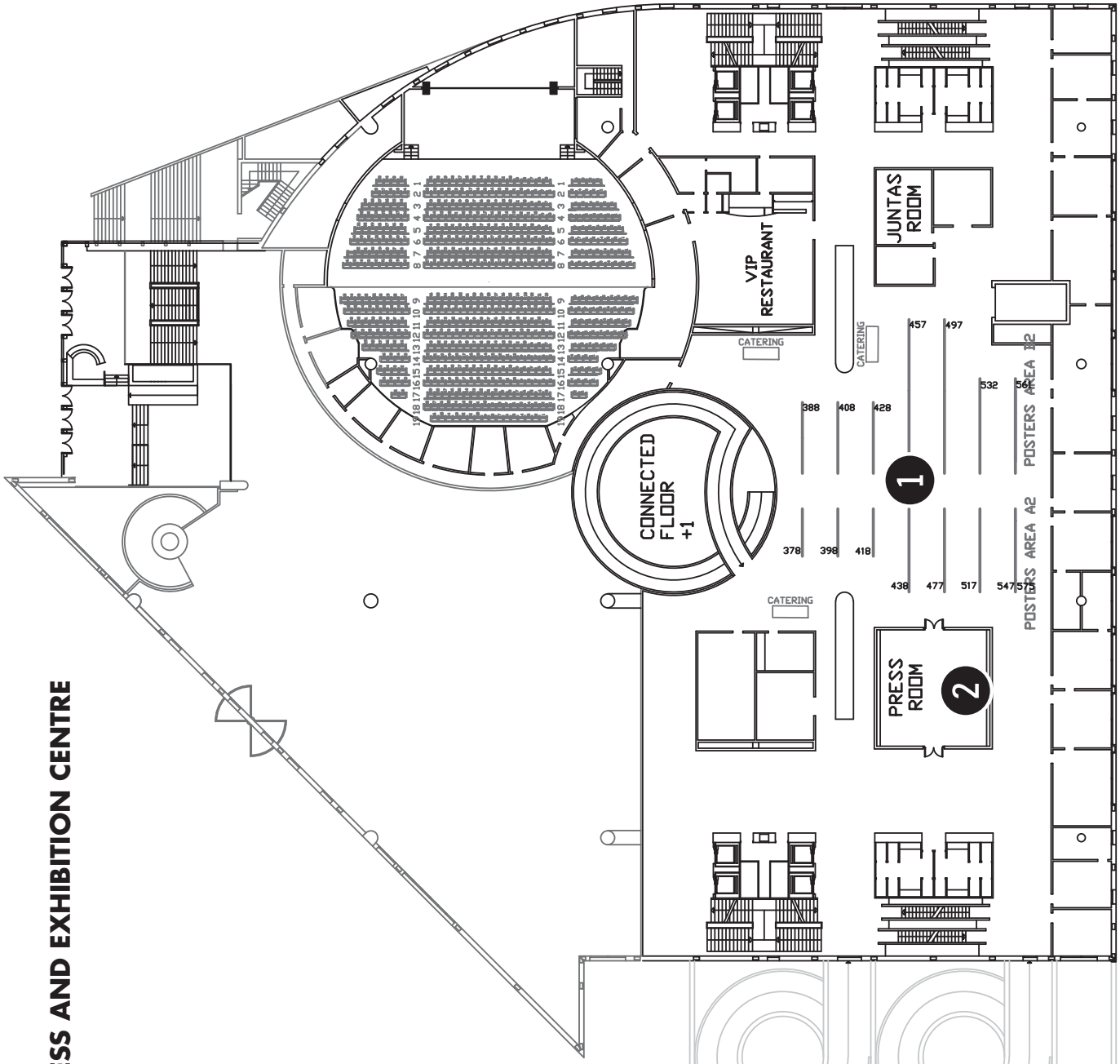
GRANADA CONGRESS AND EXHIBITION CENTRE

FLOOR 0

1. AUDITORIUM FEDERICO GARCIA LORCA
2. LORCA FOYER
3. RESTAURANT AREA 1
4. RESTAURANT AREA 2
5. GARCIA LORCA ROOM



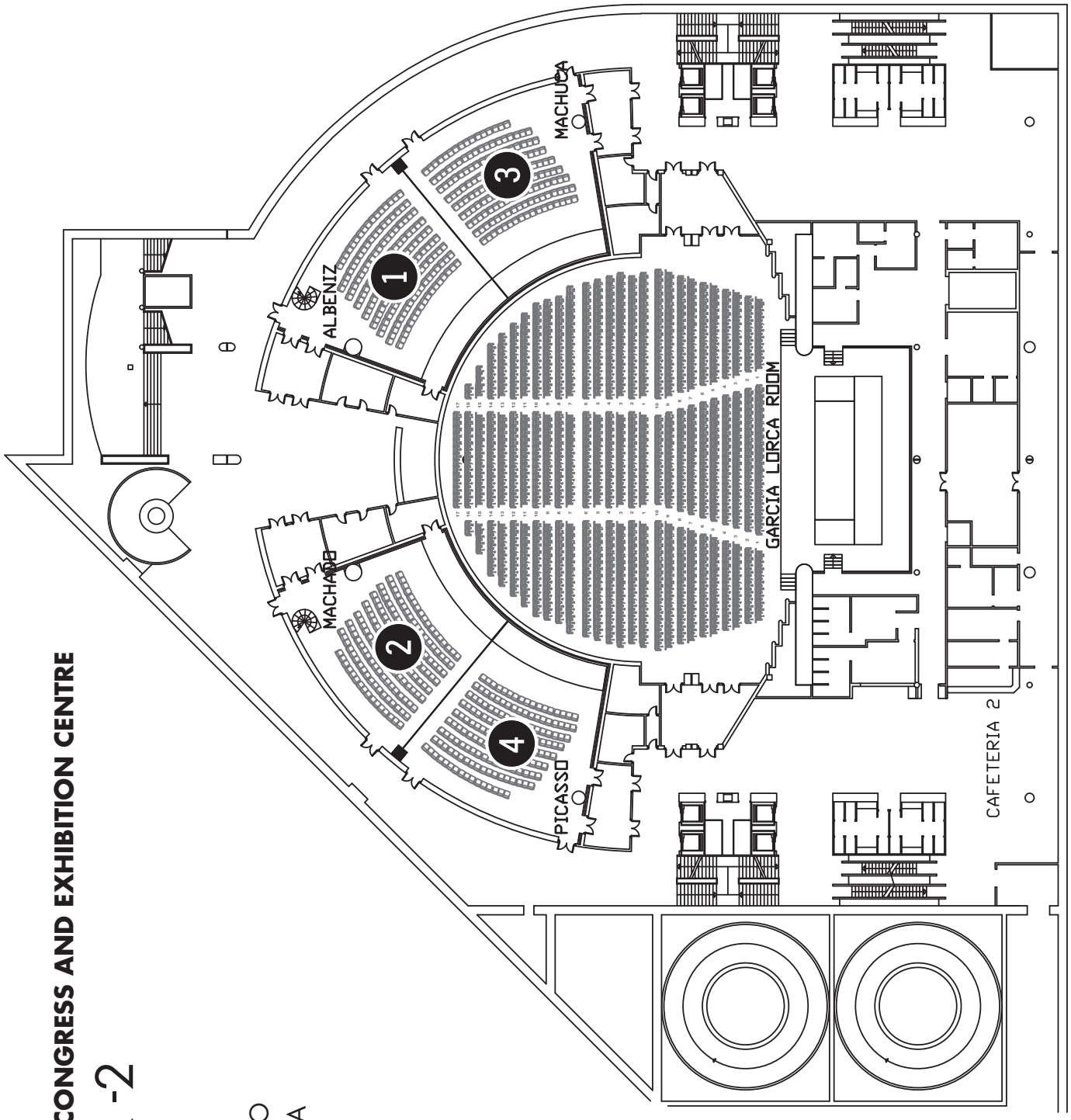

GRANADA CONGRESS AND EXHIBITION CENTRE
FLOOR 1
1 ANDALUCIA 1
2 ANDALUCIA 2
3 ANDALUCIA 3
4 AUDITORIUM MANUEL DE FALLA
5 MANUEL DE FALLA ROOM
6 POSTER AND EXHIBIT AREA
7 SEMINARIO 1-2
8 SEMINARIO 3-4-5
9 SEMINARIO 6-7
10 SEMINARIO 8
MANUEL DE FALLA ROOM
POSTERS AREA A
POSTERS AREA B
POSTERS AREA C
EXHIBITS
INTERNET AREA
CATERING
ANDALUCIA 1
ANDALUCIA 2
ANDALUCIA 3
SEMINARS 6+7
SEMINARS 3+4+5
SEMINAR 8 CHILD CARE
SPEAKERS PRESENTATION ROOM
SEMINARS 1&2
CAFETERIA 1



GRANADA CONGRESS AND EXHIBITION CENTRE

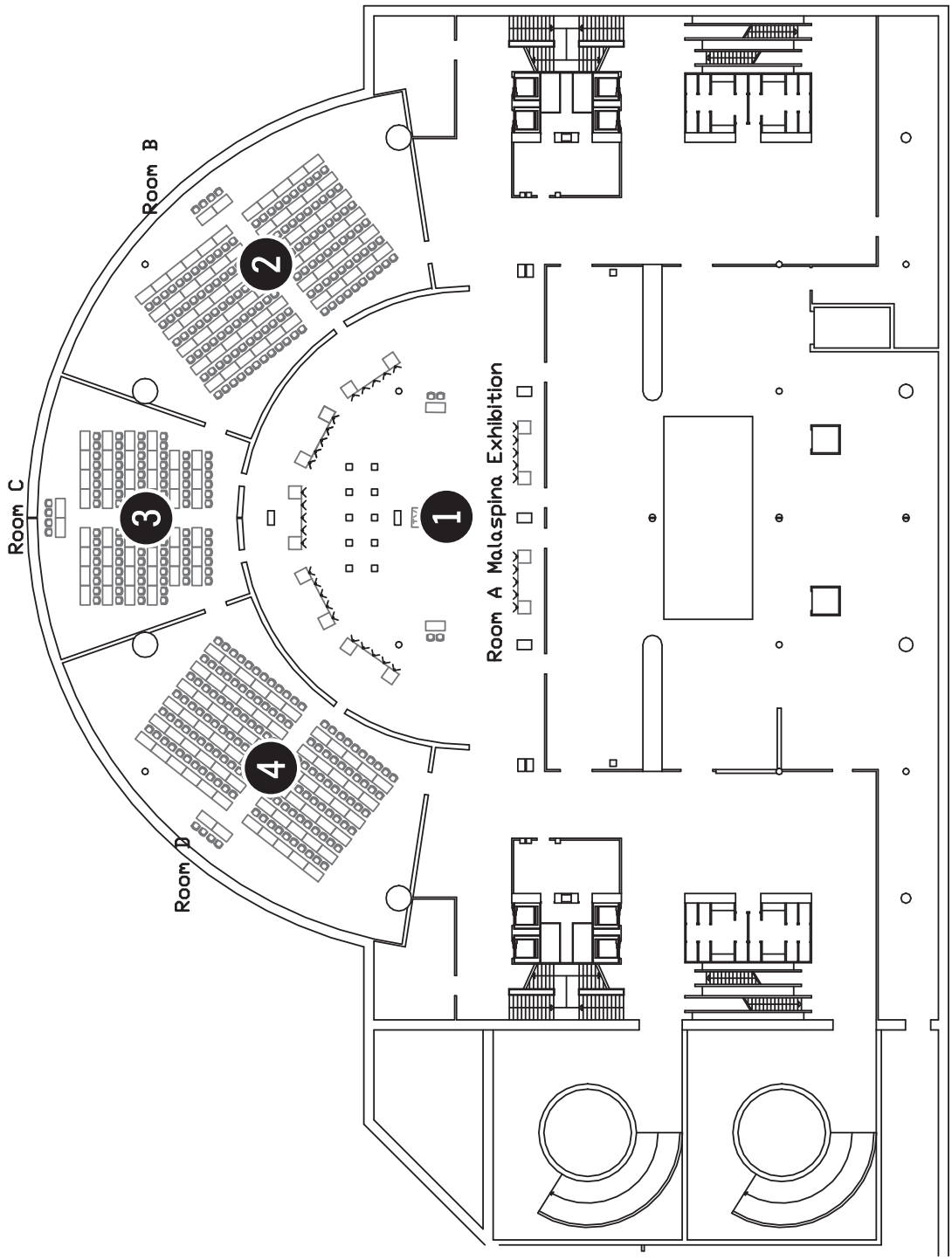
FLOOR 2

1 POSTER AREA
2 PRESS ROOM


GRANADA CONGRESS AND EXHIBITION CENTRE
FLOOR -2
1 ALBENIZ
2 MACHADO
3 MACHUCA
4 PICASSO
ALBENIZ
MACHADO
MACHUCA
PICASSO
GARCIA LORCA ROOM
CAFETERIA 2

GRANADA CONGRESS AND EXHIBITION CENTRE

FLOOR -3



1. FOYER
2. ROOM B
3. ROOM C
4. ROOM D

SCHEDULE AT A GLANCE - MONDAY

Room	MACHADO	ALBENIZ	PICASSO	MACHUCA	ROOM B	ROOM C	ROOM D	MANUEL DE FALLA AUDIT.
Floor	-2	-2	-2	-2	-3	-3	-3	+1
Session #	131	001	059	037	090	076	034	024
08:30 - 10:00	Frontiers in Invasion Ecology Research	ASLO Multi-cultural Program (ASLO MP) Student Symposium	Chemical fluxes across the sediment-water interface:…	The Molecular Ecology of Metal-Microbe Interactions	Aquatic gas fluxes: measurements, drivers and implications for ecosystem processes	Novel Microbial metabolisms and interactions in aquatic systems	Occurrence, impacts and management of cyanobacterial blooms	Small bugs, big impact: linking plankton ecology with ecosystem processes
10:00	Coffee Break							
Session #	131	001	059	037	090	076	034	024
10:30 - 12:00	Frontiers in Invasion Ecology Research	ASLO Multi-cultural Program (ASLO MP) Student Symposium	Chemical fluxes across the sediment-water interface:…	The Molecular Ecology of Metal-Microbe Interactions	Aquatic gas fluxes: measurements, drivers and implications for ecosystem processes	Novel Microbial metabolisms and interactions in aquatic systems	Occurrence, impacts and management of cyanobacterial blooms	Small bugs, big impact: linking plankton ecology with ecosystem processes
12:00 - 13:30	**ASLO Award Talks and Plenary Session** Auditorium Federico Garcia Lorca (Floor 0)							
13:30 - 15:00	Workshops, Town Halls, Auxiliary Meetings (Includes L&O/Wiley Forum). Details beginning on Page 23.							
Session #	131	001	059	112	090	076	034	024
15:00 - 16:30	Frontiers in Invasion Ecology Research	ASLO Multi-cultural Program (ASLO MP) Student Symposium	Chemical fluxes across the sediment-water interface:…	Are there freshwater biomes?	Aquatic gas fluxes: measurements, drivers and implications for ecosystem processes	Novel Microbial metabolisms and interactions in aquatic systems	Occurrence, impacts and management of cyanobacterial blooms	Small bugs, big impact: linking plankton ecology with ecosystem processes
16:30	Coffee Break							
Session #	131	001	059	087	090	076	034	024
17:00 - 18:30	Frontiers in Invasion Ecology Research	ASLO Multi-cultural Program (ASLO MP) Student Symposium	Chemical fluxes across the sediment-water interface:…	Transbiome impacts of tropical land-use change	Aquatic gas fluxes: measurements, drivers and implications for ecosystem processes	Novel Microbial metabolisms and interactions in aquatic systems	Occurrence, impacts and management of cyanobacterial blooms	Small bugs, big impact: linking plankton ecology with ecosystem processes
18:30 - 20:00	ASLO Business Meeting / ASLO Membership Forum - Auditorium Manuel de Falla (Floor 1) / Foyer (Floor 1)							
20:00 - 22:00	ASLO Student Mixer- Restaurant Area 1 (Floor 0)							

LORCA AUDITORIUM	ANDALUCIA I	ANDALUCIA II	ANDALUCIA III	SEMINARIO 3,4,5	SEMINARIO 6,7	PRESS ROOM	Room
0	+1	+1	+1	+1	+1	+2	Floor
032	114	138	067	099	039	073	Session #
Responses of marine organisms to ocean acidification	Multiple stressors in river ecosystems: challenges for conservation and management	Food Web Interactions and Trophic Linkages	Climate Change in the Baltic Sea: …	Deep Sea Carbon Flux Dynamics: biological, physical and chemical drivers	Beyond the mean: integrating the effect of variance in aquatic ecology	Coastal Ocean Biological Patterns and Processes at Regional Scales	08:30 - 10:00
Various Locations							10:00
032	114	138	067	099	039	073	Session #
Responses of marine organisms to ocean acidification	Multiple stressors in river ecosystems: challenges for conservation and management	Food Web Interactions and Trophic Linkages	Climate Change in the Baltic Sea: …	Deep Sea Carbon Flux Dynamics: biological, physical and chemical drivers	Beyond the mean: integrating the effect of variance in aquatic ecology	Coastal Ocean Biological Patterns and Processes at Regional Scales	10:30 - 12:00
Jim Elser - *ASLO 2.0: reinventing ourselves to assure relevance, impact, and sustainability* Roman Stocker - *The Microscale Biophysics of Ocean Microbes* A.C. Redfield Lifetime Achievement Award - David Schindler							12:00 - 13:30
Lunch (On your own)							13:30 - 15:00
032	062	138	067	099	004	073	Session #
Responses of marine organisms to ocean acidification	Integrated modelling of lakes in the climate system	Food Web Interactions and Trophic Linkages	Climate Change in the Baltic Sea: …	Deep Sea Carbon Flux Dynamics: biological, physical and chemical drivers	Advances in Coastal Hypoxia Modeling: From Physics to Fish	Coastal Ocean Biological Patterns and Processes at Regional Scales	15:00 - 16:30
Various Locations							16:30
032	062	109	067	092	004	012	Session #
Responses of marine organisms to ocean acidification	Integrated modelling of lakes in the climate system	Urban coastal Systems in a Changing Climate	Climate Change in the Baltic Sea: …	Geochemical and Biological Insight into Sulfate-Methane coupling…	Advances in Coastal Hypoxia Modeling: From Physics to Fish	Biogeochemi-cal Processes of Antarctic Shelf Systems	17:00 - 18:30
ASLO Business Meeting / ASLO Membership Forum - Auditorium Manuel de Falla (Floor 1) / Foyer (Floor 1)							18:30 - 20:00
ASLO Early Career Mixer - Restaurant Area 2 (Floor 0)							20:00 - 22:00

SCHEDULE AT A GLANCE - TUESDAY

Room	MACHADO	ALBENIZ	PICASSO	MACHUCA	ROOM B	ROOM C	ROOM D	MANUEL DE FALLA AUDIT.
Floor	-2	-2	-2	-2	-3	-3	-3	+1
Session #	014	002	065	085	090	116	017	024
08:30 - 10:00	Atmospheric deposition effects in aquatic ecosystems	Composition and reactivity of dissolved organic matter (DOM) across landscapes	Biogeochem., physics, and socioecon of groundwater-surface water interactions	Current advances ...approaches for measuring phytoplankton dynamics…	Aquatic gas fluxes: measurements, drivers and implications for ecosystem processes	Impact of microbial biodiversity on aquatic ecosystem functioning & biogeochem…	From "Catching the Algae" to the Role of Zooplankton ... Homage to Miquel Alcaraz	Small bugs, big impact: linking plankton ecology with ecosystem processes
10:00	Coffee Break							
Session #	014	002	065	085	090	116	017	024
10:30 - 12:00	Atmospheric deposition effects in aquatic ecosystems	Composition and reactivity of dissolved organic matter (DOM) across landscapes	Biogeochem., physics, and socioecon of groundwater-surface water interactions	Current advances ...approaches for measuring phytoplankton dynamics…	Aquatic gas fluxes: measurements, drivers and implications for ecosystem processes	Impact of microbial biodiversity on aquatic ecosystem functioning & biogeochem…	From "Catching the Algae" to the Role of Zooplankton ... Homage to Miquel Alcaraz	Small bugs, big impact: linking plankton ecology with ecosystem processes
12:00 - 13:30	**ASLO Award Talks and Plenary Session** Auditorium Federico Garcia Lorca (Floor 0)							
13:30 - 15:00	Workshops, Town Halls, Auxiliary Meetings (Includes Student Workshops). Details beginning on Page 23.							
Session #	014	002	065	085	045	116	017	024
15:00 - 16:30	Atmospheric deposition effects in aquatic ecosystems	Composition and reactivity of dissolved organic matter (DOM) across landscapes	Biogeochem., physics, and socioecon of groundwater-surface water interactions	Current advances ...approaches for measuring phytoplankton dynamics…	Addressing regional or global questions about trophic ecology	Impact of microbial biodiversity on aquatic ecosystem functioning & biogeochem…	From "Catching the Algae" to the Role of Zooplankton ... Homage to Miquel Alcaraz	Small bugs, big impact: linking plankton ecology with ecosystem processes
16:30	Coffee Break							
Session #	081	002	053	085	045	116	017	024
17:00 - 18:30	Bivalves as nutrient transformers: …	Composition and reactivity of dissolved organic matter (DOM) across landscapes	Biodiversity and ecosystem services in freshwater ecosystems…	Current advances ...approaches for measuring phytoplankton dynamics…	Addressing regional or global questions about trophic ecology	Impact of microbial biodiversity on aquatic ecosystem functioning & biogeochem…	From "Catching the Algae" to the Role of Zooplankton ... Homage to Miquel Alcaraz	Small bugs, big impact: linking plankton ecology with ecosystem processes
18:30 - 20:00	**Poster Session and Reception**							
20:00 - 21:00	Workshops, Town Halls, and Auxiliary Meetings. Details beginning on Page 23.							
20:00 - 22:30	Alhambra Night Time Tour (Optional) - Off-site							

LORCA AUDITORIUM	ANDALUCIA I	ANDALUCIA II	ANDALUCIA III	SEMINARIO 3,4,5	SEMINARIO 6,7	PRESS ROOM	Room
0	+1	+1	+1	+1	+1	+2	Floor
032	027	121	133	084	049	120	Session #
Responses of marine organisms to ocean acidification	Mercury Biogeochemistry from Headwaters to the Ocean	Natural and anthropogenic disturbances on deep-sea ecosystems	Aquatic Science Ed and Outreach	Interactive effects of Global Change Environmental Drivers …	Freshwater ecosystems and the carbon cycle:…	Key players in benthic processes: Micro vs. Macro	08:30 - 10:00
Various Locations							10:00
032	027	121	133	084	049	120	Session #
Responses of marine organisms to ocean acidification	Mercury Biogeochemistry from Headwaters to the Ocean	Natural and anthropogenic disturbances on deep-sea ecosystems	Aquatic Science Ed and Outreach	Interactive effects of Global Change Environmental Drivers …	Freshwater ecosystems and the carbon cycle:…	Key players in benthic processes: Micro vs. Macro	10:30 - 12:00
Scott Doney - *Changing coastal and open-ocean biogeochemistry in the Southern Ocean* Anthony Turton - *The Need for Transdisciplinarity Arising from the Holocene/Anthropocene Transition – Some Ideas from Water Conflict Resolution in South Africa* G. Evelyn Hutchinson Award - Craig Carlson							12:00 - 13:30
Lunch (On your own)							13:30 - 15:00
032	051	020	133	094	044	120	Session #
Responses of marine organisms to ocean acidification	Biogeochemical interactions between riparian and stream ecosystems…	Integrated Temporal Perspectives on Climate Effects on Lake Ecosystems	Aquatic Science Ed and Outreach	Policy Impacts of Aquatic Science: Communicating science to policymakers	Approaches to Regional and Global Lake Monitoring	Key players in benthic processes: Micro vs. Macro	15:00 - 16:30
Various Locations							16:30
032	051	020	133	094	044	113	Session #
Responses of marine organisms to ocean acidification	Biogeochemical interactions between riparian and stream ecosystems…	Integrated Temporal Perspectives on Climate Effects on Lake Ecosystems	Aquatic Science Ed and Outreach	Policy Impacts of Aquatic Science: Communicating science to policymakers	Approaches to Regional and Global Lake Monitoring	Bridging the gap between ecosystem modeling and ecosystem services' assessment…	17:00 - 18:30
Various Locations							18:30 - 20:00
Workshops, Town Halls, and Auxiliary Meetings. Details beginning on Page 23.							20:00 - 21:00
Alhambra Night Time Tour (Optional) - Off-site							20:00 - 22:30

SCHEDULE AT A GLANCE - WEDNESDAY

Room	MACHADO	ALBENIZ	PICASSO	MACHUCA	ROOM B	ROOM C	ROOM D	MANUEL DE FALLA AUDT.
Floor	-2	-2	-2	-2	-3	-3	-3	+1
Session #	068	007	035	085	045	118	013	008
08:30 - 10:00	Evolutionary effects of ocean warming and acidification	Biological connectivity and its importance within the context of global change	From Past to Present: Ocean Productivity and Biogeo-chemistry	Current advances ...approaches for measuring phyto-plankton dynamics…	Addressing regional or global questions about trophic ecology	Life at small scale: Microscale insights into aquatic systems	Assessing marine ecosystems health in an integrative way	The Global Ocean Ecosystem: Patterns, Drivers and Change
10:00	Coffee Break							
Session #	068	007	035	126	045	118	013	008
10:30 - 12:00	Evolutionary effects of ocean warming and acidification	Biological connectivity and its impor-tance within the context of global change	From Past to Present: Ocean Productivity and Biogeo-chemistry	Scales of variability in sources and sinks of methane in lakes	Addressing regional or global questions about trophic ecology	Life at small scale: Microscale insights into aquatic systems	Assessing marine ecosystems health in an integrative way	The Global Ocean Ecosystem: Patterns, Drivers and Change
12:00 - 13:30	**ASLO Award Talks and Plenary Session** Auditorium Federico Garcia Lorca (Floor 0)							
13:30 - 15:00	Workshops, Town Halls, Auxiliary Meetings (Includes Early Career Workshop). Details beginning on Page 23.							
Session #	019	007	035	126	045	118	013	008
15:00 - 16:30	Lakes in the cryosphere: from pole to pole	Biological connectivity and its importance within the context of global	From Past to Present: Ocean Productivity and Biogeo-chemistry	Scales of variability in sources and sinks of methane in lakes	Addressing regional or global questions about trophic ecology	Life at small scale: Microscale insights into aquatic systems	Assessing marine ecosystems health in an integrative way	The Global Ocean Ecosystem: Patterns, Drivers and Change
16:30	Coffee Break							
Session #	019	007	035	126	082	118	013	008
17:00 - 18:30	Lakes in the cryosphere: from pole to pole	Biological connectivity and its importance within the context of global change	From Past to Present: Ocean Productivity and Biogeo-chemistry	Scales of variability in sources and sinks of methane in lakes	Aquatic microbial communities across geographic and trophic gradients	Life at small scale: Microscale insights into aquatic systems	Assessing ma-rine ecosys-tems health in an integrative way	The Global Ocean Ecosystem: Patterns, Drivers and Change
18:30 - 20:00	**Poster Session and Reception**							
20:00 - 22:00	Workshops, Town Halls, and Auxiliary Meetings. Details beginning on Page 23.							
20:00 - 23:00	Dinner at La Chumbera Restaurante (Optional) - Off-site							

LORCA AUDITORIUM	ANDALUCIA I	ANDALUCIA II	ANDALUCIA III	SEMINARIO 3,4,5	SEMINARIO 6,7	PRESS ROOM	ROOM
0	+1	+1	+1	+1	+1	+2	Floor
022	054	080	143	036	046	010	Session #
The biogeochemistry of dissolved organic matter (DOM)	Advances in our Global Understanding of Ocean Acidification	Diapause strategies in aquatic organisms:…	Community Ecology	Human and jellyfish interactions	Recent ecological change in ancient lakes	Aquaculture & the environment - synergy or antagonism?	08:30 - 10:00
Various Locations							10:00
022	054	080	143	036	046	010	Session #
The biogeochemistry of dissolved organic matter (DOM)	Advances in our Global Understanding of Ocean Acidification	Diapause strategies in aquatic organisms:…	Community Ecology	Human and jellyfish interactions	Recent ecological change in ancient lakes	Aquaculture & the environment - synergy or antagonism?	10:30 - 12:00
Tim Lenton - *An evolutionary ecology approach to modelling the marine ecosystem and its response to global change* Amanda Vincent - *Imperfect advice or none at all* Ruth Patrick Award - James Cloern John Martin Award - Stephen Carpenter							12:00 - 13:30
Lunch (On your own)							13:30 - 15:00
022	054	080	143	036	040	056	Session #
The biogeochemistry of dissolved organic matter (DOM)	Advances in our Global Understanding of Ocean Acidification	Diapause strategies in aquatic organisms:…	Community Ecology	Human and jellyfish interactions	High throughput molecular tools in aquatic ecology	Aquatic microbes in a drop of water: from single cells to community interactions	15:00 - 16:30
Various Locations							16:30
022	130	023	123	100	040	056	Session #
The biogeochemistry of dissolved organic matter (DOM)	In situ studies of the impacts of ocean acidification: …	Biogeochemistry and ecology of African inland waters	Multi-Methods Connectivity Estimates to Improve Marine Protection Design	Microbial biogeochemistry of tidal flats and shallow sediments:…	High throughput molecular tools in aquatic ecology	Aquatic microbes in a drop of water: from single cells to community interactions	17:00 - 18:30
Various Locations							18:30 - 20:00
Workshops, Town Halls, and Auxiliary Meetings. Details beginning on Page 23.							20:00 - 22:00
Dinner at La Chumbera Restaurante (Optional) - Off-site							20:00 - 23:00

SCHEDULE AT A GLANCE - THURSDAY

Room	MACHADO	ALBENIZ	PICASSO	MACHUCA	ROOM B	ROOM C	ROOM D	MANUEL DE FALLA AUDIT.
Floor	-2	-2	-2	-2	-3	-3	-3	+1
Session #	139	066	035	098	058	005	013	008
08:30 - 10:00	Plankton Ecology - Phytoplankton	Strengthening the palaeo-limnological contribution to global change	From Past to Present: Ocean Productivity and Biogeo-chemistry	Ecosystem-Scale Approaches to Ecosystem-Scale Questions	Microbial interactions across the domains of life	Protist-omics: a multi-disciplinary exploration of the aquatic micro-eukaryotic world	Assessing marine ecosystems health in an integrative way	The Global Ocean Ecosystem: Patterns, Drivers and Change
10:00	Coffee Break							
Session #	042	066	016	098	058	005	095	008
10:30 - 12:00	Competition within planktonic communities: ...	Strengthening the palaeo-limnological contribution to global change	Meta-communities	Ecosystem-Scale Approaches to Ecosystem-Scale Questions	Microbial interactions across the domains of life	Protist-omics: a multi-disciplinary exploration of the aquatic micro-eukaryotic	Nitrogen limitation in freshwater - is nitrogen reduction ecologically meaningful?	The Global Ocean Ecosystem: Patterns, Drivers and Change
12:00 - 13:30	**ASLO Award Talks and Plenary Session** Auditorium Federico Garcia Lorca (Floor 0)							
13:30 - 15:00	Workshops, Town Halls, and Auxiliary Meetings. Details beginning on Page 23.							
Session #	042	066	016	098	058	005	089	008
15:00 - 16:30	Competition within planktonic communities: ...	Strengthening the palaeo-limnological contribution to global change	Meta-communities	Ecosystem-Scale Approaches to Ecosystem-Scale Questions	Microbial interactions across the domains of life	Protist-omics: a multi-disciplinary exploration of the aquatic micro-eukaryotic world	Infochemical controls on biogeochem-cial processes in aquatic and marine ecosystems	The Global Ocean Ecosystem: Patterns, Drivers and Change
16:30	Coffee Break							
Session #	042	132	016	098	058	005	089	105
17:00 - 18:30	Competition within planktonic communities: ...	Microbial diversity and dynamics in extreme environments	Meta-communities	Ecosystem-Scale Approaches to Ecosystem-Scale Questions	Microbial interactions across the domains of life	Protist-omics: a multi-disciplinary exploration of the aquatic micro-eukaryotic world	Infochemical controls on biogeochem-cial processes in aquatic and marine ecosystems	Viruses and viral mediat-ed processes in aquatic systems
18:30 - 20:00	**Poster Session and Reception**							
20:00 - 22:00	Workshops, Town Halls, and Auxiliary Meetings. Details beginning on Page 23.							
20:00 - 23:00	Dinner at La Chumbera Restaurante (Optional) - Off-site							

LORCA AUDITORIUM	ANDALUCIA I	ANDALUCIA II	ANDALUCIA III	SEMINARIO 3,4,5	SEMINARIO 6,7	PRESS ROOM	Room
0	+1	+1	+1	+1	+1	+2	Floor
022		057	009	071	003	110	Session #
The biogeochemistry of dissolved organic matter (DOM)		The oligotrophic Levantine Sea: state, challenges, and management	Reservoir Limnology	Physiological responses of phytoplankton to resource availability	People Power: The role of Citizen Scientists in aquatic science…	Canyons and Their Deep-sea Fans: When geology meets biology	08:30 - 10:00
Various Locations							10:00
022	075	057	009	071	003	110	Session #
The biogeochemistry of dissolved organic matter (DOM)	Marine Microbial Biodiversity, Bioinformatics, and Biotechnology	The oligotrophic Levantine Sea: state, challenges, and management	Reservoir Limnology	Physiological responses of phytoplankton to resource availability	People Power: The role of Citizen Scientists in aquatic science…	Canyons and Their Deep-sea Fans: When geology meets biology	10:30 - 12:00
Thorsten Dittmar - *Fire in the ocean: black carbon in aquatic environments* Tamara Galloway - *Microscopic plastic debris in aquatic ecosystems* Raymond L. Lindeman Award - Hilary G. Close Ramón Margalef Award for Excellence in Education- Marianne V. Moore							12:00 - 13:30
Workshops, Town Halls, and Auxiliary Meetings. Details beginning on Page 23.							13:30 - 15:00
022	075	086	038	071	140	072	Session #
The biogeochemistry of dissolved organic matter (DOM)	Marine Microbial Biodiversity, Bioinformatics, and Biotechnology	A meeting point for freshwater biogeochemistry and microbial biodiversity: …	Advances in flux measurements in aquatic environments	Physiological responses of phytoplankton to resource availability	Plankton Ecology - Zooplankton	Physical and biological processes associated with the exchange through Straits: …	15:00 - 16:30
Various Locations							16:30
142	075	086	038	015	140	072	Session #
Chemical Oceanography/ GEOTRACES	Marine Microbial Biodiversity, Bioinformatics, and Biotechnology	A meeting point for freshwater biogeochemistry and microbial biodiversity: …	Advances in flux measurements in aquatic environments	Long-term studies of environmental stressors on lake ecosystems	Plankton Ecology - Zooplankton	Physical and biological processes associated with the exchange through Straits: …	17:00 - 18:30
Various Locations							18:30 - 20:00
Workshops, Town Halls, and Auxiliary Meetings. Details beginning on Page 23.							20:00 - 22:00
Dinner at La Chumbera Restaurante (Optional) - Off-site							20:00 - 23:00

SCHEDULE AT A GLANCE - FRIDAY

Room	MACHADO	ALBENIZ	PICASSO	MACHUCA	ROOM B	ROOM C	ROOM D	MANUEL DE FALLA AUDIT.
Floor	-2	-2	-2	-2	-3	-3	-3	+1
Session #	101	060	011	098	026	137	047	105
08:30 - 10:00	Microscopic plastic debris and its impact on aquatic ecosystems	New insights and perspectives in ecological stoichiometry	The impact of global change on toxic phyto-plankton	Ecosystem-Scale Approaches to Ecosystem-Scale Questions	Regime shifts in lakes, rivers, and oceans	Next Generation In Situ Sensors for Aquatic Systems	Aquatic Chemical Ecology - ...organic compounds regulate trophic interactions	Viruses and viral mediated processes in aquatic systems
10:00	Coffee Break							
Session #	101	060	011	028	026	137	047	105
10:30 - 12:00	Microscopic plastic debris and its impact on aquatic ecosystems	New insights and per-spectives in ecological stoichiometry	The impact of global change on toxic phyto-plankton	Linking organic matter composition and microbial diversity	Regime shifts in lakes, rivers, and oceans	Next Generation In Situ Sensors for Aquatic Systems	Aquatic Chemical Ecology - ...organic compounds regulate trophic interactions	Viruses and viral mediated processes in aquatic systems
12:00 - 13:30	**ASLO Award Talks and Plenary Session** Auditorium Federico Garcia Lorca (Floor 0)							
13:30 - 15:00	Workshops, Town Halls, Auxiliary Meetings. Details beginning on Page 23.							
Session #	101	060	091	028	026	137	047	105
15:00 - 16:30	Microscopic plastic debris and its impact on aquatic ecosystems	New insights and per-spectives in ecological stoichiometry	Bio-optics, optical bio-geochemistry, and remote sensing of optically com-plex waters	Linking organic matter composition and microbial diversity	Regime shifts in lakes, rivers, and oceans	Next Generation In Situ Sensors for Aquatic Systems	Aquatic Chemical Ecology - ...organic compounds regulate trophic interactions	Viruses and viral mediated processes in aquatic systems
16:30	Coffee Break							
Session #	063	060	091	028	026	137	047	105
17:00 - 18:30	Respiration and the oceanic de-oxygenation problem	New insights and per-spectives in ecological stoichiometry	Bio-optics, optical bio-geochemistry, and remote sensing of optically com-plex waters	Linking organic matter composition and microbial diversity	Regime shifts in lakes, rivers, and oceans	Next Generation In Situ Sensors for Aquatic Systems	Aquatic Chemical Ecology - ...organic compounds regulate trophic interactions	Viruses and viral mediated processes in aquatic systems
19:45 - 23:00	Closing Banquet at La Mamunia (Optional) - Off-site							

LORCA AUDITORIUM	ANDALUCIA I	ANDALUCIA II	ANDALUCIA III	SEMINARIO 3,4,5	SEMINARIO 6,7	PRESS ROOM	Room
0	+1	+1	+1	+1	+1	+2	Floor
061	050	128	136	033	029	119	Session #
Global climate change: ocean acidification experiments at CO2 vents	Nitrogen-cycle feedbacks: drivers of change?	Planktonic Biodiversity: Spatial & Temporal Components	Advances in Blue Carbon Research	The role of natural ecosystems in coastal protection	Phenology and evolutionary adaptations to seasonality in aquatic ecosystems	Integrated perspectives of Eastern Boundary Upwelling Systems	08:30 - 10:00
Various Locations							10:00
061	050	128	136	033	029	119	Session #
Global climate change: ocean acidification experiments at CO2 vents	Nitrogen-cycle feedbacks: drivers of change?	Planktonic Biodiversity: Spatial & Temporal Components	Advances in Blue Carbon Research	The role of natural ecosystems in coastal protection	Phenology and evolutionary adaptations to seasonality in aquatic ecosystems	Integrated perspectives of Eastern Boundary Upwelling Systems	10:30 - 12:00
Bess Ward - *Cryptic pathways of microbial nitrogen transformations in the ocean* Peter Raymond - *Drainage Networks as Reactors* Yentsch-Schindler Early Career Award - Matthew Church							12:00 - 13:30
Lunch (On your own)							13:30 - 15:00
061	050	006	136	033	031	041	Session #
Global climate change: ocean acidification experiments at CO2 vents	Nitrogen-cycle feedbacks: drivers of change?	Ecological impacts of droughts on freshwater ecosystems	Advances in Blue Carbon Research	The role of natural ecosystems in coastal protection	Restoration of lakes, reservoirs, and coastal ecosystems by reducing internal nutri-ent recycling	Lake Ice Dynamics: Hydrology of Cold Water Bodies	15:00 - 16:30
Various Locations							16:30
061	011	006	083		031	041	Session #
Global climate change: ocean acidification experiments at CO2 vents	The impact of global change on toxic phyto-plankton	Ecological impacts of droughts on freshwater ecosystems	Environmen-tal Conse-quences of Anthropogen-ic Structure in the Offshore Environment: …		Restoration of lakes, reservoirs, and coastal ecosystems by reducing internal nutri-ent recycling	Lake Ice Dynamics: Hydrology of Cold Water Bodies	17:00 - 18:30
Closing Banquet at La Mamunia (Optional) - Off-site							19:45 - 23:00

MONDAY ORALS

001 ASLO MULTICULTURAL PROGRAM (ASLO MP) STUDENT SYMPOSIUM

Chair(s): Benjamin Cuker, benjamin.cuker@hamptonu.edu
Deidre Gibson, deidre.gibson@hamptonu.edu

Location: Albeniz (Floor -2)

08:30 **Wallace, E. J.**; Gong, D.: INTERANNUAL AND DECADAL VARIABILITY IN TEMPERATURE, SALINITY, AND SHELF WATER VOLUME IN THE MID-ATLANTIC BIGHT FROM 1977 TO 2013 (ID: 25659)

08:45 **Ramos, A. N.**: VALIDATION OF MODEL OUTPUT VS ADCP OBSERVATIONS ON THE LA PARGUERA SHELF, SOUTHWEST PUERTO RICO (ID: 25719)

09:00 **Maldonado, D. A.**; Keepler, C.; Benitez-Nelson, C.; Greenfield, D. I.: PHYSIOLOGICAL RESPONSES OF THREE HARMFUL ALGAL BLOOM SPECIES TO NITROGEN AND PHOSPHORUS FORMS AND RATIOS IN SOUTH CAROLINA ESTUARIES, USA (ID: 25642)

09:15 **Williamson, S. C.**; Rheuban, J. E.; Costa, J. E.; Glover, D. M.; Jakuba, R. W.; Kavanaugh, M. T.; Neill, C.; Doney, S. C.: LONG TERM TRENDS IN WATER QUALITY IN BUZZARDS BAY, MASSACHUSETTS (ID: 26397)

09:30 **Castro, P.**; Jauzein, C.; Baker, B. J.; Erdner, D.: BACTERIA-DINOFLAGELLATE INTERACTIONS AND THE DIFFERENTIAL EFFECTS ON THE DINOFLAGELLATE *ALEXANDRIUM* (ID: 25589)

09:45 **Perry, D. C.**; Jeppesen, R. K.; Wasson, K.: MACROALGAL BLOOMS OVER TIME AND THE EFFECTS OF WRACK ON SALT MARSH IN ELKHORN SLOUGH ESTUARY (ID: 25743)

10:30 **Migliolo, F. X.**; Deheyn, D. D.: RELATIONSHIP BETWEEN REDOX POTENTIAL AND LIGHT PRODUCTION IN THE MUCUS OF THE MARINE TUBEWORM *CHAETOPTERUS SP.* (ID: 26464)

10:45 **Emerson, A. N.**; Wheeler, J. D.; Mullineaux, L. S.: EXPLORING THE EFFECTS OF TURBULENT SPIN UP ON LARVAL SWIMMING BEHAVIOR IN THE EASTERN OYSTER (*CRASSOSTREA VIRGINICA*) (ID: 25960)

11:00 **Plummer, A.**; Plough, L.; Pierson, J.: CONSEQUENCES OF DIVERSIFICATION AMONG ACARTIA TONSA IN THE CHESAPEAKE BAY (ID: 25582)

11:15 **Padilla, A. M.**; Michel, A. P.; Gschwend, M.; Sonnichsen, F.: INVESTIGATING THE USE OF LASER INDUCED BREAKDOWN SPECTROSCOPY FOR IN SITU HEAVY METAL ANALYSIS IN OCEAN SEDIMENTS (ID: 25627)

11:30 **Wimberley, A. S.**; DeLorenzo, M.; Chung, K.; Graham, E.; Calvert, M.: EFFECTS OF OIL SPILL DISPERSANTS ON THE GRASS SHRIMP, PALAEMONETES PUGIO (ID: 25949)

11:45 **Holloway, D. L.**; Kearns, P. J.; Feinman, S. G.; Angell, J. A.; Bowen, J. L.: DIEL CHANGES IN THE ACTIVE MICROBIAL COMMUNITY OF A SALT MARSH TIDE POOL (ID: 26238)

15:00 **Taylor, S.**; Cramer, K.; Dooley, K.; Lourie, W.; Mincer, T. J.; Amaral-Zettler, L. A.; Zettler, E. R.: SHORT-TERM MICROBIAL COMMUNITY ASSEMBLY ON PLASTIC MARINE DEBRIS: EVIDENCE FROM EXPERIMENTAL COLONIZATION STUDIES IN THE WATERS OF WOODS HOLE, MA, USA (ID: 26254)

15:15 **Cordoba, G. C.**; Arellano, S.: FACTORS THAT AFFECT THE VERTICAL DISTRIBUTION OF OLYMPIA OYSTER LARVAE IN FIDALGO BAY, WA (ID: 26375)

15:30 **Luis, K.**; Hetzinger, S.; Von Reumont, J.; Manfrino, C.; Degregori, S.: COMPARATIVE ANALYSIS OF MODERN AND FOSSIL CORAL COMMUNITY STRUCUTRE AT LITTLE CAYMAN, CENTRAL CARIBBEAN (ID: 26451)

15:45 **Rice, J. A.**: DETERMINATION OF MINERAL COMPOSITION OF BLUE CRAB CARAPACE: ASSESSMENT OF SPATIAL VARIABILITY AND RESPONSE TO ACIDIFICATION IN PATUXENT RIVER, CHESAPEAKE BAY (ID: 26460)

16:00 **Nieves, M. A.**; Siuda, A. N.: FACTORS THAT INFLUENCE THE COMPOSITION OF THE RESIDENT MACROFAUNA COMMUNITY ON FREE-FLOATING SARGASSUM (ID: 27669)

16:15 **Armengol, L.**; Hernández-León, S.: MICROZOOPLANKTON GRAZING EXPERIMENTS IN SUBTROPICAL WATERS: WHAT IS GOING ON DURING INCUBATION (ID: 26572)

17:00 **Abaya, L. M.**; Wiegner, T.; Colbert, S.; Aiwohi, M.; Braun, E.; Tabandera, R.: SPATIAL DISTRIBUTION AND EFFECTS OF SEWAGE IN COASTAL HAWAIIAN WATERS (ID: 27381)

17:15 **Givens, K. F.**; Biondo, P.; Watson, A.; Yost , J.: EFFECTS OF SOYBEAN MEAL DIETARY INCLUSION ON INTESTINAL MORPHOLOGY AND GROWTH OF RED DRUM, *SCIAENOPS OCELLATUS* (ID: 26441)

17:30 **Redd, L.**; Schwarz, M. H.; Urick, S.; Breland, M.; Horodysky, A. Z.: EFFECTS OF TEMPERATURE AND FEED TYPE ON GASTRIC EVACUATION OF AQUACULTURED POMPANO (*TRACHINOTUS CAROLINUS*) (ID: 26459)

17:45 **King, E. E.**; Laurel, B. J.; Copeman, L. A.: THE ROLE OF CONDITION AND LIPID STORAGE ON SETTLEMENT TIMING IN A PACIFIC FLATFISH SPECIES (ID: 27308)

004 ADVANCES IN COASTAL HYPOXIA MODELING: FROM PHYSICS TO FISH

Chair(s): Katja Fennel, katja.fennel@dal.ca
Robert Hetland, hetland@tamu.edu
Dubravko Justic, djusti1@lsu.edu

Location: Seminario 6-7 (Floor 1)

15:00 **Lehrter, J.**; Ko, D.; Lowe, L.; Jarvis, B.; Le, C.: APPLICATION OF THE COASTAL GENERAL ECOSYSTEM MODEL (CGEM) TO ASSESS THE IMPACTS OF A FUTURE CLIMATE SCENARIO ON NORTHERN GULF OF MEXICO HYPOXIA (ID: 26938)

15:15 **Hetland, R. D.**; Zhang, W.; Fennel, K.; DiMarco, S. F.: SEASONAL HYPOXIA IN THE CONTEXT OF BOTTOM BOUNDARY LAYER DYNAMICS (ID: 26871)

15:30 **Yu, L.**; Fennel, K.; Laurent, A.: A MODELLING STUDY OF PHYSICAL CONTROLS ON HYPOXIA GENERATION IN THE NORTHERN GULF OF MEXICO (ID: 25422)

15:45 **Laurent, A.**; Fennel, K.; Cai, W.; Huang, W.; Barbero, L.; Wanninkhof, R.: PROCESSES CONTROLLING EUTROPHICATION-INDUCED ACIDIFICATION IN THE NORTHERN GULF OF MEXICO: RESULTS FROM A COUPLED PHYSICAL-BIOGEOCHEMICAL MODEL (ID: 25904)

16:00 **Justic, D.**; Wang, L.; Ayyala, I.: EVALUATING THE EFFECTIVENES OF NUTRIENT MANAGEMENT STRATEGIES FOR REDUCING HYPOXIA IN THE NORTHERN GULF OF MEXICO: LESSONS FROM SIMPLE AND COMPLEX MODELS (ID: 25910)

16:15 **Fennel, K.**; Hetland, R.; Justic, D.; Ko, D.; Laurent, A.; Lehrter, J.; Murrell, M.; Wang, L.; Yu, L.; Zhang, W.: INTERCOMPARISON OF HYPOXIA MODELS FOR THE NORTHERN GULF OF MEXICO (ID: 25917)

17:00 **Harrison, C. S.**; Hales, B.; Samelson, R. M.; Siedlecki, S.: PHYSICAL-BIOGEOCHEMICAL INTERACTIONS AND OXYGEN DRAWDOWN IN UPWELLING SYSTEMS (ID: 25941)

17:15 **Pozo Buil, M.**; Di Lorenzo, E.; Bograd, S. J.: DECADAL PREDICTION OF HYPOXIA ALONG THE US WEST COAST (ID: 26404)

17:30 **Schwefel, R.**; Bouffard, D.; Wüest, A. J.: IMPACT OF DEEPWATER MIXING ON HYPOXIA IN LAKE GENEVA (ID: 26979)

17:45 **Klump, J. V.**; LaBuhn, S. L.; Koopmans, D.; Waples, J. T.; Hamidi, S.; Bravo, H. R.: MECHANISMS CONTROLLING THE DEVELOPMENT OF HYPOXIA IN GREEN BAY, LAKE MICHIGAN (ID: 27486)

18:00 **Bravo, H. R.**; Hamidi, S. A.; Klump, J. V.: STRATIFICATION INDUCED BY CIRCULATION AND HEAT FLUXES LEADS TO HYPOXIA IN GREEN BAY, LAKE MICHIGAN (ID: 27502)

18:15 **Roman, M. R.**; Elliott, D. T.; Pierson, J. J.: OVERHEATED AND OUT OF BREATH: TEMPERATURE REGULATION OF RESPIRATION AND OXYGEN SUPPLY IN COASTAL ZOOPLANKTON (ID: 25897)

012 BIOGEOCHEMICAL PROCESSES OF ANTARCTIC SHELF SYSTEMS

Chair(s): Dennis A. Hansell, dhansell@rsmas.miami.edu
Giacomo DiTullio, DitullioJ@cofc.edu
Robert B. Dunbar, dunbar@stanford.edu
Alexander B. Bochdansky, ABochdan@odu.edu
Monica Orellana, Monica.Orellana@systemsbiology.org
Roberta L. Hansman, rhansman@gmail.com

Location: Press Room (Floor 2)

17:00 Lee, A.; **Orellana, M. V.**; Lopez Garcia de Lomana, A. V.; Jennings, M.; Bercovici, S.; Baliga, N. S.; Hansell, D. A.: PROGRAMMED CELL DEATH IN THE ROSS SEA (ID: 25964)

17:15 **Bercovici, S.**; Hansell, D.: BIOGEOCHEMICAL TRANSFORMATIONS OF DENSE SHELF WATERS IN THE ROSS SEA (ID: 25889)

17:30 **Hansman, R. L.**; Herndl, G. J.: MICROBIAL CHEMOAUTOTROPHY IN THE WESTERN ROSS SEA (ID: 26080)

17:45 **Tortell, P. D.**; Bittig, H. C.; Körtzinger, A.; Jones, E. M.; Hoppema, M.: BIOLOGICAL AND PHYSICAL CONTROLS ON SURFACE GAS DISTRIBUTIONS ALONG THE ANTARCTIC CONTINENTAL SHELF (ID: 27394)

18:00 **DeJong, H. B.**; Dunbar, R. B.; Mucciarone, D.; Koweek, D.: CARBON CHEMISTRY OF THE ROSS SEA, ANTARCTICA DURING EARLY AUTUMN: IMPLICATIONS FOR CARBON EXPORT AND CO_2 FLUX (ID: 27680)

18:15 **Dunbar, R.**; Riesselman, C.; DeJong, H.; DiTullio, G.; Orellana, M.; Lee, P.; Lee, A.; Hansell, D.: LATE SUMMER ALGAL BLOOMS IN FRAZIL AND PANCAKE ICE OF THE ROSS SEA: ORIGINS, BIOPHYSICAL LINKAGES AND IMPLICATIONS FOR THE C CYCLE (ID: 27659)

024 SMALL BUGS WITH A BIG IMPACT: LINKING PLANKTON ECOLOGY WITH ECOSYSTEM PROCESSES

Chair(s): Susanne Menden-Deuer, smenden@gso.uri.edu
Thomas Kiorboe, tk@aqua.dtu.dk

Location: Auditorium Manuel de Falla (Floor 1)

08:30 **Sichlau, M. H.**; Kiørboe, T.; Nielsen, E. E.; Thygesen, U. H.: MATING SUCCESS AND SEXUAL SELECTION IN A PELAGIC COPEPOD, *TEMORA LONGICORNIS* – EVIDENCE FROM PATERNITY ANALYSES (ID: 25421)

08:45 **Wollrab, S.**; Diehl, S.: BOTTOM-UP RESPONSES OF THE LOWER OCEANIC FOOD WEB ARE SENSITIVE TO COPEPOD MORTALITY AND FEEDING BEHAVIOUR (ID: 27289)

09:00 **Dufour, K.**; Maps , F.; Plourde, S.; Joly, P.; Fortier, L.; Turgeon, J.: INTRAGUILD PREDATION IN ARCTIC AND SUBARCTIC COPEPOD COMMUNITIES (ID: 27170)

09:15 **Meunier, C. L.**; Boersma, M.; Wiltshire, K. H.; Malzahn, A. M.: ZOOPLANKTON EATS WHAT IT NEEDS: COPEPOD SELECTIVE FEEDING AND POTENTIAL CONSEQUENCES FOR MARINE SYSTEMS (ID: 25418)

09:30 **Uszko, W.**; Diehl, S.: TYPE III FUNCTIONAL RESPONSE IN *DAPHNIA* - IS IT REAL AND DOES IT STABILIZE? (ID: 26119)

09:45 **Michalec, F. G.**; Souissi, S.; Holzner, M.: SWIMMING DYNAMICS OF THE CALANOID COPEPOD *EURYTEMORA AFFINIS* IN TURBULENT FLOW (ID: 25687)

10:30 Nihongi, A.; Ziarek, J. J.; Nagai, T.; **Uttieri, M.**; Sandulli, R.; Zambianchi, E.; Strickler, J. R.: KAIROMONE-INDUCED CHANGES IN THE INTERSEASONAL SWIMMING BEHAVIOUR OF DAPHNIA PULICARIA (CRUSTACEA: CLADOCERA) (ID: 25776)

10:45 **Mayor, D. J.**; Sanders, R.; Giering, S. L.; Anderson, T. R.: MICROBIAL GARDENING IN THE OCEAN'S TWILIGHT ZONE: DETRITIVOROUS METAZOANS BENEFIT FROM FRAGMENTING, RATHER THAN INGESTING, SINKING DETRITUS (ID: 27622)

11:00 **Gutierrez Rodriguez, A.**; Pillet, L.; Biard, T.; Simo, R.; Not, F.: THE ROLE OF DIMETHYL SULFUR COMPOUNDS AS ANTIOXIDANT IN PLANKTONIC PHOTOSYMBIOSIS AND ITS ECOLOGICAL IMPLICATIONS (ID: 26748)

11:15 **Amato, A.**; Kooistra, W.; Peters, F.; Ribera d'Alcalà, M.; Sanges, R.; Iudicone, D.; Ferrante, M. I.: ISOTROPIC MARINE MICROTURBULENCE AFFECTS DIATOM CHAIN COMPOSITION (ID: 26955)

11:30 **Berman-Frank, I. R.**; Bar-Zeev, E.; Spungin, D.; Bidle, K.: MECHANISM OF DEATH DETRMINES FATE OF BIOMASS - COUPLING EXPORT PRODUCTION AND PROGRAMMED CELL DEATH IN THE BLOOM FORMING TRICHODESMIUM (ID: 26548)

11:45 Grossowicz, M.; Roth-Rosenberg, D.; Aharonovich, D.; Follows, M. J.; **Sher, D.**: THE CHALLENGE OF MODELING A "SIMPLE" ORGANISM WITH A "SIMPLE" MODEL: WHAT DO WE NEED TO KNOW IN ORDER TO MODEL PROCHLOROCOCCUS GROWTH AND DEATH? (ID: 26694)

15:00 **Bondoc, K. V.**; Heuschele, J.; Gillard, J.; Vyverman, W.; Pohnert, G.: HUNGRY FOR SILICIC ACID: CHEMOKINETIC MOVEMENT OF THE DIATOM *SEMINAVIS ROBUSTA* TOWARDS SI SOURCES (ID: 27567)

15:15 **Kenitz, K. M.**; Andersen, K. H.; Mariani , P.; Visser, A. W.: VERTICAL DISTRIBUTION OF MOTILE AND NON-MOTILE PHYTOPLANKTON AND IMPLICATIONS FOR OPTIMAL FEEDING MODE OF ZOOPLANKTON (ID: 26966)

15:30 **Cunliffe, M.**; Taylor, J. D.: DNA STABLE ISOTOPE PROBING REVEALS ASSIMILATION OF TRANSPARENT EXOPOLYMER PARTICLES INTO THE COASTAL PLANKTONIC FOOD WEB. (ID: 26011)

15:45 **Polimene, L.**; Mitra, A.; Sailley, S. F.; Ciavatta, S.; Widdicombe, C. E.; Atkinson, A.; Allen, J. I.: DECREASE IN DIATOM PALATABILITY CONTRIBUTES TO BLOOM FORMATION IN THE WESTERN ENGLISH CHANNEL (ID: 25882)

16:00 **Burian, A.**; Grosse, J.; Boschker, E.; Winder, M.: PHYSIOLOGICAL ADAPTATION AND COMPOUND-SPECIFIC RATES OF BIOLOGICAL PROCESSES IN COPEPODS (ID: 25720)

16:15 **Barton, A. D.**; Ward, B. A.; Williams, R. G.; Follows , M. J.: THE ROLES OF TURBULENCE AND ZOOPLANKTON GRAZING IN SHAPING PHYTOPLANKTON COMMUNITY STRUCTURE AND CARBON EXPORT* (ID: 25417)

17:15 **Luecke, C. M.**: LINKAGES BETWEEN COMMUNITY STRUCTURE AND ECOSYSTEM PROCESSES IN LAKES (ID: 25546)

17:30 **Serret, P.**; Robinson, C.; Aranguren-Gassis, M.; Garcia-Martin, E. E.; Kaiser, N.; Kitidis, V.; Lozano, J.; Stephens, J.; Harris, C.; Thomas, R.: PLANKTON RESPIRATION CAUSES REGIONAL CHANGES IN METABOLIC STATE IN THE OLIGOTROPHIC OCEAN (ID: 27173)

17:45 **Hirst, A. G.**; Horne, C. R.; Atkinson, D.; Kiorboe, T.: UPSCALING PHENOTYPIC PLASTICITY AND PHYSIOLOGICAL RESPONSES* (ID: 27154)

18:00 **Aldebert, C.**; Nerini, D.; Poggiale, J. C.: IS AN ECOSYSTEM MODEL MORE SENSITIVE TO ITS COMPLEXITY OR ITS FORMULATION? (ID: 25706)

032 RESPONSES OF MARINE ORGANISMS TO OCEAN ACIDIFICATION, INTERACTIONS WITH OTHER STRESSORS AND BIOGEOCHEMISTRY

Chair(s): Carles Pelejero, carles.pelejero@icrea.cat
Heidi Burdett, hb57@st-andrews.ac.uk

Location: Auditorium Federico Garcia Lorca (Floor 0)

08:30 **Widdicombe, S.**; Queirós, A. M.; Fernandes, J. A.; Papathanasopoulou, E.; Hattam, C.: DEVELOPING METHODS TO ASSESS AND PROJECT SCENARIOS OF OCEAN ACIDIFICATION ON TO POPULATIONS, COMMUNITIES AND ECOSYSTEM SERVICES[T] (ID: 26172)

09:00 **Roberts, M.**: OCEAN ACIDIFICATION: A GLOBAL ISSUE REQUIRING A GLOBAL RESPONSE* (ID: 26231)

09:15 **Mass, T.**; Drake, J. L.; Falkowski, P. G.: THE MECHANISM OF ARAGONITE PRECIPITATION IN CORALS* (ID: 25588)

09:45 Wicks, L. C.; Hennige, S. J.; Kamenos, N. A.; Findlay, H.; **Roberts, J. M.**: HIDDEN COSTS OF CORAL ACCLIMATION TO OCEAN ACIDIFICATION (ID: 26242)

10:30 **Comeau, S.**; Carpenter, R. C.; Lantz, C. A.; Edmunds, P. J.: RESPONSE OF FORE REEF CORAL COMMUNITIES TO OCEAN ACIDIFICATION AND FLOW SPEED (ID: 26457)

10:45 Leblud, J.; Moulin, L.; Batigny, A.; Dubois, P.; **Grosjean, P.**: ECOPHYSIOLOGICAL CHANGES OF A SIMPLIFIED CORAL REEF COMMUNITY FACING OCEAN ACIDIFICATION: A ONE YEAR STUDY IN ARTIFICIAL REEF MESOCOSMS (ID: 26997)

11:00 **Dungan, A. M.**; Hall, E. R.; Blackwelder, P.; Fogarty, N. D.: EFFECTS OF OCEAN ACIDIFICATION ON GROWTH AND MICROCALCIFICATION DURING CORAL LIFE HISTORY STAGES IN REEF BUILDING CARIBBEAN SPECIES (ID: 27227)

11:15 **Camp, E. F.**; Smith, D. J.; Suggett, D.: PHYSIOLOGICAL RESPONSE OF MARGINAL CORALS PROVIDE INSIGHTS TO THE BIOLOGICAL COST OF FUTURE OCEAN ACIDIFICATION (ID: 25565)

11:30 **Santiago-Vazquez, L. Z.**; Donepudi, S. R.; Kodali, B. K.; Pereira, R. W.; Ramamurthy, S. H.; Sharma, S. R.; Boothe, G. C.; Rivera, S.; Tidwell, I. T.: DOES STRESS CAUSES MICROBIOME AND SECONDARY METABOLITE CHANGES IN THE SOFT CORAL PLEXAURA HOMOMALLA? 16S RDNA AND PROSTAGLANDIN ANALYSIS (ID: 27240)

11:45 **Silbiger, N. J.**; Donahue, M. J.: SECONDARY CALCIFICATION AND DISSOLUTION RESPOND DIFFERENTLY TO FUTURE OCEAN CONDITIONS (ID: 25756)

15:00 **Jewett, E. B.**; Newton, J. A.; Williamson, P.; Gledhill, D. K.; Busch, S.: MONITORING ECOSYSTEM IMPACTS OF OCEAN ACIDIFICATION: CAN WE DO THIS? (ID: 26874)

15:15 **Taylor, P. J.**; Stahl, H.; Hicks, N.; Vik, U.; Jakobsen, K.: CHANGES IN SEDIMENT BIOGEOCHEMSTRY WHEN EXPOSED TO CARBON DIOXIDE IN A SIMULATED LEAK FROM A SUB- SEABED CARBON CAPTURE AND STORAGE RESERVOIR (ID: 26813)

15:45 **Bunse, C.**; Lundin, D.; Dopson, M.; Karlsson , C.; Palovaara, J.; Vila-Costa , M.; Calvo, E.; Marrasé , C.; Gasol, J. M.; Pinhassi, J.: OCEAN ACIDIFICATION CAUSES A COMMUNITY-WIDE BACTERIAL PH STRESS RESPONSE (ID: 26708)

16:00 **Ribes, M.**; Calvo, E.; Movilla, J.; Logares, R.; Coma, R.; Pelejero, C.: RESPONSE OF MEDITERRANEAN SPONGES TO OCEAN ACIDIFICATION (ID: 26294)

16:15 **Maas, A. E.**; Tarrant, A. M.; Thabet, A. A.; Bergan, A. J.; Lawson, G. L.: AN INTEGRATIVE ASSESSMENT OF SEASONALITY IN THE RESPONSE OF THE THECOSOME PTEROPOD *LIMACINA RETROVERSA* TO CO_2(ID: 25926)

17:00 **Tarling, G. A.**; Bednarsek, N.; Fielding, S.; Bakker, D.: CAN PTEROPODS BUILD THEIR WAY OUT OF DISSOLUTION? (ID: 27172)

17:30 **Bouquet, J. M.**; Troedsson, C.; Mrutyunjaya, P.; Reeve, M.; Dupont , S.; Novac, A.; Sandnes Skaar, K.; Massart, W.; Manak, J. R.; Thompson, E. M.: GELATINOUS ZOOPLANKTON IN CHANGING OCEANS: THE UROCHORDATE,*OIKOPLEURA DIOICA*, IN THE CONTEXT OF OCEANIC WARMING AND PH VARIATION. (ID: 25544)

17:45 **Algueró-Muñiz, M.**; Ecker, U.; Malzahn, A. M.; Boersma, M.: MESOZOOPLANKTON COMMUNITY DEVELOPMENT AFFECTED BY OCEAN ACIDIFICATION: RESULTS FROM A LONG-TERM NEAR-NATURAL CONDITIONS EXPERIMENT (ID: 26908)

[T] REPRESENTS TUTORIAL PRESENTATIONS

18:00 **Isari, S.**; Zervoudaki, S.; Pelejero, C.; Peters, J.; Papantoniou, G.; Saiz, E.: VITAL RATES OF MARINE COPEPODS UNDER OCEAN ACIDIFICATION SCENARIOS (ID: 25603)

18:15 **Zervoudaki, S.**; Strogyloudi, E.; Krasakopoulou, E.; Olsson, H.; Van der Jagt, H.; Dupont, S.: COPEPOD RESPONSE TO THE SYNERGISTIC EFFECT OF ACIDIFICATION AND METAL EXPOSURE (ID: 25980)

034 OCCURRENCE, IMPACTS AND MANAGEMENT OF CYANOBACTERIAL BLOOMS

Chair(s): Nico Salmaso, nico.salmaso@fmach.it
Antonio Quesada, antonio.quesada@uam.es
Myriam Bormans, myriam.bormans@univ-rennes1.fr

Location: Room D (Floor -3)

08:30 Ibelings, B. W.; Mantzouki, E.; Bormans, M.; Visser, P. M.; **Venail, P.**: UNDERSTANDING THE KEY ECOLOGICAL TRAITS OF CYANOBACTERIA AS A BASIS FOR THEIR MANAGEMENT AND CONTROL UNDER EXPECTED ENVIRONMENTAL CHANGE[T] (ID: 26824)

09:00 **Tromas, N.**; Fortin, N.; Greer, C. W.; De Longchamp, D.; Shapiro, B. J.: ECOLOGICAL AND EVOLUTIONARY FORCES SHAPING MICROBIAL DIVERSITY IN FRESHWATER BLOOMS (ID: 25872)

09:15 **Knie, M.**; Rücker, J.; Nixdorf, B.: DOES HIGH RESOURCE USE EFFICIENCY EXPLAIN THE DOMINANCE OF FILAMENTOUS CYANOBACTERIA IN LAKES? (ID: 27536)

09:30 Yema, L.; Litchman, E.; **De Tezanos Pinto, P.**: THE ROLE OF THE HETEROCYTE IN THE ECOLOGY OF TWO BLOOM FORMING NITROGEN FIXING CYANOBACTERIA. (ID: 27454)

09:45 **Fadel, A.**; Lemaire, B. J.; Atoui, A. K.; Slim, K.; Vinçon-Leite, B.: MODELLING THE SEASONAL SUCCESSION BETWEEN TOXIC CYANOBACTERIA M. AERUGINOSA AND A. OVALISPORUM IN A MIDDLE-EAST RESERVOIR USING A SIMPLIFIED MODEL (ID: 26642)

10:30 **Bertos-Fortis, M.**; Farnelid, H.; Lindh, M. V.; Casini, M.; Andersson, A.; Pinhassi, J.; Legrand, C.: CYANOBACTERIA SEASONAL DYNAMICS IN A COASTAL-OFFSHORE TRANSECT IN THE BALTIC PROPER (ID: 26763)

10:45 **Zakrisson, A.**; Larsson, U.; Höglander, U.: BALTIC SEA CYANOBACTERIA ADD SIGNIFICANT AMOUNTS OF FIXED NITROGEN TO THE COASTAL SESTON AND ZOOPLANKTON NITROGEN POOLS ALSO WHEN COMBINED NITROGEN IS SUPPLIED (ID: 26660)

11:00 **Louati, I.**; Pascault, N.; Debroas, D.; Maloufi, S.; Humbert, J. F.; Leloup, J.: HOST-SPECIFICITY OF BACTERIAL COMMUNITIES ASSOCIATED WITH DIFFERENT BLOOM-FORMING FRESHWATER CYANOBACTERIA (ID: 26964)

11:15 **Salmaso, N.**; Capelli, C.; Shams, S.; Boscaini, A.; Tolotti, M.; Cerasino, L.: INVASION OF *DOLICHOSPERMUM LEMMERMANNII* (CYANOBACTERIA) TO THE DEEP LAKES SOUTH OF THE ALPS: AN UNUSUAL COLONIZATION FROM NORTH TO SOUTH? (ID: 26177)

11:30 Sabart, M.; Legrand, B.; Miras, Y.; **Latour, D.**: RECURRENCE OF CYANOBACTERIAL BLOOMS SINCE SIX THOUSAND YEARS IN THE FRENCH LAKE AYDAT (ID: 26546)

11:45 **Marinho, M. M.**; de Araujo Torres, C.; Lürling, M.: ASSESSMENT OF THE EFFECTS OF LIGHT AVAILABILITY ON GROWTH AND COMPETITION BETWEEN STRAINS OF PLANKTOTHRIX AGARDHII AND MICROCYSTIS AERUGINOSA (ID: 25539)

15:00 **Méjean, A.**; Ploux, O.: BIOSYNTHESIS OF THE CYANOBACTERIAL TOXINS, ANATOXINS AND CYLINDROSPERMOPSINS: FROM THE GENES TO THE METABOLITES[T] (ID: 25699)

15:30 **Agha, R.**; Quesada, A.: OLIGOPEPTIDE DIVERSITY IN CYANOBACTERIA. A SCENARIO ON THEIR BIOLOGICAL ROLE. (ID: 25676)

15:45 **Gkelis, S.**; Chronis, I.; Kagalou, I.: MONITORING A NEWLY RE-BORN PATIENT: PHYTOPLANKTON BASED WATER QUALITY AND CYANOTOXIN OCCURRENCE IN A RECONSTRUCTED SHALLOW MEDITERRANEAN LAKE (ID: 27076)

16:00 **Casero, M. C.**; Velázquez, D.; Cirés, S.; Quesada, A.: UNRAVELLING THE DIVERSITY OF POTENTIALLY TOXIC CYANOBACTERIA IN RESERVOIRS BY NEXT GENERATION SEQUENCING TECHNIQUES. (ID: 26165)

16:15 **Cerasino, L.**; Shams, S.; Boscaini, A.; Salmaso, N.: EVOLUTION OF THE TOXIN DIVERSITY IN THE OLIGO-MESOTROPHIC ENVIRONMENT OF LAKE GARDA (ITALY) (ID: 26646)

17:00 **Briand, E.**; Bormans, M.; Gugger, M.; Gerwick, W. H.: CHANGES IN MICROCYSTIS METABOLIC PROFILES IN RESPONSE TO INTRA-SPECIFIC INTERACTIONS EVIDENCED BY A CO-CULTURING/MOLECULAR NETWORKING APPROACH (ID: 26174)

17:15 **Hartnell, D. M.**; Franklin, D. J.: AUTOINHIBITION OF THE GROWTH IN MICROCYSTIS: A PROCESS THAT COULD YIELD NOVEL ANTIMICROBIALS? (ID: 27382)

17:30 **Harke, M. J.**; Gobler, C. J.: CHOREOGRAPHY OF GENE EXPRESSION, NITROGEN UPTAKE, AND MICROCYSTIN SYNTHETASE IN THE HARMFUL CYANOBACTERIUM, MICROCYSTIS, GROWN WITH VARYING NITROGEN SOURCES (ID: 27311)

17:45 **de Senerpont Domis, L. N.**; Lurling, M.; Van de Waal, D. B.: SOMETHING OLD, SOMETHING NEW, SOMETHING BORROWED, SOMETHING BLUE? PULSING NITROGEN TO COMBAT CYANOBACTERIAL DOMINANCE (ID: 26820)

18:00 **Matthijs, H. C.**; Antoniou, M. G.; Brient, L.; Edwards, C.; Gurbuz, F.; Jasser, I.; Koker, L.; Luimstra , V. M.; Meriluoto, J.; Schuurmans, J. M.; Simeunović, J.; Stoica, E.; Svircev, Z.; Vasas, G.; Visser, P. M.; Vitonyte, I.; Weenink, E. F.J..: SURVEY OF HYDROGEN PEROXIDE EFFECTIVENESS FOR MITIGATION OF CYANOBACTERIA IN A RANGE OF LAKES ACROSS EUROPE (ID: 26973)

18:15 **Mendes e Mello, M.**; Faassen, E.; Oosterhout, F.; Senerpont Domis , L. N.; Lürling, M.: THE EFFECT OF HYDROGEN PEROXIDE ON DIFFERENT MORPHOTYPES OF THE CYANOBACTERIUM MICROCYSTIS AERUGINOSA (ID: 27175)

037 THE MOLECULAR ECOLOGY OF METAL-MICROBE INTERACTIONS IN THE OCEAN ENVIRONMENT

Chair(s): Robert Strzepek, robert.strzepek@anu.edu.au
Maria Maldonado, mmaldona@eos.ubc.ca
Yeala Shaked, yeala.shaked@mail.huji.ac.il

Location: Machuca (Floor -2)

08:30 **Saito, M. A.**; McIlvin, M. R.; Moran, D. M.; Santoro, A.; Dupont, C.; Goepfert, T. J.; Rafter, P.; Sigman, D. M.; Waterbury, J. W.; Lamborg, C. H.: DISTRIBUTIONS OF OCEANIC MICROBIAL METALLOENZYMES AND THEIR POTENTIAL ROLE IN NITROGEN BIOGEOCHEMICAL CYCLING AS MEASURED BY TARGETED METAPROTEOMICS* (ID: 27386)

* REPRESENTS INVITED PRESENTATIONS

08:45 **Gledhill, M.**: FROM IRON TO HEMES: MICROBIAL UTILISATION OF IRON IN THE MARINE ENVIRONMENT* (ID: 26830)

09:00 **Shaked, Y.**; Lis, H.; Kranzler, C.; Keren, N.; Morel, F. M.: IRON BIOAVAILABILITY TO PHYTOPLANKTON - AN EMPIRICAL APPROACH (ID: 25518)

09:15 **Hogle, S. L.**; Dupont, C. L.; Brahamsha, B.; Barbeau, K. A.: EVOLUTION, ECOLOGY, AND MECHANISMS OF HEME UPTAKE IN THE MARINE ROSEOBACTER LINEAGE (ID: 27584)

09:30 **Paz-Yepes, J.**; Morrissey, J.; Sutak, R.; Tanaka, A.; Moustafa, A.; Veluchamy, A.; Thomas, Y.; Botebol, H.; Bouget, F.; McQuaid, J. B.; Tirichine, L.; Allen, A. E.; Lesuisse, E.; Bowler, C.: A NOVEL PROTEIN, UBIQUITOUS IN MARINE PHYTOPLANKTON, CONCENTRATES IRON AT THE CELL SURFACE AND FACILITATES FERRIC IRON UPTAKE (ID: 26076)

09:45 Cohen, N. R.; **Burns, W. G.**; Benjamin, J.; Loftus, S.; Johnson, Z.; Sanudo-Wilhelmy, S.; Marchetti, A.: DIATOM AND BACTERIAL INTERACTIONS ALONG A NATURAL IRON GRADIENT AND WITHIN AN IRON/VITAMIN MICROCOSM ENCRICHMENT EXPERIMENT (ID: 27238)

10:30 **Gauglitz, J. M.**; McIlvin, M. R.; Waterbury, J. B.; Saito, M. A.: INFLUENCE OF IRON ON THE PROTEOME OF THE UNICELLULAR DIAZOTROPH *CROCOSPHAERA WATSONII* WH8501 (ID: 26348)

10:45 **Hutchins, D. A.**; Fu, F. X.; Sedwick, P. N.; Garcia, N. S.: IRON LIMITATION INCREASES THE GROWTH AND N2 FIXATION RATES OF PHOSPHORUS-LIMITED TRICHODESMIUM AND CROCOSPHAERA (ID: 26151)

11:00 **Semeniuk, D. M.**; Maldonado, M. T.: ACQUISITION OF ORGANICALLY COMPLEXED COPPER (CU) BY A HIGH-AFFINITY CU TRANSPORT SYSTEM IN MARINE PHYTOPLANKTON (ID: 26391)

11:15 **Godrant, A.**; Bucciarelli , E.; Sarthou, G.; Le Grand , F.; Long, M.; Soudant, P.; Pichereau, V.; Otero-Ferrer, J. L.; Scharek, R.: IRON LIMITATION AND FE/CU CO-LIMITATION DRIVING PHOTOSYNTHESIS AND LIPID STRATEGIES OF THE MARINE DIATOM T. PSEUDONANA: A PLURIDISCIPLINARY APPROACH (ID: 26229)

11:30 **Samanta, M.**; Ellwood, M.; Strzepek, R.; Mortimer, G.: ZINC ISOTOPES AS A TOOL TO INVESTIGATE ZINC BIOGEOCHEMICAL CYCLING (ID: 26436)

11:45 **Bender, S. J.**; Moran, D.; McIlvin, M.; Allen, A. E.; Saito, M.: UNFOLDING COLONY FORMATION MECHANISMS IN PHAEOCYSTIS ANTARCTICA (ID: 27320)

039 BEYOND THE MEAN: INTEGRATING THE EFFECT OF VARIANCE IN AQUATIC ECOLOGY

Chair(s): Alexander Wacker, alexander.wacker@uni-potsdam.de
Apostolos-Manuel Koussoroplis, apostolos.koussoroplis@uni-potsdam.de

Location: Seminario 6-7 (Floor 1)

08:30 **Whitt, D. B.**: PHYSICAL AND BIOGEOCHEMICAL DYNAMICS IN A SUBMESOSCALE FRONT FORCED BY HIGH FREQUENCY WINDS (ID: 27575)

08:45 **Gallegos, C. L.**; Neale, P. J.: EVENT-SCALE VARIANCE OF PRIMARY PRODUCTION IN A EUTROPHIC ESTUARY: CONTROLS AND IMPORTANCE (ID: 25874)

09:00 **Iglesias-Rodriguez, M. D.**; Matson, P. G.: LOCAL COOLING IN A WARMING OCEAN - PHYSIOLOGICAL IMPACTS ON MARINE PHYTOPLANKTON (ID: 27648)

09:15 **Piera, J.**; Campbell, L.; Sosik, H. M.; Anglès, S.; Torrecilla, E.; Sánchez, A. M.: SAMPLING REQUIREMENTS TO CHARACTERIZE THE VARIANCE ON MULTISCALE PROCESSES IN AQUATIC ECOLOGY (ID: 26681)

09:30 **Benedetti-Cecchi, L.**: MEANS, VARIANCES AND EXTREMES: FROM FIRST TO HIGHER MOMENTS OF ECOLOGICAL UNDERSTANDING[T] (ID: 25535)

10:30 **Robson, B. J.**; Geoffroy, L.; Brebion, J.; Mongin, M.; Jones, E.: EVIDENCE-BASED PARAMETER DISTRIBUTIONS FOR ECOLOGICAL MODELS (ID: 26492)

10:45 **Guy-Haim, T.**; Raddatz, S.; Silverman, J.; Wahl, M.; Rilov, G.: ENVIROMENTAL VARIABILITY MAY DETERMINE SPECIES SENSITIVITY TO CLIMATE CHANGE (ID: 25765)

11:00 **Downing, A. L.**; Brown, B. L.; Leibold, M. A.: TEMPORAL STABILITY IN AQUATIC FOOD WEBS: THE ROLE OF ENVIRONMENTAL VARIABILITY AND BIODIVERSITY (ID: 26311)

11:30 **Koussoroplis, A. M.**; Wacker, A.: COLIMITED IN HETEROGENEOUS ENVIRONMENTS: WHEN AND HOW COVARIANCE MATTERS (ID: 25506)

11:45 **Wacker, A.**; Koussoroplis, A. M.: COLIMITED IN HETEROGENEOUS ENVIRONMENTS: ECTOTHERM PERFORMANCE DEPENDS ON TEMPERATURE AND FOOD COVARIANCE (ID: 25433)

059 CHEMICAL FLUXES ACROSS THE SEDIMENT-WATER INTERFACE: PROCESSES, DISTURBANCES AND TECHNIQUES

Chair(s): Gary Fones, gary.fones@port.ac.uk
Kai Ziervogel, ziervoge@email.unc.edu

Location: Picasso (Floor -2)

08:30 **Cornwell, J. C.**; Owens, M. S.: ENVIRONMENTAL CONTROLS ON SEDIMENT-EXCHANGE OF NUTRIENTS: EXPERIMENTAL AND SAMPLING CONSIDERATIONS[T] (ID: 27336)

09:00 **Chelsky, A.**; Pitt, K. A.; Ferguson, A. J.; Bennett, W. W.; Teasdale, P. R.; Welsh, D. T.: IMPACTS OF DECOMPOSING JELLYFISH CARRION ON BENTHIC FLUXES AND SEDIMENT REDOX CONDITIONS (ID: 25443)

09:15 **Dadi, T.**; Wendt-Potthoff, K.; Friese, K.; Koschorreck, M.: BENTHIC FLUXES OF DISSOLVED ORGANIC CARBON IN DRINKING WATER RESERVOIRS (ID: 25871)

09:30 **Vlahos, P.**; Warren, J.; Fike, D.: A NOVEL METHOD FOR TRACKING SULFATE FLUXES IN SEDIMENT-WATER (ID: 27451)

09:45 Toussaint, F.; **Rabouille, C.**; Tisnérat-Laborde, N.; Abchiche, A.; Pairaud, I.: A NEW DEVICE TO FOLLOW TEMPORAL VARIATIONS OF OXYGEN DEMAND IN DELTAIC SEDIMENTS: THE LSCE BENTHIC STATION (ID: 26214)

10:30 **Soto Neira, J. P.**; Zhu, Q.; Aller, R. C.: MULTIDIMENSIONAL DETERMINATION OF IRON AND MANGANESE FLUXES ACROSS THE SEDIMENT-WATER INTERFACE IN MARINE SEDIMENTS: FROM SUBTIDAL MUDS TO MANGROVES . (ID: 27463)

10:45 **Almroth-Rosell, E.**; Eilola, K.; Kuznetsov, I.; Hall, P.; Meier, M.: MODELLING THE OXYGEN DEPENDENT BENTHIC PHOSPHATE FLUXES IN THE BALTIC SEA- A NEW APPROACH (ID: 27505)

11:00 Bierlein, K. A.; **Little, J. C.**; Rezvani, M.; Socolofsky, S.; Rueda, F. J.: VARABLE SEDIMENT OXYGEN UPTAKE IN OXYGENATED LAKES: FROM FIELD OBSERVATIONS TO NUMERICAL SIMULATIONS (ID: 27529)

[T] REPRESENTS TUTORIAL PRESENTATIONS

11:15 **Alonso-Perez, F.**; Castro, C. G.: BENTHIC OXYGEN AND NUTRIENT FLUXES IN A COASTAL UPWELLING SYSTEM (RAA DE VIGO, NW IBERIAN PENINSULA): SEASONAL TRENDS AND REGULATING FACTORS (ID: 26537)

11:30 **Rassmann, J.**; Rabouille, C.; Lansard, B.; Pozzato, L.; Bombled, B.; Dumoulin, J. P.: THE CARBONATE SYSTEM AT THE SEDIMENT-WATER INTERFACE FORCED BY EARLY DIAGENESIS: A CASE STUDY AT THE RHNNE RIVER DELTA (ID: 26122)

11:45 **Reader, H. E.**; Stedmon, C. A.: ANOXIA-MEDIATED RELEASE OF DISSOLVED ORGANIC MATTER FROM SEDIMENTS IN THE BALTIC SEA (ID: 26377)

15:00 **Ahmerkamp, S.**; Winter, C.; de Beer, D.; Kuypers, M.; Holtappels, M.: THE IMPACT OF BEDFORM MIGRATION AND TRANSIENT CURRENT VELOCITIES ON THE O2 FLUX IN PERMEABLE SEDIMENTS (ID: 26534)

15:15 **Brand, A.**; Dinkel, C.; Holzner, M.; Wehrli, B.: IN-SITU CURRENT MEASUREMENTS AT THE SEDIMENT-WATER INTERFACE OF LAKES USING A HIGH RESOLUTION ACOUSTIC VELOCITY PROFILER (ID: 25403)

15:30 **Jeske, T.**; Bertilsson, S.; Wendeberg, A.: MICROBIAL HABITAT HETEROGENEITY ON IN WATER SEDIMENT INTERFACES OF HIGH LATITUDE LAKES (ID: 26834)

15:45 **Hoffman, D.**; Mutchler, T.; McCarthy, M. J.; Gardner, W.: COMPARING NITROGEN TRANSFORMATION RATES IN VEGETATED AND UN-VEGETATED MARINE SEDIMENTS OF ST. JOSEPH BAY, FL (ID: 27202)

16:00 **Zohar, I.**; Prat, T.; Oppenheim, N.; Litaor, M. I.: NUTRIENTS DYNAMICS AND EUTROPHICATION STATE OF SHALLOW CONSTRUCTED WETLAND IMPACTED BY POTENTIALLY TOO MANY WINTERING BIRDS (ID: 27099)

16:15 Samano, M. L.; **Claramunt, I.**; Perez, M. L.; García, A.: PARTITION COEFFICIENT AND POLLUTANTS AVAILABILITY IN ESTUARINE ZONES. (ID: 26719)

17:00 **Kalnejais, L. H.**; Percuoco, V. P.: BEYOND DIFFUSION: QUANTIFYING BENTHIC NUTRIENT FLUXES ACROSS CALM TO STORMY CONDITIONS * (ID: 27663)

17:15 **Fones, G. R.**; Thompson, C. E.; Couceiro, F.; Statham, P. J.: RESUSPENSION, OXYGEN AND CARBON EFFECTS ON COHESIVE SEDIMENT-WATER COLUMN NUTRIENT EXCHANGE PROCESSES (ID: 26063)

17:30 **Olszewska, J. P.**; Spears, B. M.; McDonald, C. M.; Edwards, R.; Foster, T.; Winfield, I. J.; Heal, K. V.: AN ASSESSMENT OF BENTHIC-PELAGIC COUPLING OF ARSENIC IN A SHALLOW LAKE RECOVERING FROM INDUSTRIAL POLLUTION (KINGHORN LOCH, UK) (ID: 26962)

17:45 **Joung, D.**; Giles, C.; Xu, Y.; Isles, P.; Gearhart, T.; Schroth, A.: TEMPORAL AND SPATIAL VARIATIONS OF NUTRIENT AND TRACE METALS IN A EUTROPHIC LAKE, MISSISQUOI BAY, LAKE CHAMPLAIN (ID: 27210)

18:00 **Ariyarathna, T. S.**; Vlahos, P.; Tobias, C.; Ballentine, M.; Smith, R.; Cooper, C.: TRACKING THE FLUX AND METABOLISM OF EXPLOSIVES IN COASTAL MARINE ECOSYSTEMS USING STABLE ISOTOPIC TRACERS: ROLE OF SEDIMENT (ID: 27507)

062 INTEGRATED MODELLING OF LAKES IN THE CLIMATE SYSTEM

Chair(s): Klaus D. Joehnk, klaus.joehnk@csiro.au
Wim Thiery, Wim.Thiery@ees.kuleuven.be
Victor Stepanenko, stepanen@srcc.msu.ru
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Carsten Lemmen, carsten.lemmen@hzg.de
Wolf Mooij, w.mooij@nioo.knaw.nl

Location: Andalucia 1 (Floor 1)

15:00 **MacIntyre, S.**; Vidal, J.: CAPTURING THE CONSEQUENCES OF NON-LINEAR INTERNAL WAVES IN HYDRODYNAMIC MODELS* (ID: 27618)

15:15 Hofmeister, R.; Lemmen, C.; Nasermoaddeli, H.; **Wirtz, K. W.**: DATA, MODELS, AND VIEWS: TOWARDS INTEGRATION OF DIVERSE NUMERICAL MODEL COMPONENTS AND DATA SETS FOR SCIENTIFIC AND PUBLIC DISSEMINATION (ID: 26362)

15:30 **Kuiper, J. J.**; van Gerven, L.; Janssen, A.; Janse, J. H.; de Klein, J.; Mooij, W. M.: SERVING MANY AT ONCE: HOW WATER QUALITY MODELLING CAN BENEFIT FROM A DATABASE APPROACH TO MODELLING (DATM) (ID: 26959)

15:45 **Toffolon, M.**; Piccolroaz, S.; Majone, B.: HOW LAKES RESPOND TO AIR TEMPERATURE CHANGES: A LUMPED MODEL FOR LONG-TERM PREDICTIONS (ID: 27027)

16:00 **Bruce, L. C.**; Frassl, M. A.; Adiyanti, S.; Gal, G.; Read, J. S.; Hipsey, M. R.: BUFFERING THE EFFECTS OF CLIMATE CHANGE: A GLOBAL LAKE MODELLING STUDY (ID: 27721)

16:15 **Janssen, A.**; Beusen, A.; Janse, J.; Mooij, W.: GLOBAL VARIATION IN LAKE RESPONSE TO ANTHROPOGENIC STRESSES: AN INTEGRATED MODELLING APPROACH (ID: 26915)

17:00 **Perroud, M.**; Goyette, S.: DEVELOPMENT AND VALIDATION OF A COUPLED SINGLE COLUMN LAKE – ATMOSPHERIC MODEL TO SIMULATE THERMAL PROFILES IN LAKE GENEVA (ID: 25891)

17:15 **Bueche, T.**; Vetter, M.: THE MIXING BEHAVIOR OF A MEDIUM-SIZED LAKE IN SOUTHERN GERMANY. A MODELING APPROACH BY THE IMPLEMENTATION OF THE NEW COMMUNITY MODEL GLM AND FABM. (ID: 26805)

17:30 **Gal, G.**; Schlabing, D.; Gilboa, Y.; Shachar, N.: ENSEMBLE MODELING OF THE IMPACT OF INCREASED FREQUENCY OF CLIMATIC DISTURBANCES ON A SUB-TROPICAL LAKE ECOSYSTEM (ID: 25469)

17:45 **Soulignac, F.**; Lemaire, B. J.; Martins, J. R.; Tchiguirinskaia, I.; Vincon Leite, B.: 3D MODELLING OF THE INTER-ANNUAL VARIABILITY OF THE MIXING REGIME IN A SHALLOW URBAN LAKE: LAKE CRETEIL, FRANCE (ID: 27232)

18:00 **Wen, L.**: IMPACT OF LAKE SALINITY ON LOCAL CLIMATE WITH THE WRF_CLM MODEL (ID: 25563)

* REPRESENTS INVITED PRESENTATIONS

067 CLIMATE CHANGE IN THE BALTIC SEA: IMPACTS OF WARMING, DESALINATION, EUTROPHICATION AND ACIDIFICATION

Chair(s): Frank Melzner, fmelzner@geomar.de
Sam Dupont, sam.dupont@bioenv.gu.se
Thorsten Reusch, treusch@geomar.de

Location: Andalucia 3 (Floor 1)

08:30 **Johannesson, K.**: POPULATIONS AT THE BRINK - BALTIC SEA MARINE COMMUNITIES UNDER CLIMATE CHANGE[T] (ID: 26500)

09:15 **Pedersen, M. F.**: HEAT RESPONSE OF DANISH SACCHARINA LATISSIMA (ID: 26585)

09:30 **Kremp, A.**; Oja, J.; LeTortorec, A.; Hakanen, P.; Tuimala, J.; Tahvanainen, P.; Suikkanen, S.: DIVERSE SEED BANKS FAVOUR ADAPTATION OF A TOXIC MICRO-ALGA TO FUTURE CLIMATE CONDITIONS IN THE BALTIC SEA (ID: 26541)

09:45 **Karlsson, K.**; Puiac, S.; Winder, M.: ADAPTIVE CAPACITY TO CLIMATE CHANGE OF ZOOPLANKTON IN THE BALTIC SEA (ID: 26907)

10:30 **Conley, D. J.**; Carstensen, J.; Gustafsson, B.; Slomp, C. P.: HYPOXIA IN THE BALTIC SEA: THE PAST, THE PRESENT AND THE FUTURE[T] (ID: 26015)

11:00 Findeisen, U.; Hiebenthal, C.; **Melzner, F.**: LONG-TERM IMPACTS OF TEMPERATURE AND OCEAN ACIDIFICATION ON THE SEA STAR ASTERIAS RUBENS FROM A NATURALLY CO2 ENRICHED FJORD IN THE BALTIC SEA (ID: 27261)

11:15 **Pansch, C.**; Havenhand, J.: LONG-TERM ACCLIMATION POTENTIAL OF A MARINE INVERTEBRATE TO FUTURE OCEAN ACIDIFICATION. (ID: 27357)

11:30 **Müller, J.**; Schneider, B.; Aßmann, S.; Hammer, K.; Rehder, G.: SPECTROPHOTOMETRIC PH MEASUREMENTS IN THE BALTIC SEA: NECESSITY, CHALLENGES AND SOLUTIONS. (ID: 26902)

11:45 **Charrieau, L. M.**; Schoon, P. L.; Chierici, M.; Groeneveld, J.; Kimoto, K.; Kritzberg, E.; Ljung, K.; Sasaki, O.; Toyofuku, T.; Filipsson, H. L.: ZOMBIE FORAMINIFERA REVEAL IMPACTS OF OCEAN ACIDIFICATION IN THE BALTIC SEA (ID: 26930)

15:00 **Engström-Öst, J.**; Almén, A. K.; Brutemark, A.; Gorokhova, E.; Hogfors, H.; Lehtinen, S.; Lehtiniemi, M.; Pulina, S.; Suikkanen, S.; Vehmaa, A.: RESPONSES OF PLANKTON TO WARMING AND ACIDIFICATION (ID: 26776)

15:15 **Vaquer-Sunyer, R.**; Conley, D. J.; Kritzberg, E. S.: DISSOLVED ORGANIC NITROGEN (DON) INPUTS FROM WASTEWATER TREATMENT PLANT EFFLUENTS INCREASE THE RESPONSE OF PLANKTONIC METABOLIC RATES TO WARMING (ID: 25456)

15:30 **Bergen, B.**; Endres, S.; Engel, A.; Sommer, U.; Jürgens, K.: EFFECT OF ACIDIFICATION AND WARMING ON PLANKTONIC BACTERIAL COMMUNITIES DURING TWO SEASONAL PHYTOPLANKTON BLOOM MESOCOSMS (ID: 27422)

15:45 **Paul, C.**; Matthiessen, B.; Sommer, U.: WARMING AND ENHANCED CO2 AFFECT PHYTOPLANKTON SUMMER BLOOMS IN THE BALTIC SEA (ID: 25452)

16:00 **Garzke, J.**; Hansen, T.; Ismar, S. M.; Sommer, U.: MULTI-STRESSOR IMPACTS OF OCEAN WARMING AND ACIDIFICATION ON COPEPOD ABUNDANCE, BODY SIZE AND FATTY ACID CONTENT (ID: 27274)

16:15 **Dippner, J. W.**; Fründt, B.; Hammer, C.: THE INDIRECT IMPACT OF ATLANTIC MULTI-DECADAL OSCILLATION ON THE WEIGHT OF BALTIC SEA HERRING (ID: 26140)

17:00 **Rugiu, L.**; Manninen, I.; Rothäusler, E.; Jormalainen, V.: TOLERANCE AND PHENOTYPIC PLASTICITY OF BALTIC SEA FUCOIDS TO FUTURE CLIMATE CHANGE CONDITIONS (ID: 26869)

17:15 **Al-Janabi, B.**; Kruse, I.; Wahl, M.: INTERACTION BETWEEN INTRASPECIFIC GENETIC DIVERSITY AND ENVIRONMENTAL STRESS IN EARLY LIFE-STAGE MACROALGAE (ID: 26906)

17:30 **Pajusalu, L.**; Martin, G.; Põllumäe, A.; Paalme, T.: RESPONSE OF PHOTOSYNTHETIC ACTIVITY OF MACROPHYTES TO INCREASED CO_2 IN A BRACKISH-WATER ECOSYSTEM (ID: 25838)

17:45 **Werner, F. J.**; Graiff, A.; Matthiessen, B.: TEMPERATURE-INDUCED DISRUPTION OF TOP-DOWN CONTROL IMPAIRS THE BALTIC SEA FUCUS VESICULOSUS SYSTEM DURING SUMMER (ID: 25498)

18:00 **Nielsen, S. L.**; Palmqvist, A.; Khan, F.; Banta, G. T.: EFFECTS OF ANTHROPOGENIC AND NATURAL MULTIPLE STRESSORS ON EELGRASS (*ZOSTERA MARINA* L.) (ID: 26108)

18:15 **Salo, T.**: FROM GENES TO COMMUNITIES: STRESS TOLERANCE IN BALTIC EELGRASS (*ZOSTERA MARINA*) (ID: 26193)

073 COASTAL OCEAN BIOLOGICAL PATTERNS AND PROCESSES AT REGIONAL SCALES

Chair(s): G. Carleton Ray, cr@virginia.edu
Jerry McCormick-Ray, mgm9c@virginia.edu

Location: Press Room (Floor 2)

08:30 **Bermejo, R.**; Ramírez-Romero, E.; Vergara, J. J.; Hernández, I.: SPATIAL PATTERNS OF MACROPHYTE COMPOSITION AND LANDSCAPE ALONG THE ROCKY SHORES OF NORTHERN COASTS OF THE ALBORAN SEA: OCEANOGRAPHY VS. GEOMORPHOLOGY. (ID: 25613)

08:45 **Fujimura, A. G.**; Reniers, A. J.; Paris, C. B.; Shanks, A. L.; MacMahan, J. H.; Morgan, S. G.: BIOPHYSICAL MODELING OF ONSHORE TRANSPORT OF PHYTO- AND ZOOPLANKTON (ID: 27059)

09:00 **Lima, F. P.**; Gomes, F.; Seabra, R.; Wethey, D. S.; Hilbish, T. J.: MICROCLIMATE, THERMAL STRESS AND BIOGEOGRAPHIC PATTERNS IN THE EUROPEAN ATLANTIC INTERTIDAL (ID: 26670)

09:15 **Anglès, S.**; Jordi, A.; Campbell, L.: SHORT-TERM RESPONSES OF THE PHYTOPLANKTON COMMUNITY TO HURRICANES IN A COASTAL SYSTEM OF THE GULF OF MEXICO. (ID: 27279)

09:30 **Campbell, L.**; Henrichs, D. W.; Harred, L. B.; Anglès, S.: COASTAL OCEAN PHYTOPLANKTON COMMUNITY COMPOSITION INVESTIGATED WITH THE IMAGING FLOWCYTOBOT IN THE NORTHERN GULF OF MEXICO (ID: 27268)

09:45 **McCormick-Ray, M. G.**: OYSTERS AND SEASCAPE PATTERNS IN LAYERS OF SELF-ORGANIZATION (ID: 25622)

10:30 **Cabrera, O. C.**; Alabia, I. D.; Villanoy, C. L.; Gordon, A. L.: CHLOROPHYLL AND CIRCULATION PATTERNS IN LAMON BAY, PHILIPPINES (ID: 27379)

[T] REPRESENTS TUTORIAL PRESENTATIONS

10:45 **Laws, E. A.**; Ye, S.; Pei, S.; DeLaune, R.; Yuknis, N.; Ding, X.; Yuan, H.; Zhao, G.; Wang, J.; Yu, X.: CARBON SEQUESTRATION AND SOIL ACCRETION IN THE DELTAS OF THE YELLOW RIVER AND LIAOHE RIVER, CHINA (ID: 25631)

11:00 **Cosme, N.**; Koski, M.; Hauschild, M. Z.: A MARINE EUTROPHICATION IMPACTS ASSESSMENT METHOD IN LCIA COUPLING COASTAL ECOSYSTEMS EXPOSURE TO NITROGEN AND SPECIES SENSITIVITY TO HYPOXIA (ID: 26739)

11:15 **Bryant, L. D.**; Dengler, M.; Sommer, S.; Dale, A.; Altabet, M.; Bourbonnais, A.; Dullo, C.: WATER-COLUMN NUTRIENT FLUXES ALONG THE CONTINENTAL MARGIN OF THE PERUVIAN OXYGEN MINIMUM ZONE (ID: 25815)

11:30 **Seabra, R.**; Gomes, F.; Wethey, D. S.; Lima, F. P.: WATER WINS OVER AIR: MEDIUM-TERM STRESS LEVELS IN THE LIMPET *PATELLA VULGATA* ARE MORE LINKED TO WATER THAN AIR TEMPERATURE (ID: 27406)

11:45 **Huete-Stauffer, T. M.**; Arandia-Gorostidi, N.; Calvo-Díaz, A.; Nogueira, E.; González, N.; Morán, X. A.: TEMPERATURE EFFECTS ON MICROBIAL CARBON FLUXES IN NORTH EAST ATLANTIC COASTAL WATERS (ID: 25798)

15:00 **Klotz, P. M.**; Schloss, I. R.; Dumont, D.: MODELLING THE EFFECTS OF AN OIL SPILL ON THE PLANKTONIC SYSTEM IN THE GULF OF SAN JORGE, ARGENTINA (ID: 27467)

15:15 **Hopcroft, R. R.**; Questel , J. M.; Clarke-Hopcroft, C.: INTER-ANNUAL VARIABILITY OF THE PLANKTONIC COMMUNITIES IN THE NORTHEASTERN CHUKCHI SEA: 2008-2014 (ID: 27725)

15:30 **Ray, G. C.**: SEASCAPES, CLIMATE CHANGE, AND CONSEQUENCES FOR ICE-DEPENDENT PINNIPEDS AND THE BERING SEA ECOSYSTEM (ID: 26384)

15:45 **Schloss, I. R.**; Dumont, D.: MODELING PHYTOPLANKTON DYNAMICS IN A COASTAL ANTARCTIC ENVIRONMENT (ID: 26421)

16:00 **Yniguez, A. T.**; Bollozos, I. S.; Villanoy, C. L.: LINKING BIFURCATION SHIFTS AND EDDY PROPAGATION TO CHANGES AT TWO TROPHIC LEVELS (ID: 26668)

16:15 **Rodriguez-Garcia, L.**; Martinez, B.; Carreño, F.: PREDICTED EXPANSION OF A TROPICAL HYDROCORAL TO EUROPEAN SHORES IN CLIMATE CHANGE SCENARIOS USING SPECIES DISTRIBUTION MODELS (ID: 26789)

076 NOVEL MICROBIAL METABOLISMS AND INTERACTIONS IN AQUATIC SYSTEMS

Chair(s): Gerhard Herndl, gerhard.herndl@univie.ac.at
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Josep M. Gasol, pepgasol@icm.csic.es
Marcelino Suzuki, suzuki@obs-banyuls.fr
Christian Jeanton, jeanthon@sb-roscoff.fr

Location: Room C (Floor -3)

08:30 **Gonzalez, J. M.**; Gomez-Consarnau, L.; Pedros-Alio, C.; Pinhassi, J.: REGULATION OF GENE EXPRESSION IN PROTEORHODOPSIN-CONTAINING FLAVOBACTERIIA* (ID: 26029)

08:45 Lehours, A. C.; Enault, F.; Boeuf, D.; **Jeanthon, C.**: NOVEL INSIGHTS INTO ECOLOGICAL PATTERNS OF AEROBIC ANOXYGENIC PHOTOHETEROTROPHIC BACTERIA IN MARINE ENVIRONMENTS* (ID: 25774)

09:00 **Koblizek, M.**; Feng, F.; Medova, H.; Dean, J. L.; Zeng, Y.: PURPLE PHOTOSYNTHETIC REACTION CENTERS FOUND IN THE RARE BACTERIAL PHYLUM GEMMATIMONADETES* (ID: 26517)

09:15 Courties, A.; Riedel, T.; Rappaport, A.; Niesldottir, M. C.; Caparros, J.; Catala, P.; Salmeron, C.; Batailler, N.; Lebaron, P.; **Suzuki, M. T.**: LIGHT-DRIVEN INCREASE IN C YIELD IS LINKED TO MAINTENANCE IN THE PROTEORHODOPSIN-CONTAINING *PHOTOBACTERIUM ANGUSTUM* S14* (ID: 25817)

09:30 **Pachiadaki, M. G.**; Suter, E. A.; Taylor, C.; Montes-Herrera, E.; Taylor, G. T.; Edgcomb, V. P.: POLYPHASIC APPROACH TO MICROBIAL PROCESSES AND INTERACTIONS ALONG A STABLE MARINE REDOXCLINE* (ID: 26388)

09:45 **Widner, B.**; Post, A. F.; Mulholland, M. R.; Mopper, K.: COMBINED BIOGEOCHEMICAL AND MICROBIOLOGICAL TOOLS REVEAL CYANATE TO BE A NOVEL NITROGEN SOURCE FOR MARINE PHYTOPLANKTON* (ID: 27525)

10:30 Muñoz-Marín, M. C.; Luque, I.; Gómez-Baena, G.; Beynon, R. j.; Zubkov, M. V.; Hill, P.; González-Ballester, D.; Diez, J.; **García-Fernández, J. M.**: GLUCOSE UPTAKE BY *PROCHLOROCOCCUS*: DIVERSITY OF KINETICS AND METABOLIC EFFECTS (ID: 26054)

11:00 Vasquez-Cardenas, D.; van de Vossenberg, J.; Polerecky, L.; Malkin, S. Y.; Schauer, R.; Middelburg, J. J.; Meysman, F.; **Boschker, H. T.**: MICROBIAL COMMUNITIES AND CARBON METABOLISM ASSOCIATED WITH ELECTROGENIC SULFUR OXIDATION IN COASTAL SEDIMENTS* (ID: 27423)

11:15 **Høgslund, S.**; Cedhagen, T.; Risgaard-Petersen, N.: NITRATE METABOLISM IN THE GROMIID MICROBIAL UNIVERSE* (ID: 25787)

11:30 Bentzon-Tilia, M.; Severin, I.; Hansen, L. H.; **Riemann, L.**: GENOMICS AND ECOPHYSIOLOGY OF HETEROTROPHIC NITROGEN FIXING BACTERIA ISOLATED FROM ESTUARINE SURFACE WATER * (ID: 25693)

11:45 **Sebastian, M.**; Gonzalez, J. M.; Fredricks, H. F.; Van Mooy, B.; Koblizek, M.; Sa, E. L.; Mostajir, B.; Pitta, P.; Gasol, J. M.: MARINE HETEROTROPHIC BACTERIA SYNTHESIZE NON-PHOSPHORUS LIPIDS UPON PHOSPHORUS STRESS* (ID: 27139)

15:00 **Gomez Consarnau, L.**; Sachdeva, R.; Gifford, S. M.; Cutter, L. S.; Fuhrman, J. A.; Sañudo-Wilhelmy, S. A.; Moran, M. A.: B-VITAMIN EXCHANGE AS A CENTRAL NEXUS OF THE MICROBIAL COMMUNITY IN A COASTAL ENVIRONMENT* (ID: 27266)

15:15 **Thume, K.**; Gebser, B.; Pohnert, G.: OXIDIZED ZWITTERIONIC SULFUR SPECIES AS POSSIBLE SHORTCUT IN THE MARINE SULFUR CYCLE* (ID: 26525)

15:30 **Tinta, T.**; Malfatti, F.; Klun, K.; Kogovsek, T.; Turk, V.; Malej, A.: MARINE HETEROTROPHIC BACTERIA ISOLATES DISPLAY DIVERSE STRATEGY TO UTILIZE JELLYFISH-DERIVED ORGANIC MATTER - INVESTIGATIONS AT THE INDIVIDUAL CELL LEVEL* (ID: 26980)

15:45 **Sintes, E.**; Haberleitner, E.; Ortiz, V.; Amano, C.; Varela, M. M.; De Corte, D.; Herndl, G. J.: TAURINE: AN ENERGY "DRINK" FOR DEEP SEA MICROBES* (ID: 26858)

* REPRESENTS INVITED PRESENTATIONS

16:00 **Hollibaugh, J. T.**; Tolar, B. B.; Popp, B. B.; Wallsgrove, N. J.: EVIDENCE FOR THE DIRECT OXIDATION OF POLYAMINE NITROGEN BY THAUMARCHAEOTA-DOMINATED MARINE NITRIFYING COMMUNITIES* (ID: 26435)

16:15 **Guerrero-Feijóo, E.**; Sintes, E.; Herndl, G. J.; Varela, M. M.: DARK CO_2 FIXATION BY CHEMOLITHOAUTROPHIC PROKARYOTES IN THE DEEP-WATER MASSES OF THE NORTH-WEST COAST OF THE IBERIAN PENINSULA* (ID: 26594)

17:00 **Tolar, B. B.**; Wallsgrove, N. J.; Popp, B. N.; Hollibaugh, J. T.: OXIDATION OF AMMONIA VERSUS UREA BY MARINE NITRIFYING ORGANISMS* (ID: 27562)

17:15 **Bergauer, K.**; Sprenger, R. R.; Garcia, J. A.; Stepanauskas, R.; Herndl, G. J.: A COMPARATIVE METAPROTEOMIC AND GENOMIC SURVEY OF DARK OCEAN MICROBIAL COMMUNITIES* (ID: 26843)

17:30 **Bayer, B.**; Vojvoda, J.; Offre, P.; Elisabeth, N.; Garcia, J. A.; Schleper, C.; Herndl, G. J.: DIFFERENT LIFE STRATEGIES OF CLOSELY RELATED THAUMARCHAEOTA ISOLATED FROM THE NORTHERN ADRIATIC SEA (ID: 25842)

17:45 **Berg, C.**; Feike, J.; Offre, P.; Urich, T.; Schleper, C.; Labrenz, M.; Jürgens, K.: METATRANSCRIPTOMIC PROFILING OF THAUMARCHAEOTAL ACTIVITIES AT A PELAGIC REDOX INTERFACE* (ID: 27313)

18:00 **Seyler, L. M.**; Gilbert, J. A.; Biddle, J. F.; McGuinness, L. M.; McCartney, M. S.; Gong, D.; Kerkhof, L. J.: DISCERNING MARINE CRENARCHAEAL HETEROTROPHY IN THE NORTH ATLANTIC BY STABLE ISOTOPE PROBING (ID: 27609)

087 TRANSBIOME IMPACTS OF TROPICAL LAND-USE CHANGE

Chair(s): Emma Rochelle-Newall, emma.rochelle-newall@ird.fr
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Anne van Dam, a.vandam@unesco-ihe.org

Location: Machuca (Floor -2)

17:00 **Rochelle-Newall, E.**; Pommier, T.; Janeau, J. L.; Trinh, D. A.; Le, Q. P.; Nguyen, H. T.; Le, H. T.; Sengtaheuanghoung, O.; Ribolzi, O.: IMPACT OF LAND-USE CHANGE ON ECOLOGICAL PROCESSES AND ENVIRONMENTAL STABILITY (ID: 26146)

17:15 **Ometto, J. P.**; Bustamante, M.; Perez, T.; Pacheco, F.; Martinelli, L. A.: LAND USE CHANGE AND NITROGEN CYCLE, IMPACT IN AQUATIC SYSTEMS IN LATIN AMERICA (ID: 27466)

17:30 **Gettel, G.**; Ural, A.: AGRICULTURAL DEVELOPMENT AND WATER QUALITY IN SUB-SAHARAN AFRICA (ID: 27187)

17:45 **Uwimana, A.**; Gettel, G.; van Dam, A.; Bigirimana, B.: WATER QUALITY TRENDS WITH AGRICULTURAL LAND USE & LAND COVER DYNAMICS IN MIGINA CATCHMENT, RWANDA (ID: 26937)

18:00 Loecke, T.; Burgin, A.; **Thomas, S. A.**; Davis, C.; St. Clair, M.; Riveros-Iregui, D.; Ward, A.: DROUGHT-INDUCED ENRICHMENT OF SOIL NITROGEN LEADS TO RECORD HIGH NITRATE LOADING TO AGRICULTURAL RIVER NETWORKS (ID: 27635)

18:15 **Mangalaa, K. R.**; Cardinal, D.; Sarma, V. V.; Djouraev, I.; Bhaskar, D.: BIOGENIC SILICA DISTRIBUTION AND ITS ASSOCIATED PROCESSES IN THE INDIAN ESTUARIES ALONG CONTRASTED SEASONAL CLIMATE AND LAND USE (ID: 26199)

090 AQUATIC GAS FLUXES: MEASUREMENTS, DRIVERS AND IMPLICATIONS FOR ECOSYSTEM PROCESSES

Chair(s): Yves Prairie, prairie.yves@uqam.ca
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Sally MacIntyre, sally@icess.ucsb.edu
Marcus Wallin, marcus.wallin@geo.uu.se
Daniel McGinnis, dfmcginnis@yahoo.com

Location: Room B (Floor -3)

08:30 **Deshpande, B.**; MacIntyre, S.; Matveev, A.; Vincent, W. F.: OVERCOMING PERSISTENT ANOXIA: IMPORTANCE OF FALL MIXING FOR GAS EXCHANGE IN PERMAFROST THAW LAKES (ID: 25438)

08:45 **Hotchkiss, E. R.**; Burrows, R. M.; Klaminder, J.; Laudon, H.; Sponseller, R. A.; Karlsson, J.: INTEGRATING STREAM METABOLISM WITH CARBON FLUXES IN A BOREAL RIVER NETWORK (ID: 25525)

09:00 **Halbedel, S.**; Gómez Gener, L.; Koschorreck, M.; Marcé, R.; Obrador, B.; von Schiller, D.; Sabater, S.: THE REGULATION OF THE DIC:DO DYNAMIC IN LOTIC AND LENTIC FRESHWATERS (ID: 25527)

09:15 **Kortelainen, P.**; Rantakari, M.; Alm, J.; Larmola, T.; Juutinen, S.; Bergström, I.; Huttunen, J. T.; Martikainen, P. J.: N2O CONCENTRATIONS IN BOREAL LAKES ARE LINKED TO NITRATE (ID: 26041)

09:30 **Saarenheimo, J.**; Devlin, S. P.; Syväranta, J.; Tiirola, M.; Jones, R. I.: CASCADING TROPHIC REGULATION OF METHANE EMISSIONS IN A BOREAL LAKE (ID: 26051)

09:45 **Allesson, L.**; Ström, L.; Berggren, M.: IMPACT OF PHOTOCHEMICAL PROCESSING OF DOC ON THE BACTERIAL RESPIRATORY QUOTIENT IN AQUATIC ECOSYSTEMS (ID: 26098)

10:30 **Wilkinson, G. M.**; Cole, J. J.; Pace, M. L.: THE CONTRIBUTION OF BIOLOGICAL AND PHYSICAL PROCESSES TO THE FORMATION OF METALIMNETIC OXYGEN MAXIMA IN LAKES (ID: 26424)

10:45 **Bortolotti, L. E.**; St. Louis, V. L.; Vinebrooke, R. D.; Wolfe, A. P.: ESTIMATING THE METABOLIC STATUS OF PRAIRIE PONDS: LINKING CARBON DIOXIDE FLUXES AND THE DIEL OXYGEN METHOD (ID: 26472)

11:00 **Shelley, F.**; Trimmer, M.; Grey, J.: MICROBIAL METHANE OXIDATION CAN SIGNIFICANTLY ALTER THE BALANCE OF CARBON GAS EMISSIONS FROM RIVERS (ID: 27058)

11:15 **Obrador, B.**; Von Schiller, D.; Marcé, R.; Gómez-Gener, L.; Koschorreck, M.; Catalán, N.: CO2 AND CH4 FLUXES REVEAL STRONG AQUATIC-TERRESTRIAL INTERACTIONS IN TEMPORARY PONDS (ID: 26432)

11:30 **Gómez-Gener, L.**; von Schiller, D.; Obrador, B.; Marcé, R.; Casas-Ruíz, J. P.; Proia, L.; Catalán, N.; Acuña, V.; Sabater, S.; Muñoz, M. I.; Koschorreck, M.: HOT SPOTS OF CARBON EMISSIONS FROM MEDITERRANEAN FLUVIAL NETWORKS DURING SEASONAL DROUGHT (ID: 26770)

11:45 **Sieczko, A. K.**; Demeter, K.; Mayr, M.; Meisterl, K.; Peduzzi, P.: THE EFFECT OF FLOODING ON CO2 EVASION FROM A RIVER-FLOODPLAIN SYSTEM. (ID: 27037)

15:00 **McGinnis, D. F.**; Kirillin, G.; Tang, K.; Flury, S.; Bodmer, P.; Engelhardt, C.; Casper, P.; Grossart, H. P.: THE BIG ROLE OF TINY BUBBLES: MICROBUBBLES ENHANCE DIFFUSIVE METHANE EMISSIONS FROM OLIGOTROPHIC LAKE STECHLIN (ID: 25572)

15:15 **Wallin, M. B.**; Weyhenmeyer, G. W.; Campeau, A.; Bishop, K. H.: SCALING GHG EMISSIONS FROM STREAMS – A REAPPRAISAL OF THE HEADWATER EMISSIONS OF SWEDEN (ID: 25701)

15:30 **Melack, J. M.**; MacIntyre, S.; Forsberg, B. R.; Amaral, J. H.: INUNDATION AND GAS FLUXES FROM AMAZON LAKES AND WETLANDS (ID: 25965)

15:45 **Morales-Pineda, M.**; Úbeda, B.; Cózar, A.; Laiz, I.; Gálvez, J. A.: EPILIMNETIC PCO2 VARIABILITY IN MEDITERRANEAN RESERVOIRS AT DIFFERENT TIME SCALES: DO COMMON WATER-ATMOSPHERE GAS EXCHANGE MODELS EXPLAIN PHYSICAL FORCINGS? (ID: 26048)

16:00 **Serca, D.**; Deshmukh, C.; Delon, C.; Demarty, M.; Jarnot, C.; Chanudet, V.; Guedant, P.; Rode, W.; Descloux, S.; Guerin, F.: PHYSICAL DRIVERS OF CO2 AND CH4 EMISSIONS DETERMINED FROM EDDY COVARANCE MEASUREMENTS OVER A SUBTROPICAL HYDROELECTRIC RESERVOIR (NAM THEUN 2, LAO PDR) (ID: 27023)

16:15 **Lauderdale, J. M.**; Dutkiewicz, S.; Scott, J.; Williams, R. G.; Follows, M. J.: OCEANIC CONTROLS OF AIR-SEA CO_2 FLUXES (ID: 27143)

17:00 **Lundin, E. J.**; Giesler, R.; Mörth, C. M.; Rocher, G.; Humborg, C.: WHAT DETERMINES THE TEMPORAL VARIATION OF STREAM CO2 CONCENTRATION AND THE 13C-DIC SIGNATURE? (ID: 27207)

17:15 **Leith, F. I.**; Dinsmore, K. J.; Wallin, M. B.; Billett, M. F.; Heal, K. V.; Laudon, H.; Oquist, M. G.; Bishop, K.: CARBON DIOXIDE TRANSPORT ACROSS THE HILLSLOPE-RIPARIAN-STREAM CONTINUUM IN A BOREAL HEADWATER CATCHMENT (ID: 25737)

17:30 **Mueller, D.**; Warneke, T.; Rixen, T.; Mueller, M.; Jamahari, S.; Denis, N.; Notholt, J.: LATERAL CARBON FLUXES AND CO_2 OUTGASSING FROM A TROPICAL PEAT-DRAINING RIVER (ID: 25796)

17:45 **Juutinen, S.**; Valkama, P.; Ojala, A.; Halonen, A. I.; Koskinen, K.; Tolppanen, M. E.; Vasander, H.; Salminen, O. M.: HIGH-FREQUENCY DYNAMICS OF CARBON DIOXIDE AND METHANE FLUXES IN A SURFACE FLOW CONSTRUCTED WETLAND AS AFFECTED BY DISCHARGE AND VEGETATION (ID: 25829)

18:00 **Rasilo, T.**; del Giorgio, P. A.: LINKING STREAM CO_2, CH_4 AND DOC DYNAMICS TO LATERAL SOIL WATER INPUTS (ID: 26304)

18:15 **Campeau, A.**; Wallin, M.; Bishop, K.; Venkiteswaran, J. J.; Schiff, S. L.: REGIONAL SOURCE ASSESSMENT OF CO_2 IN HEADWATER STREAMS (ID: 26349)

092 GEOCHEMICAL AND BIOLOGICAL INSIGHT INTO SULFATE-METHANE COUPLING IN MARINE AND MARGINAL MARINE SETTINGS

Chair(s): Orit Sivan, oritsi@bgu.ac.il
Alexandra Turchyn, avt25@cam.ac.uk

Location: Seminario 3-4-5 (Floor 1)

17:00 **Elvert, M.**: ON THE NATURE OF MICROBIAL COMMUNITIES IN SULFATE-METHANE TRANSITION ZONES: NEW INSIGHTS FROM ENVIRONMENTAL AND LABORATORY STUDIES[T] (ID: 26799)

17:30 **Turchyn, A. V.**; Miller, M.; Byrne, D. J.; Hodell, D. A.; Antler, G. A.: THE SULFATE-METHANE TRANSITION IN MODERN MARINE SEDIMENTS: A CASE STUDY FROM IODP EXPEDITION 339, SITE U1385 (ID: 26751)

17:45 **Antler, G.**; Turchyn , A. V.; Herut, B.; Sivan, O.: A UNIQUE ISOTOPIC FINGERPRINT DURING SULFATE-DRIVEN ANAEROBIC OXIDATION OF METHANE (ID: 26070)

18:00 **Avrahamov, N.**; Antler, G.; Yechieli, Y.; Gavrieli, I.; Joye, S. B.; Saxton, M.; Turchyn, A. V.; Sivan, O.: ANAEROBIC OXIDATION OF METHANE BY SULFATE IN HYPERSALINE GROUNDWATER OF THE DEAD SEA AQUIFER (ID: 26734)

18:15 **Sawicka, J. E.**; Rattray, J. E.; Olsson, C.; Brüchert, V.: SULFATE REDUCTION RATES, METHANE AND NITROUS OXIDE CONCENTRATIONS AT THE OXYCLINE INTERSECTION WITH SEDIMENT IN THE BALTIC SEA. (ID: 27284)

099 DEEP SEA CARBON FLUX DYNAMICS: BIOLOGICAL, PHYSICAL AND CHEMICAL DRIVERS

Chair(s): Clara Manno, clanno@bas.ac.uk
Gabriele Stowasser, gsto@bas.ac.uk

Location: Seminario 3-4-5 (Floor 1)

08:30 **Sanders, R. J.**; Henson, S. A.; Marsay, C. M.: CONTROLS OVER MESOPELAGIC MINERALISATION (ID: 26603)

08:45 **Belcher, A. C.**; Sanders, R.; Henson, S.; Manno, C.; Tarling, G. A.: ECOSYSTEM STRUCTURE AS A CONTROL ON CARBON FLUX IN THE SCOTIA SEA, ANTARCTICA (ID: 25883)

09:00 **Stone, J. P.**; Steinberg, D. K.: SALP CONTRIBUTION TO CARBON EXPORT IN THE SARGASSO SEA (ID: 27340)

09:15 **Scharek, R.**; Isla, A.; Latasa, M.; Gonzalez, F.; Fernandez, P.: CONTRIBUTION OF ACTIVE CARBON FLUX BY ZOOPLANKTON DIEL VERTICAL MIGRATION TO DEEP TOTAL FLUX IN THE NW MEDITERRANEAN (ID: 25547)

09:30 **Bauerfeind, E.**; Nöthig, E. M.; Busch, K.; Hardge, K.; Beszczynska, A.; Metfies, K.; Lalande, C.; Soltwedel, T.: SHIFT IN PARTICULATE MATTER FLUX IN THE EASTERN FRAM STRAIT - RESULTS FROM A LONG-TERM SEDIMENT TRAP STUDY AT THE LTER SITE HAUSGARTEN SINCE 2000 (ID: 26154)

09:45 **Salter, I.**; Schiebel, R.; Ziveri, P.; Movellan, A.; Lampitt, R. S.; Wolff, G. A.: CARBONATE COUNTER PUMP STIMULATED BY NATURAL IRON FERTILISATION IN THE POLAR FRONTAL ZONE (ID: 27497)

10:30 **Pedrosa Pàmies, R.**; Sànchez Vidal, A.; Calafat, A.; Parinos, C.; Gogou, A.; Canals, M.; Lampadariou, N.: ATMOSPHERIC FORCING OF CARBON EXPORT TO THE DEEP EASTERN MEDITERRANEAN SEA (ID: 26960)

10:45 **Cavan, E. L.**; Wolff, G. A.; Thompson, A.; Sanders, R. J.: ORGANIC BIOMARKERS OF SINKING PARTICLES IN THE (ALMOST) DARK OCEAN (ID: 26246)

11:00 **Close, H. G.**; Hannides, C. S.; Drazen, J. C.; Popp, B. N.: DEGRADATIVE TRANSFORMATIONS OF STABLE ISOTOPE RATIOS IN SINKING AND SUSPENDED ORGANIC MATTER, FROM SURFACE TO UPPER BATHYPELAGIC DEPTHS, STATION ALOHA (ID: 27523)

11:15 **Celussi, M.**; Ingrosso, G.; Malfatti, F.; Tsiola, A.; Pitta, P.; Ziveri, P.; Giani, M.; Del Negro, P.: MEDITERRANEAN PECULIARIATIES: WHAT ARE THE MAIN METABOLIC PATHWAYS DRIVING THE C CYCLE IN ITS MESO- AND BATHYPELAGIC WATERS? (ID: 25479)

[T] REPRESENTS INVITED PRESENTATIONS

11:30 **Yamada, Y.**; Fukuda, H.; Tada, Y.; Kogure, K.; Nagata, T.: BACTERIAL ENHANCEMENT OF MICROGEL COAGULATION IN SEAWATER (ID: 26453)

15:00 **Waite, A. M.**; Stemmann, L.; Hogg, A. M.; Guidi, L.; Calil, P. H.; Thompson, P. A.; Feng, M.; Picheral, M.; Gorsky, G.: THE "WINE-GLASS EFFECT" IN AN OCEAN VORTEX CONCENTRATES PARTICLE EXPORT AND BIOGEOCHEMICAL FLUXES (ID: 26532)

15:15 **Kiko, R.**; Biastoch, A.; Brandt, P.; Hauss, H.; Hummels, R.; Kriest, I.; Schwarzkopf, F.; Vandromme, P.; Oschlies, A.; Stemmann, L.: THE MARINE EQUATORIAL SNOWFALL – A RESULT OF *IN SITU* AGGREGATION OF PARTICLES IN THE DEEP SEA? (ID: 27530)

15:30 **Ibello, V.**; Yumruktepe , C. V.; Butenschon , M.; Salihoglu, B.: KEY PROCESSES INFLUENCING PARTICLE CARBON FLUX: A MODELLING STUDY (ID: 27657)

15:45 **Villa-Alfageme, M.**; de Soto, F. C.; Le Moigne, F. A.; Ceballos, E. V.; Henson, S.: VARIABILITY IN THE PARTICLE SINKING VELOCITY AND ITS INFLUENCE ON THE EXPORT EFFICIENCY TO THE TWILIGHT ZONE (ID: 26180)

16:00 **Ceballos-Romero, E.**; Villa-Alfageme, M.; Le Moigne, F.; Henson, S.; Marsay, C.: COMPARISON OF PELAGRA SEDIMENT TRAPS AND RADIOACTIVE AS PROXIES FOR THE ESTIMATION OF EXPORT EFFICIENCY (ID: 26836)

16:15 **Roca-Martí, M.**; Puigcorbé, V.; Masqué, P.; Rutgers van der Loeff, M.; Iversen, M. H.; Hoppe, C. J.; Klaas, C.: CARBON EXPORT IN A BLOOM REGION FROM THE ATLANTIC SECTOR OF THE SOUTHERN OCEAN DERIVED FROM ^{234}TH AND SEDIMENT TRAPS (ID: 26608)

109 URBAN COASTAL SYSTEMS IN A CHANGING CLIMATE

Chair(s): Linda Duguay, duguay@usc.edu
Michelle Wood, m.michellewood@gmail.com
Doug Capone, Capone@usc.edu

Location: Andalucia 2 (Floor 1)

17:00 **Jaijel, R.**; Goodman, B. N.; Beddows, P.; Carter, A.; Smith, D.; Rissolo, D.; Glover, J. B.; Ben Avraham, Z.: RECONSTRUCTING THE SHORELINE AND CLIMATE OF THE ANCIENT MAYA PORT VISTA ALEGRE USING MARINE GEOARCHAEOLOGICAL METHODS (ID: 25601)

17:15 **Ortner, P. B.**; Kelble, C. R.; Fletcher, P. J.; Wood, A. M.: THE MARINE ECOSYSTEM GOAL SETTING (MARES) PROCESS. A SOCIOLOGICAL TESTBED: RESULTS OBTAINED AND LESSONS LEARNED (ID: 26445)

17:30 **Cherrier, J.**; Pillich, J.; Klein, Y.: A BLUE-GREEN RESPONSE TO URBAN STORMWATER CHALLENGES (ID: 27475)

17:45 **Sullivan, T.**; Zhang, D.; Burgina, C. B.; Regan, F.: SMART CITY INFRASTRUCTURE AND CHANGING CLIMATE: THE ROLE OF AUTONOMOUS SENSING IN PREPARING FOR CHANGE. (ID: 27033)

18:00 **Sakamaki, T.**; Morita, A.; Touyama, S.; Watanabe, Y.: SPATIAL VARIATION OF BIOGEOCHEMICAL ENVIRONMENT IN COASTAL AREAS OF A CORAL REEF ISLAND: AN ANALYSIS FOCUSING ON EFFECTS OF WATERSHED LANDUSE AND SPATIAL SCALE (ID: 26503)

18:15 **Sánchez-Badorrey, E.**; Sierra-Ruiz , B.: URBANIZED COASTAL SAND BARRIERS IN A CHANGING CLIMATE: IMPACTS ON GROUNDWATER DISCHARGE AND SOLUTE TRANSPORT (ID: 27239)

112 ARE THERE FRESHWATER BIOMES?

Chair(s): Emily Bernhardt, emily.bernhardt@duke.edu
Nancy Grimm, nbgrimm@asu.edu

Location: Machuca (Floor -2)

15:00 **Bernhardt, E. S.**; Grimm, N. B.: HOW SHOULD WE DEFINE STREAM BIOMES AND WHY DO WE NEED THEM? (ID: 27520)

15:15 **Dodds, W. K.**: THE FRESHWATER BIOME GRADIENT CONCEPT (ID: 25908)

15:30 **Hawkins, C. P.**; Vander Laan, J. J.; Olson, J. R.; Hill, R. A.; Stoddard, J. L.: ARE THERE FRESHWATER BIOMES?: A VIEW FROM THE ECOLOGICAL ASSESSMENT COMMUNITY (ID: 27592)

15:45 **Hall, R. O.**; Stets, E. G.; Stanley, E. H.; Read, J. S.: CONSIDERATIONS IN ESTIMATING TIME SERIES OF STREAM ECOSYSTEM METABOLISM FROM DISSOLVED OXYGEN DATA (ID: 27580)

16:00 **Ulseth, A. J.**; Singer, G. A.; Schelker, J.; Battin, T. J.: TEMPERATURE SENSITIVITY OF ECOSYSTEM METABOLISM VARIES ACROSS A FLUVIAL NETWORK (ID: 26012)

16:15 **Arroita, M.**; Hall, R. O.; Elosegi, A.: HISTORIC CHANGES OF RIVER METABOLISM: UNDERSTANDING PROS AND CONS OF DIFFERENT METHODS TO CALCULATE THE GAS EXCHANGE RATE (ID: 27484)

114 MULTIPLE STRESSORS IN RIVER ECOSYSTEMS: CHALLENGES FOR CONSERVATION AND MANAGEMENT

Chair(s): Sergi Sabater, sergi.sabater@udg.edu
Arturo Elosegi, arturo.elosegi@ehu.es

Location: Andalucia 1 (Floor 1)

08:30 **Vila-Costa, M.**; Gioia, R.; Acena, J.; Perez, S.; Casamayor, E. O.; Dachs, J.: IN SITU MICROBIAL RESISTANCE MECHANISM TO SULFONAMIDES: QUANTIFICATION AND FATE OF SULFONAMIDE CONSUMPTION IN THE LLOBREGAT RIVER (NE IBERIAN PENINSULA) (ID: 26073)

08:45 **Inostroza, P. A.**; Michalski, S.; Brack, W.; Norf, H.: SEASONAL VARIABILITY OF AMPHIPOD POPULATIONS IN DIFFERENTLY IMPACTED STREAM ECOSYSTEMS: INSIGHTS FROM A FIELD STUDY USING MICROSATELLITES. (ID: 27403)

09:00 **Bruno, D.**; Gutiérrez-Cánovas, C.; Velasco, J.; Sánchez-Fernández, D.: FUNCTIONAL REDUNDANCY AS A TOOL FOR BIOMONITORING: A TEST USING RIPARIAN VEGETATION (ID: 25824)

09:15 **Lambert, A. S.**; Dabrin, A.; Morin, S.; Foulquier, A.; Gahou, J.; Coquery, M.; Pesce, S.: INFLUENCE OF TEMPERATURE INCREASE ON THE RESPONSE OF RIVER PHOTOTROPHIC BIOFILMS TO A CHRONIC EXPOSURE TO COPPER (ID: 25428)

09:30 **Aristi, I.**; Casellas, M.; Petrovic, M.; Sabater, S.; Timoner, X.; Elosegi, A.; Acuña, V.: COMBINED EFFECTS OF NUTRIENTS AND EMERGENT CONTAMINANTS ON STREAM BIOFILMS (ID: 25928)

09:45 **Sabater, S.**; Barceló, D.; de Castro, N.; Ginebreda, A.; Petrovic, M.; Ponsati, L.; Muñoz, I.: BIOTIC RESPONSES TO MULTIPLE STRESSORS OCCURRENCE IN MEDITERRANEAN RIVERS (ID: 25982)

10:30 **Martín, E. J.**; Doering, M.; Robinson, C. T.: ECOLOGICAL EFFECTS OF A SEDIMENT BYPASS TUNNEL IN AN ALPINE STREAM (ID: 25585)

10:45 **Elosegi, A.**; Aristi , I.; Arroita, M.; Ponsati, L.; Sabater, S.; von Schiller, D.; Acuña, V.: STRESS OR SUBSIDY? MIXED EFFECTS OF WWTP EFFLUENTS ON RIVER ECOSYSTEM METABOLISM (ID: 25495)

11:00 **Acuña, V.**; Barceló, D.; Corominas, L.; Petrovic, M.; Rodriguez-Mozaz, S.; Ruhí, A.; Sabater, S.; vonSchiller, D.; Elosegi, A.: PHARMACEUTICALS FATE AND EFFECTS IN WWTP EFLUENT INFLUENCED RIVERS (ID: 26255)

11:15 **Pusch, M.**; Lorenz, S.; Gabel, F.: ECOLOGICAL EFFECTS OF BOATING ON LAKES AND RIVERS (ID: 27605)

11:30 **Samal, N. R.**; Stewart, R. J.; Wollheim, W. M.; Zuidema, S.; Sheehan, K.: CHANGING WATER TEMPERATURE IN NEW ENGLAND: IMPACT OF CLIMATE CHANGE AND IMPLICATIONS FOR ECOSYSTEM SERVICES IN A SNOW DOMINATED REGION (ID: 27557)

11:45 **Sushchik, N. N.**; Shulepina, S. P.; Ageev, A. V.; Dubovskaya, O. P.; Kolmakova, A. A.; Kalachova, G. S.; Gladyshev, M. I.: PRODUCTION OF HIGHLY UNSATURATED FATTY ACIDS BY ZOOBENTHOS ACROSS RIVERS CONTRASTING IN TEMPERATURE (ID: 25690)

131 FRONTIERS IN INVASION ECOLOGY RESEARCH: THEORETICAL FRAMEWORKS, METHODS AND APPLICATIONS

Chair(s): Anthony Ricciardi, tony.ricciardi@mcgill.ca
Hugh MacIsaac, hughm@uwindsor.ca
Jaimie Dick, j.dick@qub.ac.uk
Belinda Gallardo, belinda@ebd.csic.es
Andy Green, ajgreen@ebd.csic.es

Location: Machado (Floor -2)

08:30 **Dick, J.**: PREDICTING THE ECOLOGICAL IMPACTS OF INVASIVE SPECIES UNDER MULTIPLE CONTEXT-DEPENDENCIES (ID: 25569)

08:45 **Iacarella, J. C.**; Dick, J. T.; Ricciardi, A.: PREDATORY IMPACT OF AN INVASIVE FRESHWATER CRUSTACEAN ALONG A SPATIO-TEMPORAL GRADIENT OF INVASION (ID: 25864)

09:00 **Penk, M.**; Irvine, K.; Donohue, I.: ECOSYSTEM-LEVEL EFFECTS OF A GLOBALLY-SPREADING INVERTEBRATE INVADER ARE NOT MODERATED BY THE PRESENCE OF A FUNCTIONALLY SIMILAR NATIVE SPECIES (ID: 26928)

09:15 **Barrios-O'Neill, D.**; Dick, J. T.; Emmerson, M. C.; Kelly, R.; Ricciardi, T.; MacIsaac, H. J.: LANDSCAPES OF BIOTIC RESISTANCE: CONTEXT-DEPENDENCIES RESTRUCTURE THE ALLOMETRIC SCALING OF PREDATOR-PREY INTERACTIONS (ID: 26283)

09:30 **Loewen, C. J.**; Vinebrooke, R. D.: NATIVE SPECIES DIVERSITY MEDIATES THE IMPACTS OF INVASIVE TROUT ON LAKE COMMUNITIES (ID: 25637)

09:45 **MacLennan, M. M.**; Vinebrooke, R. D.: TEMPORAL SYNCHRONIZATION OF INVASIVE SPECIES AND WARMING MAXIMIZES THEIR SYNERGISTIC EFFECT ON PLANKTONIC COMMUNITIES (ID: 27078)

10:30 **Mandrak, N. E.**; Howeth, J. G.; Murphy, S.; Lodge, D. M.: PREDICTING FISH INVADERS USING TRAIT-BASED MODELS: LESSONS FROM THE LAURENTIAN GREAT LAKES (ID: 25938)

10:45 **Pagnucco, K. S.**; Ricciardi, A.: BIOTIC AND ABIOTIC FACTORS AFFECTING IMPACTS OF NON-NATIVE FISHES: A GLOBAL META-ANALYSIS (ID: 25722)

11:00 **Raab, D.**; Mandrak , N. E.; Ricciardi, A.: ROUND GOBY IMPACT ON NATIVE FISHES IN A FLOW-MODIFIED LAURENTIAN GREAT LAKES TRIBUTARY (ID: 25459)

11:15 **Kovac, V.**: THE THEORY OF ALTERNATIVE ONTOGENIES AND INVASIVE POTENTIAL OR WHY SOME SPECIES OF FISHES MAY BECOME SUCCESSFUL INVADERS (ID: 26909)

11:30 **Caiola, N.**; Ibáñez, C.; Verdú, J.; Munné, A.: EFFECTS OF FLOW REGULATION ON THE ESTABLISHMENT OF ALIEN FISH SPECIES: A COMMUNITY STRUCTURE APPROACH TO BIOLOGICAL VALIDATION OF ENVIRONMENTAL FLOWS (ID: 27022)

11:45 **Gallardo, B.**; Clavero, M.; Sanchez, M. I.; Vila, M.: INVASIVE SPECIES CASCADING IMPACTS ON AQUATIC ECOSYSTEMS, A GLOBAL META-ANALYSIS (ID: 26617)

15:00 **Brown, N. E.**; Therriault, T. W.; Harley, C. G.: ECOLOGICAL RESPONSES TO ASCIDIAN INVASION AND OCEAN ACIDIFICATION BY MARINE FOULING COMMUNITIES (ID: 25519)

15:15 **Cvetanovska, E.**; Ricciardi, T.; Hendry, A. P.; Conn, B. D.: LEFT OUT IN THE COLD? VARIATION IN LOW-TEMPERATURE TOLERANCE AMONG INVASIVE POPULATIONS OF THE ASIAN CLAM CORBICULA FLUMINEA (ID: 25736)

15:30 **Kratina, P.**; Mac Nally, R.; Thomson, J.; Winder, M.: CHANGES TO INTERACTION NETWORKS AND NUTRITIONAL COMPOSITION ASSOCIATED WITH SPECIES INVASIONS (ID: 26067)

15:45 **Willis-Jones, W. E.**; Trimmer, M.; Harvey, G.; Grey, J.: THE INDIRECT IMPACTS OF INVASIVE CRAYFISH BIOTURBATION (ID: 27047)

16:00 **Karatayev, A. Y.**; Burlakova, L. E.; Pdilla, D. K.: DIFFERENCE IN SPREAD, POPULATION DYNAMICS, AND ECOSYSTEM IMPACTS OF TWO DREISSENA CONGENERS (ID: 25952)

16:15 **Burlakova, L. E.**; Karatayev, A. Y.; Tulumello, B. L.; Zanatta, D. T.; Krebs, R. A.; Schloesser, D. W.; Lucy, F. E.; Mastitsky, S. E.: IMPACTS OF DREISSENID INVASION ON NATIVE UNIONID COMMUNITIES: A SYNTHESIS OF TRENDS IN NORTH AMERICA AND EUROPE (ID: 25716)

17:00 **Bailey, S. A.**: GREAT EXPECTATIONS – MAKING THE MOVE TO BALLAST WATER MANAGEMENT SYSTEMS (ID: 26150)

17:15 **Chan, F. T.**; Bradie, J. N.; Briski, E.; Bailey, S. A.; MacIsaac, H. J.: ASSESSING INTRODUCTION RISK USING SPECIES' RANK-ABUNDANCE DISTRIBUTIONS (ID: 26158)

17:30 **Goldsmit, J.**; Howland, K. L.; Chust, G.; Villarino, E.; Liu, G. Z.; Lukovich, J. V.; Barber, D. G.; Archambault, P.: AQUATIC INVASIVE SPECIES IN THE CANADIAN ARCTIC: PRESENT AND FUTURE HIGH RISK AREAS AND SPECIES (ID: 26296)

17:45 **Chain, F. J.**; Brown, E. A.; MacIsaac, H.; Cristescu, M.: MONTIORING BIODIVERSITY FOR THE EARLY DETECTION OF INVASIVE SPECIES USING ENVIRONMENTAL DNA AND NEXT GENERATION SEQUENCING (ID: 25914)

18:00 **Bowen, J. L.**; Meyerson, L. A.; Kearns, P. J.; Yu, J.; Burger, M. K.: THE *PHRAGMITES AUSTRALIS* RHIZOSPHERE MICROBIOME: A CASE STUDY IN DETERMINING THE ROLE OF MICROBES IN INVASION SUCCESS (ID: 26285)

18:15 **Scott, R.**; Gras, R.; MacIsaac, H. J.; Brown, E. A.; Cristescu, M. E.; Zhan, A.: EXPLORING THE BALANCE BETWEEN TYPE I AND TYPE II ERROR IN CLUSTERING OF RIBOSOMAL DNA (18S) SEQUENCES USING UPARSE (ID: 26225)

138 FOOD WEB INTERACTIONS AND TROPHIC LINKAGES

Chair(s): Bill Richardson, wrichardson@usgs.gov

Location: Andalucia 2 (Floor 1)

08:30 **Kitchell, j.**; Carpenter, S.; Cole, J.; Pace, M.; Hodgson, J.; Cline, T.: UNEXPECTED OUTCOMES IN EXPERIMENTAL LAKES (ID: 27223)

08:45 Carlson, P. E.; McKie, B. G.; Sandin, L.; **Johnson, R. K.**: LAND-USE EFFECTS ON THE DISPERSAL PATTERNS OF STREAM INSECTS: IMPLICATIONS FOR TERRESTRIAL CONSUMERS (ID: 27060)

09:00 Lau, D. C.; Vrede, T.; **Goedkoop, W.**: CONTRASTING RESPONSES IN BIODIVERSITY AND FOOD-CHAIN LENGTH TO DISTURBANCES IN LAKES (ID: 27107)

09:15 **Quintana, X. D.**; Arim, M.; Badosa, A.; Blanco, J. M.; Boix, D.; Brucet, S.; Compte, J.; Egozcue, J. J.; de Eyto, E.; Gaedke, U.; Gascón, S.; Gil de Solá, L.; Irvine, K.; Jeppesen, E.; Lauridsen, T. L.; López-Flores, R.; Mehner, T.; Romo, S.; Søndergaard, M.: EFFECTS OF PREDATION AND COMPETITIVE INTERACTIONS ON SIZE DISTRIBUTIONS IN AQUATIC ECOSYSTEMS (ID: 27292)

09:30 **Yohannes, E.**; Grimm, C.; Behrmann-Godel, G.: PARASITES AS SOURCES OF VARIATION IN FOOD WEB AND TROPHIC LINKAGE : INSGITH FROM CONSUMER–DIET PATTERNS OF PERCH & PIKE TAPEWORM (ID: 27427)

09:45 **Richardson, W. B.**; Knights, B.; Kelly, P.; Haro, R.: LIPIDS, EMERGENT INSECTS, AND GROWTH OF INSECTIVOROUS BIRDS: RELATION TO CHLOROPHYLL, NUTRIENTS AND ASIAN CARP IN TWO FLOODPLAIN RIVERS, USA (ID: 27345)

10:30 **Makhutova, O. N.**; Zinchenko, T. D.; Sushchik, N. N.; Kalachova, G. S.; Golovatyuk, L. V.; Gladyshev, M. I.: SALINE RIVERS PROVIDE ARID LANDSCAPES WITH A CONSIDERABLE AMOUNT OF BIOCHEMICALLY VALUABLE PRODUCTION OF CHIRONOMID (DIPTERA) LARVAE (ID: 25590)

10:45 **Rothhaupt, K. O.**; Yohannes, E.: BIOGENIC METHANE SUPPORTS THE PELAGIC FOOD WEB OF A SMALL EUTROPHIC LAKE (ID: 26910)

11:00 **Stibor, H.**; Behl, S.; Pondaven, P.: EXPERIMENTAL ANALYSES OF A NEGLECTED PELAGIC FOOD WEB MODULE (ID: 26767)

11:15 Setälä, O.; Dinasquet, J.; Møller, L. F.; Granhag, L.; Hosia, A.; Hovi, M.; Katajisto, T.; Kuosa, H.; Lehtiniemi, M.; **Kuparinen, J.**: FOOD WEB INTERACTIONS IN THE NORTHERN BALTIC SEA DURING AUTUMNAL PHYTOPLANKTON BLOOM MANIPULATED WITH TOP PREDATORS (ID: 25551)

11:30 **Scotti, M.**; Mittermayr, A.: TEMPORAL CHANGES IN THE STRUCTURE OF A TEMPERATE ZOSTERA MARINA FOOD WEB (ID: 25831)

11:45 **Miller, R. J.**; Page, H. M.; Yorke, R. C.; Koenigs, R. C.: KELP AS A TROPHIC RESOURCE TO REEF FOOD WEBS (ID: 26469)

15:00 **Gilarranz, L. J.**; Bascompte, J.: ANTHROPOGENIC EFFECTS ON THE PERSISTENCE OF CARIBBEAN-REEF-FISH COMMUNITIES (ID: 26661)

15:15 **De Smet, B.**; De Troch, M.; Vincx, M.; Vanaverbeke, J.: LIVING IN AN ISOTOPICALLY ORDERED WORLD: THE LINK BETWEEN BIOGENIC *LANICE CONCHILEGA* REEFS AND FOOD WEB STRUCTURE OF SANDY BEACH ECOSYSTEMS (ID: 26601)

15:30 **Eriksson, B. K.**; Weenstra, J.; Terpstra, S.; van der Zee, E.; van der Heide, T.; Weerman, E.; Donadi, S.: NON-TROPHIC INTERACTIONS CONTROL ENERGY TRANSFER IN AN INTERTIDAL FOOD WEB (ID: 25850)

15:45 **Christaki, U.**; Lefèvre, D.; Georges, C.; Blain, S.; Obernosterer, I.: MICROBIAL FOOD WEB DYNAMICS DURING SPRING PHYTOPLANKTON BLOOMS IN THE NATURALLY IRON-FERTILIZED KERGUELEN AREA (SOUTHERN OCEAN) (ID: 25574)

TUESDAY ORALS

002 COMPOSITION AND REACTIVITY OF DISSOLVED ORGANIC MATTER (DOM) ACROSS LANDSCAPES

Chair(s): Nuria Catalan Garcia, ncatalangarcia@gmail.com
Dolly Kothawala, dolly.kothawala@ebc.uu.se
Anne Kellerman, anne.kellerman@ebc.uu.se
Lars Tranvik, lars.tranvik@ebc.uu.se

Location: Albeniz (Floor -2)

08:30 **Xenopoulos, M. A.**: NOT ALL CARBON IS CREATED EQUAL: DISSOLVED ORGANIC MATTER QUALITY IN FRESHWATER ECOSYSTEMS AND ITS EVOLVING MEANING TO AQUATIC SCIENTISTS AND STAKEHOLDERS[T] (ID: 26983)

09:00 **Williams, C. J.**; Downing, J. A.: LAND USE DOES NOT DRIVE DISSOLVED ORGANIC MATTER COMPOSITION IN INTENSIVE AGRICULTURAL WATERSHEDS (ID: 27690)

09:15 **Steinbauer, A. T.**; Frei, S.; Gilfedder, B. S.: EFFECTS OF EXTREME STORM EVENTS ON DOC AND WATER MOBILISATION PROCESSES IN PEATLANDS (ID: 25718)

09:30 **Panneer Selvam, B.**; Christensen , T. R.; Guillemette, F.; Lapierre, J. F.; Voigt, C.; Lamprecht, R.; Berggren , M.: EFFECT OF PERMAFROST THAW ON LABILE DISSOLVED ORGANIC CARBON (DOC) IN A NORTHERN PALSA MIRE (ID: 26186)

09:45 **Burrows, R. M.**; Sponseller, R. A.: TEMPORAL PATTERNS OF CARBON AND NUTRIENT LIMITATION OF STREAM HETEROTROPHIC BIOFILMS AMONG DISTINCT BOREAL LANDSCAPE UNITS (ID: 25901)

10:45 **McCallister, S. L.**; McIntosh, H.: ENVIRONMENTAL DRIVERS OF RIVERINE ORGANIC MATTER AGE (ID: 27712)

11:00 **Casas-Ruiz, J. P.**; Tittel, J.; Marcé, R.; von Schiller, D.; Catalán, N.; Obrador, B.; Gómez-Gener, L.; Zwirnmann, E.; López, P.; Muñoz, I.; Sabater, S.: DISSOLVED ORGANIC MATTER COMPOSITION AND USE ACROSS THE HETEROGENEOUS HABITATS OF A TEMPORARY RIVER DURING SEASONAL DROUGHT (ID: 26163)

11:15 **Hein, T.**; Bondar-Kunze, E.; Damir, T.; Marjanovic-Rajcic, M.; Kirschner, A.; Welti, N.; Yeh, T. C.: DOM PROPERTIES IN LARGE RIVERS: INSIGHTS FROM A WHOLE RIVER SURVEY ALONG THE DANUBE (ID: 27390)

11:30 **Lambert, T.**; Darchambeau , F.; Bouillon, S.; Alhou , B.; Mbega , J. D.; Teodoru, C.; Nyoni , F. C.; Borges, A. V.: THE EFFECT OF VEGETATION COVER AND HYDROLOGICAL CONNECTIVITY ON THE SPATIAL AND TEMPORAL VARIABILITY OF CDOM AND DOC IN LARGE AFRICAN RIVERS (ID: 26352)

11:45 **Dubinenkov, I. V.**; Flerus, R.; Schmitt-Kopplin, P.; Kattner, G.; Koch, B. P.: MOLECULAR REACTIVITY OF DOM ALONG THE LENA RIVER-LAPTEV SEA TRANSITION (ID: 26823)

15:00 **Kellerman, A. M.**; Kothawala, D. N.; Dittmar, T.; Tranvik, L. J.: DOES SIZE MATTER? LANDSCAPE-LEVEL CONTROLS AND PATTERNS OF MOLECULAR-LEVEL DISSOLVED ORGANIC MATTER COMPOSITION AND SIZE (ID: 27109)

15:15 **Parot, J.**; Guéguen, C.; Parlanti, E.: EXAMINING MOLECULAR SIZE AND COMPOSITION OF AQUATIC DISSOLVED ORGANIC MATTER USING ASYMMETRICAL FLOW FIELD-FLOW FRACTIONATION AND ORBITRAP MASS SPECTROMETRY (ID: 27100)

15:30 **Lavonen, E. E.**; Harir, M.; Hertkorn, N.; Schmitt-Kopplin, P.; Köhler, S. J.: TRANSFORMATION OF DISSOLVED ORGANIC MATTER DURING TRANSPORT IN A LARGE SWEDISH LAKE (LAKE MÄLAREN) AND ITS IMPORTANCE FOR DRINKING WATER PRODUCTION (ID: 25612)

16:00 **Guillemette, F.**; von Wachenfeldt, E.; Kothawala, D. N.; Bastviken, D.; Tranvik, L. J.: PREFERENTIAL SEQUESTRATION OF ALLOCHTHONOUS ORGANIC MATTER IN LAKE SEDIMENTS (ID: 26370)

17:00 **Williamson, C.**; overholt, E. P.; Brentrup, J. A.; Pilla, R.; Leach, T. H.; Schladow, G.; Sadro, S.; Chandra, S.; Caldwell, T.; Watanabe, S.: SENTINEL RESPONSES TO DROUGHT, CLIMATE TELECONNECTIONS, AND WILDFIRE: UV EXPOSURE AND DOM QUALITY IN LAKES (ID: 27280)

17:15 **Morales-Williams, A. M.**; Williams, C. J.; Wanamaker, Jr., A. D.; Downing, J. A.: CARBON PROCESSING IN LAKES IS ALTERED MORE BY HYDROLOGIC PERMEABILITY THAN BY LAND-USE (ID: 27692)

17:30 **Hornak, K.**; Schmidheiny, H.; Pernthaler, J.: PRONOUNCED SPATIAL AND TEMPORAL VARIABILITY IN THE CONCENTRATIONS OF DISSOLVED FREE AMINO ACIDS IN A MESOTROPHIC LAKE (ID: 26597)

17:45 **Valinia, S.**; Futter, M.; Cosby, B.; Rosén, P.; Fölster, J.: A SIMPLE MODEL TO ESTIMATE HISTORICAL AND RECENT TRENDS OF DISSOLVED ORGANIC CARBON IN LAKES (ID: 26627)

014 ATMOSPHERIC DEPOSITION EFFECTS IN AQUATIC ECOSYSTEMS

Chair(s): Francesc Peters, cesc@icm.csic.es
Barak Herut, barak@ocean.org.il
Adina Paytan, apaytan@ucsc.edu
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Ana M Aguilar-Islas, amaguilarislas@alaska.edu
Clifton Buck, Clifton.Buck@skio.uga.edu
Simon Usher, sussher@plymouth.ac.uk

Location: Machado (Floor -2)

08:30 **Rahav, E.**; Herut, B.: THE TRANSPORT OF VIABLE MICROBIAL ORGANISMS BY DESERT DUST INTO THE EASTERN MEDITERRANEAN SEA: POTENTIAL ECOLOGICAL IMPLICATIONS (ID: 25967)

08:45 **Fernandez, E.**; Teira, E.; Barber-Lluch, E.; Hernandez-Ruiz, M.; Sobrino, C.; Teixeira, I. G.; Arbones, B.; Nieto-Cid, M.; Alvarez-Salgado, X. A.; Figueiras, F. G.: COMPLEX BIOMASS AND PRODUCTION RESPONSES OF MICROBIAL PLANKTON TO NATURAL ATMOSPHERIC INPUTS IN A COASTAL ECOSYSTEM (NW IBERIAN COAST) (ID: 26784)

09:00 **Sedwick, P.**; Bernhardt, P.; Kernisan, C.; Mendonca, I.; Mulholland, M.; Najjar, R.; Price, L.; Sohst, B.; Sookhdeo, C.; Widner, B.: BIOLOGICAL IMPACT OF WET DEPOSITION TO SEASONALLY OLIGOTROPHIC WATERS OFF THE U.S. EASTERN SEABOARD (ID: 25424)

[*] REPRESENTS INVITED PRESENTATIONS

09:15 **Morales-Baquero, R.**; Pérez-Martínez, C.: PHYTOPLANKTON RESPONSE TO AEROSOL DEPOSITION IN THE SOUTH-EAST IBERIAN PENINSULA (ID: 25995)

09:30 **Marin, I.**; Nunes, S.; Sanchez-Perez, E. D.; Txurruka, E.; Marrase, C.; Estrada, M.; Moreno, T.; Querol, X.; Peters, F.: MICROBIAL PLANKTONIC COMMUNITIES RESPONSE TO SAHARAN DUST AND ANTHROPOGENIC ATMOSPHERIC INPUTS IN A LOW-NUTRIENT LOW-CHLOROPHYLL REGION (ID: 26584)

09:45 **Peters, F.**; Gallisai, R.; Marin, I.; Txurruka, E.; Nunes, S.: ON THE DIFFICULTY OF ESTIMATING DUST DEPOSITION EFFECTS IN THE MEDITERRANEAN AT ECOLOGICAL TIME SCALES. (ID: 26184)

10:30 **Afshinnekoo, E.**; Hauptman, J.; Kirchner, A.; Maldano, J.; Tang, Y.; Sarkodee-Adoo, J.; Stewart, G.: DUST INFLUENCES DENSITY AND CARBON CONTENT OF COPEPOD FECAL PELLETS (ID: 27017)

10:45 **Ebling, A. M.**; Wyatt, N.; Landing, W. M.: THE MISSING LINK: CHARACTERIZING TRACE ELEMENTS WITHIN THE ATMOSPHERE, SEA SURFACE MICROLAYER, AND UNDERLYING WATER COLUMN (ID: 26359)

11:00 **Buck, C. S.**; Auilar-Islas, A.; Rember, R.; Landing, W. M.: ATMOSPHERIC DEPOSITION FLUX AND TRACE ELEMENT FRACTIONAL SOLUBILITY ON THE US GEOTRACES EASTERN TROPICAL SOUTH PACIFIC SECTION (ID: 26932)

11:15 **Fishwick, M. P.**; Sedwick, P. N.; Lohan, M. C.; Worsfold, P. J.; Buck, K. N.; Church, T. M.; Ussher, S. J.: THE EFFECT OF SURFACE OCEAN PH, TEMPERATURE AND OXYGENATION ON AEROSOL TRACE METAL DISSOLUTION (ID: 25529)

11:30 **Longo, A. F.**; Feng, Y.; Lai, B.; Landing, W.; Nenes, A.; Mihalopoulos, N.; Violaki, K.; Ingall, E. D.: KEY FACTORS CONTROLLING THE SOLUBILITY OF IRON IN SAHARAN DUST (ID: 26316)

11:45 **Ussher, S. J.**; Fishwick, M.; Marsay, C.; Sedwick, P. N.: SOLUBLE AND COLLOIDAL IRON FRACTIONATION FOLLOWING AEROSOL DISSOLUTION IN THE SURFACE ATLANTIC OCEAN (ID: 27319)

15:00 **Ingall, E. D.**; Longo , A. F.; Diaz, J. M.; King, L. E.; Nenes, A.; Mihalopoulos, N.; Violaki, K.; Avila, A.; Benitez-Nelson, C. R.; Brandes, J.: AEROSOL PHOSPHORUS DELIVERED TO THE MEDITERRANEAN SEA: INSIGHTS FROM SYNCHROTRON BASED SPECTROSCOPY (ID: 25939)

15:15 **Stockdale, A.**; Krom, M. D.; Mortimer, R. J.; Benning, L. G.; Carslaw, K. S.; Shi, Z.: INVESTIGATING THE CONTROLS OF ACID DISSOLUTION OF P IN ATMOSPHERIC AEROSOLS (ID: 26091)

15:30 **Shelley, R. U.**; Sarthou, G.: ELEMENTAL COMPOSITION OF ATMOSPHERIC DEPOSITION DURING THE GEOVIDE CAMPAIGN (LISBON, PORTUGAL-ST JOHN'S, CANADA; GEOTRACES GA01) (ID: 26552)

15:45 **Gao, Q.**; Chen, S.; Mgana, H. F.; Kimirei, I. A.; Zhang, L.: NITROGEN FLUXES BY ATMOSPHERIC DEPOSITION IN LAKE TANGANYIKA (ID: 27714)

16:00 **Trommer, G.**; Poxleitner, M.; Lorenz, P.; Stibor, H.: INCREASED ATMOSPHERIC NITROGEN DEPOSITION CAUSES BIOMASS CHANGES IN PLANKTON COMMUNITIES EVEN IN PHOSPHORUS LIMITED LAKE ECOSYSTEMS (ID: 25537)

16:15 **Poxleitner, M.**; Trommer, G.; Stibor, H.: EFFECTS OF INCREASED ATMOSPHERIC NITROGEN LOAD ON PHYTOPLANKTON IN A PHOSPHORUS LIMITED LAKE (ID: 25775)

017 FROM "CATCHING THE ALGAE" TO THE ROLE OF ZOOPLANKTON IN BIOGEOCHEMICAL CYCLES: HOMAGE TO MIQUEL ALCARAZ

Chair(s): Enric Saiz, enric@icm.csic.es
Albert Calbet, acalbet@icm.csic.es

Location: Room D (Floor -3)

08:30 Castellani, C.; Licandro, P.; Fileman, E.; Di Capua, I.; **Mazzocchi, M. G.**: DOES *OITHONA SIMILIS* LIKE IT HOT? (ID: 26160)

08:45 **Calliari, D. L.**; Castiglioni, R.; Espinosa, N.; Martinez, M.; Cervetto, G.: COPEPOD PRODUCTION IN THE RIO DE LA PLATA ESTUARY (ID: 27112)

09:00 Davies, K.; **Sourisseau, M.**; Vandromme, P.; Huret, M.; Dumas, F.: APPLICATION OF A TRAIT-BASED MODEL TO CHARACTERIZE ZOOPLANKTON SIZE AND DIET IN A 3D MODELED ENVIRONMENT OVER A CONTINENTAL SHELF. (ID: 27569)

09:15 Villate, F.; **Iriarte, A.**; Uriarte, I.; Intxausti, L.: COMPLEXITY OF THE MECHANISMS ACCOUNTING FOR THE CHANGES IN THE ESTUARINE ZOOPLANKTON DURING THE REHABILITATION PROCESS OF THE ESTUARY OF BILBAO (ID: 26324)

09:30 **Cowles, T. J.**: SPANNING SPATIAL SCALES IN PLANKTON ECOLOGY: THE ARC OF INFLUENCE OF MIQUEL ALCARAZ (ID: 27324)

09:45 **Alcaraz, M.**: OFF THE SHOULDERS OF GIANTS: BENEFITS, PERILS AND PITFALLS OF TOE'S IN ZOOPLANKTON STUDIES. * (ID: 25869)

10:30 **Landry, M. R.**; Stukel, M. R.; Décima, M.: INDIRECT FLUXES THROUGH THE MICROBIAL FOOD WEB SUPPORT HIGH RESPIRATION AND GROWTH RATES OF MESOZOOPLANKTON IN THE EQUATORIAL PACIFIC (ID: 27565)

10:45 **Kobari, T.**; Unno, K.; Nakamura, R.; Kitamura, M.; Aita, M. N.; Honda, M. C.: ROLES OF MESOZOOPLANKTON COMMUNITY ON MESOPELAGIC BIOGEOCHEMICAL CYCLES IN THE NORTHWESTERN PACIFIC OCEAN (ID: 25557)

11:00 **Darnis, G.**; Grenvald, J.; Berge, J.; Renaud, P.: ZOOPLANKTON DIEL MIGRATION AND THE EXPORT OF CARBON AT DEPTH IN A HIGH ARCTIC FJORD, KONGSFJORDEN, SVALBARD (ID: 27021)

11:15 **Jonasdottir, S. H.**; Visser, A. W.: CALANUS AND THE BIOLOGICAL CARBON PUMP (ID: 26798)

11:30 **Gleiber, M. R.**; Steinberg, D. K.; Schofield, O. M.: COPEPOD GRAZING IMPACT AND CARBON EXPORT ALONG THE WESTERN ANTARCTIC PENINSULA (ID: 26475)

11:45 **Yebra, L.**; Herrera, I.; Mercado, J. M.; Cortés, D.; Alonso, A.; Gómez, F. J.; Sánchez, A.; Salles, S.; Valcárcel, N.: ZOOPLANKTON DISTRIBUTION AND METABOLISM IN THE WESTERN ALBORAN SEA, IMPLICATIONS FOR EXPORT FLUXES (ID: 25792)

15:00 **Kiorboe, T.**; Goncalves, R. J.: DETECTING THE ALGAE: HOW COPEPODS DETECT THEIR PREY (ID: 25449)

15:15 **Mahadik, G. A.**; Mazzocchi, M.: INFLUENCE OF PREY MORPHOLOGY AND CONCENTRATION ON COPEPOD FEEDING BEHAVIOUR (ID: 26181)

15:30 **van Someren Gréve, H.**; Almeda, R.; Kiørboe, T.: BEHAVIOUR-DEPENDENT PREDATION RISK IN MARINE PLANKTONIC COPEPODS (ID: 26031)

15:45 **Zamora-Terol, S.**; Nielsen, T. G.; McKinnon, A. D.; Saiz, E.: LIGHTS AND SHADOWS OF THE FEEDING ECOLOGY OF THE SMALL COPEPOD *OITHONA* (ID: 25531)

16:00 **Rodríguez-Graña, L. M.**; Martínez, M. H.; Santos, L.; Denicola, A.; Calliari, D. L.: AGEING, CALORIC RESTRICTION AND OXIDATIVE DAMAGE IN ACARTIA TONSA (COPEPODA, CALANOIDA): GENDER-SPECIFIC DIFFERENCES (ID: 26385)

16:15 **Tiselius, P.**; Fransson, K.: RAPID CHANGE IN 15N STABLE ISOTOPE SIGNATURE FOLLOWING A DIET SHIFT IN ACARTIA TONSA–AN EXPERIMENTAL STUDY (ID: 26733)

17:00 **Selph, K. E.**; Kolker, G.; Chang, S. M.; Uchida, M.: CILIATE COMMUNITY COMPOSITION CHANGES RELATIVE TO SHORT TERM NUTRIENT INPUTS IN KANEOHE BAY, OAHU, HAWAII (ID: 27196)

17:15 **Morison, F.**; Menden-Deuer, S.: PROTISTAN HERBIVORY IN FJORDS ALONG THE WESTERN ANTARCTIC PENINSULA DURING LATE AUSTRAL AUTUMN (ID: 26354)

17:30 **Børsheim, K. Y.**: THE SPRING BLOOM DYNAMICS OF PHYTOPLANKTON OBSERVED FROM SPACE AS INDICATORS OF SECONDARY PRODUCTION (ID: 25984)

17:45 **Buskey, E. J.**; Almeda, R.; Gemmell, B. J.; Katz, J.: PHYSICAL AND CHEMICAL DISPERSION OF MARINE CRUDE OIL SPILLS AND EFFECTS OF DISPERSED OIL ON ZOOPLANKTON (ID: 27385)

18:00 **Almeda, R.**: INGESTION OF DISPERSED CRUDE OIL BY ZOOPLANKTON (ID: 25785)

18:15 **Strickler, J. R.**; Jiang, H.; Motschman, J.; Horn, S.; Keithrafferty, C.; Nihongi, A.; Alcaraz, M.: ACARTIA GRANI AND ITS INTERACTIONS WITH OIL DROPLETS* (ID: 25726)

020 INTEGRATED TEMPORAL PERSPECTIVES ON CLIMATE EFFECTS ON LAKE ECOSYSTEMS

Chair(s): Jasmine E. Saros, jasmine.saros@maine.edu
Daniel R. Engstrom, dre@umn.edu

Location: Andalucia 2 (Floor 1)

15:00 **Leavitt, P. R.**; Limnology Laboratory of Regina, a. a.; 2008 Chapman Conference Synthesis Group, a. a.: UNIQUE AND INTERACTIVE EFFECTS OF CLIMATE ON LAKES OF THE NORTHERN GREAT PLAINS: APPLICATIONS OF THE ENERGY-MASS FLUX FRAMEWORK FROM SEASONS TO MILLENNIA.* (ID: 25888)

15:15 **Strock, K. E.**; Saros, J. E.; Edlund, M. B.; Engstrom, D. R.: RESPONSE OF BOREAL LAKES TO CHANGING WIND STRENGTH: COHERENT LONG-TERM CHANGES IN PHYSICAL LAKE HABITAT BUT VARYING SHORT-TERM EFFECTS ON PRIMARY PRODUCERS* (ID: 27362)

15:30 **Engstrom, D. R.**; Edlund, M. B.; Almendinger, J. E.; Fang, X.; Elias, J. E.; Galvert, U.: MODELING THE EFFECTS OF PAST CLIMATE CHANGE ON BOREAL LAKES (ID: 25742)

15:45 **Daniels, W. C.**; Huang, Y.; Russell, J. M.; Longo, W. M.; Welker, J. M.; Giblin, A. E.: CHANGING DIATOM COMMUNITIES AND PRIMARY PRODUCTION AT SEASONAL TO MILLENIAL TIME SCALES IN AN ARCTIC ALASKAN LAKE* (ID: 27430)

16:00 **Whiteford, E. J.**; McGowan, S.; Jones, V. J.; Anderson, N. J.: USING LIMNOLOGY AND BIOASSAYS TO UNDERSTAND ALGAL PRODUCTION AND COMMUNITY RESPONSE TO POST-LITTLE ICE AGE ENVIRONMENTAL CHANGE IN SW GREENLAND (ID: 27039)

16:15 **Anderson, N. J.**; Curtis, C. J.; Jones, V. J.; McGowan, S.; Simpson, G. L.; Whiteford, E. J.: COMPLEX SPATIAL PATTERNS OF LIMNOLOGICAL VARIABILITY AT SEASONAL TO CENTENNIAL TIMESCALES ALONG A REGIONAL CLIMATE GRADIENT IN SW GREENLAND* (ID: 26986)

17:00 **Saros, J. E.**; Northington, R. M.; Malik, H.; Anderson, N. J.: LINKING EXPERIMENTAL AND PALEOLIMNOLOGICAL APPROACHES TO DECIPHER CLIMATE-INDUCED CHANGES IN WEST GREENLAND LAKES (ID: 26240)

17:15 **Maier, D. B.**; Bigler , C.; Renberg, I.: CALIBRATING SEDIMENT SIGNALS WITH MONITORED WATER COLUMN PROCESSES (ID: 27125)

17:30 **Saar, K.**; Søndergaard, M.; Jensen, M.; Jørgensen, C.; Reitzel, K.; Jeppesen, E.; Lauridsen, T.; Jensen, H. S.: THE IMPACT OF CLIMATE CHANGE AND EUTROPHICATION ON PHOSPHORUS FORMS IN ACCUMULATED SEDIMENT: A LONG-TERM MESOCOSM EXPERIMENT (ID: 27149)

17:45 **Sánchez-López, G.**; Hernández, A.; Pla-Rabes, S.; Toro, M.; Granados, I.; Sigró, J.; Trigo, R. M.; Rubio-Inglés, M. J.; Valero-Garcés, B.; Giralt, S.: THE EFFECTS OF NAO ON TWO IBERIAN ALPINE LAKES FOR THE LAST TWO MILLENNIA (ID: 26599)

18:00 **Isles, P. D.**; Xu, Y.; Stockwell, J. D.; Schroth, A. W.: CONTRASTING RESPONSES OF NUTRIENT DYNAMICS IN SHALLOW VS. DEEP SITES IN A TEMPERATE LAKE TO SEASONAL CLIMATE PATTERNS AND STORM EVENTS (ID: 25913)

18:15 **Prairie, Y. T.**: THE FUTURE ROLE OF LAKES AND OTHER INLAND AQUATIC SYSTEMS IN THE CARBON CYCLE OF THE LANDSCAPE (ID: 27277)

024 SMALL BUGS WITH A BIG IMPACT: LINKING PLANKTON ECOLOGY WITH ECOSYSTEM PROCESSES

Chair(s): Susanne Menden-Deuer, smenden@gso.uri.edu
Thomas Kiorboe, tk@aqua.dtu.dk

Location: Auditorium Manuel de Falla (Floor 1)

08:30 **Lim, A.**; Jeong, H.; Kang, N.; Jang, T.: THE NEWLY DESCRIBED HETEROTROPHIC DINOFLAGELLATE *STOECKERIA CHANGWONENSIS* IN THE FAMILY PFIESTERIACEAE: TAXONOMY, FEEDING, AND EVOLUTION (ID: 25819)

08:45 **Gäbler-Schwarz, S.**; Micheller, S.; Riedel, J.; Metfies, K.: *PHAEOCYSTIS GLOBOSA* – A HARMFUL MICRO ALGAL SPECIES AT THE GATES TO THE ARCTIC? (ID: 27158)

09:00 **Lagaria, A.**; Mandalakis , M.; Psarra, S.: PHYTOPLANKTON PIGMENTS DISTRIBUTION AND SEASONAL VARIATION IN RELATION TO WATER MASSES IN THE NE AEGEAN SEA (NE MEDITERRANEAN) (ID: 26216)

09:15 **Washburn, L.**; Dellaripa, N. W.; Brzezinski, M. A.; Simons, R. D.: PHYTOPLANKTON TRANSPORT OUT OF THE EUPHOTIC ZONE BY SUBDUCTION AND GRAVITATIONAL SINKING IN THE SANTA BARBARA CHANNEL, CALIFORNIA, USA (ID: 25485)

TUESDAY

* REPRESENTS INVITED PRESENTATIONS

09:30 **Neszi, N. Z.**; Estrada, M.; Artigas, M. L.; Ross, O. N.; Muñiz, O.; Laflamme, S.; Sousoni, D.; Viure, L.; Berdalet, E.: FROM PICO- TO MICRO: VARIABILITY OF A SPRING BLOOM IN AN ESTUARINE BAY AT A HIGH TEMPORAL AND SPATIAL RESOLUTION (ID: 26038)

09:45 **El-Tourky, S. H.**; Hitchcock, G.: MESOZOOPLANKTON IN THE STRAITS OF FLORIDA: AN INVESTIGATION INTO PATTERNS IN BIOMASS AND DISTRIBUTION AS AN EXPLANATION FOR LARVAL BILLFISH GUT CONTENTS (ID: 27493)

10:30 **Carstensen, J.**; Klais, R.; Cloern, J. E.: PHYTOPLANKTON BLOOMS IN ESTUARINE-COASTAL WATERS: SEASONAL PATTERNS AND KEY SPECIES (ID: 25576)

10:45 **Van Oostende, N.**; Fawcett, S.; Lueders-Dumont, J.; Marconi, D.; Swart, K.; Ward, B.: DISTRIBUTIONAL PATTERNS OF PHYTOPLANKTON GROUPS AND BIOGEOCHEMICAL FEATURES FROM THE ATLANTIC SUBTROPICAL TO THE SUBARCTIC PROVINCE IN LATE SUMMER (ID: 27271)

11:00 **Balch, W. M.**; Bates, N. R.; Lam, P. J.; Twining, B. S.: SMALL COCCOLITHOPHORES WITH A BIG IMPACT: THE GREAT CALCITE BELT (ID: 25907)

11:15 **Raes, E. J.**; Bodrossy, L.; Holmes, B.; van de Kamp, J.; Allison, A. S.; Laverock, B.; Hardman-Mountford, N.; Thompson, P. A.; Waite, A. M.: THE EXTENT OF N2 FIXATION AND THE POTENTIAL FOR N LOSSES: FROM THE TROPICS TO THE SUB TROPICS (ID: 25963)

11:30 **Rabouille, S.**; Talec, A.; Bernard, O.; Sciandra, A.: NITROGEN AND CARBON FLUXES IN UNICELLULAR, DIAZOTROPHIC CYANOBACTERIA: FROM CULTURES TO MODELS (ID: 26637)

11:45 **Hense, I.**; Beckmann, A.: MODELING THE SIZE-REDUCTION-RESTITUTION-CYCLE OF DIATOMS (ID: 26118)

15:00 **Lovejoy, C.**; Comeau, A.; Lagunas, M.; Varela, D.: NITROGEN UPTAKE AND COMMUNITY STRUCTURE AT THE CANADA BASIN ICE EDGE (ID: 27452)

15:15 **Popendorf, K. J.**; Duhamel, S.: DIFFERENT STRATEGIES FOR PHOSPHORUS UPTAKE AND ALLOCATION BETWEEN BACTERIA AND PHYTOPLANKTON: DEFINING THE MICROBIAL ROLE IN PHOSPHORUS CYCLING (ID: 27702)

15:30 **Mouriño-Carballido, B.**; Cermeño, P.; Chouciño, P.; Fernández-Castro, B.; Hojas, E.; Latasa, M.; Marañón, E.; Morán, X. A.; Otero, J. L.; Vidal, M.; Villamaña, M.: DOES NUTRIENT SUPPLY PLAY A ROLE IN THE CONTROL OF PICOPLANKTON COMMUNITY STRUCTURE? (ID: 25454)

15:45 **Thomas, M. K.**; Pomati, F.: RAPID SHIFTS IN PHYTOPLANKTON TRAITS *IN SITU* DRIVEN BY SELECTION (ID: 27299)

16:15 **Fontana, S.**; Petchey, O. L.; Pomati, F.: INDIVIDUAL-LEVEL TRAIT DIVERSITY CONCEPTS AND METRICS ARE COMPLEMENTARY TO THE CLASSICAL SPECIES-LEVEL APPROACH IN EXPLAINING ECOSYSTEM FUNCTIONING (ID: 26227)

17:00 **Taniguchi, D.**; Follows, M. J.; Menden-Deuer, S.: SIMULATED TRADEOFFS IN PREDATOR-PREY DYNAMICS OF PHYTO- AND MICROZOOPLANKTON (ID: 26471)

17:15 **Jackson, G. A.**; Visser, A.: IMPLICATIONS OF ZOOPLANKTON FEEDING TYPE ON PARTICLE FATE AS DETERMINED BY INDIVIDUAL BASED MODELS (ID: 25514)

17:30 **Dolan, J. R.**: PARADOXICAL POLYMORPHISM IN PLANKTONIC PROTISTS (ID: 25542)

17:45 **Pomati, F.**; Jokela, J.; Castiglioni, S.; Nizzetto, L.: INTERACTION BETWEEN ENVIRONMENTAL GRADIENTS AND MICROPOLLUTANTS ON THE STRUCTURE AND FUNCTIONING OF NATURAL PHYTOPLANKTON COMMUNITIES (ID: 25790)

18:00 **Moorthi, S. D.**; Busch, M.; Bialonski, S.; Caron, D. A.; Kantz, H.; Feudel, U.: FROM LABORATORY EXPERIMENTS TO COASTAL OCEAN TIME SERIES – LOCAL AND REGIONAL FACTORS INFLUENCING BLOOM DYNAMICS OF HARMFUL ALGAE (ID: 27115)

027 MERCURY BIOGEOCHEMISTRY FROM HEADWATERS TO THE OCEAN

Chair(s): George Aiken, graiken@usgs.gov
Ulf Skyllberg, Ulf.Skyllberg@slu.se
David Krabbenhoft, dpkrabbe@usgs.gov

Location: Andalucia 1 (Floor 1)

08:30 **Aiken, G.**; Bergamaschi, B.; Krabbenhoft, D.: UNDERSTANDING THE DISSOLVED ORGANIC MATTER-MERCURY CONNECTION FROM HEADWATERS TO THE SEA (ID: 27237)

08:45 **Gascón Díez, E.**; Garcia Bravo, A.; Graham, N. D.; Bouchet, S.; Cosio, C.; Amouroux, D.; Loizeau, J. L.: UNDERSTANDING THE ORIGIN OF HIGH METHYLMERCURY CONCENTRATIONS ON SETTLING PARTICLES IN LAKE GENEVA (SWITZERLAND) (ID: 27548)

09:00 **Skyllberg, U.**; Tjerngren, I.; Kronberg, R.; Björn, E.: SEASONALITY OF CHEMICAL SPECIATION AND TRANSFORMATIONS OF HG AND MEHG IN A BOREAL LAKE SEDIMENT WITH FRAMBOIDAL PYRITE (ID: 25821)

09:15 **Bravo, A. G.**; Bouchet, S.; Tolu, J.; Björn, E.; Bertilsson, S.: PLANKTONIC ORGANIC MATTER CONTROLS MERCURY METHYLATION IN BOREAL SEDIMENT LAKES (ID: 26292)

09:30 **Bouchet, S.**; Monperrus, M.; Acha, D.; Heredia, C.; Guyonneaud, R.; Goni-Urriza, M.; Lazzaro, X.; Rocha, S.; Tessier, E.; Amouroux, D.: IN SITU EXPLORATION OF THE PHOTOCHEMICAL AND BIOLOGICAL PROCESSES CONTROLLING HG BIOGEOCHEMISTRY IN LAKE TITICACA (BOLIVIAN ALTIPLANO) (ID: 27667)

09:45 **Soto Cárdenas, C.**; Diéguez, M. C.; Queimaliños, C. P.; Gerea, M.; Marvin-DiPasquale, M.; Ribeiro Guevara, S.: MERCURY IN FOOD WEBS OF ANDEAN PATAGONIAN LAKES: DISSOLVED ORGANIC MATTER, BIOAVAILABILITY AND BIOCONCENTRATION POTENTIAL OF PELAGIC BASAL ORGANISMS (ID: 27304)

10:30 **Pollard, A. I.**; Krabbenhoft, D. P.; Garrison, P.: OCCURRENCE, ASSOCIATIONS AND TEMPORAL CHANGE IN LAKE SEDIMENT MERCURY: A NATIONAL-SCALE ANALYSIS (ID: 26281)

10:45 **Bishop, K. H.**; Kraus, A.; Futter, M.; Schelker, J.; Meili, M.; Boyer, E.; Eklöf, K.: RIPARIAN FLOW PATHS AND SEASONAL VARIATION IN SOIL WATER CONCENTRATIONS PREDICT THG AND MEHG DYNAMICS IN SEVEN BOREAL STREAMS (ID: 27759)

11:00 **Meili, M.**; Blomqvist, P.; Laudon, H.; Bishop, K. H.: METHYLMERCURY AND TOTAL MERCURY IN BOREAL STREAM WATERS: HIGHLY VARIABLE YET FAIRLY PREDICTABLE FROM CLIMATIC VARIABLES (ID: 27624)

11:15 **Kainz, M. J.**; Schultz, S.: AQUEOUS, NOT PARTICULATE SOURCES PREDICT METHYL MERCURY BIOACCUMULATION IN FRESHWATER ZOOPLANKTON (ID: 26693)

11:30 **Wu, P.**; Åkerblom, S.; Eklöf, K.; Bishop, K.: METHYLMERCURY BIOAVAILABILITY FOR PLANKTON AT THE BASE OF THE FOOD CHAIN IN AQUATIC ECOSYSTEMS (ID: 25724)

11:45 **Roy, C.**; Garcia-Bravo, A.; Poirier, A.; Ariztegui, D.: EVIDENCE FOR EXTENDED MAYAN POSTCLASSIC MINING ACTIVITIES AND DEFORESTATION USING TOTAL HG AND PB ISOTOPES IN LACUSTRINE SEDIMENTS (ID: 27254)

032 RESPONSES OF MARINE ORGANISMS TO OCEAN ACIDIFICATION, INTERACTIONS WITH OTHER STRESSORS AND BIOGEOCHEMISTRY

Chair(s): Carles Pelejero, carles.pelejero@icrea.cat
Heidi Burdett, hb57@st-andrews.ac.uk

Location: Auditorium Federico Garcia Lorca (Floor 0)

08:30 **Bailey, A. M.**; Browman, H. I.; Fields, D.; Runge, J.; Hop, H.; Vermont, A.; Bjelland, R.; Durif, C.; Thompson, C.; Shema, S.; Thor, P.: EFFECTS OF PROJECTED OCEAN ACIDIFICATION ON THE EARLY DEVELOPMENT OF A KEY ARCTIC COPEPOD, *CALANUS GLACIALIS* (ID: 26984)

08:45 **Tonkes, H.**; Niehoff, B.; Freese, D.; Sartoris, F. J.: INFLUENCE OF PCO_2, TEMPERATURE, AND FEEDING ON THE EXTRACELLULAR PH OF *CALANUS GLACIALIS* (COPEPODA) DURING DIAPAUSE (ID: 27013)

09:15 **Lange, J.**; Boersma, M.; Schwenk, K.: EFFECTS OF OCEAN ACIDIFICATION ON ZOOPLANKTON: METABARCODING RESULTS FROM A LONG-TERM MESOCOSMOS EXPERIMENT IN THE NORTH SEA (ID: 26147)

09:30 **Cohen-Rengifo, M.**; Moureaux, C.; Dubois, P.; Flammang, P.: PHENOTYPIC PLASTICITY OF TUBE FOOT AND ATTACHMENT CAPACITY IN THE SEA URCHIN PARACENTROTUS LIVIDUS ACCORDING TO SEAWATER VELOCITIES (ID: 26159)

09:45 **Van Colen, C.**; Jansson , A.; Saunier, A.; Lacoue-Labarthe, T.; Dorey, N.; Becquet, V.; Vincx , M.: POPULATION-LEVEL VARIATION AND THE EFFECT OF TEMPORAL FOOD LIMITATION AND TEMPERATURE ON LARVAL DEVELOPMENT OF THE BIVALVE MACOMA BALTHICA IN ACIDIFIED WATERS (ID: 26867)

10:30 **Glaspie, C. N.**; Seitz, R. D.; Bishop, M. J.: PREDATOR-PREY INTERACTIONS AND GLOBAL CHANGE: RESPONSE OF SYDNEY ROCK OYSTERS AND MUD CRABS TO LONG-TERM ACIDIFICATION (ID: 26787)

10:45 **Gobler, C. J.**; Depasquale, E.; Clark, H.; Baumann, H.; Griffith, A.: VULNERABILITY AND RESISTANCE AMONG EARLY LIFE STAGE FINFISH AND BIVALVES TO CONCURRENT OCEAN ACIDIFICATION AND HYPOXIA (ID: 27637)

11:00 **Lewis, C.**: WILL OCEAN ACIDIFICATION INCREASE THE TOXICITY OF METALS TO MARINE ORGANISMS? (ID: 25801)

11:15 **Campbell, A. L.**; Mangan, S.; Ellis, R. P.; Lewis, C.: OCEAN ACIDIFICATION INCREASES COPPER TOXICITY TO THE EARLY LIFE HISTORY STAGES OF THE POLYCHAETE *ARENICOLA MARINA* IN ARTIFICIAL SEAWATER (ID: 25813)

11:30 **Krång, A. S.**; Styf, H. K.; Hernroth, B.; Baden, S. P.; Mattsson, J.; Jutfelt, F.; Baker Wood, H. L.; Nilsson Sköld, H.; Ungfors, A.; Eriksson, S. P.: EFFECTS OF COMBINED EXPOSURE TO OCEAN ACIDIFICATION AND HYPOXIA OR MANGANESE ON BEHAVIOURAL, PHYSIOLOGICAL AND IMMUNOLOGICAL RESPONSES IN THE NORWAY LOBSTER (ID: 26862)

11:45 **Hernroth, B. E.**; Baden, S. P.: ARE MARINE INVERTEBRATES MORE SUSCEPTIBLE TO INFECTIONS UNDER THE PRESSURE OF CLIMATE CHANGE? (ID: 25683)

15:00 **Dahlke, F. T.**; Pörtner, H. O.; Storch, D.: EFFECTS OF OCEAN ACIDIFICATION AND WARMING ON THE EMBRYOGENESIS OF ATLANTIC COD, GADUS MORHUA. (ID: 26891)

15:15 **Perez, P. J.**; Hurst, T. P.: INCREASED OTOLITH SIZE IN JUVENILE FISH DUE TO PROLONGED EXPOSURE TO OCEAN ACIDIFICATION (ID: 27035)

15:30 **Sswat, M.**; Clemmesen, C.; Riebesell, U.: IMPACT OF OCEAN ACIDIFICATION ON LARVAE OF A COMMERCIALLY IMPORTANT FISH SPECIES (*CLUPEA HARENGUS*) (ID: 27425)

15:45 Rosa, R.; **Paula, J. R.**; Trübenbach, K.; Pimentel, M.; Baptista, M.; Lopes, V. M.; Coelho, M. M.; Almeida-Val, M. V.; Calado, R.; Repolho, T.: SHARK BRAIN LOSES AEROBIC POTENTIAL AND NEUROTRANSMITTER ACTION UNDER CLIMATE CHANGE (ID: 27029)

16:00 **Timmins-Schiffman, E. B.**; Nunn, B. L.; Boyd, P.: DIATOM PROTEOMICS REVEAL PHYSIOLOGICAL RESPONSES TO FUTURE OCEAN CONDITIONS (ID: 25936)

16:15 **Gutowska, M. A.**; Meier, S. K.; Bach, L. T.; Schulz, K. G.; Riebesell, U.: DIFFERENTIAL SENSITIVITY OF COCCOLITHOPHORE SPECIES TO OA GIVES INSIGHT TO FUTURE CHANGES IN THEIR COMMUNITY STRUCTURE (ID: 27587)

17:00 **Paul, A. J.**; Bach, L. T.; Boxhammer, T.; Czerny, J.; Achterberg, E.; Trense, Y.; Hellemann, D.; Schulz, K. G.; Riebesell, U. R.: IMPACTS OF OCEAN ACIDIFICATION ON A SUMMER BALTIC SEA PLANKTON COMMUNITY: RESULTS FROM A PELAGIC MESOCOSM STUDY (ID: 26634)

17:15 Hofmann, L.; Bischof, K.; Baggini, C.; Johnson, A.; Koop-Jakobsen, K.; **Teichberg, M.**: CO_2 AND INORGANIC NUTRIENT ENRICHMENT AFFECT THE PERFORMANCE AND COMPETITIVE STRENGTH OF A CALCIFYING GREEN ALGA AND ITS NONCALCIFYING EPIPHYTE (ID: 26800)

17:30 **Krause-Jensen, D.**; Duarte, C. M.; Marba, N.; Hendriks, I.; Sanz-Martin, M.; Carstensen, J.; Sejr, M.: MACROPHYTE CONTROL OF COASTAL PH DEPENDS ON PHOTOPERIOD (ID: 26939)

17:45 Cox, T. E.; Gattuso, J. P.; Diaz-Castañeda, V.; Delille, J.; Schenone, S.; **Gazeau, F.**: IMPACTS OF OCEAN ACIDIFICATION ON THE MEDITERRANEAN SEAGRASS POSIDONIA OCEANICA AND ITS EPIPHYTIC COMMUNITY (ID: 26504)

18:00 **Jinuntuya, M.**; Keller-Miller, K. N.; Hill, V. J.; Zimmerman, R. C.: RESPONSES OF EELGRASS, *ZOSTERA MARINA* L., TO DISSOLVED CO_2 AVAILABILITY AND SEDIMENT QUALITY, A MESOCOSM STUDY. (ID: 27197)

TUESDAY

18:15 **Iniguez, C.**; Carmona, R.; Lorenzo, M. R.; Niell, F. X.; Wiencke, C.; Gordillo, F. J.: INCREASED CO_2 MODIFIES THE CARBON BALANCE AND THE PHOTOSYNTHETIC YIELD OF THE ARCTIC SEAWEEDS *ALARIA ESCULENTA* AND *DESMARESTIA ACULEATA* (ID: 25854)

044 APPROACHES TO REGIONAL AND GLOBAL LAKE MONITORING

Chair(s): João Antonio Lorenzzetti, loren@dsr.inpe.br
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Igor Ogashawara, igorogas@umail.iu.edu
Tiit Kutser, tiit.kutser@sea.ee

Location: Seminario 6-7 (Floor 1)

15:00 **Fischer, A. M.**; Kidd, I.; Pang, D.; Attard, M.; Moreno-Madrinan, M.: INTEGRATING INSITU DATA, REMOTE SENSING AND MODELLING TO ADDRESS ANTHROPOGENIC STRESSORS ON TIDALLY MODULATED SEDIMENT TRANSPORT IN AN ESTUARINE ENVIORNMENT (ID: 25666)

15:15 **Maberly, S. C.**; Woolway, R. I.; Jones, I. D.; Feuchtmayr, H.: DETECTING THE FULL SUITE OF SIGNALS FROM FRESHWATER LAKES AND ATTRIBUTING THEIR CAUSE (ID: 26087)

15:30 **Kutser, T.**; Casal, G.; Barbosa, C.; Paavel, B.; Ferreira, R.; Carvalho, L.: PROSPECTIVE OF USING LANDSAT 8 IN DETERMINING THE ROLE OF LAKES IN THE GLOBAL CARBON CYCLE (ID: 25702)

15:45 **Tyler, A. N.**; Hunter, P. D.; Spyrakos, E.; Maberly, S.; Groom, S.; Carvalho, L. A.; Miller, C.; O'Donnell, R.; Scott, E. M.; Politi, E.: GLOBAL OBSERVATORY OF LAKE RESPONSES TO ENVIRONMENTAL CHANGE (GLOBOLAKES) (ID: 26612)

16:00 **Kari, E.**; Beltrán-Abaunza, J. M.; Harvey, T. E.; Kratzer, S.: RETRIEVAL OF TOTAL SUSPENDED MATTER FROM TURBIDITY – ALGORITHM DEVELOPMENT, VALIDATION, AND APPLICATION TO MERIS DATA (ID: 26034)

16:15 **O'Donnell, R.**; Miller, C.; Scott, M.: GLOBOLAKES: FUNCTIONAL CLUSTERING AND GLOBAL SCALE COHERENCE OF LAKE WATER QUALITY (ID: 26933)

17:00 **Lorenzzetti, J. A.**; Coutinho, L. C.: ASSESSING SPACE/TIME VARIABILITY OF SURFACE TEMPERATURE OF MID TO LARGE LAKES/RESERVOIRS USING SATELLITE AND IN SITU POINT DATA (ID: 26114)

17:15 **Jennings, E.**; Ryder, E.; Pierson, D. C.; Smyth, R.; Winslow, L.; Klug, J.; Laas, A.; Hendricks, S.; Rusak, J. A.; Rose, K.: DRIVERS OF VARIABILITY IN CHLOROPHYLL FLUORESCENCE IN LAKES ACROSS CLIMATIC AND TROPHIC GRADIENTS (ID: 27359)

17:30 **Kauer, T.**; Danckaert, T.; Kutser, T.; Wüest, J. A.; Bouffard, D.: MODELLING PRIMARY PRODUCTION IN LAKE GENEVA USING EARTH OBSERVATION DATA. (ID: 26508)

17:45 **Hanson, P. C.**; Stanley, E. H.; Desai, A.; Read, J. S.: QUANTIFYING LAKE ORGANIC CARBON BUDGETS: HARMONIZING ENVIRONMENTAL SENSOR NETWORK DATA AND ECOSYSTEM MODELS (ID: 27517)

18:00 **Schladow, S. G.**; Roberts, D. C.; Hargreaves, B. R.; Hook, S. J.: HIGH FREQUENCY, LITTORAL ZONE WATER QUALITY NETWORK IN A LARGE ALPINE LAKE - THE RESPONSE TO AN INTENSE WINDSTORM (ID: 27713)

18:15 **Bradt, S. R.**; Wurtsbaugh, W. A.; Naftz, D. L.; Moore, T. S.; Haney, J. F.: DEVELOPMENT OF REMOTE SENSING ALGORITHMS TO ESTIMATE WATER QUALITY IN THE GREAT SALT LAKE, UTAH, USA (ID: 27731)

045 ADDRESSING REGIONAL OR GLOBAL QUESTIONS ABOUT TROPHIC ECOLOGY USING LIPIDS OR STABLE ISOTOPE RATIOS

Chair(s): Nicole B. Richoux, n.richoux@ru.ac.za
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Tarik Meziane, meziane@mnhn.fr

Location: Room B (Floor -3)

15:00 **Nielsen, J. M.**; Reutervik, K.; Hansson, S.; Winder, M.: NITROGEN AND CARBON AMINO ACID STABLE ISOTOPES AS TRACERS ACROSS MULTIPLE FOOD WEB CONFIGURATIONS (ID: 26792)

15:15 **Thorp, J. H.**; Bowes, R.: COSTS AND BENEFITS OF AMINO-ACID VS BULK-TISSUE ISOTOPE ANALYSIS: A LABORATORY FOOD WEB EXPERIMENT (ID: 25515)

15:30 **Masclaux, H.**; Richoux, N.: VARIABILITY OF TROPHIC SHIFT OF CARBON AND NITROGEN ISOTOPE SIGNATURES BETWEEN ZOOPLANKTON AND ITS FOOD: EFFECTS OF TEMPERATURE AND FOOD QUALITY (ID: 25847)

15:45 **Wyatt, A. S.**; Matsumoto, R.; Chikaraishi, Y.; Sato, K.; Ohkouchi, N.; Nagata, T.: ISOTOPIC TOOLS FOR ASSESSING OCEANIC VERSUS REEF-SCALE DRIVERS OF PLANKTIVOROUS MEGAUNA AGGREGATIONS (ID: 26458)

16:00 **Fernández, A.**; Weber, S. C.; Lee-Patterson, D. A.; Montoya, J. P.: TRACING THE DEEP WATER HORIZON OIL AND METHANE CARBON INTO THE PLANKTONIC FOOD WEB (ID: 27522)

16:15 **Decima, M. R.**; Landry, M. E.; Lopez-Lopez, L.; Bradley, C. J.: ZOOPLANKTON TROPHIC STRUCTURE IN THE COSTA RICA DOME (ID: 27621)

17:00 **Coccia, C.**; Boyero, L.; Fry, B.; Green, A. J.: USING STABLE ISOTOPES TO DETERMINE DIET AND ISOTOPIC NICHE WIDTH DIFFERENCES BETWEEN INVASIVE AND NATIVE CORIXIDS (HEMIPTERA, CORIXIDAE) IN SOUTH WEST SPAIN (ID: 25619)

17:15 **Desvilettes, C.**; Floury, M.; Colombet, J.; Lejeune, A. H.; Aguer, J. P.; Perriere, F.: STABLE ISOTOPE ANALYSIS OF TROPHIC INTERACTIONS BETWEEN RESTOCKED SALMON JUVENILES (SALMO SALAR) AND NATIVE FISH SPECIES IN A LARGE RIVER: THE ALLIER (FRANCE) (ID: 26081)

17:30 **Dessier, A.**; Bustamante, P.; Lefrançois, C.; Vagner, M.; Dubillot, E.; Lefèbvre, S.; Aquarium Team La Rochelle, x.; Dupuy, C.: A PELAGIC FISH EXPERIMENT: DYNAMIC OF C AND N STABLE ISOTOPE INCORPORATION IN THE PILCHARD SARDINA PILCHARCHUS (WALBUM, 1792). (ID: 25705)

17:45 **Ferrier-Pagès, C.**; Reynaud, S.; Leal, M.: TRACING TROPHIC INTERACTIONS IN SYMBIOTIC ANTHOZOANS USING STABLE ISOTOPES (ID: 25583)

18:00 Naumann, M. S.; Gori, A.; Tolosa, I.; Taviani, M.; **Grover, R.**; Ferrier-Pagès, C.: COMBINED LIPID AND COMPOUND-SPECIFIC ISOTOPE ANALYSES PROVIDE NEW INSIGHTS TO THE TROPHIC ECOLOGY OF MEDITERRANEAN AND ATLANTIC COLD-WATER CORAL SPECIES (ID: 27051)

18:15 **Rix, L. N.**; Wild, C.; De Goeij, J. M.; Al-Horani, F. A.; Naumann, M. S.: TRACING NATURAL CORAL- AND ALGAL-DERIVED DISSOLVED ORGANIC MATTER INTO RED SEA REEF SPONGES USING 13C AND 15N ENRICHMENT: EVIDENCE FOR A RED SEA SPONGE LOOP? (ID: 26845)

049 FRESHWATER ECOSYSTEMS AND THE CARBON CYCLE: EXPLORING DIFFERENCES ACROSS CLIMATIC REGIONS

Chair(s): Fabio Roland, fabio.roland@ufjf.edu.br
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Peter Raymond, peter.raymond@yale.edu

Location: Seminario 6-7 (Floor 1)

08:30 **Abril, G.**: WETLANDS : THE MISSING LINK IN THE INLAND WATERS CARBON BALANCE ?* (ID: 27018)

08:45 **Weyhenmeyer, G. A.**; Kosten, S.; Wallin, M. B.; Tranvik, L. J.; Jeppesen, E.; Roland, F.: CARBON DIOXIDE CONCENTRATIONS IN LAKES AND THEIR SOURCES ALONG A LATITUDINAL TEMPERATURE AND NUTRIENT GRADIENT (ID: 25818)

09:00 **Catalán, N.**; Kothawala, D. N.; Tranvik, L. J.: ORGANIC CARBON MINERALIZATION: IT'S A MATTER OF TIME! (ID: 26102)

09:15 **Bizic-Ionescu, M.**; Amann, R.; Grossart, H. P.: GROWTH OF HETEROTROPHIC BACTERIA IN ICE-COVERED WATERS IS CONTROLLED BY ORGANIC MATTER AVAILABILITY RATHER THAN TEMPERATURE (ID: 25816)

09:30 **Kuhn, C.**; Bettigole, C. B.; Raymond, P.; Glick, H.; Seegmiller, L.; Routh, D.; Oliver, C. D.: THE IMPACT OF SEASONALITY AND ELEVATION ON DISSOLVED GREENHOUSE GAS CONCENTRATIONS IN A SEMI-ARID WYOMING WATERSHED (ID: 26452)

09:45 **Almeida, R. M.**; Pacheco, F. S.; Barros, N.; Roland, F.: EXTREME FLOODS BOOST CO_2 OUTGASSING FROM A LARGE AMAZONIAN RIVER (ID: 27235)

10:30 **Borges, A. V.**; Bouillon, S.; Teodoru, C.; Descy, J. P.; Lambert, T.; Darchambeau, F.: INORGANIC AND ORGANIC CARBON SPATIAL VARIABILITY IN THE CONGO RIVER DURING HIGH WATERS (DECEMBER 2013) AND LOW WATERS (JUNE 2014) (ID: 25404)

10:45 **Chmiel, H. E.**; Kokic, J.; Wallin, M.; Ferland, M.; Denfeld, B. A.; Sobek, S.: THE IMPORTANCE OF SEDIMENTS AS C SINKS AND C SOURCES IN A SMALL BOREAL LAKE (ID: 27137)

11:00 **Marcé, R.**; Obrador, B.; Morguí, J. A.; Riera, J. L.; López, P.; Armengol, J.: TEMPERATURE EFFECTS ON THE DISSOLVED INORGANIC CARBON EQUILIBRIUM DRIVE THE LATITUDINAL RELEVANCE OF NON-METABOLIC CO_2 EMISSIONS FROM LAKES (ID: 25725)

11:15 **Nakayama, T.**; Maksyutov, S.: NEW STRATEGY FOR IMPROVEMENT IN MISSING ROLE OF FRESHWATER ON GLOBAL BIOGEOCHEMICAL CYCLE (ID: 25439)

11:30 **Keaveney, E. M.**; Reimer, P. J.; Foy, R. H.: INVESTIGATING CARBON CYCLING IN A COMPLEX LAKE: A NOVEL USE OF Δ14C (ID: 26888)

11:45 **Deirmendjian, l.**; Abril, G.: CO2 DEGASSING AND Δ13C-DIC EQUILIBRATION ALONG THE GROUNDWATER-STREAM-RIVER CONTINUUM IN A TEMPERATE CATCHEMENT (LEYRE RIVER, FRANCE). (ID: 26205)

051 BIOGEOCHEMICAL INTERACTIONS BETWEEN RIPARIAN AND STREAM ECOSYSTEMS UNDER ENVIRONMENTAL CHANGE

Chair(s): Susana Bernal, sbernal@ceab.csic.es
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Stefan Krause, s.krause@bham.ac.uk
Francesc Sabater, fsabater@ub.edu
Esperanca Gacia, gacia@ceab.csic.es

Location: Andalucia 1 (Floor 1)

15:00 **Sponseller, R. A.**; Blackburn, M.; Öquist, M.; Laudon, H.: UPLAND VERSUS RIPARIAN CONTROLS OVER THE EXPORT OF NITROGEN FROM A HEADWATER BOREAL CATCHMENT* (ID: 26791)

15:15 **Lupon, A.**; Poblador, S.; Martí, E.; Sabater, F.; Bernal, S.: INFLUENCE OF THE RIPARIAN ZONE ON STREAM DISCHARGE AND NITRATE DYNAMICS IN A MEDITERRANEAN FORESTED CATCHMENT (ID: 27192)

15:30 **Duval, T. P.**; Ariano, S. S.: STORMFLOW BIOGEOCHEMISTRY ALONG A RIPARIAN WETLAND IN THE ABSENCE OF UPLAND INPUTS: VARIABLE EFFECTS TO NUTRIENTS AND DOC (ID: 27601)

15:45 **Poblador, S.**; Lupon, A.; Sabaté, S.; Sabater, F.: INFLUENCE OF A MEDITERRANEAN RIPARIAN FOREST ON GROUNDWATER NITROGEN DYNAMICS (ID: 27194)

16:00 **Ledesma, J. J.**; Futter, M. N.; Laudon, H.; Mörth, C. M.; Köhler, S. J.: CLIMATE CONTROL ON SULPHATE CONCENTRATIONS AND FLUXES IN RIPARIAN AND STREAM WATER IN A BOREAL CATCHMENT (ID: 25455)

16:15 **Feijó-Lima, R.**; Silva-Junior, E.; Lourenço-Amorim, C.; Silva-Araújo, M.; Tromboni, F.; Thomas, S. A.; Zandonà, E.; Moulton, T.: IMPACTS OF LANDUSE CHANGE AND THE LOSS OF RIPARIAN FOREST ON ATLANTIC RAINFOREST STREAMS: A MULTI SCALE ASSESSMENT. (ID: 27649)

17:00 **Nizzoli, D.**; Longhi, D.; Viaroli, P.: SPATIAL AND TEMPORAL VARIABILITY OF BENTHIC N-TRANSFORMATIONS IN LITTORAL AREAS OF A LOWLAND RIVER REACH (ID: 27123)

17:15 **del Campo, R.**; Bastias, E.; Arce, M. I.; Sánchez-Montoya, M. M.; Martí, E.; Gómez, R.: LOCAL ENVIRONMENTAL CONDITIONS DETERMINE THE EVOLUTION OF THE ORGANIC MATTER CHEMICAL QUALITY AND MICROBIAL ACTIVITY IN FLOODPLAINS. (ID: 26542)

17:30 **Rovelli, L.**; Attard, K. M.; Hancke, K.; Stahl, H.; Trimmer, M.; Glud, R. N.: SEASONAL CHANGES IN REACH-SCALE STREAM METABOLISM OVER DIFFERENT GEOLOGIES (ID: 26665)

17:45 **Drummond, J. D.**; Bernal, S.; von Schiller, D.; Martí, E.: LINKING IN-STREAM NUTRIENT CYCLING TO HYDRAULICS: A SYNTHESIS STUDY WITHIN A MEDITERRANEAN CATCHMENT (ID: 26395)

18:00 **Lansdown, K. P.**; Trimmer, M.; Heppell, C. M.: DON'T RULE OUT ANAMMOX! BOTH DENITRIFICATION AND ANAMMOX ATTENUATE NITROGEN WITHIN RIVERINE SEDIMENTS (ID: 26218)

* REPRESENTS INVITED PRESENTATIONS

18:15 **Rocher-Ros, G. M.**; Burrows, R. M.; Bergström, A. K.; Giesler, R.; Sponseller, R. A.: RESOURCE LIMITATION IN ARCTIC STREAM ECOSYSTEMS: A COMPARATIVE STUDY AMONG THREE ECOREGIONS IN NORTHERN SWEDEN (ID: 26573)

053 BIODIVERSITY AND ECOSYSTEM SERVICES IN FRESHWATER ECOSYSTEMS, A SOUTH NORTH PERSPECTIVE

Chair(s): Isabelle Durance, stoidp@cardiff.ac.uk
Steve Ormerod, ormerod@cardiff.ac.uk

Location: Picasso (Floor -2)

17:00 **Durance, I.**; Chalmers, R.; Chappell, N.; Christie, M.; Cosby, J.; Noble, D.; Ormerod, S.; Prosser, H.; Woodward, G.: PROBING THE LINK BETWEEN BIODIVERSITY AND ECOSYSTEM SERVICES IN UPLAND RIVERS (ID: 26720)

17:15 **Feeley, H. B.**; Ormerod, S. J.; Durance, I.: SWIMMING IN MURKY WATERS: UNDERSTANDING THE ROLE OF RIVER BIODIVERSITY IN THE RESILIENCE OF KEY ECOSYSTEM SERVICES (ID: 25805)

17:30 **Perkins, D. M.**; Layer-Dobra, K.; Grey, J.; Woodward, G.: LAND USE EFFECTS ON STREAM FOOD WEBS AND ECOSYSTEM SERVICES (ID: 27082)

17:45 **Pye, M. C.**; Ormerod, S. J.; Vaughan, I. P.; Durance, I.: TERRESTRIAL CONTRIBUTIONS TO ENERGY FLOW IN HEADWATER STREAMS UNDER CHANGING LAND USE AND CLIMATE (ID: 25630)

18:00 **Zarfl, C.**; Tockner, K.: A GLOBAL PERSPECTIVE ON FUTURE HYDROPOWER DAMS AND THEIR BIODIVERSITY IMPACTS (ID: 27542)

18:15 **Seelen, L.**; Lürling, M.; Van Donk, E.; De Senerpont Domis, L. N.: DETERMINING ECOSYSTEM SERVICES OF DEEP MAN-MADE LAKES (ID: 26245)

065 BIOGEOCHEMISTRY, PHYSICS, AND SOCIOECONOMICS OF GROUNDWATER-SURFACE WATER INTERACTIONS

Chair(s): Hannelore Waska, hannelore.waska@uni-oldenburg.de
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Nils Moosdorf, nils.moosdorf@zmt-bremen.de

Location: Picasso (Floor -2)

08:30 Einarsdottir, K.; Wallin, M. B.; **Sobek, S.**: THE MAGNITUDE AND FATE OF DOC AND DIC INPUTS TO A BOREAL LAKE VIA SHALLOW GROUNDWATER SEEPAGE (ID: 26511)

08:45 **Buquet, D.**; Anschutz, P.; Charbonnier, C.; Bujan, S.; Laughlin, T.; Poirier, D.; Abril, G.: GROUNDWATER INPUTS IMPACT THE BIOGEOCHEMISTRY OF TWO SHALLOW LAKES (ID: 26346)

09:00 **Schmid, M.**; Ross, K. A.; Gashugi, E.; Gafasi, A.; Muvundja, F. A.; Pasche, N.; Wüest, A.: LAKE KIVU: AN EXCEPTIONAL LAKE DRIVEN BY SUBAQUATIC GROUNDWATER DISCHARGE (ID: 25536)

09:15 **Anschutz, P.**; Rapin, A.; Deirmendjian, L.; Morel, C.; Abril, G.: PHOSPHORUS BEHAVIOUR AT THE GROUNDWATER-RIVER WATER REDOX BOUNDARY (ID: 25921)

09:30 **Cerdà-Domènech, M.**; Garcia-Orellana, J.; Folch, A.; Rodellas, V.: CHARACTERIZATION OF THE RA ISOTOPE END-MEMBERS IN THE SUBMARINE GROUNDWATER DISCHARGE (SGD) (ID: 27054)

09:45 **Trezzi, G.**; Garcia-Orellana, J.; Rodellas, V.; Masqué, P.; Garcia-Solsona, E.; Andersson, P.: CONTINENTAL INPUTS OF STRONTIUM TO THE MEDITERRANEAN SEA: SGD AND EBRO RIVERINE FLUX ALONG THE IBERIAN PENINSULA EASTERN COAST (ID: 26721)

10:30 **Paytan, A.**: GROUNDWATER-SURFACE WATER INTERACTIONS – CHALLENGES IN THE FACE OF NATURAL AND ANTHROPOGENIC CHANGE[T] (ID: 26476)

11:00 **Sadat-Noori, M.**; Santos, I. R.; Maher, D. T.; Sanders, C. J.; Sanders, L. M.: QUANTIFYING GROUNDWATER DISCHARGE INTO AN ESTUARY USING SPATIALLY DISTRIBUTED RADON TIME SERIES (ID: 26418)

11:15 **Lee, J.**; Kim, G.: DEPENDENCE OF PH IN GROUNDWATER ON THE ADSORPTION OF HYDROGEN IONS ONTO SEDIMENT MINERALS IN SANDY AQUIFERS OF A VOLCANIC ISLAND, JEJU, KOREA (ID: 26640)

11:30 **Linkhorst, A.**; Waska, H.; Dittmar, T.: IRON COMPLEXATION WITH DISSOLVED ORGANIC MATTER IN A SUBTERRANEAN ESTUARY: A MOLECULAR DESCRIPTION OF COAGULATING FRACTIONS (ID: 27124)

11:45 **Reckhardt, A.**; Beck, M.; Niggemann, J.; Dittmar, T.; Brumsack, H. J.: BIOGEOCHEMICAL CYCLING IN A SUBTERRANEAN ESTUARY: CARBON, NUTRIENTS AND TRACE METALS IN HIGH-ENERGY BEACH PORE WATERS. (ID: 25680)

15:00 **Rodellas, V.**; Garcia-Orellana, J.; Trezzi, G.; Masqué, P.; Berdalet, E.; Bokuniewicz, H.; Cochran, J. K.: SEASONAL CYCLES IN RADIUM FLUXES TO A MEDITERRANEAN BAY: SUBMARINE GROUNDWATER DISCHARGE VS POREWATER ADVECTION (ID: 26614)

15:15 **Santos, I. R.**; Beck, M.; Brumsack, H. J.; Maher, D. T.; Dittmar, T.; Waska, H.; Schnetger, B.: POREWATER EXCHANGE AS A DRIVER OF CARBON DIOXIDE OUTGASSING IN THE GERMAN WADDEN SEA (ID: 26494)

15:30 **Tamborski, J. J.**; Cochran, J. K.; Bokuniewicz, H. J.; Rogers, A. D.: IDENTIFICATION OF FRESH SUBMARINE GROUNDWATER DISCHARGE USING THERMAL INFRARED IMAGERY (ID: 26303)

081 BIVALVES AS NUTRIENT TRANSFORMERS: UNDERSTANDING THE EFFECTS OF BIVALVES ON BIOGEOCHEMICAL PROCESSES

Chair(s): Ashley Smyth, arsmyth@vims.edu
Annie Murphy, annie@vims.edu
Iris Anderson, iris@vims.edu
Bongkeun Song, songb@vims.edu

Location: Machado (Floor -2)

17:00 **Cuhel, R. L.**; Aguilar, C.; Carufel, E. R.; Kletter, D.; Valencia, J.: A LITTLE AMMONIA GOES A LONG WAY TO ALTER FOOD WEB NITROGEN DYNAMICS IN LAKE MICHIGAN* (ID: 25973)

17:15 **Caffrey, J. M.**; Hollibaugh, J. T.; Mortazavi, B.: LIVING OYSTERS AS ACTIVE SITES OF NITRIFICATION AND DENITRIFICATION* (ID: 26265)

17:30 **Nickerson, Z. L.**; Cornwell, J. C.; Owens, S. M.: LOCATING THE SOURCE OF DENITRIFICATION IN A RESTORED OYSTER REEF* (ID: 26993)

17:45 **Smyth, A. R.**; Murphy, A. E.; Song, B.; Anderson, I. C.: OYSTER REEFS: A DENITRIFICATION HOT SPOT IN ESTUARINE ECOSYSTEMS* (ID: 27511)

[T] REPRESENTS TUTORIAL PRESENTATIONS

18:00 **Murphy, A. E.**; Anderson, I. C.; Song, B.; Smyth, A. R.; Luckenbach, M. W.: ENVIRONMENTAL CONTROLS ON MICROBIAL NITRATE RESPIRATION AT A COMMERCIAL CLAM AQUACULTURE SITE* (ID: 27276)

18:15 **Vieillard, A. M.**; Tobias, C. R.: THE INFLUENCE OF EASTERN OYSTER GROWTH AND AQUACULTURE PRACTICES ON BENTHIC NITROGEN CYCLING * (ID: 27719)

084 INTERACTIVE EFFECTS OF GLOBAL CHANGE ENVIRONMENTAL DRIVERS ON PHYTOPLANKTON AND BACTERIOPLANKTON IN COASTAL WATERS

Chair(s): Patrick Neale, nealep@si.edu
Cristina Sobrino, sobrinoc@uvigo.es
Irene Schloss, ireschloss@gmail.com

Location: Seminario 3-4-5 (Floor 1)

08:30 **Banaszak, A. T.**; Villafañe, V. E.; Helbling, E. W.: ANTAGONISTIC AND SYNERGISTIC RESPONSES OF PHYTOPLANKTON TO GLOBAL CHANGE (ID: 27057)

08:45 **Bandyopadhyay, D.**; Biswas, H.; Rahman Shaik, A. U.: PHYTOPLANKTON PIGMENTS INDICATE HIGHER LIGHT ENERGY UTILIZATION EFFICIENCY AND HIGHER GROWTH RATE UNDER ELEVATED CO2 LEVELS FROM THE COASTAL BAY OF BENGAL (ID: 25767)

09:00 **Garcia-Gomez, C.**; Gordillo, F. J.; Palma, A.; Lorenzo, M. R.; Segovia, M.: ELEVATED CO_2 ALLEVIATES HIGH PAR AND UV STRESS IN THE UNICELLULAR CHLOROPHYTE DUNALIELLA TERTIOLECTA (ID: 26497)

09:15 **Neale, P. J.**; Sobrino, C.; Segovia, M.; Mercado, J. M.; Reul, A.: INTERACTIVE EFFECTS OF ELEVATED CO2, NUTRIENT ENRICHMENT AND IRRADIANCE ON PHYTOPLANKTON AND BACTERIOPLANKTON FROM A COASTAL ENVIRONMENT (ID: 26442)

09:30 **Teixeira, I. G.**; Arbones, B.; Froján, M.; Zúñiga, D.; Hernández, M.; Sobrino, C.; Castro, C. G.; Teira, E.; Fernández, E.; Figueiras, F. G.: CHANGES IN PHYTOPLANKTON COMMUNITIES IN RESPONSE TO DIFFERENT NUTRIENT INPUTS IN A COASTAL UPWELLING SYSTEM (RIA DE VIGO, NW SPAIN) (ID: 26687)

09:45 **Mackey, K. R.**; Chein, C.; Paytan, A.: MICROBIAL AND BIOGEOCHEMICAL RESPONSES TO PROJECTED FUTURE NITRATE ENRICHMENT IN THE CALIFORNIA UPWELLING SYSTEM (ID: 27594)

10:30 **Jeffrey, W. H.**; Overton, M.: SEASONAL RESPONSES OF BACTERIOPLANKTON TO ULTRAVIOLET RADIATION IN COASTAL AND ESTUARINE WATERS OF NORTHWEST FLORIDA (ID: 27582)

10:45 **Sobrino, C.**; Teira, E.; Alvarez-Salgado, X. A.; Nieto-Cid, M. M.; Hernández-Ruiz, M.; Fernández, E.; Figueiras, F.: INTERACTION BETWEEN ULTRAVIOLET RADIATION AND ALLOCHTONOUS MATERIALS ON THE PRODUCTION OF COASTAL PLANKTONIC COMMUNITIES (ID: 26570)

11:00 **Haynes, V. N.**; Ward, E.; Russell, B.: THE INTERACTIVE EFFECTS OF UV RADIATION AND TITANIUM DIOXIDE NANOPARTICLES ON MARINE SNOW-ASSOCIATED MICROBES (ID: 26365)

11:15 **Fuentes-Lema, A.**; Sanleón-Bartolomé, H.; Pazó, M. J.; Vieitiez, V.; Álvarez-Salgado, X. A.; Lubián, L. M.; Álvarez, M.; Sobrino, C.: INTERACTION BETWEEN ELEVATED CO2 AND ORGANIC MATTER ON BACTERIAL METABOLISM (ID: 26633)

11:30 **Camarena Gómez, M. T.**; Lipsewers, T.; Piiperine, J.; Perez Queimaliños, D.; Hoikkala, L.; Sobrino, C.; Spilling , K.: SPRING BLOOM PHYTOPLANKTON COMMUNITY COMPOSITION AFFECTS BACTERIAL PRODUCTIVITY IN THE BALTIC SEA. (ID: 25983)

11:45 **Lipsewers, T.**; Camarena Gomez, M. T.; Klais, R.; Queimaliños Perez, D.; Spilling, K.: PRIMARY AND BACTERIAL PRODUCTION ARE AFFECTED BY THE PHYTOPLANKTON COMMUNITY COMPOSITION DURING THE BALTIC SEA SPRING BLOOM (ID: 26005)

085 CURRENT ADVANCES IN THE INTEGRATION OF (SEMI)AUTOMATED APPROACHES FOR MEASURING PHYTOPLANKTON DYNAMICS, FROM FRESHWATER TO MARINE SYSTEMS

Chair(s): Luis Felipe Artigas, Felipe.Artigas@univ-littoral.fr
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Melilotus Thyssen, melilotus.thyssen@mio.osupytheas.fr

Location: Machuca (Floor -2)

08:30 **Seppälä, J.**; Ylöstalo, P.; Simis, S.; Kaitala, S.; Houliez, E.; Louw, D.: MONITORING PHYTOPLANKTON TAXONOMY AND PRODUCTIVITY USING FLUOROMETRY^{T} (ID: 26697)

09:00 **Kromkamp, J. C.**; Philippart, C. J.; Rijkeboer, M.; Veen, A.; Silse, G.: HIGH RESOLUTION FRRF MEASUREMENTS AS MEANS TO MEASURE PHYTOPLANKTON PRIMARY PRODUCTION (ID: 26835)

09:15 **Fox, J.**; Forster, R.; Creach, V.; Geider, R.: ASSESSING THE ABUNDANCE AND PHOTOSYNTHETIC PARAMETERS OF PHYTOPLANKTON OVER LARGE SPATIAL SCALES: A SEMI-AUTOMATED FAST REPETITION RATE FLUOROMETRY APPROACH (ID: 27133)

09:30 **Beecraft, L.**; Watson, S. B.; Smith, R.: APPLICATION OF MULTI-WAVELENGTH VARIABLE FLUORESCENCE (PHYTO-PAM) FOR ASSESSMENT OF COMMUNITY COMPOSITION AND SUNLIGHT SENSITIVITY IN FRESHWATER PHYTOPLANKTON (ID: 25713)

09:45 **Hemsley, V. S.**; Painter, S. C.; Martin, A. P.; Frajka-Williams, E. E.; Smyth, T. J.: DETERMINATION OF PRIMARY PRODUCTION USING VERTICALLY PROFILING AUTONOMOUS UNDERWATER VEHICLES (ID: 25840)

10:30 **Grégori, G. J.**; Dugenne, M.; Denis, M.; Thyssen, M.: IN SITU CHARACTERISATION OF THE MARINE MICROBE DYNAMICS THANKS TO HIGH FREQUENCY ANALYSIS AT THE SINGLE CELL LEVEL: TOWARD NEW PARADIGMS* (ID: 27117)

10:45 **Thyssen, M.**; Grégori, G.; Grisoni, J. M.; Pedrotti, M.; Mousseau, L.; Artigas, L. F.; Marro, S.; Garcia, N.; Passafiume, O.; Denis, M.: INFLUENCE OF ENVIRONMENTAL PULSE EVENTS ON THE PHYTOPLANKTON DYNAMICS DURING A NW MEDITERRANEAN SPRING BLOOM ONSET. (ID: 26696)

* REPRESENTS INVITED PRESENTATIONS

11:00 **Ribalet, F.**; Berthiaume, C.; Clayton, C.; Halperin, D.; Howe, B.; Swalwell, J.; Armbrust, E. V.: PROBING THE STRUCTURE OF COMPLEX OCEAN MICROBE COMMUNITIES (ID: 27519)

11:15 **Chapman, I. J.**; Esteban, G. F.; Franklin, D. J.: OPTIMISING THE FLOW CYTOMETRIC DETECTION OF THE CYANOBACTERIA *MICROCYSTIS* IN A LOWLAND BRITISH RESERVOIR (ID: 27228)

11:30 **Sosik, H. M.**; Peacock, E. E.; Olson, R. J.: PARASITIC INFECTION AND REGULATION OF A COASTAL DIATOM: INSIGHTS FROM A LONG DURATION, HIGH RESOLUTION TIME SERIES OF PLANKTON IMAGES (ID: 27595)

11:45 **Brosnahan, M. L.**; Olson, R. J.; Sosik, H. M.; Ralston, D. K.; Anderson, D. M.: APPLICATION OF IN SITU IMAGING IN-FLOW CYTOMETRY FOR THE STUDY OF THE HARMFUL DINOFLAGELLATE *ALEXANDRIUM FUNDYENSE* (ID: 26367)

15:00 **Forster, R. M.**: DETECTION OF PELAGIC ECOSYSTEM CHANGE USING HIGH-FREQUENCY DATA FROM MULTIPLE SOURCES: RESPONSE OF NORTH SEA PLANKTON TO CHANGING TEMPERATURE (ID: 27161)

15:15 **Artigas, L. F.**; Bonato, S.; Créach, V.; Hébert, P. A.; Lefebvre, A.; Lizon, F.; Poisson-Caillault, E.; Rijkeboer, M.; Thyssen, M.; Veen, A.: ON THE COMBINATION OF SEMI-AUTOMATED APPROACHES AND TOOLS FOR MEASURING PHYTOPLANKTON DYNAMICS IN COASTAL WATERS: IMPLICATIONS FOR MONITORING NETWORKS (ID: 27623)

15:30 **Creach, V.**; Sivyer, D.; Greenwood, N.; Hull, T.: TOWARDS ON-LINE MEASUREMENT OF PHYTOPLANKTON FUNCTIONAL GROUPS AS INDICATORS TO OBSERVE PELAGIC SYSTEMS. (ID: 27199)

15:45 **Rijkeboer, M.**; Kromkamp, J. C.; Veen, A.: SIMULTANEOUS HIGH FREQUENCY MONITORING OF MARINE PHYTOPLANKTON COMMUNITIES WITH FLOW CYTOMETRY AND FRRF. (ID: 27455)

16:00 Rousseeuw, K.; Poisson-Caillault, E.; **Lefebvre, A.**: TOWARDS A BETTER UNDERSTANDING OF PHYTOPLANKTON BLOOM DYNAMICS AND ASSESSMENT OF ECOLOGICAL STATUS USING UNSUPERVISED DYNAMIC MODELLING (ID: 26976)

16:15 **Charoenvattanaporn, J.**; Panton, A.; Purdie, D. A.: INVESTIGATING THE FATE OF PHYTOPLANKTON SUMMER BLOOMS IN A SMALL TEMPERATE ESTUARY USING A COMBINATION OF SPATIAL SURVEYS AND CONTINUOUS AUTONOMOUS MONITORING (ID: 26847)

17:00 **Anderson, D. M.**; McGillicuddy, Jr., D. J.; Keafer, B. A.; Scholin, C. A.; Doucette, G. J.; Solow, A. R.; Sirois, A.: USE OF THE ENVIRONMENTAL SAMPLE PROCESSOR (ESP) IN STUDIES OF TOXIC *ALEXANDRIUM* BLOOMS IN THE GULF OF MAINE (ID: 27163)

17:15 **Stern, R. F.**; Mills, D.; Walne, A.; Edwards, M.: AN AUTONOMOUS WATER SAMPLER FOR LONG-TERM, MOLECULAR-BASED SAMPLING OF MARINE SYSTEMS (ID: 26032)

17:30 **Hessel, J.**; Metfies, K.: MOLECULAR SENSOR-BASED MONITORING OF HARMFUL ALGAE (ID: 26607)

17:45 **Blauw, A. N.**; Benincà, E.; Blaas, M.; Laane, R. W.; Greenwood, N.; Huisman, J.: PHYTOPLANKTON AS PLANT, PARTICLE AND PASSIVE TRACER: AN ANALYSIS OF CHLOROPHYLL FLUCTUATIONS ACROSS DIFFERENT TIME SCALES AND REGIONS OF THE NORTH SEA (ID: 26923)

18:00 **Downing, B.**; Bergamaschi, B.; Kendall, C.; Dennis, K. J.; Carter, J. A.; Kraus, T.; Huang, K.: USING CONTINUOUS WATER ISOTOPE MEASUREMENTS TO UNDERSTAND WATER RESIDENCE TIMES IN HYRODYNAMICALLY COMPLEX TIDAL ENVIRONMENTS (ID: 27678)

18:15 **Bracher, A. U.**; Taylor, M. H.; Taylor, B. B.; Dinter, T.; Röttgers, R.; Steinmetz, F.: PREDICTION OF PHYTOPLANKTON PIGMENTS CONCENTRATIONS FROM CONTINUOUS REMOTE SENSING REFLECTANCE MEASUREMENTS (ID: 26095)

090 AQUATIC GAS FLUXES: MEASUREMENTS, DRIVERS AND IMPLICATIONS FOR ECOSYSTEM PROCESSES

Chair(s): Yves Prairie, prairie.yves@uqam.ca
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Daniel McGinnis, dfmcginnis@yahoo.com

Location: Room B (Floor -3)

08:30 **Somlai, C.**; Lorke, A.: DO SPRINGS MATTER? – CONTRIBUTION OF SPRINGS TO THE AQUATIC GAS FLUXES FROM A SMALL WATERSHED IN CENTRAL EUROPE (ID: 26622)

08:45 **Looman, A.**; Santos, I. R.; Tait, D.; Maher, D.; Gatland, J.: CARBON EXPORTS AND CO2 OUTGASSING FROM A PRISTINE SUBTROPICAL HEADWATER STREAM IN DROUGHT AND FLOOD (ID: 26722)

09:00 **Schelker, J.**; Singer, G. A.; Ulseth, A. J.; Hengsberger, S.; Battin, T. J.: NETWORK-SCALE CO2 EVASION IN A LOWER ALPINE WATERSHED OF THE AUSTRIAN ALPS (ID: 26914)

09:15 **Vachon, D.**; Solomon, C. T.; Jones, S. E.; Prairie, Y. T.; del Giorgio, P. A.: RECONSTRUCTING SEASONAL SUCCESSION OF THE MAJOR PROCESSES SUSTAINING CO_2 EMISSIONS IN NORTHERN LAKES (ID: 26211)

09:30 Andersen, T.; Dörsch, P.; Thrane, J.; **Yang, H.**; Hessen, D. O.: GREENHOUSE GAS METABOLISM IN BOREAL LAKES (ID: 26689)

09:45 **Giesler, R.**; Mörth, C. M.; Karlsson, J.; Lundin, E.; Lyon, S. W.; Humborg, C.: SPATIOTEMPORAL VARIATIONS OF PCO_2 AND DELTA13C-DIC IN SUBARCTIC STREAMS IN NORTHERN SWEDEN (ID: 27045)

10:30 **Maranger, R.**; Soued, C.; del Giorgio, P. D.: PATTERNS IN N_2O, CH_4 AND CO_2 FLUX : ARE N AND C GASES COUPLED OR NOT? (ID: 27166)

10:45 **Dunn, S. T.**; Spawn, S. A.; Schade, J. D.; Natali, S. M.; von Fischer, J. C.: METHANE AND CARBON DIOXIDE EMISSIONS FROM A STREAM NETWORK UNDERLAIN BY CONTINUOUS PERMAFROST IN NORTH EASTERN SIBERIA (ID: 27518)

11:00 Quiñones-Rivera, Z. J.; Finlay, K.; Leavitt, P. R.; **Wissel, B.**: METABOLIC AND LIMNOLOGICAL CONTROLS OF ATMOSPHERIC EXCHANGE OF DISSOLVED OXYGEN (DO) AND DISSOLVED INORGANIC CARBON (DIC) ALONG A CHAIN OF HARDWATER LAKES (ID: 27636)

11:15 **Tyroller, L.**; Brennwald, M. S.; Marcé, R.; Casas-Ruiz, J. P.; Kipfer, R.: TRACING BUBBLES WITH NOBLE GASES DISSOLVED IN THE SEDIMENT PORE WATER OF TWO RESERVOIRS: LAKE BOADELLA, SPAIN AND LAKE LUNGERN, SWITZERLAND (ID: 26810)

11:30 **Klaus, M.**; Geibrink, E.; Bastviken, D.; Jonsson, A.; Bergström, A.; Karlsson, J.: DOES FOREST LOGGING FUEL AQUATIC GREENHOUSE GAS EMISSIONS? (ID: 26645)

11:45 **Alshboul, Z.**; Lorke, A.: CARBON DIOXIDE AND METHANE EXPORTED TO STREAMS FROM MUNICIPAL WASTEWATER TREATMENT PLANTS (ID: 25510)

094 POLICY IMPACTS OF AQUATIC SCIENCE: COMMUNICATING SCIENCE TO POLICYMAKERS

Chair(s): Adrienne Sponberg, sponberg@aslo.org
Kirsten Feifel, kirsten.feifel@gmail.com

Location: Seminario 3-4-5 (Floor 1)

15:00 **McCrackin, M.**; Elfwing, T.; Humborg, C.; Markstedt, H.: BALTIC EYE: FOCUSING ON SCIENCE AND COMMUNICATION TO IMPROVE POLICY MAKING FOR THE BALTIC SEA ENVIRONMENT (ID: 25501)

15:15 **Cañedo-Argüelles, M.**; Brucet, S.; Prat, N.: TOO MUCH SALT, TOO LITTLE WATER (ID: 25409)

15:30 **Allen, M. R.**; Stumpf, R. P.; Sellner, K. G.; Clark, J.; Moser, F. C.: ENGAGING RESEARCH, EXTENSION AND MANAGEMENT COMMUNITIES TO IMPROVE HARMFUL ALGAL BLOOM MANAGEMENT IN THE CHESAPEAKE BAY (ID: 25837)

15:45 **Ofir, E.**; Gal, G.; Shapiro, J.: ESTIMATING THE EFFECT OF BIOMANIPULATION ON A LAKE ECOSYSTEM USING A FOOD-WEB MODEL – LAKE KINNERET AS A CASE STUDY (ID: 25911)

16:00 **Essien-Ibok, M. A.**; Ekpo, I. E.: SURVEY OF TRENDS IN AQUATIC ECOSYSTEM MONITORING IN NIGERIA: CASE STUDY OF AKWA IBOM STATE RIVERS (ID: 26079)

17:00 **Futter, M. N.**; Vrede, T.; Markensten, H.; Kiessling, A.: SIMPLE MODELS FOR COMPLEX PROBLEMS: USING MASS BALANCE MODELS TO COMMUNICATE THE ENVIRONMENTAL IMPACT OF OPEN SYSTEM AQUACULTURE (ID: 26131)

17:15 **Alvarez-Troncoso, R.**; Turner, T.; Roncák, P.; Koszta, I.: TRANSBOUNDARY MANAGEMENT OF THE BLACK SEA AND BELARUS WATERBODIES AND BASINS UNDER THE WATER FRAMEWORK DIRECTIVE (WFD): RESULTS AND PUBLIC OUTREACH (ID: 26302)

17:30 **Macleod, C. K.**: WHERE DOES ENVIRONMENTAL ASSESSMENT FIT INTO AQUACULTURE PLANNING? A GLOBAL VIEW FROM AN NEW WORLD PERSPECTIVE. (ID: 26489)

17:45 **Rincón Hidalgo, M. M.**; Levontin, P.; Leach, A.; Ruiz Segura, J.; Mumford, J.: INSURANCE SCHEME FOR THE EUROPEAN ANCHOVY: THE ECONOMIC VALUE OF ENVIRONMENTAL INFORMATION (ID: 27547)

18:00 **Turner, E. J.**; Capson, T.; Cote, M.; Gledhill, D.; Liebman, M.; Morrison, J. R.; Salisbury, J.; Stancioff, E.; Stymiest, C.; Thomas, H.; Mook, B.: COMMUNICATING OCEAN AND COASTAL ACIDIFICATION TO STAKEHOLDERS AND POLICYMAKERS IN THE NORTHEAST US AND CANADIAN MARITIMES (ID: 27418)

113 BRIDGING THE GAP BETWEEN ECOSYSTEM MODELING AND ECOSYSTEM SERVICES' ASSESSMENT IN COASTAL AND MARINE WATERS

Chair(s): Adolf Konrad Stips, adolf.stips@jrc.ec.europa.eu
Camino Liquete, camino.liquete@jrc.ec.europa.eu

Location: Press Room (Floor 2)

17:00 **Liquete, C.**; Stips, A.; Druon, J. N.; Katsanevakis, S.; Macias, D.; Piroddi, C.; Tempera, F.: THE POTENTIAL OF ECOLOGICAL MODELING FOR ANALYZING MARINE AND COASTAL ECOSYSTEM SERVICES* (ID: 26515)

17:15 **Vanhoutte-Brunier, A.**; Marzin, A.; Laurans, M.; Guyader, O.; Davoult, D.; Mongruel, R.; Le Niliot, P.: SYSTEM MODELING AS A TOOL FOR ECOSYSTEM SERVICES ASSESSEMENT IN SUPPORT OF KELP HARVESTING MANAGEMENT IN THE IROISE SEA (WESTERN BRITTANY, FRANCE) (ID: 26550)

17:30 **Galván, C.**; Puente, A.; Juanes, J. A.: MAPPING ESTUARINE BIOTOPES AS A PREDICTIVE TOOL FOR SHELLFISH PROVISIONING ECOSYSTEM SERVICE (ID: 26666)

17:45 **Almodóvar-Acevedo, L.**; Hasan, M.; Townsend, H. M.; Stevens, B. G.: ASSESSING AVAILABLE HABITAT FOR BLACK SEA BASS (CENTROPRISTIS STRIATA) IN THE CHESAPEAKE BAY THROUGH A HABITAT SUITABILITY MODEL (ID: 26371)

18:00 **Tempera, F.**; Liquete, C.; Cardoso, A. C.: SPATIAL DISTRIBUTION OF MARINE ECOSYSTEM SERVICES IN THE EUROPEAN SEAS (ID: 26173)

18:15 **Drakou, E.**; Pendleton, L.: A CONCEPTUAL MODEL TO ASSESS AND MAP ECOSYSTEM SERVICES ENJOYED FAR FROM THE ECOSYSTEMS UPON WHICH THEY DEPEND (ID: 26624)

116 IMPACT OF MICROBIAL BIODIVERSITY ON AQUATIC ECOSYSTEM FUNCTIONING AND BIOGEOCHEMISTRY

Chair(s): Adam Martiny, amartiny@uci.edu
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Juan Bonachela, jabo@princeton.edu
Simon Levin, slevin@princeton.edu

Location: Room C (Floor -3)

08:30 **Bonachela, J. A.**; Levin, S. A.; Allison, S. D.; Lomas, M. W.; Martiny, A. C.: THE IMPORTANCE OF DIVERSITY IN PHYTOPLANKTON NUTRIENT UPTAKE STRATEGIES FOR MARINE BIOGEOCHEMICAL CYCLES (ID: 26266)

08:45 **Dutkiewicz, S.**; Jahn, O.; Ward, B. A.; Scott, J. R.; Follows, M. J.: DIVERISTY OF PHYTOPLANKTON FUNCTION AND CELL SIZE IN THE CURRENT AND FUTURE OCEAN (ID: 26408)

09:00 **D'Alelio, D.**; Libralato, S.; Ribera d'Alcalà, M.: EVIDENCE OF PLASTICITY IN PLANKTONIC FOOD-WEBS: AN ANALYSIS OF POSSIBLE DRIVERS AND BIOGEOCHEMICAL IMPLICATIONS (ID: 26703)

09:15 **Vallina, S. M.**; Montoya, J. M.; Loreau, M.; Follows, M. J.; Dutkiewicz, S.; Le Quere, C.: AN ECOSYSTEM MARINE MECHANISTIC MODEL OF MODULAR COMPLEXITY (EM4C): FUNCTIONAL DIVERSITY AND FOODWEB STABILITY (ID: 27215)

09:30 **Olli, K.**; Ptacnik, R.; Andersen, T.; Trikk, O.; Klais, R.; Lehtinen, S.; Tamminen, T.: AGAINST THE GLOBAL TREND: DIVERSITY INCERASE ENHANCES RESOURCE USE EFFICIENCY IN A COASTAL PLANKTON COMMUNITY (ID: 27205)

* REPRESENTS INVITED PRESENTATIONS

09:45 **Otero, J.**; Bode, A.; Álvarez-Salgado, X. A.; Varela, M.: RESOURCE USE EFFICIENCY IS AFFECTED BY PHYTOPLANKTON COMMUNITY CHANGES AND GEOCHEMICAL SHIFTS OVER TIME IN A COASTAL UPWELLING AREA (NE ATLANTIC) (ID: 26825)

10:30 **Langenheder, S.**; Berga, M.; Szekely, A. J.; Zha, Y.: TESTING RESPONSES OF BACTERIAL METACOMMUNITIES TO ENVIRONMENTAL CHANGE USING WHOLE ECOSYSTEM MANIPULATION EXPERIMENTS (ID: 27048)

10:45 **Shen, D.**; Beier, S.; Jürgens, K.: SALINITY ADAPTATIONS OF FRESHWATER, BRACKISH AND MARINE BACTERIAL COMMUNITIES OF THE BALTIC SEA: RESULTS FROM A TRANSPLANT EXPERIMENT (ID: 26977)

11:00 **Ruiz-González, C.**; Niño, J. P.; Lapierre, J. F.; Del Giorgio, P. A.: CONTRASTING ENVIRONMENTAL CONTROLS OF BACTERIOPLANKTON FUNCTIONAL TRAIT STRUCTURE AND TAXONOMIC COMPOSITION ACROSS LARGE BOREAL LANDSCAPE GRADIENTS (ID: 25943)

11:15 **Godwin, C. M.**; Cotner, J. B.: THE EFFECT OF ORGANIC CARBON PARTITIONING IN STOICHIOMETRIC MODELS OF AQUATIC HETEROTROPHIC BACTERIAL ASSEMBLAGES (ID: 27372)

11:30 **Sjöqvist, C.**; Kremp, A.: GENETIC DIVERSITY AFFECTS STABILITY OF ECOLOGICAL FUNCTIONS OF A MARINE DIATOM UNDER SALINITY STRESS (ID: 26651)

11:45 **Canelhas, M. R.**; Eiler, A.; Bertilsson, S.: TITLE: SUBSTRATE AND LIGHT: DRIVERS OF BACTERIAL COMMUNITY COMPOSITION (ID: 25783)

15:00 **Johnson, Z. I.**; Lin, Y.; Larkin, A.; Loftus, S.; Hurley, D.; Rose, S.; Ma, L.; Chandler, J.; Zinser, E. R.: IN SITU ACTIVITY OF PROCHLOROCOCCUS ECOTYPES ACROSS ENVIRONMENTAL GRADIENTS IN THE PACIFIC OCEAN (ID: 27481)

15:15 **Fragoso, G.**; Poulton, A.; Purdie, D.: LABRADOR SEA SPRING BLOOMS: UNVEILING THE DRIVERS THAT SHAPE PHYTOPLANKTON FUNCTIONAL TRAITS (ID: 26653)

15:30 **Shoemaker, K. M.**; Moisander, P. H.: SEASONAL TRENDS IN THE COPEPOD GUT MICROBIOME IN THE SARGASSO SEA (ID: 27508)

15:45 **Rouco, M.**; Haley, S. T.; Dyhrman, S. T.: MICROBIAL DIVERSITY WITHIN THE *TRICHODESMIUM* CONSORTIUM (ID: 27514)

16:00 **Moisander, P. H.**; Daley, M.; Shoemaker, K. M.; Roberts-Sano, B.; Sexton, A.: MICROBIAL COMMUNITY COMPOSITION IN ASSOCIATION WITH TEMPERATE MARINE COPEPODS FROM THE GULF OF MAINE (ID: 27679)

16:15 **Tsiola, A.**; Pitta, P.; Tsagaraki, T. M.; Pavloudi, C.; Kotoulas, G.: PROKARYOTIC ABUNDANCE, DIVERSITY AND PHOX GENE DISTRIBUTION ACROSS THE MEDITERRANEAN SEA (ID: 27164)

17:00 **Battin, T. J.**; Besemer, K.; Wilhelm, L.; Singer, G.; Peter, H.; Widder, S.: UNRAVELLING THE MASSIVE BIODIVERSITY AND FUNCTIONAL COMMUNITY STRUCTURE OF MICROBIAL BIOFILMS IN STREAM NETWORKS (ID: 25781)

17:15 **Damashek, J.**; Casciotti, K. L.; Francis, C. A.: LINKING AMMONIA-OXIDIZING MICROBIAL COMMUNITIES TO NITRIFICATION RATES ACROSS THE STEEP GRADIENTS OF SAN FRANCISCO BAY (CA, USA) WATERS (ID: 27538)

17:30 **Agawin, N. R.**; Ferriol, P.; Sintes, E.; Alcón, E.; Mena, C.; de la Torre, A.; Moyà, G.: DIAZOTROPH DIVERSITY AND THEIR RATES OF NITROGEN FIXATION IN A POSIDONIA OCEANICA MEADOW IN THE MEDITERRANEAN SEA (ID: 25830)

17:45 **Ransome, E.**; Hartmann, A.; Hester , E.; Plaisance, L.; Knowlton, N.; Meyer, C.; Collins, A.; Rohwer, F.: MICROBIAL DIVERSITY AND FUNCTION ON CORAL REEFS ASSESSED USING AUTONOMOUS REEF MONITORING STRUCTURES (ARMS) AND MULTI-OMIC METHODS (ID: 27673)

18:00 **Fernandez-Gonzalez, N.**; Hardison, A. K.; Algar, C. K.; Giblin, A. E.; Rich, J. J.: BACTERIAL COMMUNITY RESPONSE TO INCREASING ORGANIC CARBON AND NITRATE LOADS IN MARINE SEDIMENTS (ID: 25925)

18:15 **Trimmer, M.**; Shelley, F. C.; Purdy, K. J.; Maanoja, S. T.; Grey, J.: RIVERBED METHANOTROPHY - FUNCTIONAL REDUNDANCY OR A DYNAMIC AFFINITY FOR METHANE? (ID: 26711)

120 KEY PLAYERS IN BENTHIC PROCESSES: MICRO VS. MACRO

Chair(s): Diana Vasquez Cardenas, diana.vasquez@nioz.nl
Francesc Montserrat, francesc.montserrat@nioz.nl

Location: Press Room (Floor 2)

08:30 **Kristensen, E.**; Quintana, C. O.; Flindt, M. R.; Valdemarsen, T.: ARE BIOTURBATION IMPACTS ON SEDIMENT BIOGEOCHEMISTRY GOVERNED BY THE FUNCTIONAL TRAITS OF BENTHIC SPECIES?* (ID: 25500)

09:00 **Gogina, M.**; Darr, A.; Morys, C.; Lipka, M.; Woelfel, J.; Zettler, M. L.: QUANTIFYING AND MAPPING THE POTENTIAL ROLE OF BENTHIC MACROFAUNA IN ECOLOGICAL FUNCTIONING ALONG NATURAL GRADIENTS (ID: 25435)

09:15 **Sturdivant, S. K.**; Shimizu, M.: *IN SITU* ORGANISM-SEDIMENT INTERACTIONS: NOVEL OBSERVATIONS OF BIOTURBATION & BIOGEOCHEMISTRY IN A HIGHLY DEPOSITIONAL ESTUARY, CAPE LOOKOUT BIGHT, USA (ID: 27603)

09:30 **Valdemarsen, T. B.**; Quintana, C. O.; Thorsen, S. W.; Kristensen, E. B.: SURVIVAL AND BIOTURBATION EFFECTS OF COMMON MARINE MACROFAUNA IN COASTAL SOILS NEWLY FLOODED WITH SEAWATER (ID: 26658)

09:45 **Airs, R. L.**; Tait, K.; Zhang, Q.; Warwick, R. M.; McNeill, L.; Widdicombe, C. E.; Sheehan, A.; Queiros, A. M.; Tarran, G. A.; Widdicombe, S.: DETAILED STRUCTURE OF THE BENTHIC BACTERIAL AND MACROFAUNA COMMUNITY RESPONSE DURING A PROLONGED PHYTOPLANKTON BLOOM IN THE WESTERN ENGLISH CHANNEL (ID: 27168)

10:30 **Lewandowski, J.**; Hölker, F.; Baranov, V.; Hupfer, M.: 2 : 1 FOR TEAM MACRO: CHIRONOMIDS ARE KEY PLAYERS NOT ONLY IN BENTHIC PROCESSES BUT EVEN IN ENTIRE ECOSYSTEMS (ID: 25599)

10:45 **Burdorf, L.**; Malkin, S. Y.; Seitaj, D.; Meire, L.; Cook, P.; Meysman, F.: LONG DISTANCE ELECTRON TRANSPORT BY CABLE BACTERIA IN MARINE SEDIMENTS: A GLOBAL PHENOMENON (ID: 26809)

11:00 **Aschenbroich, A.**; Stieglitz, T.; Fromard, F.; Thouzeau, G.; Aller, R. C.; Tavares, M.; Gardel, A.; Michaud, E.: MANGROVE CRABS AND THEIR BURROWS – KEY PLAYERS IN BENTHIC PROCESSES IN MANGROVE ECOSYSTEMS (ID: 27126)

11:15 **Vasquez Cardenas, D.**; Meysman, F. J.; van Breugel, P.; Boschker, H. T.: BENTHIC CHEMOAUTOTROPHY: KEY PROCESS IN COASTAL CARBON CYCLING (ID: 25661)

11:30 **Quintana, C. O.**; Raymond, C.; Bonaglia, S.; Nascimento, F.; Forster, S.; Bastrop, R.; Gunnarsson, J.; Kristensen, E.: BIOTURBATION EFFECTS OF THREE MARENZELLERIA SPECIES (POLYCHAETA) ON THE BIOGEOCHEMISTRY OF WESTERN AND EASTERN BALTIC SEA SEDIMENTS (ID: 26680)

11:45 **Seitaj, D.**; Meysman, F. J.: MICROBIAL INNOVATION AND THE QUEST FOR ELECTRON DONORS IN MARINE SEDIMENTS (ID: 26327)

15:00 **Ziebis, W.**: ANIMAL-SEDIMENT-MICROBE INTERACTIONS AND THEIR IMPACT ON BIOGEOCHEMICAL PROCESSES IN THE SEABED* (ID: 27361)

15:45 **Mehring, A. S.**; Levin, L. A.; Evrard, V.; Grant, S. B.; Cook, P. L.: THE CONTRIBUTION OF AQUATIC INVERTEBRATES TO BENTHIC GREENHOUSE GAS FLUX IN URBAN WETLANDS (ID: 27737)

16:00 **Taylor, J. D.**; Cunliffe, M.: IMPACT OF MACROFAUNA ON HYDROCARBON DEGRADATION AND ACTIVE MICROBIAL COMMUNITY COMPOSITION IN OIL CONTAMINATED SEDIMENTS (ID: 26161)

16:15 **Buck, K. R.**; Walz, K.; Kuhnz, L.; Yagar, P.; Barry, J. P.: DEEP-SEA BENTHIC FAUNA :BIOMASS AND METABOLISM (ID: 25658)

121 NATURAL AND ANTHROPOGENIC DISTURBANCES ON DEEP-SEA ECOSYSTEMS

Chair(s): Dick van Oevelen, Dick.van.Oevelen@nioz.nl
Andrew Sweetman, Andrew.Sweetman@iris.no

Location: Andalucia 2 (Floor 1)

08:30 **Soetaert, K.**; Mohn, C.; Rengstorf, A.; Grehan, A.; van Oevelen, D.: DIRECT COUPLING OF 600 M DEEP-WATER CORALS TO SURFACE PRODUCTIVITY (ID: 25492)

08:45 **Georgian, S. E.**; Dupont, S.; Kurman, M.; Cordes, E. E.: LOCAL ADAPTATION ALTERS PHYSIOLOGICAL RESPONSE TO OCEAN ACIDIFICATION IN SEPARATE BIOGEOGRAPHIC POPULATIONS OF COLD-WATER CORALS (ID: 27130)

09:00 **Reynaud, S.**; Gori, A.; Orejas, C.; Ferrier-Pages, C.: THE COLD-WATER CORAL *DENDROPHYLLIA CORNIGERA* PREFERS TEMPERATE THAN COLD ENVIRONMENTS (ID: 26509)

09:15 **Gerla, D. J.**; Baussant, T.; Van Oevelen, D.: A PHYSIOLOGICAL MODEL FOR ASSESSING THE IMPACT OF DRILLING WASTES ON COLD WATER CORAL (ID: 26208)

09:30 **Nihongi, A.**; Consi, T.; Hinow, P.; Nagai, T.; Uttieri, M.; Fennimore, E. J.; Genin, A.; Strickler, J. R.: IMPACTS OF OIL AND DISPERSANTS ON SWIMMING BEHAVIORS OF COPEPODS IN THE DEEP-WATER SIMULATOR (ID: 25728)

09:45 **Nakamura, M.**; Watanabe, H.; Sasaki, T.; Yamamoto, H.; Mitarai, S.: COLONIZATION PATTERNS OF VENT SPECIES AFTER DRILLING IN THE IHEYA NORTH HYDROTHERMAL FIELD IN THE OKINAWA TROUGH (ID: 26510)

10:30 **Jacob, M.**; Soltwedel, T.; Ramette, A.; Boetius, A.: DEEP-SEA BACTERIAL AND EUKARYOTIC COMMUNITIES RESPOND RAPIDLY TO PARTICLE FLUX VARIATION DUE TO WARMING OF THE ARCTIC OCEAN (ID: 26741)

10:45 **Hoffmann, K.**; Boetius, A.; Bienhold, C.: FED UP: IMPACT OF DIFFERENT FOOD PULSES ON BACTERIAL DIVERSITY AND ACTIVITY IN ARCTIC DEEP-SEA SEDIMENTS (ID: 25685)

11:00 **Hasemann, C.**; Mokievsky, V.; Sablotny, B.; Soltwedel, T.: IMPACT OF MACROFAUNA BIOTURBATION ON SMALL-SCALE DISTRIBUTION PATTERNS OF DEEP-SEA MEIOFAUNA: AN EXPERIMENTAL APPROACH (ID: 26540)

11:15 **Stratmann, T.**; Sweetman, A.; Moodley, L.; Mevenkamp, L.; Vanreusel, A.; van Oevelen, D.: IMPACT OF MINE TAILING DEPOSITION ON THE ECOLOGY AND BIOGEO-CHEMISTRY OF MARINE SEDIMENTS (ID: 26101)

11:30 **Purser, A.**; Aguzzi, J.; Godo, O. R.; Doya, C.; Thomsen, L.: SPATIAL AND TEMPORAL SEAFLOOR AND WATER COLUMN MONITORING WITH TRACKED BENTHIC CRAWLERS (ID: 27431)

133 AQUATIC SCIENCE EDUCATION AND OUTREACH: EXPANDING INTERNATIONAL SCIENCE LITERACY

Chair(s): Bob Chen, bob.chen@umb.edu
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Linda Duguay, duguay@usc.edu

Location: Andalucia 3 (Floor 1)

08:30 **Galush, T. J.**; Cotner, S. H.: THE HYDROZOAN *HYDRACTINIA* AS A MODEL ORGANISM FOR COURSE-BASED UNDERGRADUATE RESEARCH PROJECTS (ID: 25432)

08:45 **Alvarez-Troncoso, R.**; Perez-Bilbao, A.; Benetti, C. J.; Garrido, J.: TRICHOPTERA ASSEMBLAGES IN FOUR RIVERS IN NW SPAIN AFFECTED BY HYDROELECTRIC POWER STATIONS: A CASE TO SHARE IN TRAINING STUDENTS COURSE (ID: 26736)

09:00 **Lewis, C.**; Buchanan-Dunlop, J.: HOW CAN MARINE SCIENCES SUPPORT SCIENCE EXCELLENCE IN SCHOOLS? (ID: 26220)

09:15 **Ludwig, C. M.**; Orellana, M. V.; Baliga, N. S.: BRINGING CRITICAL SYSTEMS THINKING TO SECONDARY SCHOOL STUDENTS THROUGH OCEAN ACIDIFICATION RESEARCH (ID: 25550)

09:30 Geraci, C. J.; **Idrisi, N.**: PEER RESEARCH EXPERIENCES FOR UNDERGRADUATES (REU): FRESHWATER SCIENCE AND POLICY IN THE HUMAN-DOMINATED TIGRIS RIVER BASIN, IRAQ (ID: 26152)

09:45 **Juanes, J. A.**; Gomez, A. G.; Martinez, S.; Ondiviela, B.; Fernandez, F.; Samano, M. L.: A SUCCESSFUL EXPERIENCE OF A MOOC IN PORT WATERS' QUALITY MANAGEMENT (ID: 27142)

10:30 **Aguilar, C.**; Cuhel, R. L.; Joyce, C.: UNITED STATES-INDIA-FRANCE STUDENT WATER QUALITY FILM FESTIVAL: MILWAUKEE HIGH SCHOOL STUDENTS ASK IF DILUTION IS THE SOLUTION TO POLLUTION FOR LAKE MICHIGAN (ID: 25971)

* REPRESENTS INVITED PRESENTATIONS

TUESDAY

10:45 **Chen, R. F.**; Lohmeier, J.; Lustick, D.; Rabkin, D.; Thompson, S.; Wilson, R.: CLIMATE CHANGE (ID: 26470)

11:00 **Cosme, N.**; Olsen, S. I.: A TEACHING AND COMMUNICATION TOOL BASED ON DPSIR AND LCIA INDICATOR FOR MARINE EUTROPHICATION (ID: 26745)

11:15 Jato, J.; De Los Bueis, J.; Urgorri, V.; **Fernandez, E.**: "DIVING INTO THE OCEAN": BRINGING MARINE SCIENCE TO THE SOCIETY IN THE NW IBERIAN PENINSULA (ID: 26790)

11:30 **de Tezanos Pinto, P.**; Izaguirre, I.; Saad, J.; Fontanarrosa, S.; Vinocur, A.; García Facal, G.; Yema, L.; López, M. E.; Rodriguez, P.; Sanchez, M. L.: COMMUNICATING LIMNOLOGY TO HIGH SCHOOL STUDENTS AND GENERAL PUBLIC IN ARGENTINA (ID: 27496)

11:45 Sánchez, Y.; Figueroa, M.; Subida, M. D.; **Fernandez, M.**: CHILE ES MAR – EDUCATING FOR MARINE CONSERVATION IN CHILE (ID: 27616)

15:00 **Krug, L. A.**; Rumyantseva, A.; Orchowska, M.; Shatova, O.; Cheung, V.; Seeyave, S.: THE NF-POGO ALUMNI NETWORK FOR OCEANS (NANO) (ID: 26737)

15:15 **Tockner, K.**; Tydecks, L.: BIOLOGICAL FIELD STATIONS – UNIQUE INFRASTRUCTURE OF GLOBAL STRATEGIC RELEVANCE (ID: 27465)

15:30 **Moore, A. M.**; Searle, R.; Stewart, A.; Frey, M.; Guest, H.; Murray, H.; Rockall, M.: CANOE: BUILDING CANADA'S OCEAN LITERACY NETWORK (ID: 26176)

15:45 **Pecchiar, I.**; Manno, C.: EXPERIENCING THE POLAR RESEARCH: FIRST STEP TO BUILD AN "INTO THE FIELD CLASSROOMS EDUCATIONAL NETWORK" (ID: 25523)

16:00 **Paxton, A. B.**; Larkin, A. A.; Heenehan, H. L.; Ridge, J. T.; Theuerkauf, E. J.: SCIENTIFIC RESEARCH AND EDUCATION NETWORK (SCIREN): A NOVEL APPROACH TO CONNECTING LOCAL STEM RESEARCHERS AND EDUCATORS (ID: 26379)

16:15 **Schiebel, H. N.**; Chen, R. F.; Lustick, D.; Rabkin, D.; Berhmann, K.; Morse, M.; Thompson, S.; Wilson, R.; Lohmeier, J.: SCIENCE CAFES: MAKING SOCIAL MEDIA PERSONAL (ID: 25482)

17:00 **Vang, N. K.**; Cotner, S. C.: WE'VE GOT CRABS: USING A TRAVELING TOUCH TANK TO ENGAGE SCHOOLCHILDREN IN THE EMPIRICAL NATURE OF SCIENCE (ID: 25654)

17:15 **Purser, A.**; Lund, S.; Williams, R.; Thomsen, L.: THE USE OF CABLED DEEP SEA BENTHIC CRAWLERS IN MARINE SCIENCE EDUCATION (ID: 27470)

17:30 **Bresnahan, P. J.**; Wirth, T.; Martz, T. R.: SUP, SCIENCE: LINKING THE CHARISMA OF WATERSPORTS AND GLOBAL CHANGE OCEAN CHEMISTRY EDUCATION (ID: 25553)

17:45 Wicks, L. C.; **Roberts, J. M.**: INSPIRING SEA-VOYAGE CREATING ENVIRONMENTAL AMBASSADORS (ID: 26702)

[T] REPRESENTS TUTORIAL PRESENTATIONS

TUESDAY POSTERS

001 ASLO MULTICULTURAL PROGRAM (ASLO MP) STUDENT SYMPOSIUM

Chair(s): Benjamin Cuker, benjamin.cuker@hamptonu.edu
Deidre Gibson, deidre.gibson@hamptonu.edu

Location: Poster and Exhibit Area (Floor 1)

1 **Ordonez, V.**: EXAMINING THE EFFECT OF NATURAL AND CONSTRUCTED OYSTER REEFS ON FISH POPULATIONS IN SOUTH CAROLINA ESTUARIES (ID: 26468)

2 **Davis, C. D.**; Banks, M. A.: RESOLVING TEMPORAL SUBSTRUCTURE OF CHINOOK SALMON (ONCORHYNCHUS TSHAWYTSCHA) IN THE SILETZ RIVER, OREGON. (ID: 27105)

3 **Perez, J. E.**; Robinson, W. E.: METAL TRANSPORT FROM THE BLOOD PLASMA TO THE KIDNEYS IN THE BIVLAVE MYTILUS EDULIS (ID: 26433)

4 **Bynes, K.**; Malagon, H.; Alvarez, J.; Chigbu, P.: ENVIRONMENTAL FACTORS AFFECTING THE ABUNDANCE AND DISTRIBUTION OF JUVENILE SPOT (LEIOSTOMUS XANTHURUS) IN MARYLAND COASTAL BAYS (ID: 26756)

5 **Green, S. R.**; CHung, J. S.; Stevens, B.: UNDERSTANDING THE REPRODUCTIVE ENDOCRINOLOGY OF THE RED DEEPSEA CRAB, *CHACEON QUINQUEDENS*: IDENTIFICATION OF REPRODUCTIVE REGULATORS AND VITELLOGENIN (ID: 27315)

6 **Moore, T. N.**; Burdige, D. J.: OCEAN ACIDIFICATION EFFECTS ON CARBONATE DISSOLUTION (ID: 27371)

7 **Tohl, M.**; Burmester, L.; Rotjan, R.: THE EFFECTS OF SYMBIODINIUM SP. PRESENCE ON THE MORPHOLOGY OF THE TEMPERATE CORAL, ASTRANGIA POCULATA (ID: 27435)

8 **Ricaurte, M. L.**; Schizas, N.; Weil, E.; Ciborowski, P.; Negrón, O. J.; Boukli, N.: PROTEOMIC PROFILES OF TWO THREATENED CARIBBEAN CORAL SPECIES UNDER AMBIENT TEMPERATURES (ID: 27735)

9 **Rivera Vazquez, Y.**; Bingham, B. L.: THE IMPACT OF EXUDATES FROM *ULVARIA OBSCURA* ON SAND DOLLAR AND OYSTER DEVELOPMENT (ID: 27756)

10 **Serrano-Zayas, C.**; McKenzie, K.; Frischer, M.; Cox, T.: IDENTIFICATION OF BACTERIAL COMMUNITIES ASSOCIATED WITH BOTTLENOSE DOLPHINS *TURSIOPS TRUNCATUS* (ID: 25927)

11 **Henry, C. A.**; Howard, K. E.; Fong, P.; Barber, P.: ALGAL HERBIVORY AND THE EFFECT OF BACTERIAL COMMUNITIES MO'OREA, FRENCH POLYNESIA (ID: 25954)

12 **Ellis, L. S.**; Carroll, K.; Filippino, K. C.; Bernhardt, P. W.; Mulholland, M. R.: THE IMPACTS OF STORMS ON PHYTOPLANKTON GROWTH AND PRODUCTIVITY (ID: 25958)

13 **Oglesby, T. L.**; Waples, D.; Read, A.: FORAGING ECOLOGY OF ANTARCTIC HUMPBACK (*MEGAPTERA NOVAEANGLIAE*) AND MINKE WHALES (*BALENOPTERA BONAERENSIS*) USING STABLE ISOTOPE ANALYSIS (ID: 26415)

14 **Broadhead, T. S.**; Stanistreet, J.; Nowacek, D.: PASSIVE ACOUSTIC MONITORING OF NORTH ATLANTIC RIGHT WHALES, EUBALAENA GLACIALIS (ID: 26413)

15 **Mescioglu, E.**; McDonald, N.; Parsons, R. J.: THE MICROBIAL DEGRADATION OF LIGNIN AND THE SUBSEQUENT PRODUCTION OF MARINE DISSOLVED ORGANIC MATTER IN THE SARGASSO SEA (ID: 26259)

16 **Zayas del Rio, G. B.**; Apple, J. K.: SEASONAL AND SPATIAL EXTENT OF LOW-DISSOLVED OXYGEN IN BELLINGHAM BAY (ID: 25671)

17 **Gay, N. R.**; Cruz-Marrero, W.; Stevens, B.: SURVEY OF EPI-BENTHIC SPECIES IN PLANNED OFFSHORE WIND POWER SITES (ID: 25586)

18 **Rosado-Rodríguez, G.**; Otero-Morales, E.: MARINE SPONGES AND THEIR FUNGAL ASSOCIATES AS BIOINDICATORS OF HEAVY METAL POLLUTION IN COASTAL ENVIRONMENTS (ID: 26308)

19 **Binkley, C.**; Blalock, B.; Cleary, A.; Zhou, M.; Durbin, E.; Poynton, H.: UNDERSTANDING GENE EXPRESSION IN *EUPHAUSIA SUPERBA* DURING QUIESCENCE (ID: 27236)

20 **Anthony, K. L.**: PA'AKAI OVERLOAD: POTENTIAL CONSEQUENCES OF OVER-MIXING BRACKISH WATER ECOSYSTEMS IN KEAUKAHA, HAWAII (ID: 26598)

21 **Jensen, L. T.**; Oldham, V.; Luther, G. W.: MANGANESE SPECIATION IN THE BROADKILL RIVER ESTUARY (ID: 25651)

22 **Jackson, R. L.**; Andrianasolo, E.; Vetriani, C.: NOVEL DRUG SOURCES FOUND AT HYDROTHERMAL VENTS (ID: 25655)

23 **Chapina, R. J.**; Chavez- Ramos, J.; Walsh, E. J.: GENETIC VARIATION IN A TROPICAL REEF DWELLING CRUSTACEAN MYSIDIUM GRACILE (ID: 27077)

24 **Ets-Hokin, J. M.**: FUNCTIONAL ANALYSIS OF FE(III) REDUCTASE GENES IN THE DIATOMS PHAEODACTYLUM TRICORNUTUM AND THALASSIOSIRA PSEUDONANA (ID: 25752)

25 **Degregori, S.**; Hetzinger, S.; von Reumont, J.; Manfrino, C.; Jacoby, C.; Luis, K.: TIDAL INFLUENCE ON LAGOONAL TEMPERATURE IN LITTLE CAYMAN, CENTRAL CARIBBEAN, USING HIGH-RESOLUTION IN-SITU TEMPERATURE MEASUREMENTS (ID: 26363)

26 **Fernandez, J. M.**; Townsend-Small, A.; Disbennett, D. A.; MacKay, R.; Bourbonniere, R.: RELATIVE CONTRIBUTIONS OF HYPOXIA AND NATURAL GAS PRODUCTION AND TRANSPORT TO METHANE EMISSIONS FROM LAKE ERIE (ID: 25729)

27 **Hart, A. T.**; D'Andrea, W. J.; Balascio, N. L.; Bradley, R. S.; Gjerde, M.; Bakke, J.: CONSTRUCTING A TEMPERATURE RECORD USING ALKENONE UNSATURATION IN LAKE SEDIMENTS FROM AMSTERDAMOYA, SVALBARD (ID: 26381)

28 **Castro, S. M.**; Palinkas, C.: GEOCHRONOLOGICAL ANALYSIS OF SEDIMENTS IN TIDAL FRESHWATER MARSH IN THE PATUXENT RIVER (ID: 25760)

002 COMPOSITION AND REACTIVITY OF DISSOLVED ORGANIC MATTER (DOM) ACROSS LANDSCAPES

Chair(s): Nuria Catalan Garcia, ncatalangarcia@gmail.com
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Lars Tranvik, lars.tranvik@ebc.uu.se

Location: Poster and Exhibit Area (Floor 1)

29 **Fuß, T.**; Behounek, B.; Ulseth, A. J.; Singer, G. A.: LINKING DISSOLVED ORGANIC MATTER COMPOSITION TO STREAM ECOSYSTEM METABOLISM ACROSS A LAND-USE GRADIENT (ID: 25643)

30 **Retelletti Brogi, S.**; Gonnelli, M.; Vestri, S.; Santinelli, C.: DOC AND CDOM DYNAMICS IN THE ARNO RIVER (ITALY) (ID: 27683)

31 **Erhagen, B.**; Berggren, M.; Sponseller, R.; Panneer Selvam, B.; Giesler, R.: BIOAVAILABILITY OF STREAM DISSOLVED ORGANIC CARBON (DOC) DURING SPRING FLOOD AND BASE FLOW IN HIGH-LATITUDE STREAMS (ID: 26527)

32 **Behounek, B.**; Fuß, T.; Ulseth, A. J.; Singer, G. A.: OPTICS AND BIODEGRADABILITY OF FLUVIAL DOM ACROSS A CATCHMENT LANDUSE GRADIENT AND AS INFLUENCED BY MIXING OF WATERS AT CONFLUENCES (ID: 26710)

004 ADVANCES IN COASTAL HYPOXIA MODELING: FROM PHYSICS TO FISH

Chair(s): Katja Fennel, katja.fennel@dal.ca
Robert Hetland, hetland@tamu.edu
Dubravko Justic, djusti1@lsu.edu

Location: Poster and Exhibit Area (Floor 1)

38 **DiMarco, S. F.**; Zimmerle, H.; Chapman, P.; Howard, M. K.: INTERANNUAL VARIABILITY OF ALONG- AND CROSS-SHELF SPATIAL SCALES OF OXYGEN, CHLOROPHYLL, AND CDOM IN THE GULF OF MEXICO HYPOXIC ZONE FROM TOWED OBSERVATIONS (ID: 26412)

39 **Lajaunie Salla, K.**; Sottolichio, A.; Thouvenin, B.; Litrico, X.; Abril, G.: 3D MODELLING OF SUMMER HYPOXIA IN A HIGHLY TURBID URBANIZED MACROTIDAL ESTUARY, COUPLING HYDRODYNAMICS, SEDIMENT TRANSPORT AND BIOGEOCHEMICAL PROCESSES. (ID: 26934)

009 RESERVOIR LIMNOLOGY

Chair(s): John Harrison, john_harrison@wsu.edu
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Francisco Rueda, fjrueda@ugr.es

Location: Poster and Exhibit Area (Floor 1)

63 **Ramón, C. L.**; Armengol, J.; Dolz, J.; Rueda, F. J.: SPATIAL DISTRIBUTION OF INFLOWING RIVERS AND MECHANISMS INDUCING MIXING AT THE CONFLUENCE OF TWO LARGE RIVERS SUBJECT TO VERTICAL STRATIFICATION (ID: 26568)

64 **Rocha, M. I.**; Guedes, I. A.; Gomes, A. M.; Rangel, L. M.; Branco, C. W.; Azevedo, S. M.: THE PHYTOPLANKTON COMMUNITY OF A TROPICAL RESERVOIR LARGELY DIFFERS FROM UPSTREAM AND DOWNSTREAM COMMUNITIES (ID: 27572)

65 **Gomes, A. M.**; Marinho, M. M.; Mesquita, C. M.; Prestes, A. C.; Azevedo, S. F.; Lurling, M.: GLOBAL CHANGE SCENARIO SIMULATION AFFECTING THE PHYTOPLANKTON COMMUNITY OF TWO AQUATIC SYSTEMS WITH DIFFERENT TROPHIC STATES (ID: 27715)

66 **Gómez, M. J.**; VAZQUEZ, M. J.; VELO, M.; PIÑEIRO, R.: TRIBUTARIES INFLUENCE IN RESERVOIR EUTROPHICATION (ID: 26353)

012 BIOGEOCHEMICAL PROCESSES OF ANTARCTIC SHELF SYSTEMS

Chair(s): Dennis A. Hansell, dhansell@rsmas.miami.edu
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Roberta L. Hansman, rhansman@gmail.com

Location: Poster and Exhibit Area (Floor 1)

73 **Rivaro, P.**; Langone, L.; Aulicino , G.; Cotroneo, Y.: MESOSCALE VARIABILITY OF THE CARBONATE SYSTEM IN THE ROSS SEA (ANTARCTICA) DURING THE 2014 SUMMER SEASON. (ID: 27064)

74 **Kim, S.**; Hyun, J.; Choi, A.; Cho, H.; Lee, S.; Yang, E.: LOW BENTHIC RESPIRATION AT HIGHLY PRODUCTIVE POLYNYA IN THE AMUNDSEN SEA, ANTARCTICA (ID: 27705)

014 ATMOSPHERIC DEPOSITION EFFECTS IN AQUATIC ECOSYSTEMS

Chair(s): Francesc Peters, cesc@icm.csic.es
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Clifton Buck, Clifton.Buck@skio.uga.edu
Simon Usher, sussher@plymouth.ac.uk

Location: Poster and Exhibit Area (Floor 1)

79 **McDonald, N.**; Oliver, A.; Peters, A. J.: QUANTIFICATION AND CHARACTERIZATION OF WATER-SOLUBLE ORGANIC COMPOUNDS IN THE MARINE BOUNDARY LAYER (ID: 26297)

80 **Nunes, S. O.**; Marín, I. B.; Mikel , L.; Peters , F.; Sánchez-Pérez , D. E.; Moreno, T.; Querol , X.; Estrada, M. M.: IMPACT OF ATMOSPHERIC AEROSOLS WITH DIFFERENT COMPOSITION ON COASTAL MEDITERRANEAN PHYTOPLANKTON (ID: 26337)

81 **D'Orta, G.**; Mladenov, N.; Winget, D.; Suttle, C. A.; Reche, I.: DEPOSITION RATES OF BACTERIA AND VIRUSES ATTACHED TO DUST AND MARINE AEROSOLS (ID: 26331)

83 **Mladenov, N.**; Oldani, K.; Williams, M. W.: QUANTITY AND QUALITY OF ORGANIC AEROSOLS AND OTHER ATMOSPHERIC INPUTS TO A CARBON-LIMITED ALPINE WATERSHED (ID: 27733)

84 **Frey, C.**; Korth, F.; Moros, C.; Liskow, I.; Voss, M.: PATTERNS OF NITROGEN ISOTOPE RATIOS AND FLUXES IN ATMOSPHERIC NITROGEN DEPOSITION TO THE WESTERN BALTIC SEA (ID: 27413)

85 **Sookhdeo, C.**; Bernhardt, P. W.; Mendonca, I. R.; Mulholland, M. R.; Najjar, R. G.; Sohst, B. M.; Schwarzschild, A.; Widner, B.; Sedwick, P. N.: ESTIMATING WET DEPOSITION OF NUTRIENTS TO SEASONALLY OLIGOTROPHIC WATERS OFF THE U.S. EAST COAST USING A COASTAL SAMPLING STATION (ID: 27408)

017 FROM "CATCHING THE ALGAE" TO THE ROLE OF ZOOPLANKTON IN BIOGEOCHEMICAL CYCLES: HOMAGE TO MIQUEL ALCARAZ

Chair(s): Enric Saiz, enric@icm.csic.es
Albert Calbet, acalbet@icm.csic.es

Location: Poster and Exhibit Area (Floor 1)

97 **Farber Lorda, J.**; Levin, L.; Gonzalez, J.; Romero Vargas Márquez, I.: DIFFERENCES IN ISOTOPIC SIGNALS BETWEEN SOUTHERN CALIFORNIA CURRENT AND EASTERN TROPICAL PACIFIC EUPHAUSIID SPECIES. (ID: 25915)

98 **Martínez, M. H.**; Rodríguez-Graña, L.; Santos, L.; Denicola, A.; Calliari, D. L.: EFFECT OF WATER QUALITY ON OXIDATIVE DAMAGE AND VITAL RATES IN COPEPODS (ID: 26383)

99 **Calbet, A.**; Agersted, M. D.; Enghoff, S.; Kaartvedt, S.; Møller, E. F.; Paulsen, M. L.; Solberg, I.; Tang, K. W.; Tönnesson, K.; Nielsen, T. G.: ARE THE PLANKTON WITHIN THE MIXED LAYER HOMOGENEOUSLY DISTRIBUTED? IMPLICATIONS FOR BLOOM-FORMING THEORIES (ID: 25596)

100 **Saiz, E.**; Calbet, A.; Griffell, K.; Isari, S.; Solé, M.; Peters, J.; Alcaraz, M.: ECOPHYSIOLOGICAL CHANGES THROUGH SENESCENCE IN THE MARINE CALANOID COPEPOD *ACARTIA GRANI* (ID: 25791)

101 **Carlotti, F.**; Jouandet, M.; N0waczyk , A.: MESOZOOPLANKTON STRUCTURE AND FUNCTIONING DURING THE ONSET OF THE KERGUELEN BLOOM DURING KEOPS2 SURVEY (15 OCT – 20 NOV 2011) (ID: 27716)

020 INTEGRATED TEMPORAL PERSPECTIVES ON CLIMATE EFFECTS ON LAKE ECOSYSTEMS

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Daniel R. Engstrom, dre@umn.edu

Location: Poster and Exhibit Area (Floor 1)

110 **Benito, X.**; Cearreta, A.; Trobajo, R.; Ibáñez, C.: NATURAL AND ANTHROPOGENIC CHANGES IN A MEDITERRANEAN DELTA AS RECONSTRUCTED FROM BENTHIC FORAMINIFERAL ASSEMBLAGES (ID: 26526)

111 **Trapote, M. C.**; López, P.; Gomà, J.; Safont, E.; Cañellas-Boltà, N.; Buchaca, T.; Pérez, N.; Sigró, X.; Rull, V.; Vegas-Vilarrúbia, T.: LIMNOLOGICAL CYCLE OF A MEROMICTIC LAKE (MONTCORTÈS, PYRENEES) AND ITS RELATIONSHIP TO SEDIMENT VARVE FORMATION. (ID: 25858)

112 **Zimmermann, T. K.**; Strock, K. E.; Knoll, L.; Williamson, C. E.: RECONSTRUCTING THE EFFECTS OF MULTIPLE STRESSORS ON ALGAL COMMUNITIES IN LAKES WITH DIFFERING CONCENTRATIONS OF DISSOLVED ORGANIC CARBON (ID: 27468)

024 SMALL BUGS WITH A BIG IMPACT: LINKING PLANKTON ECOLOGY WITH ECOSYSTEM PROCESSES

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Location: Poster and Exhibit Area (Floor 1)

129 **Sabia, L.**; Uttieri, M.; Zambianchi, E.: WANDERING DOES NOT RESEMBLE CASUAL - THE CORRELATION OF ZOOPLANKTON SWIMMING MOTION (ID: 27459)

130 Simoncelli, S.; Harvey, C.; Howell, S.; Thackeray, S. J.; **Wain, D. J.**: OBSERVATIONS OF TURBULENCE DURING A ZOOPLANKTON MIGRATION IN A SMALL LAKE (ID: 27262)

131 **Santi, I.**; Tsiola, A.; Kanelopoulou, M.; Dafnomili, E.; Zivanovic, E.; Dimitriou, P. D.; Papageorgiou, N.; Pitta, P.; Karakassis, I.: BENTHIC-PELAGIC COUPLING: A PICO-PLANKTONIC POINT OF VIEW (ID: 27177)

132 **Martínez Pérez, C.**; Dekaezemacker, J.; Mohr, W.; Löscher, C. R.; Littman, S.; Lavik, G.; Kuypers , M. M.: RELATIVE CONTRIBUTION OF TWO ABUNDANT DIAZOTROPHS TO TOTAL N2 FIXATION – A COMPARATIVE APPROACH USING NANOSIMS (ID: 26662)

133 **Matsumoto, K.**: THE ONSET MECHANISMS OF PHYTOPLANKTON BLOOM IN SUBARCTIC AND SUBTROPICAL GYRES IN THE NORTHWESTERN PACIFIC OCEAN (ID: 25975)

134 **Bernatowicz, P.**; Polanska, M.; Bebas, P.: THE EFFECT OF LIGHT CONDITIONS ON THE CLOCK PROTEIN PERIOD EXPRESSION IN THE BRAIN OF DAPHNIA PULEX (ID: 26200)

135 **Kitajima, S.**; Morimoto, H.; Uchikawa, K.; Goto, T.; Iguchi, N.: SELECTIVE FEEDING ON POECILOSTOMATOID COPEPODS OF ADULT JAPANESE ANCHOVIES DUE TO *OIKOPLEURA* (ID: 26561)

136 **Lorenz, P.**; Trommer, G.; Stibor, H.: INCREASED N-INPUT ALTERS ZOOPLANKTON DYNAMICS IN P-LIMITED LAKES (ID: 25609)

032 RESPONSES OF MARINE ORGANISMS TO OCEAN ACIDIFICATION, INTERACTIONS WITH OTHER STRESSORS AND BIOGEOCHEMISTRY

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Location: Poster and Exhibit Area (Floor 1)

155 **Cross, E. L.**; Peck, L. S.; Harper, E. M.: OCEAN ACIDIFICATION DOES NOT IMPACT SHELL GROWTH OR REPAIR OF THE ANTARCTIC BRACHIOPOD LIOTHYRELLA UVA (BRODERIP, 1833) (ID: 27138)

156 **Martínez Fernández, A.**; Paytan, A.; Bernhard, J. M.; Hernández Terrones, L.; Rebolledo Vieyra, M.: RESPONSE OF BENTHIC FORAMINIFERA TO OCEAN ACIDIFICATION DATA FROM A NATURAL GRADIENT (ID: 27686)

157 **Waege, J.**; Rotchell, J. M.; Hardege, J. D.; Roggatz, C. C.: MOLECULAR LEVEL EFFECTS OF LOW PH ON PLATYNEREIS DUMERILII (ID: 27551)

158 **Papageorgiou, N.**; Philippa, I.; Giaglara, E.; Moraitis, M.; Santi, I.; Tsikopoulou, I.; Dimitriou, P. D.; Pitta, P.: EFFECTS OF OCEAN ACIDIFICATION AND HYPOXIA TO THE FUNCTIONING OF DIFFERENT SEDIMENT TYPES; A BENTHIC MICROCOSM APPROACH (ID: 26826)

159 **Ramesh, K.**; Himmerkus, N.; Bleich, M.; Melzner, F.: RESPONSES OF OYSTER HEMOCYTES AND THEIR CALCIUM BEARING VESICLES TO OCEAN ACIDIFICATION (ID: 26876)

160 **Grossmann, M. M.**; Gallager, S. M.; Mitarai, S.: EFFECT OF TROPICAL CYCLONES ON NEAR-BOTTOM MESOPLANKTON COMMUNITIES ABOVE A CORAL REEF. (ID: 27644)

161 **Pelejero, C.**; Movilla, J.; Calvo, E.; Serrano, E.; López-Sanz, A.; Coma, R.: RESPONSE OF THE TEMPERATE MEDITERRANEAN CORALS *ASTROIDES CALYCULARIS* AND *LEPTOPSAMMIA PRUVOTI* TO WARMING AND ACIDIFICATION (ID: 26004)

162 **Jimenez Ramos, R.**; Egea , L. G.; Vergara, J. J.; Brun, F. G.: CLIMATE CHANGE AFFECTS LEAF PALATABILITY IN THE SEAGRASS *CYMODOCEA NODOSA* (ID: 26562)

TUESDAY

* REPRESENTS INVITED PRESENTATIONS

TUESDAY

034 OCCURRENCE, IMPACTS AND MANAGEMENT OF CYANOBACTERIAL BLOOMS

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Location: Poster and Exhibit Area (Floor 1)

165 **Capelli, C.**; Shams, S.; Cerasino, L.; Cavalieri, D.; Salmaso, N.: TOXIC CYANOBACTERIA IN THE DEEP LAKES SOUTH OF THE ALPS: A MOLECULAR ASSESSMENT ON CYANOTOXIN PRODUCING GENOTYPES (ID: 26539)

166 **Sabart, M.**; Lesobre, J.; Legrand, B.; Crenn, K.; Sabatier, P.; Colombet, J.; Latour, D.: FIRST EVIDENCE OF ANATOXIN-A GENES IN SEVERAL FRESHWATER LAKES IN FRANCE: SPATIO-TEMPORAL DIVERSITY AND PHYLOGENETIC AFFILIATION OF THE SEQUENCES (ID: 26621)

167 **Visser, P. M.**; den Haan, J.; Brocke, H.; de Baat, M.; Mes, D.; Verhoef, S. H.; van der Schoot, R.; Leao, P.; Gerssen, A.; Muyzer, G.: BENTHIC CYANOBACTERIA ON A CARIBBEAN CORAL REEF (ID: 27088)

168 **Lage, S.**; Annadotter, H.; Rasmussen, U.; Rydberg, S.: BIOTRANSFER OF BMAA IN FINJASJÖN - A SWEDISH EUTROPHICATED FRESHWATER LAKE (ID: 25834)

169 **Tonietto, A. E.**; Lombardi, A. T.: POTENCIOMETRIC DETERMINATION OF THERMODYNAMIC STABILITY CONSTANTS FOR COPPER COMPLEXES WITH CYLINDROSPERMOPSIS RACIBORSKII EXUDATES (ID: 25513)

170 **Brocke, H. J.**; Polerecky, L.; de Beer, D.; Weber, M.; Claudet, J.; Nugues, M. M.: ORGANIC MATTER DEGRADATION DRIVES BENTHIC CYANOBACTERIAL MAT ABUNDANCE ON CORAL REEFS (ID: 25427)

171 **Rangel, L. M.**; Ger, A. K.; Silva, L. H.; Soares, M. C.; Faassen, E. J.; Lürling, M.: COPEPOD SIZE-SELECTIVITY ON THE CYANOBACTERIUM CYLINDROSPERMOPSIS RACIBORSKII IS TOXICITY DEPENDENT (ID: 27647)

172 **Panosso, R.**; Lurling, M.: EFFECTS OF DIFFERENT CYLINDROSPERMOPSIS RACIBORSKII STRAINS ON THE SURVIVAL AND GROWTH OF DAPHNIA MAGNA (ID: 27068)

037 THE MOLECULAR ECOLOGY OF METAL-MICROBE INTERACTIONS IN THE OCEAN ENVIRONMENT

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Location: Poster and Exhibit Area (Floor 1)

187 **Polyviou, D.**; Hitchcock, A.; Moore, C. M.; Bibby, T. S.: IRON UPTAKE MECHANISMS IN THE GLOBALLY IMPORTANT CYANOBACTERIA *TRICHODESMIUM ERYTHRAEUM* IMS 101 (ID: 27104)

188 **Snow, J. T.**; Polyviou, D.; Skipp, P. J.; Chrismas, N.; Bibby, T. S.; Moore, C. M.: QUANTITATIVE PROTEOME RESPONSES TO IRON STRESS IN THE GLOBALLY IMPORTANT MARINE DIAZOTROPH *TRICHODESMIUM*. (ID: 26803)

189 **Chuang, C. Y.**; Santschi, P. H.: BINDING OF PARTICLE-REACTIVE RADIONUCLIDES (234TH, 233PA, 210PB, AND 7BE) IN THE OCEAN BY BIOPOLYMERS ASSOCIATED WITH BIOMINERALS (SILICA, CALCITE) (ID: 26215)

190 **Ojeda, J. J.**; Romero-Gonzalez, M. E.; Banwart, S. A.: INVESTIGATING THE CHEMICAL INTERFACE BETWEEN BACTERIAL CELLS AND MINERAL SURFACES: HYDROGEN-BONDING AND INNER-SPHERE COMPLEXES (ID: 25639)

191 **Strzepek, R. F.**; Ellwood, M.; Boyd, P. W.: WHY DO LARGE SOUTHERN OCEAN DIATOMS HAVE SUCH LOW IRON REQUIREMENTS? IMPLICATIONS FOR THEIR PHOTOSYNTHETIC ARCHITECTURE AND PHYSIOLOGY (ID: 26821)

039 BEYOND THE MEAN: INTEGRATING THE EFFECT OF VARIANCE IN AQUATIC ECOLOGY

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Location: Poster and Exhibit Area (Floor 1)

194 **Voss, K. A.**; Bernhardt, E. S.: TURNING A SNAPSHOT INTO A MOTION PICTURE: PATTERNS IN AQUATIC INSECT PRODUCTION ALONG A GRADIENT OF ALKALINE MINE DRAINAGE (ID: 27108)

195 **Plass-Johnson, J. G.**; Teichberg, M. C.; Ferse, S. C.: VARIABILITY IN CORAL REEF-FISH COMMUNITY FUNCTION (ID: 26706)

044 APPROACHES TO REGIONAL AND GLOBAL LAKE MONITORING

Chair(s): João Antonio Lorenzzetti, loren@dsr.inpe.br
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Location: Poster and Exhibit Area (Floor 1)

215 **Zafra, E.**; Sánchez, A. M.; Torrecilla, E.; Hoyer, A. B.; Rueda, J.; Piera, J.: DYNAMIC HYPERSPECTRAL SIMULATOR FOR AQUATIC ENVIRONMENTS (ID: 26982)

216 **Sánchez, A. M.**; Zafra, E.; Piera, J.: CHARACTERIZATION OF MARINE PARTICLES BASED ON MIE-LORENTZ AND T-MATRIX CODES AND A GENETIC ALGORITHM (ID: 25616)

217 **Ogashawara, I.**; Stech, J. L.; Tundisi, J. G.: RETRIEVING PHYTOPLANKTON ABSORPTION COEFFICIENT IN CDOM DOMINATED WATERS (ID: 26312)

218 **Jones, B. M.**; Arp, C. D.; Grosse, G.; Wooller, M. J.; Whitman, M. S.; Gaglioti, B. V.; Lenz, J.; Yu, Z.: DEVELOPMENT OF AN ARCTIC LAKE OBSERVATORY AT TESHEKPUK LAKE (ID: 27302)

219 **Stech, J. L.**; Curtarelli, M. P.; Ogashawara, I.: SPATIAL AND TEMPORAL VARIATIONS OF TROPHIC STATE IN A TROPICAL RESERVOIR AND ITS RELATION WITH LAND USE LAND COVER (ID: 27204)

220 **Curtarelli, M. P.**; Ogashawara, I.; Souza, A. F.; Stech, J. L.: APPLICATION OF REMOTE SENSING DATA TO MONITOR DRINKING WATER SUPPLY IN LARGE CITIES: THE SÃO PAULO METROPOLITAN REGION STUDY CASE (ID: 27061)

045 ADDRESSING REGIONAL OR GLOBAL QUESTIONS ABOUT TROPHIC ECOLOGY USING LIPIDS OR STABLE ISOTOPE RATIOS

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221 **Vilas, C.**; Gonzalez-Ortegon, E.; Rubio, E.; Walton, M. E.; Baldó, F.; Drake, P.; Van Bergeijk, S.; Le Vay, L.; Cañavate, J. P.: ECOLOGICAL DIFFERENTIATION AMONG MYSIDS STRUCTURES FOOD WEB AND SUPPORTS NURSERY FUNCTION OF GUADALQUIVIR ESTUARY. (ID: 26425)

222 **Trochine, C.**; Díaz Villanueva, V.; Bastidas Navarro, M.; Balseiro, E.; Modenutti, B.: RELEVANCE OF AUTOCHTHONOUS AND ALLOCHTHONOUS CARBON SOURCES TO THE COPEPOD *BOECKELLA GRACILIPES* IN SHALLOW PATAGONIAN LAKES (ID: 26931)

223 **Maruo, C.**; Fujibayashi, M.; Sakamaki, T.; Aikawa, Y.; Nishimura, O.: FOOD RESOURCE COMPETITION BETWEEN BIVALVE SPECIES: AN ANALYSIS BY USING FATTY ACIDS AND FATTY-ACID-SPECIFIC CARBON STABLE ISOTOPE (ID: 26551)

224 **Kankaala, P.**; Galloway, A. W.; Hiltunen, M.; Jelkänen, E.; Strandberg, U.; Taipale, S. J.: DETECTING ZOOPLANKTON DIET SOURCES IN LARGE BOREAL LAKES WITH STABLE CARBON ISOTOPE RATIOS AND FATTY ACID BIOMARKERS (ID: 25522)

225 **Fujibayashi, M.**; Maruo, C.; Aikawa, Y.; Nishimura, O.: UTILIZATION OF ALLOCHTHONOUS ORGANIC MATTER AS FOOD SOURCES BY BRACKISH BIVALVES; ANALYSIS OF CARBON STABLE ISOTOPE RATIO OF ESSENTIAL FATTY ACIDS (ID: 26567)

049 FRESHWATER ECOSYSTEMS AND THE CARBON CYCLE: EXPLORING DIFFERENCES ACROSS CLIMATIC REGIONS

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Location: Poster and Exhibit Area (Floor 1)

231 **Freixa, A.**; Casellas, M.; Corcoll, N.; Sabater, S.; Acuña, V.; Romaní , A. M.: THE IMPACT OF WARMER NIGHT-TIME TEMPERATURES ON DIEL FLUCTUATIONS OF SEDIMENT MICROBIAL ACTIVITY (ID: 27094)

232 **von Schiller, D.**; Gómez-Gener, L.; Acuña, V.; Casas-Ruiz, J. P.; Koschorreck, M.; Marcé, R.; Obrador, B.; Muñoz, I.; Sabater, S.: WHEN WATER VANISHES: CARBON DIOXIDE EMISSIONS FROM DRY WATERCOURSES (ID: 25994)

233 **Lopez, P.**; Casas-Ruiz, J.; Gomez, L.; Carbajal, V.; Marce, R.; Obrador, B.; Sabater, S.; Muñoz, I.: DYNAMICS OF PARTICULATE MATTER IN LENTIC SECTIONS OF TWO MEDITERRANEAN RIVERS. (ID: 26263)

234 **Rober, A. R.**: NUTRIENTS LIMIT THE INFLUENCE OF WARMER TEMPERATURES ON ALGAE AND HETEROTROPHIC BACTERIA IN A BOREAL PEATLAND (ID: 25441)

235 **Raposeiro, P. M.**; Gonçalves, V.; Costa, A. C.; Ferreira, V.: LEAF LITTER DECOMPOSITION IN ATLANTIC ISLANDS DEPENDS ON LITTER QUALITY AND ENVIRONMENTAL CONDITIONS AND IS MAINLY DRIVEN BY MICROBES' (ID: 26050)

051 BIOGEOCHEMICAL INTERACTIONS BETWEEN RIPARIAN AND STREAM ECOSYSTEMS UNDER ENVIRONMENTAL CHANGE

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Location: Poster and Exhibit Area (Floor 1)

247 **Bastias, E.**; Ribot, M.; Sabater, F.; Martí, E.: THE EFFECT OF VELOCITY ON LEAF LITTER TRANSPORT AND DECOMPOSITION IN STREAMS (ID: 27216)

053 BIODIVERSITY AND ECOSYSTEM SERVICES IN FRESHWATER ECOSYSTEMS, A SOUTH NORTH PERSPECTIVE

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Steve Ormerod, ormerod@cardiff.ac.uk

Location: Poster and Exhibit Area (Floor 1)

249 **Viana, D. S.**; Santamaría, L.; Figuerola, J.: DIVERSITY DISTRIBUTION OF AQUATIC LONG-DISTANCE DISPERSERS (ID: 26816)

059 CHEMICAL FLUXES ACROSS THE SEDIMENT-WATER INTERFACE: PROCESSES, DISTURBANCES AND TECHNIQUES

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Location: Poster and Exhibit Area (Floor 1)

261 Guanghuan Cheng, G.; Catalán, N.; Peter, S.; **Tranvik, L. J.**: IS THERE A "RUSTY SINK" FOR ORGANIC CARBON IN LAKE SEDIMENTS? (ID: 27131)

262 **Radu, D. D.**; Duval, T. P.: ELEVATED PHOSPHATE RELEASE AT THE WATER TABLE – SOIL SURFACE INTERFACE IN A RESTORED WETLAND (ID: 27706)

263 **Lipka, M.**; Wegwerth, A.; Dellwig, O.; Winde, V.; Al-Raei, A. M.; Böttcher, M. E.: ELEMENT TRANSFORMATION RATES AND FLUXES ACROSS THE SEDIMENT-WATER INTERFACE IN A TEMPERATE COASTAL SEA, THE BALTIC SEA (ID: 27577)

264 **Ann, V.**; Freixa, A.; Butturini, A.; Romaní, A. M.: HOW DO SEDIMENT PHYSICAL CHARACTERISTICS AFFECT MICROBIAL COLONIZATION IN A MEDITERRANEAN RIVER? (ID: 26723)

062 INTEGRATED MODELLING OF LAKES IN THE CLIMATE SYSTEM

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271 **Thiery, W.**; Davin, E.; Panitz, H.; Demuzere, M.; Lhermitte, S.; van Lipzig, N.: MODELING THE INFLUENCE OF THE AFRICAN GREAT LAKES ON THE REGIONAL CLIMATE (ID: 26100)

272 **Goyette, S.**; Perroud, M.: ON A SINGLE-COLUMN ATMOSPHERIC MODEL FRAMEWORK TO STUDY LAKE PROCESSES: THE CASE OF DEEP LAKE GENEVA, SWITZERLAND (ID: 25717)

TUESDAY

065 BIOGEOCHEMISTRY, PHYSICS, AND SOCIOECONOMICS OF GROUNDWATER-SURFACE WATER INTERACTIONS

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Nils Moosdorf, nils.moosdorf@zmt-bremen.de

Location: Poster and Exhibit Area (Floor 1)

273 **Hajati, M.**; Engesgaard , P.: LAKE BEDS AS HYDRAULIC BARRIERS TO GROUNDWATER EXCHANGE: A MULTI-TRACER STUDY USING STABLE ISOTOPES AND TEMPERATURE. (ID: 26256)

274 **Moosdorf, N.**; Stieglitz, T.; Waska, H.; Dürr, H. H.: A REVIEW OF SUBMARINE GROUNDWATER DISCHARGE FROM TROPICAL ISLANDS (ID: 25490)

275 **Waska, H.**; Koschinsky, A.; Brumsack, H.; Simon, H.; Dittmar, T.: ORGANIC ASSOCIATION OF DISSOLVED IRON AND COPPER IN THE SUBTERRANEAN ESTUARIES OF A BARRIER ISLAND IN THE GERMAN NORTH SEA (ID: 26773)

276 **Cho, H. M.**; Kim, G.: BEHAVIOR OF DISSOLVED SILICATE IN A SUBTERRANEAN ESTUARY (ID: 26638)

277 **Lecher, A. L.**; Paytan, A.; Dimova, N.; Tulaczyk, S.: SUBMARINE GROUNDWATER DISCHARGE IN THE GULF OF ALASKA: A SOURCE OF NUTRIENTS TO COASTAL ECOSYSTEMS (ID: 27662)

279 **Dacey, J. J.**; Stalker , J. C.; Swart, P. K.: TRACERS FOR GROUNDWATER-SURFACE WATER INTERACTIONS ON THE ST. JOHNS RIVER, FLORIDA, U.S.A. (ID: 27571)

067 CLIMATE CHANGE IN THE BALTIC SEA: IMPACTS OF WARMING, DESALINATION, EUTROPHICATION AND ACIDIFICATION

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285 **Matthiessen, B.**; Graiff, A.; Werner, F. J.: TEMPERATURE THRESHOLD EXPLAINS DISRUPTION OF FUCUS-SUSTAINING TOP-DOWN CONTROL (ID: 25497)

286 **Sanders, T.**; Melzner, F.: THE FUTURE OF THE BALTIC SEA: IMPLICATIONS FOR MUSSEL POPULATIONS AND DISTRIBUTIONS DERIVED FROM PHYSIOLOGICAL AND GROWTH DATA OF A HYBRID POPULATION. (ID: 26882)

287 **Herzog, S. D.**; Kritzberg, E.; Conley , D.; Persson, P.: ARE RIVERINE INPUTS ENHANCING IRON CONCENTRATIONS IN THE BALTIC SEA? (ID: 26968)

073 COASTAL OCEAN BIOLOGICAL PATTERNS AND PROCESSES AT REGIONAL SCALES

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Location: Poster and Exhibit Area (Floor 1)

307 **Bustamante, P.**; Dessier, A.; Dupuy, C.; Trancart, T.; Audras, A.; Gérard, C.: METAZOAN PARASITES IN SARDINA PILCHARDUS AND ENGRAULIS ENCRASICOLUS (CLUPEIDAE):INDICATORS OF FEEDING ECOLOGY AND FREE-LIVING BIODIVERSITY IN THE BAY OF BISCAY (ID: 26580)

308 **Smoot, C. A.**; Hopcroft, R. R.: COMPOSITION, DIVERISTY AND VERTICAL STRUCTURE OF THE ZOOPLANKTON COMMUNITY IN THE BEAUFORT SEA (ID: 26422)

309 **Zaborska, A.**; Legezynska, J.; Wlodarska-Kowalczuk, M.: THE SOURCES AND QUANTITIES OF ORGANIC CARBON – A FOOD FOR BENTHIC COMMUNITIES IN THE TWO ARCTIC FIORDS (ID: 26764)

310 **Moreira, C.**; Xavier, R.; Lima, F. P.: TEMPORAL DYNAMICS OF THE HEAT SHOCK PROTEIN RESPONSE IN AN INTERTIDAL GASTROPOD (*PATELLA VULGATA*) (ID: 27421)

311 **Voss, M.**; Bartl, I.; Frey, C.; Hellemann, D.; Hietanen, S.; Liskow, I.; Thoms, F.; Dippner, J. W.: REGIME SHIFTS AND CLIMATE CHANGE IMPACT ON NUTRIENT PROCESSING IN COASTAL SYSTEMS OF THE SOUTHERN BALTIC SEA (ID: 25474)

312 **Froján, M.**; Arbones, B.; Zúñiga, D.; Teixeira, I. G.; Hernández-Ruiz, M.; Teira, E.; Figueiras, F. G.; Castro, C. G.: SHIFTS IN THE MICROBIAL PLANKTON COMMUNITY AND METABOLIC BALANCE IN THE RIA DE VIGO (NW IBERIAN COASTAL UPWELLING SYSTEM) (ID: 26685)

313 **Erikson, K.**; Blanco-Bercial, L.; Richardson, D.; Hare, J.; Bucklin, A.: UNDERSTANDING THE IMPORTANCE OF CRYPTIC SPECIES DIVERSITY: TIME-SERIES ANALYSIS OF PSEUDOCALANUS SPP. (COPEPODA, CALANOIDA) ON THE NW ATLANTIC SHELF (ID: 26811)

314 **Hidalgo-Robatto, B. M.**; González, J.; Herrera, J. L.; Martínez-Castrillón, D.; Bernal, L. M.; Serret, P.: DAILY VARIATION OF PLANKTON COMMUNITY STRUCTURE AND METABOLISM DURING AN UPWELLING EPISODE IN THE RÍA DE VIGO, NW SPAIN (ID: 26330)

315 **Valiñas, M. S.**; Helbling, E. W.: UV-ABSORBING COMPOUNDS ACQUIRED THROUGH THE DIET ARE NOT ENOUGH FOR A MARINE MESOHERBIVORE TO COPE WITH SOLAR ULTRAVIOLET RADIATION (ID: 26321)

076 NOVEL MICROBIAL METABOLISMS AND INTERACTIONS IN AQUATIC SYSTEMS

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Location: Poster and Exhibit Area (Floor 1 and Floor 2)

325 **Amano-Sato, C.**; Sintes, E.; Reinthaler, T.; Varela, M.; Utsumi, M.; Herndl, G.: LOWER PROKARYOTIC LEUCINE INCORPORATION RATES UNDER *IN SITU* PRESSURE THAN UNDER DECOMPRESSED CONDITIONS IN THE DEEP NORTH ATLANTIC (ID: 25629)

326 **Bibiloni, J. I.**; Seymour, J. R.; Brown, M. B.: BIOGEOGRAPHY OF AEROBIC ANOXYGENIC PHOTOTROPHIC BACTERIA ALONG THE EAST COAST OF AUSTRALIA (ID: 25966)

476 **Ranson, H. J.**; Poulson-Ellestad, K.; Mincer, T. J.: PRODUCTION OF SIALIC ACIDS BY DIATOMS AND THEIR ASSOCIATED BACTERIA: IMPLICATIONS FOR DIATOM-BACTERIA INTERACTIONS. (ID: 27169)

081 BIVALVES AS NUTRIENT TRANSFORMERS: UNDERSTANDING THE EFFECTS OF BIVALVES ON BIOGEOCHEMICAL PROCESSES

Chair(s): Ashley Smyth, arsmyth@vims.edu
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Location: Poster and Exhibit Area (Floor 1)

331 **Ruiz Albizuri, R.**; Johst, K.; Weitere, M.; Frank, K.: EFFECTS OF WARMING ON GRAZER-CONTROLLED EUTROPHICATION IN RIVERS (ID: 26588)

084 INTERACTIVE EFFECTS OF GLOBAL CHANGE ENVIRONMENTAL DRIVERS ON PHYTOPLANKTON AND BACTERIOPLANKTON IN COASTAL WATERS

Chair(s): Patrick Neale, nealep@si.edu
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Location: Poster and Exhibit Area (Floor 1)

343 **Carrillo, P.**; Herrera, G.; Durán, C.; Villar-Argaiz, M.; Mercado, J. M.; Segovia, M.; Korbee, N.; Figueroa, F. L.; Medina-Sánchez, J. M.: RESPONSES OF COASTAL PHYTOPLANKTON COMMUNITY TO COMBINED EFFECTS OF UVR AND P-PULSES IN THE WESTERN MEDITERRANEAN SEA: POTENTIAL ACCLIMATION MECHANISMS (ID: 26361)

345 El-Swais, H.; Dunn, K. A.; Bielawski, J. P.; Li, W. K.; **Walsh, D. A.**; Walsh, D.: TEMPORAL DYNAMICS OF COASTAL OCEAN BACTERIOPLANKTON REVEALED THROUGH MOLECULAR ANALYSIS OF FORMALIN-FIXED ARCHIVAL SEAWATER SAMPLES. (ID: 27084)

346 **Alves Soares, A. R.**; Berggren, M.: IMPORTANCE OF CARBON AS LIMITING NUTRIENT FOR BACTERIOPLANKTON IN A BOREAL SUB-ARCTIC COASTAL SYSTEM (ID: 26669)

347 **Ward, J. E.**; Haynes, V.; Galloway, T. S.: PHOTOTOXIC EFFECTS OF TITANIA NANOPARTICLES ON ESTUARINE BACTERIAL COMMUNITIES UNDER ENVIRONMENTALLY-RELEVANT LIGHT REGIMES (ID: 26450)

348 **Krug, L. A.**; Barbosa, A. B.; Platt, T.; Sathyendranath, S.: OCEANIC AND COASTAL BIOGEOCHEMICAL PROVINCES OFF SOUTH WEST IBERIAN PENINSULA (ID: 26726)

085 CURRENT ADVANCES IN THE INTEGRATION OF (SEMI)AUTOMATED APPROACHES FOR MEASURING PHYTOPLANKTON DYNAMICS, FROM FRESHWATER TO MARINE SYSTEMS

Chair(s): Luis Felipe Artigas, Felipe.Artigas@univ-littoral.fr
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Location: Poster and Exhibit Area (Floor 1)

349 **Gabriel, A.**; Limoges, A.; de Vernal, A.; Gélinas, Y.: ANALYSIS OF BIOTOXINS IN SEDIMENTS OF THE GULF OF MEXICO: EVALUATION OF SOLID PHASE MICRO EXTRACTION AS A PREPARATION METHOD FOR ACCELERATED SOLVENT EXTRACTION (ID: 27689)

087 TRANSBIOME IMPACTS OF TROPICAL LAND-USE CHANGE

Chair(s): Emma Rochelle-Newall, emma.rochelle-newall@ird.fr
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Location: Poster and Exhibit Area (Floor 1)

350 Abass, R.; Richardson, C. N.; Ngoka, I.; Jesien, R.; May, E. B.; **Ishaque, A. B.**: CONTAMINANTS OF EMERGING CONCERN (CECS) IN MARYLAND COASTAL BAYS: CHEMICAL AND BIOMARKER ANALYSIS (ID: 27698)

351 **Stewart, R. I.**; Zülsdorff, V.; Brönmark, C.; Hansson, L. A.; Smith, H.: LINKING PONDS TO POLLINATION IN AN AGROECOSYSTEM (ID: 26883)

352 **Onandia, G.**; Gudimov, A.; Miracle, M. R.; Ahronditsis, G.: ADDRESSING THE EUTROPHICATION PROBLEMS IN SHALLOW HYPERTROPHIC SYSTEMS WITH BIOGEOCHEMICAL MODELING (ID: 26386)

353 **Paredes, I.**; Báñez, C.; López, R.; Ramírez, F.; Bravo, M. A.; Forero, M.; Green, A. J.: STABLE ISOTOPES AS TRACERS OF ANTHROPOGENIC NUTRIENT INPUTS IN TWO DIFFERENT AQUATIC SYSTEMS IN SOUTHERN SPAIN (ID: 27748)

354 **Sotomayor-Ramírez, D. R.**; Martínez-Rodríguez, G.; Viggianno-Beltrocco, M. V.; Perez-Alegria, L. R.; Santos, C.: NUMERIC REFERENCE CRITERIA AND NUMERIC NUTRIENT CRITERIA IN RIVERS OF PUERTO RICO (ID: 26277)

355 **Zapata, A. M.**; Rivera-Rondón, C. A.; Quisobony, D.; Prada-Pedreros, S.: EFFECT OF BEEF CATTLE AND WATER WITHDRAWAL ON ALGAE AND MACROINVERTEBRATES COMMUNITIES IN ANDEAN FOOTHILL STREAMS (ID: 26491)

356 Casares Ortega, V. M.; Martinez Garzon, F. J.; **Guerrero, F. J.**; Sierra, M.; Martin Garcia, A.; de Vicente, I.: ESTIMATION OF PHOSPHORUS AND NITROGEN EXTERNAL LOADING TO A MEDITERRANEAN SHALLOW LAKE: APPLICATION OF DIFFERENT METHODOLOGIES (ID: 25694)

357 **Estevez, E.**; Rodríguez-Castillo, T.; Álvarez-Cabria, M.; Peñas, F. J.; González, A. M.; Silió, A.; Álvarez, J. M.; Lezcano, M.; Barquín, J.: HOW DO LAND ABANDONMENT AND PAST LAND USES AFFECT STREAM METABOLISM? (ID: 26484)

090 AQUATIC GAS FLUXES: MEASUREMENTS, DRIVERS AND IMPLICATIONS FOR ECOSYSTEM PROCESSES

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Location: Poster and Exhibit Area (Floor 1)

366 **Aho, K. S.**; Raymond, P. A.: THE EFFECTS OF WETLAND PRESENCE AND PRECIPITATION EVENTS ON GREENHOUSE GAS FLUX FROM STREAMS IN THE SALMON RIVER WATERSHED, CT (ID: 27407)

367 Spawn, S. A.; **Dunn, S. T.**; Fiske, G. J.; Schade, J. D.; Zimov, N. S.: METHANE EBULLITION FROM AN UPLAND STREAM NETWORK IN NORTHEASTERN SIBERIA (ID: 27642)

368 **Galindo-Lorente, M.**; Vidal, M.; Flos, J.; Álvarez, M.; Padín, X. A.; Coca, J.; Ramos, A. G.; Redondo, À.: DISTRIBUTION OF AIR-SEA CO_2 FLUXES IN THE MEDITERRANEAN SEA (ID: 27439)

369 **Gatland, J. R.**; Maher, D. T.; Santos, I. R.: USE OF CAVITY RING DOWN SPECTROSCOPY TO ASSESS <&DELTA>^{13}C IN CARBON DIOXIDE AND METHANE IN NATURAL WATERS (ID: 26439)

370 **Endres, S.**; Hepach, H.; Marandino, C. A.; Quack, B.; Engel, A.: MICROBIAL CONTROL OF BROMOCARBONS IN THE SURFACE OCEAN (ID: 26289)

092 GEOCHEMICAL AND BIOLOGICAL INSIGHT INTO SULFATE-METHANE COUPLING IN MARINE AND MARGINAL MARINE SETTINGS

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Location: Poster and Exhibit Area (Floor 1 and Floor 2)

377 **Sivan, O.**; Antler, G.; Turchyn , V. A.; Marlow, J.; Orphan, V. J.: IRON OXIDES STIMULATE SULFATE DRIVEN ANAEROBIC METHANE OXIDATION IN SEEPS (ID: 25673)

378 **Mills, J. V.**; Antler, G.; Turchyn, A. V.: IRON-MEDIATED CRYPTIC SULFUR CYCLING INHIBITS METHANE PRODUCTION IN SALT MARSH SEDIMENTS (ID: 26024)

379 **Bar-Or, I.**; Ben-Dov, E.; Werner, E.; Kushmaro2, A.; Orphan, V.; Sivan, O.: EXPLORING THE MECHANISMS OF ANAEROBIC OXIDATION OF METHANE IN DEEP SEDIMENT OF LAKE KINNERET (ISRAEL). (ID: 26066)

094 POLICY IMPACTS OF AQUATIC SCIENCE: COMMUNICATING SCIENCE TO POLICYMAKERS

Chair(s): Adrienne Sponberg, sponberg@aslo.org
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Location: Poster Area (Floor 2)

380 **Caffrey, J. M.**; Carmichael, R. H.; Cressman, K.; Darrow, E. S.; Dillon, K. S.; Woodrey, M. S.: BRINGING TOGETHER RESEARCH AND MANAGEMENT TO EXAMINE THE CONSEQUENCES OF REPEATED PHOSPHORUS SPILLS IN A COASTAL ESTUARY (ID: 26272)

381 **Aalto, S. L.**; Tiirola, M.; Huotari, J.; Tulonen, T.; Rissanen, A.; Nykänen, H.; Rankinen, K.; Ahlvik, L.; Leppäranta, M.; Arvola, L.: N-SINK – REDUCTION OF WASTE WATER NITROGEN LOAD (ID: 26699)

382 **Samal, N. R.**; Jöhnk, K. D.; Pierson, D. C.; Leppäranta, M.; Yao, H.; Hargreaves, B. R.; Kratz, T.; Sharma, S.; Laas, A.; Hamilton, D.: LONG TERM CHANGES IN ICE SEASONS OF TWENTY-ONE GEOGRAPHICALLY DISTRIBUTED FRESHWATER LAKES: MODELING SIMULATIONS AND OBSERVATIONS (ID: 27656)

099 DEEP SEA CARBON FLUX DYNAMICS: BIOLOGICAL, PHYSICAL AND CHEMICAL DRIVERS

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Gabriele Stowasser, gsto@bas.ac.uk

Location: Poster Area (Floor 2)

392 **Vandromme, P.**; Kriest, I.; Stemmann, L.; Kiko, R.; Oschlies, A.: HOW THE ZOOPLANKTON DIEL VERTICAL MIGRATION AFFECTS THE EXPORT OF CARBON? A MODELING APPROACH. (ID: 27136)

393 **Srivastava, A.**; García, J. A.; Herndl, G. J.: METABOLIC LANDSCAPES OF PROKARYOTES IN THE DEEP ATLANTIC OCEAN (ID: 26480)

394 **Langone, L.**; Dunbar, R. B.; Giglio, F.; Manno, C.; Mucciarone, D.; Asper, V.; Capello, M.; Smith, W. O.; Ravaioli, M.: PARTICLE FLUXES IN THE ROSS SEA: A 20-YEAR SYNTHESIS (ID: 27450)

395 **Ariza, A.**; Hernández-León, S.: ACTIVE FLUX : TOWARDS MICRONEKTON AND BEYOND 1000 M DEPTH (ID: 26817)

396 **Capello, M.**; Cutroneo, L.; Budillon, G.; Tucci, S.: THE RESULTS OF TWENTY YEARS OF DIMENSIONAL ANALYSES OF BOTTOM-PARTICLE SAMPLES FROM SEDIMENT TRAPS IN AN ANTARCTIC POLYNYA (ROSS SEA, ANTARCTICA) (ID: 26189)

397 **Mazuecos, I. P.**; Arístegui, J.; Gasol, J. M.; Baños, I.; Espino, M.; Hernández , N.; Montero, M. F.; Reche, I.: HETEROTROPHIC PROKARYOTES AS DRIVERS OF EXOPOLYMER PARTICLES IN THE MEDITERRANEAN SEA AND THE SUBTROPICAL NORTHEAST ATLANTIC OCEAN (ID: 25602)

398 **Rembauville, M.**; Salter, I.; Blain, S.: ECOLOGICAL VECTORS OF CARBON AND BIOGENIC SILICA EXPORT FLUXES IN A NATURALLY FERTILIZED AREA OF THE SOUTHERN OCEAN : THE KERGUELEN PLATEAU (ID: 25437)

109 URBAN COASTAL SYSTEMS IN A CHANGING CLIMATE

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419 Krestenitis, Y. N.; Makris, C. V.; Androulidakis, Y. S.; **Kombiadou, K. D.**; Baltikas, V.: VARIABILITY OF STORM SURGE EXTREMES IN THE GREEK SEAS UNDER CLIMATE CHANGE (ID: 26899)

420 **Morales-Nunez, A. G.**; Chigbu, P.; Jackson, A. L.: LIFE HISTORY OF *DULICHIELLA APPENDICULATA* (CRUSTACEA: AMPHIPODA: SENTICAUDATA) IN MARYLAND COASTAL BAYS, USA (ID: 27447)

421 **Chigbu, P.**: CLIMATE VARIABILITY, PHYTOPLANKTON BIOMASS, AND WATER QUALITY DYNAMICS DURING WINTER IN NEWPORT BAY, MARYLAND, USA (ID: 27700)

422 **Branoff, B. L.**: WHAT IS URBANNESS AND HOW DOES IT INFLUENCE URBAN MANGROVE ECOLOGY? A CASE STUDY OF THE SAN JUAN BAY ESTUARY, SAN JUAN, PUERTO RICO (ID: 27660)

423 **Filippino, K. C.**; Egerton, T. A.; Hunley, W. S.; Shen, J.; Mulholland, M. R.: DRIVERS OF INTERANNUAL VARIABILITY OF *COCHLODINIUM POLYKRIKOIDES* BLOOMS IN A COASTAL URBAN ESTUARY (ID: 26364)

424 **Reyes Merlo, M. A.**; Díez Minguito, M.; Baquerizo Azofra, A.; Losada Rodriguez, M. A.: MARKOV CHAIN MONTE CARLO PREDICTIONS OF THE SALINE INTRUSION IN A WELL-MIXED ESTUARY. (ID: 26135)

112 ARE THERE FRESHWATER BIOMES?

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Nancy Grimm, nbgrimm@asu.edu

Location: Poster Area (Floor 2)

435 **Bernal, S.**; Lupon, A.; Ribot, M.; Sabater, F.; Martí, E.: PATTERNS OF IN-STREAM NUTRIENT PROCESSING IN MEDITERRANEAN STREAMS: MECHANISTIC INSIGHTS FROM LOW- AND HIGH-RESOLUTION DATA (ID: 27610)

436 **Warren, S. L.**; Mckew, B. A.; Whitby, C.; Binley, A.; Heppell, K. M.; Trimmer, M.; Underwood, G. J.: RIVER MICROPHYTOBENTHIC COMMUNITIES OVER MULTIPLE LANDSCAPE SCALES (ID: 26918)

113 BRIDGING THE GAP BETWEEN ECOSYSTEM MODELING AND ECOSYSTEM SERVICES' ASSESSMENT IN COASTAL AND MARINE WATERS

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437 **Alcaraz, C.**; Prado, P.; Caiola, N.; Ibáñez, C.: FISHERIES AND CLIMATE CHANGE: THE RELATIONSHIP BETWEEN RIVER REGIME SHIFT AND COASTAL ARTISANAL FISHERIES (ID: 27122)

438 **Galparsoro, I.**; Borja, Á.; C. Uyarra, M.: MAPPING ECOSYSTEM SERVICES PROVIDED BY BENTHIC HABITATS IN THE EUROPEAN NORTH ATLANTIC OCEAN (ID: 26777)

114 MULTIPLE STRESSORS IN RIVER ECOSYSTEMS: CHALLENGES FOR CONSERVATION AND MANAGEMENT

Chair(s): Sergi Sabater, sergi.sabater@udg.edu
Arturo Elosegi, arturo.elosegi@ehu.es

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439 **Perujo, N.**; Freixa, A.; Vivas, Z.; Gallegos, A. M.; Ejarque, E.; Butturini, A.; Romaní, A. M.: DIFFERENT FUNCTIONAL RESPONSE IN BIOFILM SEDIMENT COMMUNITIES TO WWTP INPUTS: AN EX-SITU TRANSLOCATION APPROACH (ID: 27140)

440 **Costa-Böddeker, S.**; Hoelzmann, P.; Thuyên, L. X.; Huy, H. D.; Schwarz, A.; Schwalb, A.: ENVIRONMENTAL ASSESSMENT OF A COASTAL ZONE IN SOUTHERN VIETNAM: SPATIAL DISTRIBUTION AND CONTENT OF HEAVY METALS IN SURFACE SEDIMENTS (ID: 26556)

441 Wolfer, H.; **Johnson, A. K.**: HYPOXIA-INDUCED PHYSIOLOGICAL AND IMMUNE SYSTEM EFFECTS IN ATLANTIC CROAKER FROM CHESAPEAKE BAY (ID: 27754)

442 **Martyniuk, N.**; Modenutti, B.; Balseiro, E.: CLIMATE CHANGE AFFECTING PERIPHYTON PRIMARY PRODUCERS IN ANDEAN NORTH-PATAGONIAN MOUNTAIN STREAMS: THE EFFECT OF CANOPY ON LIGHT AVAILABILITY (ID: 27184)

443 **Casas, J. J.**; Salinas, M. J.; Rubio, J. J.; López-Carrique, E. M.; Gil, C. J.: EFFECTS OF ARIDITY ON INTRA- AND INTER-SPECIFIC VARIBILITY IN LEAF QUALITY FROM RIPARIAN VEGETATION OF MEDITERRANEAN HEADWATER STREAMS (ID: 27218)

* REPRESENTS INVITED PRESENTATIONS

WEDNESDAY ORALS

007 BIOLOGICAL CONNECTIVITY AND ITS IMPORTANCE WITHIN THE CONTEXT OF GLOBAL CHANGE

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Location: Albeniz (Floor -2)

08:30 **Chust, G.**; Rodriguez-Ezpeleta, N.; Irigoien, X.: TUTORIAL PRESENTATION OF THE SESSION (ID: 25709)

08:45 **Snelgrove, P. V.**; Metaxas, A.; Pepin, P.; Bradbury, I. R.: LESSONS LEARNED ON CONNECTIVITY IN MARINE FISH AND INVERTEBRATES[T] (ID: 26822)

09:15 **Watson, J. R.**; Jonsson, B. F.: THE TIMESCALES OF GLOBAL SURFACE-OCEAN CONNECTIVITY (ID: 25528)

09:30 **Jonsson, B. F.**; Watson, J. R.: THE EFFECT OF ADVECTION ON TEMPERATURE ADAPTATION BY PHYTOPLANKTON COMMUNITIES IN THE GLOBAL OCEAN (ID: 27613)

09:45 **Viana, D. S.**; Santamaría, L.; Michot, T. C.; Figuerola, J.: ALOMETRIC SCALING OF LONG-DISTANCE SEED DISPERSAL BY MIGRATORY BIRDS (ID: 26744)

10:30 **Rothäusler, E.**; Corell, H.; Jormalainen, V.: ABUNDANCES AND SPATIO-TEMPORAL DISTRIBUTION PATTERNS OF FLOATING *FUCUS VESICULOSUS* FROM THE NORTHERN BALTIC SEA (ID: 26833)

10:45 **Faillettaz, R.**; Blandin, A.; Durand, E.; Paris, C. B.; Irisson, J. O.: BEHAVIOUR VERSUS OCEANIC CURRENTS DURING THE DISPERSAL OF LARVAL FISH IN THE NORTHWESTERN MEDITERRANEAN SEA (ID: 27097)

11:00 **Rodriguez-Ezpeleta, N.**; Álvarez, P.; Arrizabalaga, H.; Bald, J.; Irigoien, X.: ASSESSING CONNECTIVITY IN MIGRATORY AND SEDENTARY MARINE ORGANISMS THROUGH POPULATION STRUCTURE INFERRED FROM GENOME-WIDE MARKERS (ID: 26644)

11:15 **Villarino, E.**; Chenuil, A.; Chust, G.: DISPERSAL SCALES IN PLANKTON AND MARINE BENTHIC INTERVERTEBRATES: A GENETIC META-ANALYSIS APPROACH (ID: 26725)

11:30 **Hernawan, U.**; McMahon, K.; Kendrick, G.; van Dijk, K.; Lavery, P.: PREDICTORS OF GENETIC STRUCTURE OF MARINE ORGANISMS IN THE INDO-AUSTRALIAN ARCHIPELAGO (ID: 25674)

11:45 **Questel, J. M.**; Blanco-Bercial, L.; Hopcroft, R. R.; Bucklin, A.: PHYLOGEOGRAPHY AND CONNECTIVITY OF FOUR SIBLING SPECIES OF PSEUDOCALANUS (COPEPODA: CALANOIDA) IN THE NORTH PACIFIC AND ARCTIC OCEANS (ID: 25912)

15:00 **Sildever, S.**; Sefbom, J.; Lips, I.; Godhe, A.: ARE DIATOM POPULATIONS LOCALLY ADAPTED? (ID: 26156)

15:15 **Yaegashi, S.**; Watanabe, K.; Monaghan, M. T.; Omura, T.: GENE FLOW IN THE STREAM CADDISFLY STENOPSYCHE MARMORATA REVEALED BY BOTH NUCLEAR AND MITOCHONDRIAL DNA (ID: 26648)

15:30 **Thornhill, D. J.**; Howells, E. J.; Wham, D. C.; Steury, T. D.; Santos, S. R.: ECOLOGICAL AND EVOLUTIONARY IMPLICATIONS OF POPULATION STRUCTURE, DIVERSITY, AND CLONALITY IN CORAL REEF ENDOSYMBIONTS (ID: 27474)

15:45 **Arrizabalaga, H.**; Dufour, F.: CLIMATE DRIVEN HABITAT SHIFTS FOR COMMERCIALLY VALUABLE TUNAS? (ID: 26390)

16:00 **Podbielski, I.**; Bock, C.; Lenz, M.; Melzner, F.: A NEW INVADER TO THE BALTIC SEA – ACCLIMATION POTENTIAL OF THE SEA ANEMONE HALIPLANELLA LINEATA TO CHANGING SALINITIES (ID: 27231)

16:15 **Jaspers, C.**; Hinrichsen, H. H.; Friis Møller, E.: THE INVASIVE COMB JELLY *MNEMIOPSIS LEIDYI* IN NORTHERN EUROPE: TRANSPORT, ORIGIN AND LOCAL EXTINCTION AND RE-INVASIONS OF SUB-POPULATIONS (ID: 27367)

17:00 **Tuytens, K.**; Vanschoenwinkel, B.; Waterkeyn, A.; Brendonck, L.: PREDICTED CLIMATE CHANGE INFERS INCREASED ENVIRONMENTAL HARSHNESS AND ALTERED CONNECTIVITY IN A CLUSTER OF TEMPORARY POOLS (ID: 27620)

17:15 **González, A. M.**; Rodríguez-Castillo, T.; Estévez, E.; Álvarez-Cabria, M.; Peñas, F. J.; Silió-Calzada, A.; Álvarez-Martínez, J. M.; Lezcano, M.; Barquín, J.: THE ROLE OF PATCH CONNECTIVITY IN RIVER NETWORKS FOR THE DYNAMICS OF *SALMO TRUTTA* POPULATIONS (ID: 26466)

17:30 **Salvarina, I.**; Gravier, D.; Rothhaupt, K. O.: AQUATIC-TERRESTRIAL CONNECTIVITY: LAKES AS FOOD SOURCES FOR BATS (ID: 27156)

17:45 Lejeusne, C.; Frisch, D.; Sánchez, J.; **Green, A. J.**: INFLUENCE OF AVIAN VECTORS AND LAKE CHEMISTRY ON CONNECTIVITY AMONG NATIVE ARTEMIA FRANCISCANA POPULATIONS IN PRAIRIE CANADA (ID: 25721)

008 THE GLOBAL OCEAN ECOSYSTEM: PATTERNS, DRIVERS AND CHANGE

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Xose Anton Alvarez-Salgado, xsalgado@iim.csic.es

Location: Auditorium Manuel de Falla (Floor 1)

08:30 **Romera-Castillo, C.**; Álvarez, M.; Álvarez-Salgado, X. A.; Hansell, D. A.: ASSESSING SOURCES AND SINKS OF REFRACTORY DISSOLVED ORGANIC CARBON IN THE DEEP ATLANTIC OCEAN (ID: 26262)

08:45 **Catalá, T. S.**; Reche, I.; Ramón, C. L.; López-Sanz, A.; Fraile-Nuez, E.; Calvo, E.; Blasco, D.; Álvarez-Salgado, X. A.: NEW INSIGHTS ON THE UBIQUITY OF CHROMOPHORIC PRODUCTS OF MICROBIAL DEGRADATION IN THE DARK GLOBAL OCEAN (ID: 25695)

09:00 **Pinho, L.**; Dorsset, A.; Marotta, H.; Mesa, E.; Enrich-Prast, A.; Dachs, J.; Duarte, C. M.: SEMI - VOLATILE ORGANIC CARBON UPTAKE IN THE TROPICAL OCEAN (ID: 27462)

09:15 **Ayo, B.**; Azua, I.; Baña, Z.; Abad, N.; Unanue, M.; Vidal, M.; Gasol, J. M.; Duarte, C. M.; Iriberri, J.: THE TEMPERATURE SENSITIVITY OF PROKARYOTIC EXTRACELLULAR ENZYMATIC ACTIVITIES IMPLIES EXPECTED SHIFTS IN THE STOICHIOMETRY OF ORGANIC MATTER IN A WARMER OCEAN (ID: 26261)

09:30 **González Benítez, N.**; Blasco, D.; Cermeño, P.; Fernández Carrera, A.; Gasol, J. M.; Huete-Ortega, M.; Lopez Sandoval, D. C.; Marañón, E.; Morán, X. A.; Sobrino, C.: HOW BACTERIOPLANKTON IS AFFECTED BY THE SHIFTS IN BIOGENIC CARBON FLOW FROM PARTICULATE PRIMARY PRODUCTION TO DISSOLVED FORMS. (ID: 27658)

[T] REPRESENTS TUTORIAL PRESENTATIONS

09:45 **Sala, M. M.**; Borrull, E.; Antequera , C.; Azúa, I.; Baña, Z.; García-Zarandona, I.; Ayo, B.: METABOLIC DIVERSITY OF BACTERIOPLANKTON IN THE OCEAN (ID: 26039)

10:30 **Sharp, J. H.**: HOW CAN WE REALLY UNDERSTAND ENVIRONMENTAL CHANGE? (ID: 25458)

10:45 **Duarte, C. M.**; Fulweiler, R. W.; Lovelock, C. E.; Martinetto, P.; Saunders, M. J.; Pandolfi, J. M.; Gelcich, S.; Nixon, S.: IS THE OCEAN BROKEN?: AUDITING OCEAN PLAGUES (ID: 25650)

11:00 **Marbà, N.**; Jordà, G.; Agustí, S.; Girard, C.; Duarte, C. M.: IMPACTS OF CLIMATE CHANGE ON MEDITERRANEAN SEA BIOTA (ID: 25794)

11:30 **Batt, R. D.**; Pinsky, M. L.: LONG-TERM CHANGES IN NORTH AMERICAN COASTAL COMMUNITIES (ID: 27724)

11:45 **Hale, R.**; Godbold, J. A.; Solan, M.: GLOBAL PATTERNS OF NUTRIENT CYCLING IN SHELF SEA SEDIMENTS (ID: 26704)

15:00 **Morán, X. A.**; Alonso-Sáez, L.; Nogueira, E.; Ducklow, H. W.; González-Benítez, N.; López-Urrutia, Á.; Díaz-Pérez, L.; Calvo-Díaz, A.; Arandia-Gorostidi, N.; Huete-Stauffer, T. M.: THE SMALL SHALL INHERIT THE OCEAN: OBSERVATIONS AND EXPERIMENTS ON WARMING-ASSOCIATED SIZE REDUCTION IN BACTERIA (ID: 25556)

15:15 **Martiny, A. C.**; Flombaum, P.; Lomas, M. W.: PREDICTING FUTURE GLOBAL DISTRIBUTIONS AND BIOGEOCHEMICAL IMPACTS OF THE MARINE CYANOBACTERIA PROCHLOROCOCCUS AND SYNECHOCOCCUS (ID: 26366)

15:30 **Agusti, S.**; Llabres, M.; Lubian, L.; Moreno-Ostos, E.; Estrada, M.; Duarte, C. M.; Agustí, S.: DECLINE OF AUTOTROPHIC PICOPLANKTON IN A WARMING SUBTROPICAL OCEAN (ID: 26306)

15:45 **Otero-Ferrer, J. L.**; Mouriño-Carballido, B.; Cermeño, P.; Agustí, S.; Bode, A.; Chouciño, P.; Fernández-Castro, B.; Gasol, J. M.; Latasa, M.; Lubián, L. M.; Marañon, E.; Moran, X.A.. G.; Moreira-Coello, V.; Moreno-Ostos, E.; Varela, M. M.; Villamaña, M.: WHICH FACTORS CONTROL THE PICOPLANKTON COMMUNITY STRUCTURE IN THE OCEAN? (ID: 26170)

16:00 **Fernandez-Pinos, M. C.**; Piña, B.; Vila-Costa , M.; Agustí , S.; Blasco, D.; Duarte, C. M.; Estrada, M.; Simó, R.; Sobrino, C.; Dachs, J.: PHOTOSYNTHETIC GENE EXPRESSION RESPONSES OF THE OCEANIC UBIQUITOUS CYANOBACTERIUM *PROCHLOROCOCCUS* DUE TO CHANGES OF ENVIRONMENTAL VARIABLES (ID: 26068)

16:15 **Larkin, A. A.**; Lin, Y.; Johnson, Z. I.: *PROCHLOROCOCCUS* HAS SEASONAL-SPECIFIC TRENDS IN ALPHA- AND BETA-DIVERSITY ACROSS LATITUDINAL TEMPERATURE GRADIENTS IN THE NORTH PACIFIC (ID: 26319)

17:00 **O'Brien, C. J.**; Vogt, M.; Gruber, N.: GLOBAL COCCOLITHOPHORE DIVERSITY: DRIVERS AND FUTURE CHANGE (ID: 27444)

17:15 **Gravelle, A. D.**; Martin, A. P.; Henson, S. A.; Beaulieu, C.; Popova, E.: UNIVERSALITY OF STRATIFICATION CONTROL UPON PRIMARY PRODUCTION (ID: 25825)

17:45 **Monteiro, F. M.**; Dutkiewicz, S.; Poulton, A.; Bach, L.; Ridgwell, A.: WHY DO MARINE PHYTOPLANKTON CALCIFY? (ID: 27389)

18:00 **Varela, M. M.**; Álvarez-Osorio, M. T.; Bode, A.; Campos, M. J.; Guerrero-Feijoo, E.; Varela, M.: DIVERSITY AND ABUNDANCE OF PLANKTONIC COMMUNITIES IN THE DEEP WATERS OFF THE GALICIAN COAST (NW SPAIN). (ID: 26712)

18:15 **Righetti, D.**; Vogt, M.; Zimmermann, N.; Gruber, N.: GLOBAL PATTERNS IN MARINE PHYTOPLANKTON SPECIES RICHNESS INFERRED FROM SPECIES DISTRIBUTION MODELING (ID: 27554)

010 AQUACULTURE & THE ENVIRONMENT - SYNERGY OR ANTAGONISM?

Chair(s): Dror Angel, adror@research.haifa.ac.il
Peter Krost, peter.krost@web.de

Location: Press Room (Floor 2)

08:30 **Macleod, C. K.**; Eriksen, R. S.; Kelly, B.; Ross, D. J.: CAN AQUACULTURE SYNERGY BE MANAGED?: ASSESSMENT OF OPTIONS FOR MANAGING SEABED RECOVERY IN MARINE FINFISH AQUACULTURE. (ID: 26461)

08:45 **Lindahl, O.**: RECYCLING OF NUTRIENTS FROM SEA TO LAND THROUGH MUSSEL FARMING AND PRODUCTION OF MUSSEL MEAL (ID: 25533)

09:00 **Krost, P.**; Lühmann, L.; Jäger-Kleinicke, T.; Marquard, R.; Kock, M.: THICK LIPPED MULLET *CHELON LABROSUS* IN BALTIC INTEGRATED MULTITROPHIC AQUACULTURE. (ID: 26998)

09:15 **Frias-Torres, S.**: LARGE SCALE CORAL GARDENING: A SUSTAINABLE PRODUCTION METHOD FOR CORAL REEF RESTORATION (ID: 26925)

09:30 **Fragoso, B. D.**; Icely, J. D.; Newton, A.: IMPLEMENTATION OF BIVALVE OFFSHORE AQUACULTURE WITHIN A NATURAL PARK: REVIEW OF TOOLS FOR ASSESSING IMPACTS UNDER THE EU MARINE STRATEGY FRAMEWORK DIRECTIVE (ID: 27586)

09:45 **Brigolin, D.**; Lourguioui, H.; Taji, A. M.; Venier, C.; Mangin, A.; Pastres, R.: COASTAL AQUACULTURE SPACE ALLOCATION IN NORTH AFRICA: DATA CONSTRAINTS, INDUSTRY REQUIREMENTS AND CONSERVATION ISSUES (ID: 26563)

10:30 **Hattich, G. S.**; Mayor, D. J.; Thornton, B.; Gray , N. B.: DO BIG FISH FARMS HAVE A BIGGER IMPACT ON BENTHIC MICROBIAL COMMUNITIES? (ID: 25626)

10:45 **van Duren, L. A.**; Tralli, A.; Troost, T.; Kamermans, P.: FROM FARM-SCALE TO ECOSYSTEM-SCALE – TOOLS FOR SUSTAINABLE AQUACULTURE (ID: 25739)

11:00 **Polsenaere, P.**; Soletchnik, P.; Le Moine, O.; Robert, S.; Gohin, F.; Stanisière, J. Y.; Dumas, F.; Béchemin, C.: RELATIONSHIPS BETWEEN WINTER ENVIRONMENTAL VARIATIONS AND THE BLUE MUSSEL MORTALITY EVENT OBSERVED IN THE PERTUIS CHARENTAIS (FRENCH ATLANTIC COASTAL ZONE) (ID: 27087)

11:15 **López Galindo, L. L.**; Galindo Sánchez, C. E.; Díaz Herrera , F.; Re Araujo , A. D.; Larios Soriano , E.: GENE EXPRESSION OF HSP70, HSP90, HIF1A AND NA+/K+ ATPASE IN THE EXPOSURE TO CRITICAL THERMAL MAXIMA IN ABLATED AND UNABLATED LITOPENAEUS VANNAMEI. (ID: 27544)

11:30 **Cherif, M.**; Granados, M.; Fussmann, G.: MUSSEL FARM EFFECTS ON THE WATER COLUMN: A TEST OF POTENTIAL POSITIVE EFFECTS OF MUSSEL EXUDATIONS AND SEDIMENT EFFLUX USING BENTHOCOSMS (ID: 26372)

* REPRESENTS INVITED PRESENTATIONS

11:45 **Sweetman, A. K.**; Dale, T.; Norling, K.: EFFECTS OF AQUACULTURE ACTIVITIS ON BENTHIC ECOSYSTEM FUNCTIONING UNDER LOW AND HIGH WATER-FLOW REGIMES (ID: 26735)

013 ASSESSING MARINE ECOSYSTEMS HEALTH IN AN INTEGRATIVE WAY

Chair(s): Angel Borja, aborja@azti.es
Benjamin Halpern, halpern@bren.ucsb.edu
Philippe Archambault, Philippe_Archambault@uqar.ca

Location: Room D (Floor -3)

08:30 **Villazán, B.**; Salo, T.; Brun, F. G.; Vergara, J. J.; Pedersen, M. F.: SYNERGISTIC EFFECT OF AMMONIUM ENRICHMENT AND LOW SALINITY IN EELGRASS *ZOSTERA MARINA* (ID: 25714)

08:45 **Soissons, L. M.**; van Katwijk, M. M.; Han, Q.; Li, B.; Ysebaert, T.; Herman, P. M.; Bouma, T. J.: HOW TO EVALUATE SEAGRASS RESILIENCE: TIMING EFFECTS ON INDICATORS (ID: 26250)

09:00 **Roca, G.**; Romero, j.; Farina, S.; Martínez-Crego, B.; Alcoverro, T.: INTERANUAL VARIATION OF METAL CONTENT IN NORTH-WESTERN MEDITERRANEAN P. OCEANICA MEADOWS: LOCAL POLLUTION VS. LARGE SCALE SOURCES. (ID: 27464)

09:30 Subida, M. D.; deJuan, S.; Ospina-Alvarez, A.; Pérez-Matus, A.; Aiken, C.; Castilla, J. C.; Faugeron, S.; Gelcich, S.; Navarrete, S.; **Wieters, E.;** Fernandez, M.: ADAPTIVE REFERENCE CONDITIONS TO ASSESS BENTHIC ECOSYSTEM INTEGRITY IN CENTRAL CHILE (ID: 27634)

09:45 **Radziejewska, T.**; Wawrzyniak-Wydrowska, B.; Bieniek, B.; Skrzypacz, A.; Wroniecki, M.: MEIO- AND MACROBENTHIC RESPONSES TO INSHORE SEDIMENTARY HABITAT ALTERATION BY DUMPING OF DREDGING WASTE: A SOUTHERN BALTIC EXAMPLE (ID: 26575)

10:30 **Román-Geada, M.**; Fernández, E.; Méndez-Martínez, G.; Zamborain-Mason, J.; Rendal-Freire, S.: MULTIVARIATE ENVIRONMENTAL ASSESSMENT OF THE ANTHROPOGENIC EFFECT ON AN INTERTIDAL COMPLEX (NW IBERIAN PENINSULA). (ID: 26522)

10:45 **Abdul Malak, D.**; Sanchez, A.; Schröder, C.; Papatheochari, T.; Kyratsoulis, T.; Niavis, S.; Mariel, N.; Lafitte, A.; Dubreuil, C.; Leveque, L.: ASSESSING MAJOR ENVIRONMENTAL IMPACTS IN THE MEDITERRANEAN SEA: AN ECOREGIONAL APPROACH (ID: 27195)

11:00 **Abdulla, A. A.**; Obura, D.; Bertzky, B.; Shi, Y.: MARINE WORLD HERITAGE: CREATING A GLOBALLY MORE BALANCED AND REPRESENTATIVE LIST (ID: 27401)

11:15 **Albano, P. G.**; Tomašových, A.; Stachowitsch, M.; Filippova, N.; Steger, J.; Zuschin, M.: MAJOR OIL SPILLS AND CHRONIC DISCHARGES IN THE PERSIAN (ARABIAN) GULF: EFFECTS ON BIODIVERSITY INFERRED WITH LIVE-DEAD AGREEMENT STUDIES (ID: 27307)

11:30 **Brodie, J. E.**; Devlin, M. J.: IS THE GREAT BARRIER REEF EUTROPHIC? ESTABLISHING A SET OF DECISION CRITERIA. (ID: 27661)

11:45 **Cibic, T.**; Auriemma, R.; Camatti, E.; Caroppo, C.; Cardellicchio, N.; De Vittor, C.; Franzo, A.; Karuza, A.; Rogelja, M.; Del Negro, P.: ECOSYSTEM FUNCTIONING NEARBY THE LARGEST STEELWORKS IN EUROPE AND THE MAIN ITALIAN NAVAL BASE: THE STUDY CASE OF THE MAR PICCOLO OF TARANTO (ID: 25465)

15:00 **Niquil, N.**; Tecchio, S.; Chaalali, A.; Hattab, T.; Safi, G.; Astorg, L.; Halouani, G.; Raybaud, V.; Beaugrand, G.; Bopp, L.; Dauvin, J. C.; Saint-Béat, B.; Lassalle, G.; Lobry, J.; Lynam, C.; Piroddi, C.; Patrício, J.; Heymans, J. J.; Chifflet, M.; Leloc'h, F.: ECOLOGICAL NETWORK ANALYSIS INDICES SENSITIVITY TO DIFFERENT HUMAN IMPACTS (CLIMATE CHANGE, FISHERIES, HARBOUR EXTENSION): A METHODOLOGICAL PERSPECTIVE. (ID: 26009)

15:15 **Piroddi, C.**; Moutopoulos, D.; Gonzalvo, J.; Libralato, S.: USING AN ECOSYSTEM MODELLING APPROACH TO ASSESS THE HEALTH STATUS OF A MEDITERRANEAN SEMI-ENCLOSED EMBAYMENT (AMVRAKIKOS GULF, GREECE) (ID: 26190)

15:30 **Ribera d'Alcala', M.**; Crise, A.; D'Alelio, D.; Libralato, S.: REFINING THE TOOLS FOR THE IMPLEMENTATION OF THE MSFD IN THE PELAGIC ENVIRONMENT (ID: 27063)

15:45 **Uusitalo, L.**; Korpinen, S.; Andersen, J. H.; Valanko, S.; Dickey-Collas, M.: EXPERT ASSESSMENT OF CUMULATIVE EFFECTS OF MANAGEMENT IN THE BALTIC SEA (ID: 26169)

16:00 **Aubert, A. B.**; Thibault, D.; Johns, D.; McQuatters-Gollop, A.; Jamet, J. L.; Serranito, B.; Stemmann, L.; Gasparini, S.; Brylinski, J. M.: INSIGHT INTO THE POTENTIAL OF ZOOPLANKTON AS INDICATORS OF MARINE ECOSYSTEM HEALTH FOR THE MSFD (ID: 26672)

17:00 **Dimitriou, P. D.**; Papageorgiou, N.; Arvanitidis, C.; Assimakopoulou, G.; Pagou, K.; Papadopoulou, ?. ?.; Pavlidou, A.; Reizopoulou, S.; Simboura, N.; Karakassis, I.: BENTHIC-PELAGIC COUPLING ALONG AN EUTROPHICATION GRADIENT IN THE AEGEAN SEA: DO ENVIRONMENTAL INDICATORS AGREE? (ID: 26828)

17:15 **Salomidi, M.**; Tsiamis, K.; Issaris, Y.; Gerakaris, V.; Panayotidis, P.: ASSESSING THE STATUS OF SHALLOW INFRALITTORAL ROCKY REEFS IN THE EASTERN MEDITERRANEAN SEA: LOSING OUR BIOINDICATORS (ID: 27286)

17:30 **Haselmair, A.**; Gallmetzer, I.; Tomasovych, A.; Stachowitsch, M.; Zuschin, M.: HISTORICAL ECOLOGY OF THE NORTHERN ADRIATIC SEA: ASSESSING PRISTINE BENTHIC COMMUNITIES BASED ON DOWN-CORE CHANGES IN MOLLUSCAN DEATH ASSEMBLAGES (ID: 26731)

18:00 **Cánovas Molina, A.**; Bo, M.; Montefalcone, M.; Morri, C.; Bianchi, N.; Bavestrello, G.: ECOLOGICAL STATUS ASSESSMENT OF A MEDITERRANEAN DEEP CORALLIGENOUS COMMUNITY (ID: 26133)

18:15 **Karayanni, H.**; Meziti, A.; Kormas, K.; Kokkinos, P.; Vantarakis, A.; Leonardos, I.; Stamouli, A.; Nicolaidou, A.: ASSESSING THE ECOLOGICAL STATUS OF IGOUMENITSA GULF (NW GREECE) IN AN INTEGRATED WAY (ID: 25559)

019 LAKES IN THE CRYOSPHERE: FROM POLE TO POLE

Chair(s): Warwick F. Vincent, Warwick.Vincent@fsg.ulaval.ca
Antonio Quesada, antonio.quesada@uam.es
Antonio Camacho, antonio.camacho@uc.es
Ruben Sommaruga, ruben.sommaruga@uibk.ac.at

Location: Machado (Floor -2)

15:00 **McKnight, D. M.**; Sakaeva, A.; Stanish, L.; Spaulding, S.; Howkins, A.; Kohler, T.; Sokol, E.; Barrett, J.: DIATOM COMMUNITIES IN MICROBIAL MATS IN PONDS FROM THE MCMURDO SOUND REGION ANTARCTICA: EVALUATING THE HABITAT AND DISPERSAL CONTROLS ON COMMUNITY COMPOSITION* (ID: 27631)

15:15 **Wilmotte, A.**; Stelmach-Pessi, I.; Sweetlove, M.; Obbels, D.; Vanormelingen, P.; Tytgat, B.; Willems, A.; Verleyen, E.; Vyverman, W.; Van De Vijver, B.; Lara, Y.; Van de Putte, A.: MOLECULAR DIVERSITY OF MICROORGANISMS IN ANTARCTIC LACUSTRINE MICROBIAL MATS (ID: 27437)

15:30 **Velázquez, D.**; López-Bueno, A.; Aguirre de Carcer, D.; de los Ríos, A.; Alcamí, A.; Quesada, A.: ENVIRONMENTAL IMPACTS ON MICROBIAL MATS FROM (MARITIME) ANTARCTICA (ID: 27376)

15:45 **Camacho, A.**; Lo Giudice, A.; Gugliandolo, C.; Rochera, C.; Villaescusa, J. A.; Papale, M.; Maugeri, T.; Lyons, W. B.; Vincent, W. F.; Quesada, A.: STUDIES ON THE BACTERIAL COMMUNITIES INHABITING LAKES OF BYERS PENINSULA, ANTARCTICA: A TRIBUTE TO LUIGI MICHAUD, THE PROVERBIAL GENTLE GIANT (ID: 26293)

16:00 **Aguirre de Cárcer García, D.**; Lopez-Bueno, A.; Pearce, D.; Alcamí, A.: BIODIVERSITY AND DISTRIBUTION OF POLAR FRESHWATER VIRUSES (ID: 26838)

16:15 **Modenutti, B.**; Martyniuk, N.; Bastidas Navarro, M.; Balseiro, E.: GLACIAL RECESSION AFFECTING LIGHT CLIMATE IN ANDEAN PATAGONIAN LAKES: IMPLICATIONS FOR PLANKTONIC PHOTOTROPHS (ID: 25430)

17:00 **Tartarotti, B.**; Kammerlander, B.; Trattner, F.; Koinig, K. A.; Sommaruga, R.; Sonntag, B.: ENVIRONMENTAL FACTORS INFLUENCING ZOOPLANKTON ABUNDANCE AND VERTICAL DISTRIBUTION IN CLEAR AND TURBID ALPINE LAKES (ID: 27174)

17:15 **Ask, J.**; Becher, M.; Karlsson, J.: ICE-COVER AND DIC BUILD-UP DURING WINTER: IMPLICATIONS FOR BENTHIC PRIMARY PRODUCTION AND RESPIRATION IN A CLEAR-WATER SUBARCTIC LAKE (ID: 27344)

17:30 **Arp, C. D.**; Jones, B. M.; Whitman, M. S.; Grosse, G.; Townsend-Small, A.; Beaver, J. R.; Hinkel, K. M.: ICE REGIME SHIFT OF ARCTIC THERMOKARST LAKES AND ECOSYSTEM RESPONSES (ID: 25935)

17:45 **Giles, M. E.**; Whiteford, E. J.; Anderson, N. J.; Dumbrell, A. J.; Mcgenity, T. J.; Osburn, C. L.; Underwood, G. J.: SPATIAL AND TEMPORAL VARIATION IN THE DISSOLVED ORGANIC MATTER CHARACTERISTICS OF SOUTHWEST GREENLAND LAKES AND ITS IMPLICATIONS FOR CARBON CYCLING (ID: 26957)

18:00 **Sommaruga, R.**; Peter, H.; Jeppesen , E.: BACTERIAL COMMUNITY COMPOSITION AND DIVERSITY IN RECENTLY FORMED TURBID LAKES IN SW GREENLAND* (ID: 26027)

18:15 **Vincent, W. F.**: OBSERVATIONS FROM WARD HUNT LAKE AT CANADA'S FAR NORTHERN COAST: HOW SIMILAR ARE HIGH ARCTIC AND ANTARCTIC LAKES? (ID: 25670)

022 THE BIOGEOCHEMISTRY OF DISSOLVED ORGANIC MATTER (DOM)

Chair(s): Thorsten Dittmar, thorsten.dittmar@uni-oldenburg.de
Aron Stubbins, aron.stubbins@skio.uga.edu

Location: Auditorium Federico Garcia Lorca (Floor 0)

08:30 **Aluwihare, L. I.**: A KALEIDOSCOPE VIEW OF DISSOLVED ORGANIC MATTER (DOM) CYCLING: COMBINING ANALYTICAL APPROACHES TO PROVIDE A NEW PERSPECTIVE.[T] (ID: 26431)

09:00 **D'Sa, E. J.**; Kim, H. C.: CDOM ABSORPTION AND FLUORESCENCE PROPERTIES IN THE NEW ZEALAND SECTOR OF THE SOUTHERN OCEAN DURING AN AUSTRAL SUMMER (ID: 27732)

09:15 **Pohlabeln, A. M.**; Dittmar, T.: FIRST INSIGHTS INTO THE MOLECULAR STRUCTURE OF NON-VOLATILE MARINE DISSOLVED ORGANIC SULFUR (ID: 25989)

09:30 **Ksionzek, K. B.**; Lechtenfeld, O. J.; Koch, B. P.: QUANTIFICATION AND CHEMICAL CHARACTERIZATION OF DISSOLVED ORGANIC SULFUR (DOS) IN THE EAST ATLANTIC AND SOUTHERN OCEAN (ID: 26844)

09:45 Zhang, F.; Harir, M.; Zhang, J.; Schmitt-Kopplin, P.; Wu, Y.; **Hertkorn, N.**: EAST CHINA SEA DISSOLVED ORGANIC MATTER: TRACEABILITY OF OCEAN CURRENTS BY ORGANIC STRUCTURAL SPECTROSCOPY (ID: 26317)

10:30 **Sato, M.**; Hashihama, F.: CARBON–PHOSPHORUS LYASE ACTIVITIES IN THE SURFACE WATER OF THE NORTH PACIFIC OCEAN AS DETERMINED USING A SYNTHESIZED FLUORESCENT SUBSTRATE (ID: 25762)

10:45 **Koch, B. P.**; LaRowe, D. E.; Fahl, K.; Lechtenfeld, O. J.; Witt, M.; Geibert, W.: PHYSICO-CHEMICAL CONTROLS ON DISSOLVED ORGANIC MATTER TRANSFORMATION (ID: 26880)

11:00 **Hach, P. F.**; Krupke, A.; Riedel, T.; Marchant , H.; Lavik, G.; Holtappels, M.; Dittmar, T.; Kuypers, M. M.: COMBINED ^{13}C-TRACER INCUBATION WITH ULTRA-HIGH RESOLUTION MASS SPECTROMETRY REVEAL A FAST AND PREFERENTIAL DON UTILIZATION IN THE OLIGOTROPHIC OCEAN (ID: 27134)

11:15 **Yamaguchi, Y. T.**; Broek, T.; McCarthy, M. D.: SOURCES OF DISSOLVED ORGANIC NITROGEN IN THE OCEAN INDICATED BY PRECICE COMPOUND-SPECIFIC NITROGEN ISOTOPE ANALYSIS OF AMINO ACIDS (ID: 27650)

11:30 **Guo, L. D.**; Lin, P.: ABUNDANCE, SPECIATION AND DISTRIBUTION OF DISSOLVED CARBOHYDRATES IN THE NORTHERN GULF OF MEXICO INFLUENCED BY OIL SPILL (ID: 27456)

11:45 **Nieto-Cid, M.**; Martínez-Pérez, A. M.; Catalá, T. S.; San León, H.; Arístegui, J.; Álvarez-Salgado, X. A.: ASSESSING THE SIZE-REACTIVITY CONTINUUM OF DISSOLVED ORGANIC MATTER (DOM) ACROSS THE MEDITERRANEAN SEA (ID: 26533)

15:00 **Santinelli, C.**; Follett, C.; Retelletti Brogi , S.; Xu, L.; Repeta, D.: RADIOCARBON DATA OPEN NEW INTRIGUING QUESTIONS ABOUT DOM DYNAMICS IN THE MEDITERRANEAN SEA (ID: 27675)

15:15 **Martínez Pérez, A. M.**; Osterholz, H.; Nieto Cid, M.; Dittmar, T.; Álvarez Salgado, X. A.: MOLECULAR CHARACTERIZATION OF DOM IN THE EPI-, MESO- AND BATHYPELAGIC WATER MASSES OF THE MEDITERRANEAN SEA (ID: 26230)

15:30 **Hawkes, J. A.**; Rossel, P. E.; Stubbins, A.; Butterfield, D.; Connelly, D. P.; Achterberg, E. P.; Koschinsky, A.; Chavagnac, V.; Leleu, T.; Dittmar, T.: DISSOLVED ORGANIC CARBON CYCLING IN DEEP-OCEAN HYDROTHERMAL VENTS (ID: 26084)

15:45 **Longnecker, K.**; Sievert, S. M.; Sylva, S. P.; Seewald, J. S.; Kujawinski, E. B.: DISSOLVED ORGANIC MATTER IN HIGH AND LOW TEMPERATURE HYDROTHERMAL VENT FLUIDS (ID: 26286)

* REPRESENTS INVITED PRESENTATIONS

16:00 **Gomez-Saez, G. V.**; Niggemann, J.; Dittmar, T.; Riedel, T.; Pichler, T.; Bühring, S. I.: NATURAL VARIABILITY OF DOM IN SUBMARINE SHALLOW HYDROTHERMAL VENTS (ID: 27180)

16:15 **Rossel, P. E.**; Stubbins, A.; Rebling, T.; Koschinsky, A.; Hawkes, J. A.; Dittmar, T.: DISSOLVED ORGANIC MATTER CYCLING IN HYDROTHERMAL SYSTEMS: THE EFFECT OF TEMPERATURE AND PH (ID: 25605)

17:00 **Zark, M.**; Riebesell, U.; Dittmar, T.: EFFECTS OF OCEAN ACIDIFICATION ON FORMATION AND TURNOVER OF DISSOLVED ORGANIC MATTER IN A SWEDISH FJORD (ID: 26007)

17:15 Dainard, P.; Mokhtar, M.; **Gueguen, C.**; McDonald, N.; Williams, B.; Papakyriakou, T.: PHOTOBLEACHING OF FLUORESCENT DISSOLVED ORGANIC MATTER IN BEAUFORT SEA, HUDSON BAY AND NORTH ATLANTIC SUBTROPICAL GYRE (ID: 27272)

17:30 **Panton, A.**; Charoenvattanaporn, J.; Purdie, D. A.: DISSOLVED ORGANIC CARBON AND NITROGEN DYNAMICS ALONG A SALINITY GRADIENT: SEASONAL CYCLES AND THE IMPACT OF STORM EVENTS (ID: 26796)

17:45 **Mahmood, A.**; Sander, S. G.; van den Berg, C. M.; Dittmar, T.: ORGANIC SPECIATION OF DISSOLVED-IRON IN MERSEY ESTUARY AND LIVERPOOL BAY USING MULTIPLE ANALYTICAL WINDOWS (ID: 25426)

18:00 **Asmala, E.**; Staehr, P. A.; Carstensen, J.: LINKING ECOSYSTEM METABOLISM AND DISSOLVED ORGANIC MATTER IN A SHALLOW TEMPERATE ESTUARY (ID: 25524)

18:15 **Jürgens, K.**; Manecki, M.; Dittmar, T.; Herlemann, D.: MICROBIAL DECOMPOSITION OF TERRIGENOUS DISSOLVED ORGANIC MATTER AT DIFFERENT SALINITIES IN THE BALTIC SEA (ID: 26905)

023 BIOGEOCHEMISTRY AND ECOLOGY OF AFRICAN INLAND WATERS

Chair(s): Steven Bouillon, Steven.Bouillon@ees.kuleuven.be
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Francois Darchambeau, Francois.Darchambeau@ulg.ac.be
Jean-Pierre Descy, jean-pierre.descy@fundp.ac.be

Location: Andalucia 2 (Floor 1)

17:00 **Zuijdgeest, A. L.**; Baumgartner, S.; Wehrli, B.: INTENSE CARBON DIOXIDE EVASION FROM THE ZAMBEZI RIVER CROSSING A TROPICAL FLOODPLAIN (ID: 27075)

17:15 **Geeraert, N.**; Omengo, F. O.; Borges, A. V.; Govers, G.; Bouillon, S.: SEDIMENT AND CARBON DYNAMICS IN A TROPICAL RIVER-FLOODPLAIN SYSTEM DURING HIGH-DISCHARGE CONDITIONS (TANA RIVER, KENYA) (ID: 25502)

17:30 **Bouillon, S.**; Tambwe, E.; Mambo, T.; Kelemen, Z.; Lambert, T.; Darchambeau, F.; Borges, A. V.: BIOGEOCHEMISTRY OF THE CONGO RIVER: ANNUAL TRANSPORT FLUXES AND SOURCES OF CARBON IN THE UPPER CONGO RIVER (KISANGANI, DRC CONGO). (ID: 27067)

17:45 **Zhang, L.**; Chen, S. S.; Wang, Z.; KIMIREI, I. A.; Huruma, M.: NITROGEN TRANSFORMATION AND GREENHOUSE GASES POOLS: THE IMPLICATION OF NUTRIENTS AND DISSOLVED GASES PROFILES IN LAKE TANGANYIKA (EAST AFRICA) (ID: 27707)

18:00 **Kraemer, B. M.**; Hamann, E.; Vadeboncoeur, Y.; Yu-jung Kim, L.; McIntyre, P. B.: TEMPERATURE SENSITIVITY OF ORGANISMAL AND ECOSYSTEM RESPIRATION RATES IN LAKE TANGANYIKA (ID: 27550)

035 FROM PAST TO PRESENT: OCEAN PRODUCTIVITY AND BIOGEOCHEMISTRY

Chair(s): Francisca Martinez-Ruiz, fmruiz@ugr.es
Adina Paytan, apaytan@ucsc.edu
Gert de Lange, G.J.deLange@uu.nl
Eva Calvo, ecalvo@icm.csic.es
Isabel Cacho, icacho@ub.edu

Location: Picasso (Floor -2)

08:30 **Galbraith, E. D.**: CLIMATE IMPACT ON OCEAN OXYGENATION AND NITROGEN CYCLING: GROUND TRUTHS FROM THE LAST GREAT GLOBAL WARMING* (ID: 27132)

09:00 **Torner, J.**; Cacho, I.; Moreno, A.; Stoll, H.; Belmonte, A.; Sierro, F. J.; Martrat, B.; Hellstrom, J.; Edwards, R. L.; Cheng, H.: OCEAN-ATMOSPHERE EVOLUTION ALONG THE LAST INTERGLACIAL-GLACIAL TRANSITION IN THE WESTERN MEDITERRANEAN REGION: A MULTI-ARCHIVE APROACH (ID: 27221)

09:15 **López-Rodríguez, C.**; Stadnitskaia, A.; De Lange, G. J.; Martínez-Ruíz , F.; Comas, M.; Sinninghe Damsté , J. S.: FLUID VENTING FROM MUD VOLCANOS IN THE WESTERNMOST MEDITERRANEAN EVIDENCED BY LIPID BIOMARKER AND POREWATER COMPOSITION. (ID: 26247)

09:30 **Almogi-Labin, A.**; Bar-Matthews, M.; Ayalon, A.; Paterne, M.: CLIMATE, PRODUCTIVITY OR CONNECTIVITY: WHAT CONTROLS THE DISTRIBUTION OF PLANKTIC FORAMINIFERA IN THE EASTERN MEDITERRANEAN DURING THE LAST 90 KA (ID: 26398)

09:45 **Ostle, C.**; Robinson, C.; Johnson, M.; Schuster, U.; Watson, A.; Edwards, M.; Landschützer, P.: INFLUENCE OF PHYTOPLANKTON COMMUNITY STRUCTURE ON CARBON FLUX IN THE NORTH ATLANTIC OCEAN (ID: 25526)

10:30 **De Lange, G. J.**; Hennekam, R.; Goudeau, M. L.; Filippidi, A.: REDOX-CONTROLED PRESERVATION AND INTERRUPTION OF MEDITERRANEAN SAPROPEL- S1 (ID: 25932)

10:45 **Scranton, M. I.**; Taylor, G. T.; Muller-Karger, F. E.; Lorenzoni, L.; Fanning, K. A.; Thunell, R. C.; Benitez-Nelson, C. R.; Astor, Y.; Varela, R.: A SOURCE FOR "MISSING" OXIDANT AND REDUCTANT AT THE REDOX INTERFACE OF THE CARIACO BASIN (ID: 25511)

11:00 **Margolin, A. R.**; Hansell, D. A.; Rijkenberg, M.; Gerringa, L. J.: DISTRIBUTION OF DISSOLVED ORGANIC CARBON DEFICITS IN THE BLACK SEA (ID: 25933)

11:15 **Kemp, A.**; Villareal, T. A.: HIGH DIATOM PRODUCTION AND EXPORT IN STRATIFIED WATERS – A POTENTIAL NEGATIVE FEEDBACK TO GLOBAL WARMING (ID: 25549)

11:30 **Jiménez-Arias, J. L.**; Mata, M. P.; Corzo, A.; Sánchez-Bellón , A.; Martínez, J.; Casas-Ruiz , M.; García-Robledo, E.; Bohórquez, J.; Poulton, S. W.; März, C.; Papaspyrou, S.: A MULTIPROXY STUDY DISTINGUISHES ENVIRONMENTAL CHANGES AND DIAGENETIC ALTERATIONS IN THE RECENT SEDIMENTARY RECORD OF THE INNER CADIZ BAY (SW SPAIN) (ID: 26062)

T REPRESENTS TUTORIAL PRESENTATIONS

11:45 **Nieto-Moreno, V.**; Martínez-Ruiz, F.; Sinninghe Damsté, J. S.; Böttcher, M. E.; Mulch, A.; Gallego-Torres, D.; Giralt, S.; García-Orellana, J.; Masqué, P.; Ortega-Huertas, M.: CONTRIBUTION FROM NATURAL CAUSES AND HUMAN ACTIVITIES TO CLIMATE VARIABILITY IN THE WESTERNMOST MEDITERRANEAN OVER THE LAST MILLENNIUM. (ID: 25890)

15:00 **Rodríguez-Tovar, F. J.**: ICHNOFABRIC APPROACH TO ASSESSING PAST PRODUCTIVITY CHANGES: THE TOARCIAN AND THE CENOMANIAN/TURONIAN EVENTS (ID: 25692)

15:15 **Sosa-Montes de Oca, C.**; Rodríguez-Tovar , F. J.; Martínez-Ruiz , F.: PRODUCTIVITY RECOVERY AFTER THE CRETACEOUS-PALEOGENE BOUNDARY EVENT (ID: 26219)

15:30 McKay, C. L.; **Filipsson, H. L.**; Romero, O. E.; Stuut, J. B.; Donner, B.: THE INTERPLAY BETWEEN PRIMARY PRODUCTIVITY AND BOTTOM WATER OXYGENATION WITHIN THE BENGUELA UPWELLING SYSTEM OVER THE LAST 70 000 YEARS (ID: 26901)

15:45 **Torres-Crespo, N.**; Martínez-Ruiz, F.; González-Muñoz, M. T.; Bedmar, E. J.; de Lange, G. J.; Jroundi, F.: MICROBIAL BARITE PRECIPITATION UNDER LABORATORY CONDITIONS: IMPLICATIONS FOR PALEOPRODUCTIVITY RECONSTRUCTIONS (ID: 26224)

16:00 **Rodrigo-Gámiz, M.**; Rampen, S. W.; Martinez-Ruiz, F.; Schouten, S.; Sinninghe Damsté, J. S.: APPLYING INDEPENDENT ORGANIC TEMPERATURE PROXIES TO RECONSTRUCT SEA SURFACE TEMPERATURES IN THE WESTERN MEDITERRANEAN SEA (ID: 26502)

16:15 **Bermejo, M.**; Cacho, I.; Frigola, J.; Canals, M.; Masqué, P.; Lirer, F.; Margaritelli, G.; García, A.: SEA SURFACE TEMPERATURE AND WESTERN MEDITERRANEAN DEEP WATER VARIABILITY DURING THE LAST 2.700 YR: HIGH-RESOLUTION MULTIPROXY MARINE RECORDS (ID: 27026)

17:00 **Stramska, M.**: PARTICULATE ORGANIC CARBON IN THE SURFACE WATERS OF THE NORTH ATLANTIC: SPATIAL AND TEMPORAL VARIABILITY BASED ON SATELLITE OCEAN COLOR (ID: 26202)

17:15 Lee, Y.; **Matrai, P. A.**; Friedrichs, M.; Saba, V.: PPARR-5 ARCTIC OCEAN: A NET PRIMARY PRODUCTIVITY ALGORITHM ROUND ROBIN – OCEAN COLOR AND REGIONAL CLIMATE MODELS (ID: 26414)

17:30 **Richardson, K.**; Bendtsen, J.: MORE PRIMARY PRODUCTION MAY BE OCCURRING IN OLIGOTROPHIC REGIONS OF THE OCEAN THAN PREVIOUSLY ESTIMATED (ID: 26760)

17:45 **Kowalski, N.**; Kaiser, D.; Wu, Z.; Dellwig, O.; Schütt, J.; Unger, D.; Böttcher, M. E.: EARLY DIAGENETIC ELEMENT CYCLING IN THE BEIBU GULF (SOUTH CHINA SEA) (ID: 27296)

18:00 **Steinle, L.**; Felber, N.; Tessarolo, C.; Zopfi, J.; de Lange, G.; Stadnitskaia, A.; Sinninghe Damsté, J. S.; Lehmann, M. F.; Treude, T.; Niemann, H.: MICROBIAL LIFE IN EXTREME ENVIRONMENTS: THE DEEP-SEA HYPERSALINE MAGNESIUMCHLORID-BRINE BASIN KRYOS (MEDITERRANEAN SEA) (ID: 26947)

18:15 **Edgcomb, V. P.**; Pachiadaki, M. G.; Kormas, K. A.; Taylor, C.; Bernhard, J. M.: CROSS-DOMAIN MICROBIAL INTERACTIONS AND PROCESSES IN DEEP HYPERSALINE ANOXIC BASIN WATER COLUMNS AND SEDIMENTS (ID: 26369)

036 HUMAN AND JELLYFISH INTERACTIONS

Chair(s): Veronica Fuentes, vfuentes@icm.csic.es
Stefano Piraino, stefano.piraino@unisalento.it
Macarena Marambio, marambio@icm.csic.es
Jennifer E. Purcell, purcelj3@wwu.edu

Location: Seminario 3-4-5 (Floor 1)

08:45 **Fuentes, V. L.**; Marambio, M.; Piraino, S.; Deidun, A.; Kéfi-Daly Yahia , O.; Daly Yahia Mohamed , N.; Canepa, A.; Boero, F.: ROLE OF CITIZEN SCIENCE IN JELLYFISH RESEARCH AND MANAGEMENT: THE MEDJELLYRISK PROJECT´S APPROACH (ID: 27083)

09:00 **Marambio, M.**; López, L.; Kéfi-Daly Yahia, O.; Daly Yahia, N.; Deidun, A.; Piraino, S.; Fuentes, V.: MITIGATION TOOLS FOR JELLYFISH IMPACT IN COASTAL AREAS THROUGH COLLABORATIVE CITIZEN SCIENCE APPROACH (ID: 26879)

09:15 **Canepa Oneto, A.**; Saeta, I.; Barcía, A.; Fuentes, M.; Marambio, M.; Deidun, A.; kéfi-Daly Yahia, O.; Daly Yahia, N.; Piraino, S.; Fuentes, V.: FORECASTING JELLYFISH BLOOMS ALONG THE CATALAN COAST: A CITIZEN SCIENCE-BASED MODEL AND AN ON-LINE APP TO PAY IT FORWARD (ID: 26793)

09:30 **Brotz, L.**; Pauly, D.: FISHING FOR JELLYFISH: WHAT'S THE CATCH? (ID: 26427)

09:45 **Sabatés, A.**; Maynou, F.; Fuentes, V. L.; Tomlinson , B.; Canepa, A.: INTERACTION BETWEEN JELLYFISH BLOOMS AND FISHERIES ALONG THE CATALAN COAST: THE ROLE OF CITIZEN SCIENCE (ID: 27355)

10:30 **Tilves, U.**; Fuentes, V. L.; Raya, V.; Sabatés, A.: CHARACTERIZATION OF THE ASSOCIATION BETWEEN FISH JUVENILES AND JELLYFISH IN THE CATALAN COAST (NW MEDITERRANEAN) (ID: 26873)

10:45 **Acevedo, M. J.**; Canepa, A.; Zappu, S.; Bosch-Belmar, M.; Alonso, C.; Bordehore, C.; Calbet, A.; Fuentes, V.: COASTAL EUTROPHICATION MAY DRIVE THE NATIVE SPECIES *CARYBDEA MARSUPIALIS* (CNIDARIA: CUBOZOA) TO AN "INVADER STATUS" IN THE MEDITERRANEAN (ID: 26656)

11:00 Nakar, N.; **Angel, D. L.**; Disegni, D.: IMPACT OF AN INVASIVE SWARMING SCYPHOMEDUSA ON ISRAELI FISHERIES (ID: 26885)

11:15 **Slesinger, E. T.**; Smayda, T.; Borkman, D.: MULTI-DECADAL VARIABILITY IN MNEMIOPSIS LEIDYI ABUNDANCE IN NARRAGANSETT BAY: CLIMATE CHANGE OR PREY MEDIATED? (ID: 26409)

11:30 **Bordehore, C.**; Fuentes, V. L.; Segarra, J. G.; Acevedo, M.; Canepa, A.; Raventós, J.: EVALUATING THEORETICAL MANAGEMENT STRATEGIES FOR THE BOX JELLYFISH CARYBDEA MARSUPIALIS USING A MATRIX POPULATION MODEL (INVERSE METHOD FOR TIME SERIES) (ID: 26064)

11:45 **Bozman, A.**; Titelman, J.; Aksnes, D.: EFFECTS OF IRRADIANCE AND ZOOPLANKTON ON THE VERTICAL MIGRATION OF PERIPHYLLA PERIPHYLLA (ID: 26236)

15:00 **Pascual, M.**; Fuentes, V.; Acuña, J. L.; Leone, M.; Guerrero, E.; Tilves, U.; Raya, V.; Sabatés, A.: SPATIAL DISTRIBUTION OF SALPS IN THE CATALAN SEA, NORTH WESTERN MEDITERRANEAN (ID: 26057)

15:15 **González, R.**; Damian, A.; Fuentes, V.; Tilves, U.; Acevedo, M.; Canepa, A.; Ziveri, P.: CNIDARIAN ZOOPLANKTON DISTRIBUTION ACROSS GEOGRAPHICAL, VERTICAL, BIOTIC AND ABIOTIC GRADIENTS IN THE MEDITERRANEAN SEA (ID: 27041)

WEDNESDAY

* REPRESENTS INVITED PRESENTATIONS

15:30 **Javidpour, J.**; Hilbisch, M.; Aberle-Malzahn, N.; López Abbate , M. M.; Ismar, S.; Weiland , N.; Neulinger, S.; Scotti, M.: THE END OF THE "DEAD-END": JELLYFISH BLOOM FOSTERS MORE JELLYFISH (ID: 26616)

15:45 **Baba, R.**; Oba, J.; Kamide, H.: TRANSIENT RESPONSE IN THE SWIMMING BEHAVIOR OF MOON JELLYFISH UPON MODULATED ILLUMINATION STUDIED BY THE FREQUENCY DOMAIN VIDEO IMAGE ANALYSIS (ID: 27738)

16:00 **Lombard, F.**; Patwa, A.; Thiéry, A.; Lilley, M. K.; Boisset, C.; Bramard, J. f.; Bottero, J. Y.; Berthélémy, P.: USING JELLYFISH MUCUS TO TRAP NANOPARTICLES FROM WASTE WATERS WORKS (ID: 26863)

16:15 **Kogovsek, T.**; Ikeda, H.; Takao, M.; Uye, S.: SCYPHOZOAN SURVIVAL STRATEGIES WITH EMPHASIS ON STARVATION RESISTANCE IN EPHYRAE (ID: 27225)

040 HIGH THROUGHPUT MOLECULAR TOOLS IN AQUATIC ECOLOGY

Chair(s): Marc E. Frischer, marc.frischer@skio.uga.edu
Christofer Troedsson, Christofer.Troedsson@uni.no

Location: Seminario 6-7 (Floor 1)

15:00 **Edvardsen, B.**; Egge, E. S.; Stadniczeňko, S. G.; Johannessen, T. V.; Larsen, A.; Sandaa, R.; Andersen, T.: DIVERSITY, SEASONAL DYNAMICS AND BIOTIC INTERACTIONS IN MARINE PHYTOPLANKTON AND VIRUS COMMUNITIES (ID: 27504)

15:15 **Genitsaris, S.**; Monchy, S.; Christaki, U.: HIGH-THROUGHPUT MOLECULAR TOOLS REVEAL NOVEL UNICELLULAR EUKARYOTES AND HIGHLIGHT OVERLOOKED ECOLOGICAL ROLES IN MARINE PROTIST COMMUNITIES (ID: 26097)

15:30 **Ray, J. L.**; Skaar, K. S.; Simonelli, P.; Larsen, A.; Troedsson, C.: PREY-SPECIFIC QPCR AND PYROSEQUENCING OF UNIVERSAL 18S AMPLICONS FROM SEAWATER AND COPEPOD GUT CONTENT (ID: 25570)

15:45 **Balseiro, P.**; Sandnes Skaar, K.; Strohmeier, T.; Strand, Ø.; Kjelby, M.; Frischer, M. E.; Troedsson, C.: MOLECULAR TROPHIC INTERACTION BETWEEN BLUE MUSSEL AND THEIR PREY IN A CONTROLLED UP-WELLING SYSTEM IN LYSEFJORDEN, NORWAY, USING NEXT GENERATION SEQUENCING (ID: 25744)

16:15 **Pernice, M. C.**; Giner, C. R.; Logares, R.; Perea, J.; Massana, R.: DIVERSITY OF MARINE MICROEUKARYOTES IN THE GLOBAL DEEP OCEAN (ID: 26922)

17:00 **Moreno-Linares, E. J.**; Conde-Porcuna, J. M.; Perez-Martinez, C.; Gomez, A.: DNA BARCODING OF ROTIFERS FROM ECOLOGICALLY DIVERSE AQUATIC SYSTEMS (ID: 27135)

17:15 **Harvey, J. B.**; Johnson, S. B.; McCann, M.; Vrijenhoek, R. C.: MOLECULAR VERSUS MORPHOLOGICAL METHODS: IDENTIFYING ZOOPLANKTON COLLECTED IN PLANKTON NET TOWS (ID: 25732)

17:30 Danks, G. B.; Subramaniam, G.; Campsteijn, C.; Raasholm, M.; Long, A. M.; Lenhard, B.; Manak, J. R.; **Thompson, E. M.**: HIGH RESOLUTION TILING ARRAYS: MECHANISMS OF GROWTH ARREST AND RECOVERY IN REGULATING POPULATION DYNAMICS OF OIKOPLEURA, A KEY COMPONENT OF PELAGIC COMMUNITIES (ID: 25597)

17:45 **Bengtsson, M. M.**; Wagner, K.; Burns, N. R.; Schwab, C.; Urich, T.; Battin, T. J.: LIGHT REGIME IMPACTS METATRANSCRIPTOMIC PROFILES IN MULTIPLE TROPHIC LEVELS OF A STREAM BIOFILM COMMUNITY (ID: 27434)

18:00 **Gröndahl, S.**; Fink, P.: THE BEST OF TWO WORLDS: A COMBINED APPROACH FOR ANALYZING BENTHIC ALGAL COMMUNITY STRUCTURE VIA NGS AND TRADITIONAL MORPHOLOGICAL METHODS (ID: 26768)

18:15 **Bryson, S. J.**; Kieft, B. P.; Li, Z.; Pett-Ridge, J.; Hettich, R.; Pan, C.; Mayali, X.; Mueller, R.: SHIFTS IN THE STRUCTURE OF A NORTH PACIFIC MICROBIAL COMMUNITY IN RESPONSE TO NUTRIENT SUPPLEMENTATION AS DETECTED BY METAGENOMICS (ID: 27638)

045 ADDRESSING REGIONAL OR GLOBAL QUESTIONS ABOUT TROPHIC ECOLOGY USING LIPIDS OR STABLE ISOTOPE RATIOS

Chair(s): Nicole B. Richoux, n.richoux@ru.ac.za
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Location: Room B (Floor -3)

08:30 **Strandberg, U.**; Hiltunen, M.; Jelkänen, E.; Kankaala, P.: TROPHIC TRANSFER OF POLYUNSATURATED FATTY ACIDS IN LARGE BOREAL LAKES (ID: 25493)

08:45 **Hiltunen, M.**; Taipale, S. J.; Strandberg, U.; Kahilainen, K. K.; Kankaala, P.: FATTY ACID COMPOSITION OF *EUDIAPTOMUS* SPP. IN BOREAL AND SUBARCTIC LAKES (ID: 25976)

09:00 **Berggren, M.**; Karlsson, J.; Ziegler, S. E.; Bergström, A. K.; del Giorgio, P. A.: ALLOCHTHONY IN MAJOR GROUPS OF CRUSTACEAN ZOOPLANKTON IN BOREAL LAKES – STRONGLY CONTRASTING PATTERNS ACROSS SPACE AND TIME (ID: 25987)

09:15 **Gladyshev, M. I.**; Sushchik, N. N.; Makhutova, O. N.; Kravchuk, E. S.; Kalachova, G. S.: STABLE ISOTOPE COMPOSITION OF FATTY ACIDS IN TROPHIC CHAIN OF THE YENISEI RIVER (ID: 25584)

09:30 **Rodgers, C.**; Rennie, M.; Higgins, S.; Blanchfield, P.: VALIDATING THE USE OF STABLE ISOTOPES IN EVALUTATING WHOLE-ECOSYSTEM CHANGES (ID: 27629)

09:45 **Richoux, N. B.**; Bergamino, L.; Moyo, S.; Dalu, T.; Chari, L.; Carassou, L.; Villet, M. H.: CONNECTIVITY THROUGH ALLOCHTHONY: RECIPROCAL LINKS BETWEEN ADJACENT AQUATIC AND TERRESTRIAL ECOSYSTEMS IN SOUTH AFRICA (ID: 25560)

10:30 **Moulton, T. P.**; Neres-Lima, V.; Machado-Silva, F.; Heatherly , T.; Zandonà, E.: THE AUTOCHTHONOUS-ALLOCHTHONOUS DEBATE IN TROPICAL STREAMS – IS THE TIPPING POINT MORE SHADY? (ID: 26323)

10:45 **Abril, M.**; Bastias, E.; von Schiller, D.; Martí, E.; Sabater, F.; Sabater, S.; Menéndez , M.; Muñoz, I.: MICROBIAL UPTAKE AND TROPHIC TRANSFER OF CARBON AND NITROGEN IN A MEDITERRANEAN FORESTED STREAM (ID: 26016)

11:00 **Ribot, M.**; von Schiller , D.; Martí, E.: NITROGEN SPIRALING IN STREAM ECOSYSTEMS: DOES THE NITROGEN SPECIE MATTER? (ID: 26759)

11:15 **Llopiz, J. K.**; Thorrold, S. R.: DECADAL-SCALE CHANGES IN THE GEORGES BANK ECOSYSTEM: EVIDENCE FROM BULK AND COMPOUND-SPECIFIC STABLE ISOTOPE ANALYSES OF FISH SCALES (ID: 27699)

11:30 **Mohr, W.**; Tang, T.; Bovee, R. J.; Sattin, S. R.; Pearson, A.: PROTEIN STABLE ISOTOPE FINGERPRINTING (P-SIF): A NEW TOOL TO UNDERSTAND NATURAL ISOTOPIC HETEROGENEITY OF MIXED MICROBIAL ECOSYSTEMS (ID: 26244)

11:45 **Bentaleb, I.**; Bosch, D.; Roubira, P.: MEDITERRANEAN FIN WHALES IN A CHANGING ENVIRONMENT : A MULTI PROXY GEOCHEMICAL STUDY OF BALEEN PLATE ARCHIVES (ID: 26840)

15:00 **Happel, A.**; Rinchard, J.; Czesny, S.: FISH CAN BE DIFFERENTIATED BY FATTY ACID SIGNATURES REGARDLESS OF WITHIN SPECIES SIGNIFICANT VARIATIONS (ID: 27055)

15:15 **Lichti, D. A.**; Rinchard, J.; Kimmel, D. G.: CHANGES IN THE ZOOPLANKTON COMMUNITY FATTY ACID PROFILES AT THE FRESHWATER/SALTWATER INTERFACE: IMPLICATIONS FOR LARVAL FISH GROWTH AND SURVIVAL (ID: 25548)

15:30 **Copeman, L. A.**; Laurel, B. J.; Heintz, R. A.; Vollenweider, J. J.; Boswell , K. M.: ONTOGENTIC VARIABILITY IN TROPHIC BIOMARKERS OF SAFFRON COD (*ELEGINUS GRACILIS*) FROM THE WESTERN ARCTIC AND NORTHERN PACIFIC. (ID: 25749)

15:45 **Lienart, C.**; Feunteun, E.; Miller , M. J.; Mortillaro, J. M.; Hubas, C.; Kuroki, M.; Otake, T.; Tsukamoto, K.; Meziane, T.: LEPTOCEPHALI TROPHIC ECOLOGY IN WESTERN SOUTH PACIFIC : WHAT DO FATTY ACID AND STABLE ISOTOPE TELL US ? (ID: 27056)

16:00 Kohlbach, D.; **Graeve, M.**; David, C.; Lange, B. A.; Flores, H.: DYNAMICS IN DIET SOURCES OF ANTARCTIC KRILL SPECIES REVEALED BY LIPID AND STABLE ISOTOPE ANALYSES (ID: 26919)

16:15 **Garrido, S.**; Silva, A.; Maguas, C.; Bandarra, N.; Pastor, J.; Dominguez, R.; Santos, A. M.: TROPHIC INTERACTIONS OF PELAGIC FISHES IN THE IBERIAN UPWELLING ECOSYSTEM: STABLE ISOTOPES, FATTY ACIDS AND STOMACH CONTENT ANALYSIS (ID: 27559)

046 RECENT ECOLOGICAL CHANGE IN ANCIENT LAKES

Chair(s): Stephanie E. Hampton, s.hampton@wsu.edu
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Anson W. Mackay, ans.mackay@ucl.ac.uk
Marianne V. Moore, mmoore@wellesley.edu
George E. A. Swann, george.swann@nottingham.ac.uk

Location: Seminario 6-7 (Floor 1)

08:30 **Timoshkin, O. A.**: INTERDISCIPLINARY RESEARCH OF THE COASTAL ZONE OF LAKE BAIKAL (EAST SIBERIA): DELAYED EVIDENCE OF "INDIRECT" EUTROPHICATION? (ID: 26153)

08:45 **Swann, G. E.**; Panizzo, V. N.; Mackay, A. W.; Roberts, S.; Vologina, E.; Horstwood, M. S.: CAN SILICON ISOTOPES BE USED TO ASSESS ANTHROPOGENIC IMPACTS AND NUTRIENT UTILISATION IN LAKE BAIKAL, SIBERIA? (ID: 26535)

09:00 **McGowan, S.**; Roberts, S.; Swann, G. E.; Mackay, A. W.; Panizzo, V. N.; Vologina, E. G.: LIMNOLOGICAL CHANGE IN LAKE BAIKAL OVER THE PAST MILLENNIUM INFERRED FROM SEDIMENTARY STABLE ISOTOPES AND ALGAL PIGMENTS (ID: 26713)

09:15 **Roberts, S.**; McGowan, S.; Swann, G.; Mackay, A.; Panizzo, V.; Vologina, E.: INVESTIGATING ANTHROPOGENIC AND CLIMATIC PERTURBATIONS AT LAKE BAIKAL, SIBERIA, THROUGH WATER AND SURFACE SEDIMENT PIGMENTS (ID: 26033)

09:30 **Ozersky, T.**; Deng, X.; Moore, M. V.; Pastukhov, M. V.; Poste, A. E.: USING SEAL TEETH TO RECONSTRUCT 80 YEARS OF HEAVY METAL POLLUTION IN LAKE BAIKAL (ID: 26207)

09:45 **Poste, A. E.**; Pastukhov, M. V.; Moore, M. V.; Ozersky, T.: CONTEMPORARY AND HISTORICAL HG ACCUMULATION IN THE LAKE BAIKAL SEAL: PATTERNS, PREDICTORS AND TOXICOLOGICAL IMPLICATIONS (ID: 26866)

10:30 **Bedulina, D. S.**; Axenov-Gribanov, D. V.; Gurkov, A. N.; Vereshchagina, K. P.; Luckenbach, T.; Timofeyev, M. A.: CELLULAR STRESS-RESPONSE IN BAIKAL AND PALEARCTIC AMPHIPODS: WILL GLOBAL CHANGE AFFECT AMPHIPOD COMMUNITIES IN LAKE BAIKAL (ID: 27310)

10:45 **Spanbauer, T. L.**; Fritz, S. C.: EVOLUTIONARY CHANGE IN A DOMINANT PHYTOPLANKTON SPECIES COMPLEX IN LAKE TITICACA DURING THE LAST ~370,000 YEARS (ID: 25554)

11:00 **Moore, M. V.**; Hampton, S. E.; Ferwerda, C. J.; Gray, D. K.; Ozersky, T.; Silow, E. A.; Woo, K.: LAKE-WIDE PHYSICAL AND BIOLOGICAL TRENDS ASSOCIATED WITH WARMING IN LAKE BAIKAL (ID: 27091)

11:15 **Jensen, O. P.**; Mendsaikhan, B.; Free, C.; Young, T.; Ahrenstorff, T.; Hrabik, T.; Weidel, B.; Chandra, S.: GEOLOGICALLY OLD, ECOLOGICALLY YOUNG: ECOSYSTEM ORGANIZATION AND CHANGE IN LAKE HOVSGOL, MONGOLIA (ID: 27349)

11:30 **O'Donnell, D. R.**; Wilburn, P.; Yampolsky, L.; Litchman, E.: NITROGEN AND PHOSPHORUS CO-LIMIT PRIMARY PRODUCTION IN LAKE BAIKAL: RESULTS OF A SPATIAL SURVEY AND NUTRIENT ENRICHMENT EXPERIMENTS (ID: 27178)

11:45 **Silow, E. A.**; Shimaraeva, S. V.; Krashchuk, L. S.; Onuchin, K. A.; Pislegina, E. V.; Rusanovskaya, O. O.; Shchapov, K. S.: RECENT EFFECTS OF HUMAN ACTIVITIES ON LAKE BAIKAL ECOSYSTEM (ID: 25564)

054 ADVANCES IN OUR GLOBAL UNDERSTANDING OF OCEAN ACIDIFICATION

Chair(s): Kim Currie, Kimc@chemistry.otago.ac.nz
Monica Orellana, Monica.Orellana@systemsbiology.org
Jan Newton, newton@apl.uw.edu
Pedro Monteiro, pmonteir@csir.co.za

Location: Andalucia 1 (Floor 1)

08:45 **Newton, J. A.**; Jewett, E. B.; Williamson, P.: THE GLOBAL OCEAN ACIDIFICATION OBSERVING NETWORK (GOA-ON) (ID: 26411)

09:00 **De Carlo, E. H.**; Terlouw, G.; Drupp, P. S.; Mackenzie, F. T.; Sabine, C. L.; Musielewicz, S.; Sutton, A.: HIGH-RESOLUTION TIME-SERIES CO2 DATA FROM CORAL REEFS ON OAHU, HAWAII: CHANGES AND OCEAN ACIDIFICATION (ID: 27433)

09:15 **Currie, K. I.**; Murdoch, J.; Marriner, A.; Law, C.: SETTING UP A COASTAL OCEAN ACIDIFICATION OBSERVING NETWORK IN NEW ZEALAND (ID: 25961)

09:30 **Cantoni, C.**; Barba, L.; Bastianini, M.; Bortoluzzi, G.; Celio, M.; Chiggiato, J.; Cozzi, S.; Luchetta, A.; Ravaioli, M.; Sparnocchia, S.: A MULTISCALE OBSERVING APPROACH FOR UNDERSTANDING ACIDIFICATION PROCESS IN A MARGINAL SEA (NORTHERN ADRIATIC). (ID: 27128)

10:30 **Ríos, A. F.**; Resplandy, L.; García-Ibáñez, M. I.; Fajar, N. M.; Velo, A.; Padin, X. A.; Wanninkhof, R.; Steinfeldt, R.; Roson, G.; Pérez, F. F.: DECADAL ACIDIFICATION IN THE WATER MASSES OF THE ATLANTIC OCEAN (ID: 26652)

10:45 **DeGrandpre, M.**; Islam, F.; Krishfield, R.; Toole, J.; Evans, W.; Williams, B.: AIR-SEA CO2 FLUXES IN THE BEAUFORT SEA AND IMPLICATIONS FOR OCEAN ACIDIFICATION (ID: 27243)

11:00 **Hendriks, I. E.**; Duarte, C. M.; Chierici, M.: PATHWAYS OF ARCTIC OCEAN ACIDIFICATION (ID: 25985)

11:15 Fuentes, J. D.; Troxler, T.; **Barr, J. G.**; Gaiser, E.; Fourqrean, J.; Malone, S. L.; Starr, G.; Skla, F.; Rudnick, D. T.; Davis, S.: CARBON CYCLE SCIENCE IN THE FLORIDA COASTAL EVERGLADES: RESEARCH TO INFORM CARBON AND WATER MANAGEMENT (ID: 27429)

11:30 **Montserrat, F.**; Renforth, P.; Way, S.; Meysman, F. J.: MITIGATION OF OCEAN ACIDIFICATION THROUGH ENHANCED MINERAL WEATHERING (ID: 25920)

15:00 **James, A. K.**; Carlson, C. A.; Passow, U.; Brzezinski, M. A.; Trapani, J. N.; Parsons, R.: ELEVATED PCO_2 INCREASES RESPIRATION OF DOC BY NATURAL BACTERIOPLANKTON (ID: 27291)

15:15 **White, M. M.**; Lubelczyk, L. C.; Waller, J. D.; Drapeau, D. T.; Bowler, B. C.; Vermont, A.; Fields, D. M.; Balch, W. M.: DISSOLUTION OF *PLEUROCHRYSIS CARTERAE* COCCOLITHS IN *ACARTIA TONSA* GUTS: TESTING THE TUMS HYPOTHESIS (ID: 26456)

15:30 **Ramajo, L.**; Perez-Leon, E.; Hendriks, I. E.; Marbá, N.; Krause-Jensen, D.; Sejr, M.; Blicher, M.; Lagos, N. A.; Olsen, Y.; Duarte, C. M.: DRIVERS OF MOLLUSC PERFOMANCE: FOOD SUPPLY VS. CARBONATE SATURATION STATE (ID: 25707)

16:00 **Roggatz, C. C.**; Lorch, M.; Benoit, D. M.; Hardege, J. D.; Terschak, J. A.; Wäge, J.: OCEAN ACIDIFICATION AFFECTS SIGNALLING MOLECULES OF MARINE INVERTEBRATES (ID: 27186)

056 AQUATIC MICROBES IN A DROP OF WATER: FROM SINGLE CELLS TO COMMUNITY INTERACTIONS

Chair(s): Dr Joseph Christie-Oleza, j.christie-oleza@warwick.ac.uk
Dr Cristiana Callieri, c.callieri@ise.cnr.it
Prof David Scanlan, D.J.Scanlan@warwick.ac.uk

Location: Press Room (Floor 2)

15:00 **Christie-Oleza, J. A.**; Armengaud, J.; Scanlan, D. J.: THE ECONOMY OF MARINE SYSTEMS, NUTRIENTS MUST CIRCULATE (ID: 25848)

15:15 **Stepanauskas, R.**: WIRETAPPING MICROBIAL INTERACTIONS BY SINGLE CELL GENOMICS[T] (ID: 25450)

15:45 **Salcher, M. M.**; Ewert, C.; Šimek, K.; Kasalický, V.; Posch, T.: INTERSPECIFIC COMPETITION AND GRAZING AFFECT THE GROWTH SUCCESS OF FRESHWATER *BETAPROTEOBACTERIA* (ID: 25710)

16:00 **Li, W.**; Podar, M.; Morgan-Kiss, R.: DIVERSITY, METABOLIC VERSATILITY AND POTENTIAL INTERACTIONS OF MICROBIAL EUKARYOTES (PROTISTS) RESIDING IN ICE-COVERED ANTARCTIC LAKES (ID: 26307)

16:15 **Vaulot, D.**; Lopes dos Santos, A.; Pollina, T.; Corre, E.: PICOEUCARYOTE METAGENOMES FROM THE SOUTH-EASTERN PACIFIC OCEAN* (ID: 26864)

17:00 **Callieri, C.**; Amalfitano, S.; Corno, G.; Di Cesare, A.; Bertoni, R.: FRESHWATER *SYNECHOCOCCUS* PHYLOTYPES SHOW DIFFERENCES IN MICROCOLONY FORMATION INDUCED BY NANOFLAGELLATE GRAZING (ID: 25793)

17:15 **Rodriguez-Valera, F. F.**; Mizuno, C.; Ghai, R. R.: DIVERSITY OF PHAGES IN A SINGLE DEEP CHLOROPHYLL MAXIMUM SAMPLE* (ID: 25447)

17:30 **Bryson, S.**; Li, Z.; Pett-Ridge, J.; Hettich, R.; Mayali, X.; Pan, C.; Mueller, R.: IDENTIFYING FUNCTIONAL GUILDS WITHIN MARINE MICROBIAL COMMUNITIES USING PROTEOMICS-SIP (ID: 27727)

17:45 **Pierce, M. L.**; Ward, J. E.: INDICATION FOR A CONSERVED MICROBIOME BETWEEN BIVALVE SHELLFISH: INFLUENCE OF MARINE SNOW AND AGGREGATE-FREE SEAWATER (ID: 27259)

18:00 **Shabarova, T.**; Salcher, M. M.; Kasalický, V.; Posch, T.; Pernthaler, J.; Šimek, K.: A NEW FISH PROBE REVEALED HIGH ENVIRONMENTAL RELEVANCE OF LIMA LINEAGE OF THE GENUS LIMNOHABITANS (ID: 27036)

18:15 **Yahel, G.**; Dadon-Pilosof, A.; Richter, M.; Steindler, L.; Sutherland, K. R.; Lombard, F.; Conley, K.; Tikochinski, Y.; Gilboa, M.; Genin, A.: TEFLON BACTERIA? CAN PELAGIBACTER UBIQUE, THE MOST ABUNDANT BACTERIUM IN THE OCEAN, EVADE PREDATION BY SLIPPING THROUGH MUCUS NETS? (ID: 25657)

068 EVOLUTIONARY EFFECTS OF OCEAN WARMING AND ACIDIFICATION

Chair(s): Sam Dupont, sam.dupont@bioenv.gu.se
Piero Calosi, piero.calosi@plymouth.ac.uk
Frank Melzner, fmelzner@geomar.de
Pierre de Wit, pierre.de_wit@bioenv.gu.se
Peter Thor, peter.thor@npolar.no
David Fields, dfields@bigelow.org

Location: Machado (Floor -2)

08:30 **Pespeni, M. H.**: MECHANISMS OF RESILIENCE IN FUTURE CLIMATE CONDITIONS: INTEGRATING GENOMICS, PHYSIOLOGY AND ECOLOGY TOWARD A PREDICTIVE FRAMEWORK* (ID: 27693)

08:45 **Walworth, N. G.**; Fu, F. X.; Webb, E. A.; Saito, M. A.; Moran, D.; McIlvin, M. R.; Gale, J.; Johnson, C.; Hutchins, D. A.: COMPARATIVE FUNCTIONAL GENOMICS AND EPIGENOMICS OF TRICHODESMIUM ADAPTED TO LONG-TERM ELEVATED CO2 UNDER SIMULTANEOUS IRON AND PHOSPHORUS CO-LIMITATION (ID: 25521)

09:00 **Fitzer, S. C.**; Cusack, M.; Phoenix, V. R.; Kamenos, N. A.: OCEAN ACIDIFICATION REDUCES THE CRYSTALLOGRAPHIC CONTROL IN JUVENILE MUSSEL SHELLS (ID: 25704)

09:15 **Schlüter, L.**; Lohbeck, K. T.; Riebesell, U.; Reusch, T. B.: ADAPTATION OF A GLOBALLY IMPORTANT COCCOLITHOPHORE TO OCEAN ACIDIFICATION AND WARMING (ID: 26605)

[T] REPRESENTS TUTORIAL PRESENTATIONS

09:30 **Shama, L. N.**; Strobel, A.; Mark, F. C.; Wegner, K. M.: ACUTE VS. DEVELOPMENTAL ACCLIMATION SHAPES PARENTAL AND GRANDPARENTAL EFFECTS OF OCEAN WARMING ON MARINE STICKLEBACKS (ID: 26201)

09:45 Jarrold, M. D.; Rodríguez-Romero, A.; Massamba-N'Siala, G.; Spicer, J. I.; **Calosi, P.**: TRANS-GENERATIONAL PLASTICITY AND RAPID EVOLUTIONARY ADAPTATION TO CHANGES IN PCO2 IN A POLYCHAETE WORM: RESULTS FROM A LABORATORY SELECTION EXPERIMENT (ID: 25918)

10:30 **Reusch, T. B.**: A REVIEW OF MULTI-GENERATIONAL EXPERIMENTS IN MARINE PHYTOPLANKTON* (ID: 25763)

10:45 **Thor, P.**; Dupont, S.: TRANSGENERATIONAL BUFFERING ALLEVIATES SEVERE EFFECTS OF OCEAN ACIDIFICATION IN A UBIQUITOUS PLANKTONIC COPEPOD (ID: 25906)

11:00 **De Wit, P.**; Thor, P.; Dupont, S.: MULTI-GENERATION EXPERIMENT SUGGESTS OA-BASED SELECTION ON RNA SYNTHESIS AND TRANSLATION IN COPEPODS (ID: 25640)

11:15 **Pedersen, S. A.**; Håkedal, O. J.; Salaberria, I.; Tagliati, A.; Gustavson, L. M.; Jenssen, B. M.; Olsen, A. J.; Altin, D.: MULTIGENERATIONAL EXPOSURE TO OCEAN ACIDIFICATION DURING FOOD LIMITATION REVEALS CONSEQUENCES FOR COPEPOD SCOPE FOR GROWTH AND VITAL RATES (ID: 27745)

11:30 **Donelson, J. M.**; Miller, G. M.; Welch , M. J.; McCormick, M. I.; Munday, P. L.: TRANSGENERATIONAL PLASTICITY TO CLIMATE CHANGE AND OCEAN ACIDIFICATION IN REEF FISHES (ID: 26519)

11:45 Friis Moller, L.; Jonsson, P.; Reusch, T.; **Dupont, S.**: IMPACT OF THE RATE OF CHANGE ON ADAPTATION: RESPONSE OF MNEMIOPSIS LEIDYI TO LOW SALINITY THROUGH MULTIPLE GENERATIONS (ID: 27373)

080 DIAPAUSE STRATEGIES IN AQUATIC ORGANISMS: ECOLOGICAL AND EVOLUTIONARY CONSEQUENCES

Chair(s): Luc Brendonck, luc.brendonck@bio.kuleuven.be
José María Conde-Porcuna, jmconde@ugr.es

Location: Andalucia 2 (Floor 1)

08:30 **Slusarczyk, M.**; Starzynski, J.; Bernatowicz, P.: HOW LONG TO REST IN UNPREDICTABLY CHANGING HABITATS? (ID: 26356)

08:45 **Pinceel, T.**; Vanschoenwinkel, B.; Brendonck, L.: DORMANCY STRATEGIES IN THE VARIABLE AND UNCERTAIN TEMPORARY POOL ENVIRONMENT – A BLEND OF PHENOTYPIC PLASTICITY AND BET HEDGING (ID: 25827)

09:00 Pinceel, T.; Vanschoenwinkel, B.; Grégoir, A.; **Brendonck, L.**: EARLY AND LATE DEVELOPMENTAL ARREST AS COMPLEMENTARY EMBRYONIC BET HEDGING STRATEGIES IN AFRICAN KILLIFISH (ID: 26130)

09:15 **Franch Gras, L.**; García-Roger, E. M.; Serra , M.; Tarazona, E.; Carmona, M. J.: TIMING OF DIAPAUSE IN ROTIFER POPULATIONS VARIES ACCORDINGLY TO ENVIRONMENTAL PREDICTABILITY (ID: 25875)

09:30 **Sirianni, K. M.**; Hairston, N. G.: PHENOTYPIC DIFFERENCES IN DIAPAUSING EGGS REFLECT A DORMANCY-DISPERSAL TRADEOFF FOR TWO CLADOCERANS IN A ROCK-POOL METACOMMUNITY (ID: 25959)

09:45 **García-Roger, E. M.**; Carmona, M. J.; Serra, M.: MODES OF BET HEDGING TO EXPLAIN VARIATION IN DIAPAUSE DURATION IN CYCLICALLY PARTHENOGENETIC ROTIFERS: RECENT FINDINGS AND CHALLENGES (ID: 25711)

10:30 **Radzikowski, J.**; Krupinska, K.; Slusarczyk, M.: DORMANT EGGS OF DAPHNIA FROM DEEP LAKES AND ASTATIC WATERS REQUIRE DIFFERENT THERMAL HATCHING STIMULI (ID: 26116)

10:45 **Conde-Porcuna, J. M.**; Pérez-Martínez, C.; Moreno-Linares, E. J.: ZOOPLANKTON DISPERSAL BY WATERFOWL: EFFECT OF SALINITY ON HATCHING OF DISPERSED RESTING EGGS. (ID: 26341)

11:00 **Aránguiz-Acuña, A.**: DIAPAUSING AS SCAPE STRATEGY UNDER EXPOSURE TO SUBLETHAL ARSENIC (ID: 25887)

11:15 **Sukenik, A.**; Maldener, I.; Delhaye, T.; Bormans, M.: CARBON FIXATION AND ALLOCATION IN A FILAMENTOUS CYANOBACTERIUM DURING AKINETE DIFFERENTIATION USING NANOSIMS AND MICROSCOPY (ID: 25566)

11:30 **de Tezanos Pinto, P.**; Kust, A.; Kozlíková (Zapomelová), E.: DORMANCY IN NITROGEN FIXING CYANOBACTERIA: LINKING AKINETE SHAPE, GERMINATION AND BLOOM OCCURENCES. (ID: 27488)

11:45 **Giannakourou, A.**; Venetsanopoulou, A.; Balci, M.; Balkis, N.; Mudie, P.; Pagou, K.: DINOFLAGELLATE CYST MAPPING IN THE MEDITERRANEAN AND MARMARA SEA: AN ASSESSMENT INDEX OF EUTROPHICATION AND RISK FOR HAB APPEARANCE (ID: 26886)

15:00 **Gross, S.**; Montresor, M.; Töpel, M.; Godhe, A.: *SKELETONEMA MARINOI*: A SLEEPING BEAUTY (ID: 27410)

15:15 **Ejsmond, M. J.**; McNamara, J. M.; Varpe, Ø.: STAY SAFE OR FEED? MODELLING LIFE HISTORY IMPLICATIONS FOR TIMING OF DIAPAUSE (ID: 27043)

15:30 **Armengol, J.**; Raad, P.; Beneyto , D.; Sasa, M.; Rojo, C.; Monros, J.; Mezquita, F.: ZOOPLANKTON HATCHING PATTERNS IN SEDIMENT SAMPLES FROM "PALO VERDE" A TROPICAL TEMPORARY WETLAND IN COSTA RICA. (ID: 25895)

15:45 **Walsh, E. J.**; Samaniego, S.; Messerschmidt, C.; Schmidt, A.; Wallace, R.; Schroeder, T.: DORMANCY AND ASSEMBLY OF COMMUNITY STRUCTURE IN TEMPORARY DESERT AQUATIC HABITATS (ID: 27641)

082 AQUATIC MICROBIAL COMMUNITIES ACROSS GEOGRAPHIC AND TROPHIC GRADIENTS

Chair(s): Irina Izaguirre, iri@ege.fcen.uba.ar
Hugo Sarmento, hugo.sarmento@gmail.com
M. Romina Schiaffino, rominaschiaffino@ege.fcen.uba.ar

Location: Room B (Floor -3)

17:00 **Pedrós-Alió, C.**; Mackenzie, R.; Uribe, L.; Díez, B.: THE IMPORTANCE OF DISPERSAL LIMITATION FOR THE STRUCTURE OF HOT SPRING MICROBIAL MAT COMMUNITIES: FROM THE TROPICS TO ANTARCTICA (ID: 25845)

17:15 **Wilburn, P.**; Shchapov, K.; Pislegina, E. V.; Ozersky, T.; Teal, T. K.; Shade, A.; Litchman, E.: MICROBIAL SURVEY OF LAKE BAIKAL: INSIGHTS AND LIMITATIONS OF TAXONOMIC AND NETWORK-BASED FUNCTIONAL ANALYSES (ID: 27666)

* REPRESENTS INVITED PRESENTATIONS

17:30 **Segovia, B. T.**; Domingues, C. D.; Meira, B. R.; Lansac-Toha, F. M.; Fermani, P.; Unrein, F.; Machado Velho, L. F.; Sarmento, H.: COUPLING BETWEEN HETEROTROPHIC NANOFLAGELLATES AND BACTERIA IN FRESH WATERS: DOES LATITUDE MAKE A DIFFERENCE? (ID: 27526)

17:45 **Mussmann, M.**; Dyksma, S.; Probandt, D.: IDENTIFICATION, ECOLOGY AND ECOGENOMICS OF UBIQUITOUS BACTERIAL KEY PLAYERS IN COASTAL SEDIMENTS. (ID: 26943)

18:00 **Elser, J. J.**; Bercel, T.; Learned, J.; Poret-Peterson, A.; Raymond, J.; Ze, R.; Niu, D.; Fu, H.: "MYSTERIOUS LAKES" AMID MEGADUNES: A LIMNOLOGICAL EXPLORATION OF THE GROUNDWATER-FED PONDS AND LAKES OF BADAIN JARAN, NORTH-CENTRAL CHINA. (ID: 25759)

18:15 **Lara, E.**; Fernández Parra, L.; Schiaffino, R.; Izaguirre, I.: A NEW FRESHWATER BATHYCOCCACEAE LINEAGE FROM ARGENTINEAN PATAGONIA SHOWS DISTANCE RELATED POPULATION STRUCTURE (ID: 27002)

085 CURRENT ADVANCES IN THE INTEGRATION OF (SEMI)AUTOMATED APPROACHES FOR MEASURING PHYTOPLANKTON DYNAMICS, FROM FRESHWATER TO MARINE SYSTEMS

Chair(s): Luis Felipe Artigas, Felipe.Artigas@univ-littoral.fr
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Melilotus Thyssen, melilotus.thyssen@mio.osupytheas.fr

Location: Machuca (Floor -2)

08:30 **Nelson, H.**; Poulton, N. J.; Peterson, T.; Leathem , M.; Wolfe, P.: IMPROVED METHODOLOGY FOR SEMI-AUTOMATED IDENTIFICATION OF PLANKTON AND BIOVOLUME ESTIMATION USING A DIGITAL IMAGING FLOW CYTOMETER (FLOWCAM) (ID: 27428)

08:45 **Grosjean, P.**; Denis, K.; Wacquet, G.; Ali, N.; Rousseau, V.; Parent, J. Y.; Lancelot, C.: TOWARDS A BETTER CLASSIFICATION OF PLANKTON DIGITAL IMAGES: SUSPECT DETECTION, ERROR CORRECTION AND REAL-TIME (ID: 26315)

09:00 **Romero-Martinez, L.**; van Slooten, C.; Nebot, E.; Acevedo-Merino, A.; Peperzak, L.: ROUTINE MONITORING OF DIVERSITY AND ABUNDANCE OF MICRO-ORGANISMS IN BALLAST WATER WITH FLOWCAM (ID: 26185)

09:15 **Zetsche, E.**; El Mallahi, A.; Dubois, F.; Yourassowsky, C.; Kromkamp, J.; Meysman, F. J.: IMAGING-IN-FLOW: DIGITAL HOLOGRAPHIC MICROSCOPY AS A NOVEL TOOL TO DETECT AND CLASSIFY NANOPLANKTONIC ORGANISMS (ID: 26052)

09:30 **Greenfield, D. I.**; Coyne, K. J.; Doll, C.; Main, C.; Bianco, C.: THE EFFECTS OF CELL PHYSIOLOGY ON SANDWICH HYBRIDIZATION ASSAY AND QUANTITATIVE PCR RESULTS FOR THE HARMFUL ALGA, HETEROSIGMA AKASHIWO (ID: 25951)

100 MICROBIAL BIOGEOCHEMISTRY OF TIDAL FLATS AND SHALLOW SEDIMENTS: PHYSICAL FORCING BY TIDES AND PHOTOPERIOD

Chair(s): Alfonso Corzo, alfonso.corzo@uca.es
Graham J. C. Underwood, gjcu@esssex.ac.uk
Sokratis Papaspyrou, sokratis.papaspyrou@uca.es

Location: Seminario 3-4-5 (Floor 1)

17:00 **Orvain, F.**; Morelle, J.; Claquin, P.; Lefebvre, S.: MICROPHYTOBENTHIC BIOFILMS IN RESPONSE TO PHYSICAL FORCING BY TIDES AND PHOTOPERIOD[T] (ID: 27189)

17:30 **Meysman, F.**; Malkin, S.: MICROBIAL ELECTRICITY INDUCES RAPID REDOX TELECONNECTIONS IN THE SEAFLOOR (ID: 26026)

17:45 **Lavergne, C.**; Hugoni, M.; Dupuy, C.; Debroas, D.; Agogué, H.: ACTIVE PROKARYOTIC COMMUNITY STRUCTURE DURING DAY AND NIGHT EMERSION IN COASTAL MUDDY SEDIMENTS (ID: 26120)

18:00 **Redzuan, N. S.**; Underwood, G. J.: SEDIMENT-WATER COLUMN EXCHANGES OF MICROPHYTOBENTHOS ON INTERTIDAL FLATS: INFLUENCE OF TIDAL RANGE, WIND AND WAVES ACROSS NEAP-SPRING-NEAP TIDAL CYCLES (ID: 26893)

18:15 **Gómez-Ramírez, E. H.**; Bohórquez, J.; Corzo, A.; García-Robledo, E.; Aguilar-Barquero, V.; Morales-Ramírez, A.; Papaspyrou, S.: MICROBENTHIC PRIMARY PRODUCTION AND NET METABOLISM IN AN INTERTIDAL TROPICAL MUDFLAT (ID: 26926)

118 LIFE AT SMALL SCALE: MICROSCALE INSIGHTS INTO AQUATIC SYSTEMS

Chair(s): Mimi Koehl, cnidaria@berkeley.edu
Thomas Kiorboe, tk@aqua.dtu.dk>
Roman Stocker, romans@MIT.EDU
Stuart Humphries, S.Humphries@hull.ac.uk

Location: Room C (Floor -3)

08:30 **Sage, J.**; Humphries, S.: ADAPTATION TO TEMPERATURE IN *TETRASELMIS* SWIMMING HAS TWO RATES (ID: 26342)

08:45 **Nielsen, L. T.**; Andersen, A.; Kiørboe, T.: DINOFLAGELLATES CREATE FLOWS THAT MEDIATE FEEDING AND NUTRIENT UPTAKE (ID: 26560)

09:00 **Jenkinson, I. R.**; Berdalet, E.; Chin, W. C.; Herminghaus, S.; Mitchell, J. G.; Qiu, R.; Seuront, L.; Wang, P.; Wyatt, T.; Li, Z.: NANO/MICROFLUIDICS AROUND PHYTO- AND ZOOPLANKTON (ID: 26505)

09:15 **Costello, J. H.**; Colin, S. P.; Gemmell, B. J.; Sutherland, K. R.: WORKING TOGETHER: PROPULSIVE JET ORGANIZATION DURING SWIMMING BY THE SIPHONOPHORE NANOMIA BIJUGA. (ID: 26403)

09:30 **Colin, S. P.**; MacPherson, R.; Gemmell, B.; Costello, J. H.; Sutherland, K.; Jaspers, C.: ELEVATING THE PREDATORY EFFECT: SENSORY-SCANNING FORAGING STRATEGY BY THE LOBATE CTENOPHORE MNEMIOPSIS LEIDYI (ID: 26868)

09:45 **Koehl, M.**: SWIMMING IN AN UNSTEADY WORLD (ID: 27118)

10:30 **Gemmell, B. J.**; Jiang, H.; Strickler, J. R.; Buskey, E. J.: A TALE OF THE CILIATE TAIL: INVESTIGATION INTO THE ADAPTIVE SIGNIFICANCE OF THIS UNIQUE ULTRASTRUCTURE (ID: 27543)

[T] REPRESENTS TUTORIAL PRESENTATIONS

10:45 **El Baidouri, F.**; Humphries, S.: NEW INSIGHTS INTO THE EVOLUTION OF BACTERIAL SHAPE AND MOTILITY (ID: 26061)

11:00 **Schuech, R.**; Smith, D. J.; Humphries, S.: OPTIMAL SHAPES OF SWIMMING BACTERIA (ID: 26700)

11:15 **Tuval, I.**; Arrieta, J.; Barreira, A.: MICROSCALE PATCHES OF NON-MOTILE PHYTOPLANKTON (ID: 26001)

11:30 **Wheeler, G. L.**; Chrachri, A.; Brownlee, C. L.: THE ROLE OF THE CELLULAR MICROENVIRONMENT IN DETERMINING PHYTOPLANKTON PHYSIOLOGY (ID: 27487)

11:45 **Ojamäe, K.**; Lips, I.; Hansen, P. J.: PREY UPTAKE IN MIXOTROPHIC DINOFLAGELLATES *DINOPHYSIS* SPP. MEDIATED BY MUCUS SECRETIONS (ID: 26558)

15:00 **Popovich, Y.**; Rubin-Blum, M.; Shemesh, E.; Goodman-Tchernov, B.; Shavit, U.; Tchernov, D.: THE BENEFIT OF SPIONIDAE ROCKING OSCILLATIONS DRIVEN BY GAS RELEASE IN THE MEDITERRANEAN DEEP SEA: A QUANTITATIVE ANALYSIS (ID: 26085)

15:15 **Shavit, U.**; Holzman, R.; Genin, A.; Asher, S.: AN UNDERWATER PIV STUDY OF FLOW INSIDE AND AROUND CORAL REEFS (ID: 26951)

15:30 **Borisov, S. M.**; Staudinger , C.; Kühl, M.; Klimant, I.: NEW OPTODES FOR SENSING AND IMAGING OF PH IN AQUATIC SYSTEMS ON MICROSCALE (ID: 26524)

15:45 **Taylor, G. T.**; Suter, E.; Stinton, D. T.; Chow, S. T.; Li, Z. Q.: LINKING BIOGEOCHEMICAL FUNCTION TO PHYLOGENY IN MARINE MICROBIAL COMMUNITIES USING SIP-RAMAN-FISH (ID: 25841)

16:00 **Malfatti, F.**; Celussi, M.; Del Negro, P.: HIGH-RESOLUTION IMAGING (AFM LSCM) COUPLED WITH IN SITU DETECTION OF ALKALINE PHOSPHATASE REVEALS MICROSCALE ORGANIC MATTER PROCESSING BY ALGAE AND BACTERIA (ID: 25475)

17:00 **Cisternas-Novoa, C.**; Lee, C.; Engel, A.: TRANSPARENT EXOPOLYMER PARTICLES (TEP) AND COOMASSIE STAINABLE PARTICLES (CSP): COMPARING THEIR ORIGIN AND BEHAVIOR USING FLOWCAM VISUALIZATION AND IMAGING. (ID: 25425)

17:15 **Ionescu, D.**; Bizic-Ionescu, M.; Khalili, A.; Malekmohammadi , R.; Morad, M. R.; de Beer, D.; Grossart, H. P.: PARTICLE ASSOCIATED COMMUNNITIES ARE REGULATED BY ANTAGONISTIC REACTIONS RATHER THAN CARBON QUALITY AS SHOWN USING A NEW FLOW-THROUGH ROLLIING-TANK (ID: 25814)

17:30 **Ziervogel, K.**; Burns, W.; Marchetti, A.; Prairie, J. C.; Vicci, L.; Whilte, B. L.: HOW DOES TURBULENCE AFFECT ALGAL-BACTERIAL INTERACTIONS AND TEP FORMATION IN THE SURFACE OCEAN? (ID: 27242)

17:45 **Ploug, H.**; Bergqvist, J.; Klawonn, I.; Whitehouse, M. J.: DIRECT QUANTIFICATION OF CELL-SPECIFIC INORGANIC NITROGEN UPTAKE DURING A DIATOM SPRING BLOOM USING STABLE ISOTOPE TRACERS AND SECONDARY ION MASS SPECTROMETRY (ID: 25835)

18:00 **Lehman, P. W.**; Kurobe, T.; Kudela, R.; Baxa, D.; Teh, S. J.; Brown, T.; Tung, A.; Hollingshead, T.: HIGH FREQUENCY VARIABILITY OF PHYTOPLANKTON, ZOOPLANKTON AND WATER QUALITY IN SAN FRANCISCO ESTUARY (ID: 27604)

123 MULTI-METHODS CONNECTIVITY ESTIMATES TO IMPROVE MARINE PROTECTION DESIGN

Chair(s): Katell Guizien, guizien@obs-banyuls.fr
Sophie Arnaud-Haond, s-arnaud@univ-montp2.fr

Location: Andalucia 3 (Floor 1)

17:00 **Aspillaga, E.**; Bartumeus, F.; García-Rubies, A.; López-Sanz, À.; Díaz, D.; Linares, C.; Starr, R. M.; Hereu, B.: ORDINARY AND EXTRAORDINARY MOVEMENT BEHAVIOUR OF SEABREAMS IN A MPA: IMPLICATIONS TO MANAGEMENT (ID: 27162)

17:30 **Corell, H.**; Moksnes, P. O.; Jonsson, P. R.: BRINGING TOGETHER PIECES OF THE CONNECTIVITY PUZZLE: LOCAL OCEANOGRAPHY AND INHERITED BEHAVIOUR STUDIED ON MULTIPLE SPATIAL AND TEMPORAL SCALES (ID: 26565)

17:45 **Costa, A.**; Doglioli, A. A.; Guizien, K.; Petrenko, A. A.: ESTIMATION OF CONNECTIVITY IN MARINE BIOLOGICAL NETWORKS: GRAPH THEORY VERSUS METAPOPULATION MODELS. AN APPLICATION TO THE GULF OF LION. (ID: 26006)

18:00 **Padron, M.**; Bakzay, S.; Bramanti, L.; Costantini, F.; Guizien, K.: CONNECTIVITY OF WHITE GORGONIAN POPULATIONS IN THE GULF OF LIONS: OBSERVED VERSUS MODELLED GENETIC STRUCTURE (ID: 26020)

18:15 **Comtet, T.**; Traisnel, G.; Pécheyran, C.; Thébault, J.: ELEMENTAL FINGERPRINTING AS A TOOL TO STUDY CONNECTIVITY IN THE INVASIVE GASTROPOD *CREPIDULA FORNICATA* (ID: 26596)

126 SCALES OF VARIABILITY IN SOURCES AND SINKS OF METHANE IN LAKES, RESERVOIRS AND RIVERS

Chair(s): Bradford Sherman, csiro.brad@icloud.com
Tonya Delsontro, tdelsontro@gmail.com

Location: Machuca (Floor -2)

10:30 **Bastviken, D.**; Klaus, M.; Lundin, E.; Natchimuthu , S.; Enrich-Prast, A.; Crill, P.; Karlsson, J.: METHANE EMISSIONS FROM VARIOUS TYPES OF NORTHERN LAKES (ID: 27085)

10:45 **Casper, P.**; Martinez-Cruz, K.; Fuchs, A.; Cardoso Lisboa, C.; Reverey, F.; Rodriguez, M.; Sepulveda-Jauregui, A.; Ullrich, N.: METHANE DYNAMICS IN TEMPERATE AQUATIC SYSTEMS: PRODUCTION; OXIDATION; EMISSION (ID: 27182)

11:00 **DelSontro, T.**; Thottathil, S. D.; Prairie, Y.; del Giorgio, P.: METHANE OVERSATURATION IN BOREAL LAKES: TOWARDS PROCESS-BASED UNDERSTANDING (ID: 26929)

11:15 **Tremblay, A.**; Lambert, M.: CH4 AND N2O EMISSIONS FROM BOREAL RESERVOIRS, 20 YEARS OF DATA! (ID: 26260)

11:30 **Deemer, B. R.**; Harrison, J. A.; Beaulieu, J. J.; Li, S.; Santos, M. A.; Neto, J. F.; Powers, S. M.; Vonk, J. A.; DelSontro, T.; Barros, N.: GLOBAL GREENHOUSE GAS EMISSIONS FROM RESERVOIRS: A MATTER OF METHANE (ID: 27717)

11:45 **Grinham, A. R.**; Dunbabin, M. D.: RELATIVE IMPORTANCE OF METHANE EBULLITION TO TOTAL STORAGE EMISSIONS IN FIVE SUBTROPICAL RESERVOIRS (ID: 26428)

15:00 **Sepulveda-Jauregui, A.**; Hoyos-Santillan, J.; Martinez-Cruz, K.; Belmonte-Izquierdo, Y.; Casper, P.; Walter Anthony, K. M.; Thalasso, F.: TEMPERATURE AND TROPHIC STATUS DEPENDENCE ON METHANE PRODUCTION AND OXIDATION IN LAKES (ID: 26877)

15:15 **Wilkinson, R. J.**; Maeck, A.; Alshboul, Z.; Lorke, A.: METHANE EBULLITION FOLLOWS SEASONAL TEMPERATURE: LINKING BUBBLE FLUX AND PRODUCTION RATE IN AN IMPOUNDED RIVER (ID: 26334)

15:30 **Martinez-Cruz, K.**; Sepulveda-Jauregui, A.; Walter Anthony, K. M.; Casper, P.; Thalasso, F.: ANAEROBIC OXIDATION OF METHANE IN BOREAL LAKE SEDIMENTS (ID: 26853)

15:45 **Oswald, K.**; Milucka, J.; Brand, A.; Littmann, S.; Wehrli, B.; Kuypers, M. M.; Schubert, C. J.: EMISSIONS FROM STRATIFIED LAKES REDUCED BY LIGHT DEPENDENT AEROBIC METHANE OXIDATION (ID: 25499)

16:00 **Denfeld, B. A.**; Canelhas, M. R.; Bertilsson, S.; Bastviken, D.; Weyhenmeyer, G.: METHANE ACCUMULATION AND OXIDATION AT THE WATER-ICE INTERFACE IN ICE-COVERED LAKES (ID: 25782)

16:15 **Laurion, I.**; Bouchard, F.; Preskienis, V.; Fortier, D.: THE AGE OF BUBBLES: GREENHOUSE GAS EMISSIONS FROM PERMAFROST THAW LAKES (ID: 25653)

17:00 Deshmukh, C.; **Guerin, F.**; Labat, D.; Vongkhamsao, A.; Guedant, P.; Rode, W.; Chanudet, V.; Descloux, S.; Serca, D.: METHANE EMISSIONS FROM A SUBTROPICAL HYDROELECTRIC RESERVOIR: IMPACT OF SEASONAL AND ARTIFICIAL DESTRATIFICATION ON DIFFUSIVE FLUXES AND DOWNSTREAM EMISSIONS (ID: 27046)

17:15 **Rodriguez, M.**; Casper, P.: GREEN HOUSE GASES EMISSIONS (CO_2 AND CH_4) IN THE SEMIARID ITAPARICA RESERVOIR IN NORTHEAST BRASIL AND CONTRIBUTION OF TURBINE PASSAGE (ID: 26571)

17:30 **Beaulieu, J. J.**; Nietch, C. T.; McManus, M. G.; Townsend-Small, A.: TEMPORAL AND SPATIAL PATTERNS OF METHANE EMISSIONS FROM A RESERVOIR DRAINING AN AGRICULTURAL WATERSHED (ID: 26895)

17:45 **Sturm, K.**; Grinham, A.; Werner, U.; Yuan, Z.: SOURCES, SPATIAL VARIABILITY AND DRIVERS OF SUBTROPICAL ESTUARINE METHANE EMISSIONS (ID: 26496)

18:00 **Striegl, R. G.**; Dornblaser , M. M.; Crawford, J. T.; Loken, L. C.: METHANE AND CARBON DIOXIDE CONCENTRATION AND FLUX ON THE DAM AND POOL NAVIGATION SYSTEM OF THE UPPER MISSISSIPPI RIVER (ID: 26812)

18:15 **Sherman, B.**; Ford, P.; Kernke, M.: MEASURING LARGE METHANE GAS FLUXES IN THE CONDAMINE RIVER (ID: 26444)

130 IN SITU STUDIES OF THE IMPACTS OF OCEAN ACIDIFICATION: OBSERVATIONS, CO2 VENTS, AND FOCE EXPERIMENTS

Chair(s): James P. Barry, barry@mbari.org
David Kline, dkline@ucsd.edu
Jean-Pierre Gattuso, gattuso@obs.vlfr.fr

Location: Andalucia 1 (Floor 1)

17:00 **Barkley, H. C.**; Cohen, A. L.; Golbuu, Y.; Starczak, V. R.; Shamberger, K. F.; DeCarlo, T. M.: COMPOSITIONAL CHANGES IN CORAL REEF COMMUNITIES ACROSS A NATURAL PH GRADIENT (ID: 26916)

17:15 **Ricevuto, E.**; Gambi, M. C.: OCEAN ACIDIFICATION: WHAT WE CAN LEARN FROM POLYCHAETES IN A SHALLOW CO_2 VENTS SYSTEM (ID: 25852)

17:30 **Gattuso, J. P.**; Kirkwood, W.; Barry, J.; Cox, E.; Gazeau, F.; Kline, D.; McElhany, P.; Martin, S.; Peltzer, E.; Saderne, V.; Tait, K.; Widdicombe, S.; Brewer, P.: FREE OCEAN CO2 ENRICHMENT (FOCE) SYSTEMS: PRESENT STATUS AND FUTURE DEVELOPMENTS (ID: 25486)

17:45 **Cox, T. E.**; Gazeau, F.; Hendricks, I.; Gattuso, J. P.: IMPACTS OF OCEAN ACIDIFICATION ON THE STRUCTURE, PRODUCTION, AND PHYSIOLOGY OF THE MEDITERRANEAN SEAGRASS POSIDONIA OCEANICA (ID: 27404)

18:00 **Barry, J. P.**; Lovera, C.; Buck, K. R.; Peltzer, E. T.; Taylor, J. R.; Walz, P.; Whaling, P. J.; Brewer, P. G.: USE OF A FREE OCEAN CO2 ENRICHMENT (FOCE) SYSTEM TO EVALUATE THE EFFECTS OF OCEAN ACIDIFICATION ON THE FORAGING BEHAVIOR OF A DEEP-SEA URCHIN (ID: 25516)

18:15 **Burdett, H. L.**; Perna, G.; McKay, L.; Broomhead, G.; Kamenos, N. A.: ECOSYSTEM-LEVEL RESPONSE OF A CORALLINE ALGAL BED TO HIGH CO2 VIA IN SITU ENRICHMENT (ID: 26686)

143 COMMUNITY ECOLOGY

Chair(s): Pia Bartels, pia.bartels.pb@gmail.com

Location: Andalucia 3 (Floor 1)

08:30 **Waterkeyn, A.**; Van den Broeck, M.; Rhazi, L.; Grillas, P.; El Madihi, M.; Brendonck, L.: ECOLOGY AND CONSERVATION OF MOROCCAN TEMPORARY PONDS UNDER ANTHROPOGENIC PRESSURE (ID: 26124)

08:45 **Lebret, K.**; Langenheder, S.; Östman, Ö.; Lindström, E.: IMPACT OF INCREASED WATERCOLOR ON THE FUNCTION AND STRUCTURE OF PLANKTON COMMUNITIES IN SCANDINAVIAN LAKES (ID: 25595)

09:00 **Brucet, S.**; Mehner, T.; Beklioglu, M.; Svenning, J. C.; Boll, T.; Arranz, I.; Benejam, L.; Argillier, C.; Holmgren, K.; Winfield, I. J.; Jeppesen, E.: TEMPERATURE DRIVES THE RELATIONSHIP BETWEEN SPECIES AND SIZE DIVERSITY IN LAKE FISH COMMUNITIES (ID: 25708)

09:15 **Lopes, A. R.**; Rosa, I. C.; Faleiro, F.; Paula, J. R.; Diniz, M. E.; Repolho, T.; Rosa, R.: ECOPHYSIOLOGY OF INTERTIDAL AND SUBTIDAL *PALAEMON* SHRIMPS: WHO WILL SUFFER THE MOST WITH GLOBAL WARMING? (ID: 27008)

09:30 **Hernan Martinez, G.**; Martinez, A.; Terrados, J.; Tomas, F.: EFFECTS OF TEMPERATURE IN SEAGRASS SEEDLINGS AND ITS TROPHIC RELATIONS (ID: 26677)

09:45 **Arranz, I. U.**; Mehner, T.; Benejam, L.; Argillier, C.; Holmgren, K.; Jeppesen, E.; Lauridsen, T. L.; Volta, P. J.; Winfield, I. J.; Brucet, S.: DENSITY-DEPENDENT EFFECTS OVERRIDE TEMPERATURE AS DRIVERS OF INTRASPECIFIC SIZE-STRUCTURE IN SIX LAKE FISH SPECIES ACROSS EUROPE (ID: 26718)

10:30 **Céspedes, V.**; Coccia, C.; Valdecasas, A. G.; Sánchez, M. I.; Green, A. J.: INFLUENCE OF WATER MITES ON A HEMIPTERAN COMMUNITY IN SPANISH WETLANDS: ENEMIES THAT LIMIT THE INVASION OF TRICHOCORIXA VERTICALIS? (ID: 25577)

10:45 **Webert, K. C.**; Herren, C. M.; Einarsson, A.; Ives, A. R.: ABIOTIC DISTURBANCE AND ECOLOGICAL COMMUNITIES: THE COMPOSITION OF BENTHIC CLADOCERAN ASSEMBLAGES IN LAKE MYVATN, ICELAND (ID: 27255)

WEDNESDAY

11:00 **Chiapella, A. M.**; Strecker, A. L.: MACROINVERTEBRATE COMMUNITY CHANGE ALONG AN ELEVATION GRADIENT IN FISHLESS VERSUS FISH-STOCKED MONTANE LAKES (ID: 27209)

11:15 **Novoa, A.**; Talley, T. S.; Talley, D. M.; Crooks, J. A.: ASSESSING BIVALVE COMMUNITY SHIFTS IN SEVERAL ESTUARIES IN SOUTHERN CALIFORNIA AND NORTHERN BAJA CALIFORNIA, MEXICO (ID: 25608)

11:30 **Wood, M. A.**; Lipcius, R. N.: THE EXOTIC ALGA GRACILARIA VERMICULOPHYLLA: AN EMERGING NURSERY HABITAT FOR BLUE CRABS CALLINECTES SAPIDUS IN CHESAPEAKE BAY (ID: 26288)

11:45 **Stockenreiter, M.**; terHorst, C. P.; Litchman, E.: THE GHOST OF COMPETITION PRESENT PREDICTS PHYTOPLANKTON COMMUNITY ASSEMBLY PATTERNS (ID: 25766)

15:15 **Kazanjian, G.**; Köhler, J.; Flury, S.; Attermeyer, K.; Kalettka, T.; Premke, K.; Hilt, S.: SMALL WATER BODIES POSE UNIQUE PRIMARY PRODUCTION DYNAMICS: CONSEQUENCES OF ALTERNATIVE VEGETATION REGIMES IN KETTLE HOLES (ID: 27583)

15:30 **Pereira, L. S.**; Tencatt, L. C.; Agostinho, A. A.: CANNIBALISM IS NOT A COMMON BEHAVIOR AMONG FRESHWATER FISHES (ID: 25667)

15:45 **Bartels, P.**; Öhlund, G.; Hudson, A. G.; Englund, G.: EARLY DIVERSIFICATION PROCESSES AFFECT ECOSYSTEM FUNCTIONING (ID: 27516)

* REPRESENTS INVITED PRESENTATIONS

WEDNESDAY POSTERS

003 PEOPLE POWER: THE ROLE OF CITIZEN SCIENTISTS IN AQUATIC SCIENCE - GLOBAL OPPORTUNITIES AND PERSPECTIVES

Chair(s): Steven Loiselle, loiselle@unisi.it
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Davi Gasparini Fernandes Cunha, davig@sc.usp.br
Yuchao Zhang, yczhang@niglas.ac.cn

Location: Poster and Exhibit Area (Floor 1)

33 **Prat, N.**; Rieradevall, M.; Fortuño, P.: RIU.NET, AN APP TO APPROACH THE CITIZENS TO THE RIVERS (ID: 26754)

34 **Friedrichs, A.**; Busch, J. A.; John, C.; Zielinski, O.: MEASURING FLUORESCENCE BY MEANS OF SMARTPHONES WITH THE NEW CITCLOPS-APPLICATION (ID: 27329)

36 **Bardají, R.**; Simon, C.; Piera, J.: THE GREAT POTENTIAL OF KDUINO, A CITIZEN SCIENCE INSTRUMENT (ID: 26557)

37 **Schnetzer, J.**; Kopf, A.; Kottmann, R.; Bicak, M.; Kostadinov, I.; Glöckner, F. O.: MYOSD – THE CITIZEN SCIENCE PROJECT FOR THE OCEAN SAMPLING DAY (ID: 26113)

005 PROTIST-OMICS: A MULTIDISCIPLINARY EXPLORATION OF THE AQUATIC MICROEUKARYOTIC WORLD

Chair(s): Ramiro Logares, ramiro.logares@gmail.com
Colomban de Vargas, vargas@sb-roscoff.fr
Ramon Massana, ramonm@icm.csic.es

Location: Poster and Exhibit Area (Floor 1)

40 **Vader, A.**; Jakobsen, K. S.; Gabrielsen, T. M.: FUNCTION AND DIVERSITY OF A MARINE PROTIST SUMMER COMMUNITY FROM A HIGH-ARCTIC FJORD. (ID: 26728)

41 **Marquardt, M.**; Vader, A.; Gabrielsen, T. M.: SEASONALITY AND DIVERSITY OF ARCTIC PELAGIC PROTIST COMMUNITIES IN ADVENTFJORDEN (WEST SPITSBERGEN) (ID: 26609)

42 **Felip, M.**; Triadó-Margarit, X.; Casamayor, E. O.; Gasol, J. M.; Catalan, J.: PROTIST DIVERSITY ASSESSMENT: COMPARING MICROSCOPY, CYTOMETRY AND MOLECULAR APPROACHES (ID: 26399)

43 **Nuy, J. K.**; Boenigk, J.: MICROBIAL COMMUNITIES UNDER INVESTIGATION – UNDERSTANDING THE BIASES OF DEEP SEQUENCING DATA (ID: 25833)

44 **Fujiki, T.**; Takagi, H.; Kimoto, K.; Kurasawa, A.; Yuasa, T.; Mino, Y.: ASSESSMENT OF ALGAL PHOTOSYNTHESIS IN PLANKTIC FORAMINIFERS BY FAST REPETITION RATE FLUOROMETRY (ID: 25769)

45 **Haraldsen, A. B.**; Bjorbækmo, M. M.; Mangot, J. F.; Fuss, J.; Shalchian-Tabrizi, K.; Hansen, H.; Bass, D.; Klaveness, D.: PROTIST DIVERSITY IN A MARINE AND LACUSTRINE SYSTEM: PATTERNS ACROSS A SALINTY GRADIENT (ID: 26945)

006 ECOLOGICAL IMPACTS OF DROUGHTS ON FRESHWATER ECOSYSTEMS

Chair(s): Jose Luiz Attayde, attayde@cb.ufrn.br
Erik Jeppesen, ej@dmu.dk
Meryem Beklioglu, meryem@metu.edu.tr

Location: Poster and Exhibit Area (Floor 1)

47 Vasconcelos, J.; Train, S.; **Barbosa, J.**: REGIME SHIFTS AND STABILITY OF AQUATIC COMMUNITIES IN RESERVOIRS OF SEMIARID REGION: ALTERNATIVE STABLE STATE? (ID: 26544)

48 Crispim, M. C.; **Vieira, D. M.**; Vieira, D. M.: ZOOPLANKTON COMMUNITIES IN A BRAZILIAN SEMIARID DAM: DRY PERIODS BEFORE AND AFTER PISCIVOROUS FISH INTRODUCTION (ID: 27608)

007 BIOLOGICAL CONNECTIVITY AND ITS IMPORTANCE WITHIN THE CONTEXT OF GLOBAL CHANGE

Chair(s): Guillem Chust, gchust@azti.es
Xabier Irigoien, Xabier.Irigoyen@kaust.edu.sa
Naiara Rodriguez-Ezpeleta, nrodriguez@azti.es

Location: Poster and Exhibit Area (Floor 1)

49 **Redondo-Hasselerharm, P. E.**; Cabrerizo, M. J.; Carrillo, P.; Helbling, E. W.; Villafañe, V. E.; Villar-Argaiz, M.; Medina-Sánchez, J. M.: BACTERIOPLANKTON RESPONSES TO VERTICAL MIXING, ULTRAVIOLET RADIATION, NUTRIENTS AND CO2 ALONG AN OPTICAL GRADIENT IN MEDITERRANEAN LAKES (ID: 26941)

50 **Sutthacheep, M.**; Kazuhiko, S.; Mitarai, S.; Yeemin, T.; Nakajima, Y.; Thummasan, M.; Putthayakool, J.: GENETIC CONNECTIVITY IN SCLERACTINIAN CORALS IN THE GULF OF THAILAND (ID: 26112)

51 **Blanco Bercial, L.**; Bucklin, A.: THE OTHER SIDE OF THE COIN FOR ZOOPLANKTON POPULATION CONNECTIVITY: MEASURING THE FLOW (ID: 26149)

008 THE GLOBAL OCEAN ECOSYSTEM: PATTERNS, DRIVERS AND CHANGE

Chair(s): Carlos M. Duarte, c.duarte@csic.es
Susana Agusti, sagustii@imedea.uib-csic.es
Xose Anton Alvarez-Salgado, xsalgado@iim.csic.es

Location: Poster and Exhibit Area (Floor 1)

52 **Moreno-Ostos, E.**; Blanco, J. M.; Agusti, S.; Lubian, L.; Rodriguez, V.; Llabres, M.; Palomino-Torres, R. L.; Rodriguez, J.: RELATION BETWEEN PHYTOPLANKTON SIZE-SPECTRUM MODEL PARAMETERS AND TOTAL BIOMASS IN THE OLIGOTROPHIC ATLANTIC OCEAN. RESULTS FROM THE MALASPINA EXPEDITION (ID: 26204)

53 Azua, I.; Abad, N.; Ayo, B.; Baña, Z.; Unanue, M.; Garcia-Zarandona, I.; Sala, M. M.; Moran, X. A.; Gasol, J. M.; **Iriberri, J.**: EXTRACELLULAR ENZYMATIC ACTIVITY (EEA) IN THE WATER COLUMN OF THE GLOBAL OCEAN (ID: 26954)

54 **Yeemin, T.**; Sangmanee, K.; Klinthong, W.; Samsuvan, W.; Sutthacheep, M.: ABUNDANCE OF MACROALGAE ON CORAL COMMUNITIES IN THAI WATERS AFTER A CORAL BLEACHING EVENT (ID: 26086)

55 **Iuculano, F.**; Alvarez Salgado , X. A.; Sobrino, C.; Duarte , C. M.; Agustí, S.: CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) IN THE EPIPELAGIC GLOBAL OCEAN (ID: 26345)

56 Osma, N.; Fernández-Urruzola, I.; Maldonado, F.; Packard, T. T.; **Gómez, M.**: RESPIRATORY ENZYME KINETICS AND PYRIDINE NUCLEOTIDES IN OCEANIC ZOOPLANKTON (ID: 26884)

57 **Jiménez-Gómez, F.**; Bartual, A.; Agustí, S.; Morillo-García, S.; Moreno-Ostos, E.; Lubián, L.; Sendra, M.; Echevarría, F.: PHYTOPLANKTON DISTRIBUTION ALONG A TRANSECT ACROSS THE NORTH ATLANTIC (ID: 25924)

58 **Estrada, M.**; Blasco, D.; Latasa, M.; Rodríguez, F.; Salat, J.: RELATIONSHIPS BETWEEN ENVIRONMENTAL FORCING AND THE VERTICAL DISTRIBUTION OF CHLOROPHYLL IN THE INDIAN AND PACIFIC OCEANS (ID: 26278)

59 **Gallo, N. D.**; Levin, L. A.: DISTRIBUTION, ADAPTATION, AND FEEDING ECOLOGY OF DEMERSAL AND BENTHIC FISHES IN OXYGEN MINIMUM ZONES (ID: 27708)

60 **Garijo, J. C.**; González-Gordillo, J. I.; Echevarría, F.; Bode, A.; Fernández de Puelles, M. L.; Irigoien, X.; Hernández-León, S.: MESOZOOPLANKTON DISTRIBUTION, PRODUCTION AND RESPIRATION IN THE GLOBAL OCEAN (ID: 27412)

62 **Pouch, A.**; Zaborska, A.; Pazdro, K.: THE FATE OF PCBS IN THE ARCTIC MARINE ECOSYSTEM (ID: 26801)

010 AQUACULTURE & THE ENVIRONMENT - SYNERGY OR ANTAGONISM?

Chair(s): Dror Angel, adror@research.haifa.ac.il
Peter Krost, peter.krost@web.de

Location: Poster and Exhibit Area (Floor 1)

67 **Sadeghi-Nassaj, S. M.**; Reche, I.: NUTRIENT AND PARTICULATE ORGANIC MATTER DYNAMICS IN INTEGRATED MULTI-TROPHIC AQUACULTURE TANKS WITH SEA CUCUMBERS AND ANEMONES (ID: 27011)

68 **Jones, T. A.**; Arellano, S.; Casper, N.: EFFECTS OF OCEAN ACIDIFICATION ON THE EMBRYONIC DEVELOPMENT OF DUNGENESS CRABS (ID: 25735)

69 **Garcia de Souza, J. R.**; Solimano, P. J.; Maiztegui, T.; Baigún, C. R.; Claps, M. C.; Colautti, D. C.: ECOSYSTEM APPROACH OF PEJERREY (ODONTESTHES BONARIENSIS) CAGE CULTURE IN PAMPEAN SHALLOW LAKES (ARGENTINA) (ID: 26848)

011 THE IMPACT OF GLOBAL CHANGE ON TOXIC PHYTOPLANKTON

Chair(s): Val H. Smith, vsmith@ku.edu
Dedmer B. Van de Waal, d.vandewaal@nioo.knaw.nl
Hans W. Paerl, hans_paerl@unc.edu

Location: Poster and Exhibit Area (Floor 1)

70 **Berdalet, E.**; Vila, M.; Abós-Herràndiz, R.; Àlvarez, J.; Estrada, M.: TEMPORAL ASSOCIATION OF OSTREOPSIS CF. OVATA BLOOMS AND HUMAN HEALTH DISORDERS: RESULTS OF SIMULTANEOUS EPIDEMIOLOGY AND ECOLOGICAL STUDIES (ID: 25746)

71 **Guillebault, D.**; Villa, E.; Orozco-Holguin, J.; Manes, C. L.; Medlin, L.: TOWARDS REAL-TIME IN-SITU MONITORING OF TOXIC ALGAE (ID: 27751)

72 Migliaccio, O.; Castellano, I.; Di Cioccio, D.; Cirino, P.; Romano , G.; Zingone, A.; **Palumbo, A.**: *OSTREOPSIS* CF. *OVATA* BLOOMS IN THE GULF OF NAPLES AND THEIR EFFECTS ON SEA URCHIN: INVOLVEMENT OF NITRIC OXIDE (ID: 27214)

013 ASSESSING MARINE ECOSYSTEMS HEALTH IN AN INTEGRATIVE WAY

Chair(s): Angel Borja, aborja@azti.es
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76 **Moraitis, M.**; Dimitriou, P. D.; Geropoulos, A.; Kagiorgi, M.; Kalogeropoulou, V.; Papageorgiou, N.; Tsikopoulou, I.; Karakassis, I.: HIGH PRODUCTIVITY AREAS IN AN OLIGOTROPHIC ENVIRONMENT: IS THERE ROOM FOR HYPOXIA IN THE AEGEAN SEA? (ID: 26944)

77 **Jayasinghe, R. P.**; Amarasinghe, U. S.; Newton, A.: EVALUATION OF THE STATUS OF SELECTED MARINE FISHERIES IN THE EU REGION BASED ON LIFE HISTORY OF FISH (ID: 26574)

78 **Moreno-Marín, F.**; Villazán, B.; Santandreu, M.; Lopez-Pulido, P.; Vergara, J. J.; Pérez-Lloréns, J. L.; Pedersen, M. F.; Brun, F. G.: SEAGRASS DIVERSITY ENHANCES THEIR RESISTANCE AGAINST HIGH AMMONIUM DOSES (ID: 26732)

015 LONG-TERM STUDIES OF ENVIRONMENTAL STRESSORS ON LAKE ECOSYSTEMS: COMMON IMPACTS AND DYNAMICS

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86 **Ramos-Rodríguez, E.**; Conde-Porcuna, J. M.; Jiménez, L.; Moreno, E. J.; Pérez- Martínez , C.: EXPLORING PLANKTON TROPHIC MISMATCHING IN AN ALPINE LAKE DURING THE ICE-FREE SEASON (ID: 26671)

87 **Huber, M. P.**; Quiroga, M. V.; Kranewitter, V.; Torremorell, A.; Lagomarsino, L.; Llames, M. E.; Unrein, F.: FLOW CYTOMETRY PATTERNS OF AUTOTROPHIC PICOPLANKTON FROM EUTROPHIC SHALLOW LAKES (ID: 27004)

88 **Aguilar, C.**; Cuhel, R. L.: DECADAL TIME SERIES OF DEEP CHLOROPHYLL-BIOMASS MAXIMA IN AN OLIGOTROPHIC SYSTEM (ID: 25970)

89 **Futter, M. N.**; Valinia, S.; Köhler, S. J.; Löfgren, S.; Fölster, J.: LONG-TERM EFFECTS OF CLIMATE CHANGE, DECLINING ACIDIC DEPOSITION AND MORE INTENSIVE FORESTRY ON WATER QUALITY OF ACID SENSITIVE SWEDISH LAKES (ID: 26125)

90 **Yankova, Y.**; Posch, T.; Pernthaler, J.: WARMING INDUCED CHANGES OF METALIMNION STRUCTURES CAN FAVOUR THE HARMFUL FILAMENTOUS CYANOBACTERIUM *PLANKTOTHRIX RUBESCENS* (ID: 25410)

91 **Vogt, R. J.**; Bourbonniere, R. A.; Watson, S. B.; Koops, M. A.; Frost, P. C.; Xenopoulos, M. A.: SPATIAL AND TEMPORAL VARIABILITY IN CARBON FLUX ALONG A PRODUCTIVTY GRADIENT IN LAKE ERIE (ID: 27010)

92 **Iyer, S. K.**; Kaster, J. L.: SUITABILITY OF GREEN BAY BENTHIC CONDITIONS AT LOCATIONS INSIDE AND OUTSIDE AREAS OF CONCERN TO HEXAGENIA LIMBATA MAYFLIES (ID: 25581)

016 METACOMMUNITIES

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93 **Spatharis, S.**; Lambrinou, V.; Danielidis, D.: DRIVERS OF PHYTOPLANKTON BETA-DIVERSITY ACROSS A REGIONAL HETEROGENEOUS SEASCAPE (ID: 25647)

* REPRESENTS INVITED PRESENTATIONS

94 **Engel, F. G.**; Mathhiessen, B.; Eriksson, B. K.: RESPONSE OF MICROPHYTOBENTHOS TO EXTREME CLIMATE EVENTS (ID: 26093)

95 **Tadiri, C. P.**; Scott, M. E.; Fussmann, G. F.: SEX AND CONDITION OF THE HOST DETERMINE HOST-PARASITE DYNAMICS IN AN EXPERIMENTAL METAPOPULATION (ID: 25948)

96 **Joglar, V.**; Batanero, G. L.; Martin-Platero , A. M.; Green, A. J.; Reche, I.: AQUATIC BACTERIA AND ARCHAEA DISPERSED BY FLAMINGOS (ID: 27742)

019 LAKES IN THE CRYOSPHERE: FROM POLE TO POLE

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102 **Payne, C. M.**: CHARACTERIZING THE INFLUENCE OF SEDIMENT PLUMES ON PRIMARY PRODUCTIVITY IN KONGSFJORDEN, SVALBARD (ID: 27749)

103 **Gutiérrez, M. H.**; Galand, P. E.; Riquelme, P.; Pantoja, S.: GLACIER RETREAT IMPACTS THE COMPOSITION OF MICROORGANISMS AND ORGANIC BIOMARKERS IN A PATAGONIAN FJORD (ID: 27335)

104 **Tucker, W. C.**; Raymond, P. A.: COMPARING DIC CYCLING IN TWO SOUTHEASTERN ALASKA ESTUARIES WITH ^{13}C AND ^{14}C ISOTOPES (ID: 27515)

105 **Mariash, H. L.**; Smith, P. A.: EFFECTS OF OVERABUNDANT GEESE AND ARCTIC FRESHWATER ECOSYSTEMS (ID: 26782)

106 **Rogora, M.**; Kamburska, L.; Tartari, G. A.; Marchetto, A.; Mosello, R.; Mercalli, L.; Cat Berro, D.; Bertolotto, P. L.: THE EFFECTS OF CLIMATE CHANGE ON ALPINE AND SUBALPINE LAKE CHEMISTRY: EVIDENCE FROM LONG-TERM STUDIES IN THE ITALIAN ALPS (ID: 26516)

107 **Skorospekhova, T.**; Fedorova, I.; Shumskaia, N.; Chetverova, A.: HYDROLOGICAL AND HYDROCHEMICAL FEATURES OF FILDES PENINSULA LAKES (KING GEORGE ISL. ANTARCTICA) FORMATION (ID: 26591)

108 **Nedbalová, L.**; Kavan, J.; Elster, J.: CURRENT DISTRIBUTION OF THE ANTARCTIC FAIRY SHRIMP (BRANCHINECTA GAINI) IN LAKES AT THE JAMES ROSS ISLAND ARCHIPELAGO, NORTHEASTERN ANTARCTIC PENINSULA (ID: 26679)

109 **Özkundakci, D.**; Gsell, A. S.; Hintze, T.; Täuscher, H.; Adrian, R.: WINTER SEVERITY DETERMINES FUNCTIONAL TRAIT COMPOSITION OF PHYTOPLANKTON IN SEASONALLY ICE COVERED LAKES (ID: 26075)

022 THE BIOGEOCHEMISTRY OF DISSOLVED ORGANIC MATTER (DOM)

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113 **Gonçalves-Araujo, R.**; Stedmon, C. A.; Kraberg, A.; Bracher, A.: DYNAMICS OF DOM IN THE LENA DELTA REGION (SIBERIA) REVEALED BY PARALLEL FACTORIAL ANALYSIS (ID: 27588)

114 **Burpee, B. T.**; Northington, R. M.; Simon, K. S.; Saros, J. E.: WITHIN-LAKE POTENTIAL FOR MICROBIAL DEGRADATION OF DOC IN ARCTIC LAKES OF SOUTHWESTERN GREENLAND (ID: 27312)

115 **Galletti, Y.**; Gonnelli, M.; Vestri, S.; Santinelli, C.: CDOM DYNAMICS IN OPEN WATERS OF THE MEDITERRANEAN SEA (ID: 27703)

116 **Masuda, Y.**; Taguchi, S.: PHOTO-DEGRADATION OF THE ALGAL CHROMOPHORIC DISSOLVED ORGANIC MATTER DERIVED FROM MARINE DIATOM (ID: 26740)

117 **Engel, A.**; Borchard, C.: EXTRACELLULAR RELEASE OF PRIMARY PRODUCTION BY EMILIANIA HUXLEYI: INSIGHTS TO STRUCTURE AND FUNCTION OF DISSOLVED COMBINED CARBOHYDRATES (ID: 25772)

118 **Morling, K.**; Tittel, J.: MICROBIAL DEGRADATION OF TERRESTRIAL DOC – EVIDENCE FOR AQUATIC PRIMING EFFECT (ID: 25641)

119 **Maydanov, A.**; Timko, S.; Luek, J.; Conte, M.; Gonsior, M.: TIME-RESOLVED PHOTOCHEMISTRY OF MARINE FLUORESCENT DISSOLVED ORGANIC MATTER (ID: 25625)

120 **Tittel, J.**; Müller, C.; Schultze, M.; Knoeller, K.: CONTEMPORARY AND ANCIENT CARBON MOBILIZED IN WATERSHEDS OF DIFFERENT LAND USE AND TOPOGRAPHY (ID: 26099)

121 **Halim, K. M.**; Liu, S.; Liu, Z.: EXAMINING CAPABILITIES OF TWO SINGLE BACTERIAL STRAINS ON PEPTIDE DEGRADATION (ID: 26447)

122 **Yoon, B.**; Raymond, P.: IN-SITU MEASUREMENT OF DISSOLVED ORGANIC MATTER REMOVAL – LEAF LEACHATE INJECTION EXPERIMENT IN A FIRST ORDER STREAM (ID: 27244)

123 **Jennings, M. K.**; Hansell, D. A.: ENHANCEMENT OF DEEP EQUATORIAL PACIFIC DOC: ALLOCHTHONOUS OR AUTOCHTHONOUS SOURCE? (ID: 27478)

124 **Li, Y.**; Harir, M.; Lucio, M.; Kanawati, B.; Hertkorn, N.; Flerus, R.; Schmitt-Kopplin, P.: PROPOSED GUIDELINES FOR SOLID PHASE EXTRACTION (SPE) OF SUWANNEE RIVER DISSOLVED ORGANIC MATTER (SR DOM) (ID: 26373)

023 BIOGEOCHEMISTRY AND ECOLOGY OF AFRICAN INLAND WATERS

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125 **Darchambeau, F.**; Muvundja Amisi, F.; Morana, C.; Leporcq, B.; Rugema , E.; Descy, J.; Bouillon, S.: FATE AND DOWNWARD FLUXES OF ORGANIC MATTER AND PHYTOPLANKTON PIGMENTS IN A DEEP TROPICAL LAKE (ID: 26290)

126 **Darchambeau, F.**; Descy, J. P.; Leporcq, B.; Stoyneva, M. P.; Bouillon, S.; Borges, A. V.: PLANKTON DIVERSITY AND METABOLISM IN THE CONGO RIVER DURING HIGH WATERS (DECEMBER 2013) AND LOW WATERS (JUNE 2014) (ID: 26104)

127 **Kelemen, Z.**; Gillikin, D. P.; Havel, H.; Graniero, L.; Yambélé, A.; Bouillon, S.: STABLE ISOTOPES IN FRESHWATER BIVALVE SHELLS: RECONSTRUCTING THE OUBANGUI RIVER (CONGO BASIN) DISCHARGE USING RECENT AND ARCHIVED MUSEUM SPECIMENS (ID: 26082)

128 **Bila-Isia, I.**; Zanga, A.; Mputu, A.; Willen, E.; Wilander, A.; Bishop, K.: AQUATIC ASSESSMENT OF THE LAKE TUMBA LANDSCAPE, DR CONGO (ID: 27627)

WEDNESDAY

035 FROM PAST TO PRESENT: OCEAN PRODUCTIVITY AND BIOGEOCHEMISTRY

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173 **Català, A.**; Cacho, I.; Frigola, J.; Canals, M.: HOLOCENE CLIMATE VARIABILITY IN THE WESTERN ALBORAN SEA (ID: 27211)

174 **Gallego-Torres, D.**; de Lange, G. J.; Martinez-Ruiz, F.; Nieto-Moreno, V.; Rodrigo-Gamiz, M.; Ortega-Huertas, M.: ORGANIC MATTER DEPOSITION IN THE ALBORAN SEA BASIN AS RECORD OF PALEOCEANOGRAPHIC CONDITIONS DURING THE LAST 15KYR (ID: 27353)

175 **Gallego, M. A.**; Chikamoto, M.; Hauri, C.; Timmermann, A.: HOTSPOTS OF NATURAL VARIABILITY IN UPPER OCEAN PH AND CARBONATE ION CONCENTRATION (ID: 27746)

176 **Cacho, I.**; Pena, L.; Calvo, E.; Pelejero, C.: LAST DEGLACIATION CHANGES IN THE EQUATORIAL UPWELLING SYSTEM (ID: 27482)

177 **Jacobson, Y.**; Yam, R.; Chemello, R.; Shemesh, A.: VERMETID REEFS AS MULTIPLE-PROXY ARCHIVE FOR NATURAL AND ANTHROPOGENIC PROCESSES IN THE MEDITERRANEAN SEA (ID: 26950)

178 **Calvo, E.**; Quiros, L.; Bostock, H.; Neil, H.; Pelejero, C.: RECONSTRUCTION OF PAST SHIFTS IN THE POSITION OF THE SUBTROPICAL FRONT SOUTH OF NEW ZEALAND SINCE THE LAST GLACIAL PERIOD (ID: 25990)

179 **Dorador, J.**; Rodríguez-Tovar, F. J.: PALEOCLIMATIC CHANGES AFFECTING DEEP-SEA ENVIRONMENT IN THE WESTERN IBERIAN MARGIN: THE ICHNOLOGICAL RECORD AS A PROXY FOR THE MEDITERRANEAN RESEARCH (ID: 25686)

180 **Morcillo-Montalbá, L.**; Martínez-Ruiz, F.; Ortega-Huertas, m.: WESTERNMOST MEDITERRANEAN PALEOCLIMATE EVOLUTION OVER THE LAST 30 KYR: A HIGH-RESOLUTION GEOCHEMICAL RECORD OF THE LAST DEGLACIATION. (ID: 26593)

182 **Martinez-Ruiz, F.**; Gallego-Torres, D.; Rodrigo-Gámiz, M.; Nieto-Moreno, V.; Jiménez-Espejo, F. J.; Paytan, A.; Ortega-Huertas, M.: THE MEDITERRANEAN BARIUM RECORD: LINKING PRODUCTIVITY FLUCTUATIONS AND CLIMATE VARIABILITY OVER THE LAST 20 KYR (ID: 26358)

183 **Jakowczyk, M.**; Stramska, M.: VARIABILITY OF OCEAN COLOR IN COASTAL WATERS OF THE BARENTS SEA (ID: 26188)

036 HUMAN AND JELLYFISH INTERACTIONS

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184 **Hoehn, D.**; Lucas, C.; Thatje, S.: RESPIRATORY RESPONSE OF *AURELIA AURITA* POLYPS TO TEMPERATURE ACROSS ITS THERMAL LIMITS (ID: 27001)

185 **Alonso, C.**; Bordehore, C.; Sánzhez-Fernández, L.; Canepa, A. J.; Acevedo, M.; Nogué, S.; Fuentes, V. L.: JELLYFISH PREVAIL AMONG LIFEGUARD ASSISTANCES AT THE SPANISH MEDITERRANEAN BEACHES. PROPOSALS FOR IMPROVING RISK MANAGEMENT. (ID: 26549)

186 **Isinibilir, M.**: DISTRIBUTION OF CHRYSAORA HYSOSCELLA (LINNAEUS, 1767) IN THE MARMARA SEA (ID: 27160)

040 HIGH THROUGHPUT MOLECULAR TOOLS IN AQUATIC ECOLOGY

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Location: Poster and Exhibit Area (Floor 1)

196 **Gibson, D. M.**; Green, S.; Leandre, M.; Walters, T.; Elliott, D. T.: DOLIOLID BLOOMS: (ID: 27614)

197 **Lekang, K.**; Hadziavdic, K.; Jonassen, I.; Thompson, E. M.; Sandnes Skaar, K.; Lanzén, A.; Troedsson, C.: DEVELOPMENT AND EVALUATION OF MICROARRAYS TO INVESTIGATE EUKARYOTIC DIVERSITY IN MARINE SEDIMENTS (ID: 26336)

198 **Monchamp, M.**; Pomati, F.; Spaak, P.: INVESTIGATING THE LONG-TERM CYANOBACTERIAL RESPONSE TO EUTROPHICATION AND RE-OLIGOTROPHICATION USING GENETIC AND MONITORING DATA (ID: 26008)

199 **Hadziavdic, K.**; Lekang, K.; Lanzen, A.; Jonassen, I.; Thompson, E.; Troedsson, C.: HIGH THROUGHPUT SEQUENCING TECHNOLOGY FOR ENVIRONMENTAL MONITORING OF EUKARYOTIC BIODIVERSITY (ID: 25923)

200 **Parada, A. E.**; Needham, D. M.; Ahlgren, N. A.; Fuhrman, J. A.: TIME-SERIES AND SURFACE TO SEAFLOOR ANALYSIS OF MARINE ARCHAEAL DIVERSITY THROUGH 16S RDNA AND METAGENOMIC SEQUENCING (ID: 25902)

201 **Frischer, M. E.**; Walters, T. L.; Bulski, K. E.; Walker, A. N.; Mathes, T.; Geer, P.; Lee, R. F.: SHRIMP BLACK GILL IN THE COASTAL SOUTHEAST USA, CAUSES AND CONSEQUENCES: INTEGRATING HIGH THROUGHPUT SEQUENCING DATA WITH OTHER LARGE DATA-SETS (ID: 25873)

202 **Israelsson, S.**; Berggren, H.; Lindh, M. V.; Lundin, D.; Legrand, C.; Forsman, A.; Pinhassi, J.: BACTERIAL COMMUNITIES IN FISH ARE SPECIFIC TO DIFFERENT FISH SPECIES AND DIFFER FROM THE BACTERIAL COMMUNITY COMPOSITION OF THE SURROUNDING SEAWATER (ID: 26017)

056 AQUATIC MICROBES IN A DROP OF WATER: FROM SINGLE CELLS TO COMMUNITY INTERACTIONS

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250 **Parada, C.**; Bravo, Z.; Orruño, M.; Arana, I.: EFFECTS OF TEMPERATURE AND PREDATION ON PERMANENCE OF *VIBRIO HARVEYI* IN SEAWATER (ID: 26636)

251 **Dadon-Pilosof, A.**; Conley, K.; Lombard, F.; Sutherland, K.; Steindler, L.; Tikochinski, Y.; Richter, M.; Gilboa, M.; Genin, A.; Yahel, G.: NON-PHOTOSYNTHETIC BACTERIA ELUDE APPENDICULARIA FILTRATION IN SITU (ID: 25598)

252 **Wyatt, K. H.**; Rober, A. R.; Turetsky, M. R.: ALGAE PROMOTE HETEROTROPHIC METABOLISM THROUGH THE RELEASE OF CARBON SUBSIDIES IN A BOREAL PEATLAND (ID: 25440)

253 Jobard, M.; Marie, D.; Vaulot, D.; Domaizon, I.; SIME-NGANDO , T.; Debroas, D.; **Lepere, C.**: FUNCTIONAL ROLE OF OVERLOOKED TINY PARASITES IN LACUSTRINE ECOSYSTEMS: A SINGLE CELL APPROACH (ID: 25445)

254 **Bertoni, R.**; Hernández-Avilés, S.; Salcher, M. M.; Callieri, C.: *THAUMARCHAEOTA* IN THE WATER COLUMN OF SIX DEEP PREALPINE LAKES (ID: 25800)

255 **Huang, T.**; Ostrowski, M.; Mazard, S.; Jin, D.; Pauslen, I.: METAGENOMICS AND SINGLE CELL ANALYSES OF MARINE PHOTOSYNTHETIC PICOEUKARYOTES (ID: 25664)

068 EVOLUTIONARY EFFECTS OF OCEAN WARMING AND ACIDIFICATION

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288 **Harney, E.**; Nunes, F.: RESPONSES OF MARINE MOLLUSCS TO CHANGING TEMPERATURE AND PH DURING EARLY DEVELOPMENT (ID: 26924)

289 **Kumar, A.**; Patti, F. P.; Castellano, I.; Delledonne, M.; Buia, M. C.; Palumbo, A.: ADAPTATION*VERSUS* ACCLIMATION IN *SARGASSUM VULGARE*: A KEY STUDY IN ACIDIFIED WATER (ID: 26531)

290 **Chiarore, A.**; Buia, M. C.; Patti, F. P.: GENETIC VARIABILITY OF *SARGASSUM VULGARE* POPULATIONS OFF ISCHIA ISLAND: THE CASE OF THE ACIDIFIED AREA "CASTELLO ARAGONESE" (ID: 27113)

080 DIAPAUSE STRATEGIES IN AQUATIC ORGANISMS: ECOLOGICAL AND EVOLUTIONARY CONSEQUENCES

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327 **Paes, T. A.**; Rietzler, A. C.; Maia-Barbosa, P. M.: TECHNIQUES FOR THE ISOLATION OF RESTING EGGS CONTAINED WITHIN EPHIPPIUM OF DAPHNIA (ID: 26878)

328 **Veiga-Neto, J.**; Moreno-Linares, E. J.; Pérez-Martínez, C.; Conde-Porcuna, J. M.: GENETIC VARIABILITY IN THE SPECIES COMPLEX OF *DAPHNIA PULEX-PULICARIA* FROM SIERRA NEVADA LAKES (SPAIN) (ID: 26753)

329 Paes, T. A.; Rietzler, A. C.; **BARBOSA, P. M.**: HIGH TEMPERATURES AND LACK OF LIGHT AFFECT THE HATCHING RESTING EGGS OF DAPHNIA IN THE TROPICS (ID: 27350)

082 AQUATIC MICROBIAL COMMUNITIES ACROSS GEOGRAPHIC AND TROPHIC GRADIENTS

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332 **Schiaffino, M. R.**; Lara, E.; Balagué, V.; Izaguirre, I.: INFLUENCE OF GEOGRAPHIC DISTANCE AND LOCAL ENVIRONMENTAL FACTORS IN SHAPING SMALL EUKARYOTE COMMUNITY STRUCTURE ALONG A LATITUDINAL GRADIENT OF LAKES (ID: 25733)

333 **Pajunen, V.**; Luoto, M.; Soininen, J.: ARE DIATOM ASSEMBLAGES USEFUL PREDICTORS OF CLIMATE? (ID: 26499)

334 **Gaynus, C.**; Howard, K.; Wallace, S.; Hatton, D.; Henry, C.; Fong , P.: HOW DO BIOTIC COMPONENTS OF SEDIMENT AFFECT TURF ALGAE GROWTH IN MO'OREA FRENCH POLYNESIA? (ID: 26329)

335 **Broman, E.**; Sjöstedt, J.; Pinhassi, J.; Dopson, M.: CHANGES IN BALTIC SEA SEDIMENT OXYGEN CONCENTRATIONS INDUCES CHANGES IN MICROBIAL COMMUNITY STRUCTURES (ID: 26674)

336 **Van Colen, W.**; Mosquera, P.; Vanderstukken, M.; Goiris, K.; Carrasco, M.; Decaestecker, E.; Alonso, M.; Tamariz, L.; Muylaert, K.: LIMNOLOGY AND HUMAN IMPACTS IN TROPICAL ALPINE LAKES IN THE ANDEAN PÁRAMO (CAJAS NATIONAL PARK, ECUADOR) (ID: 26912)

337 **Negreiros, O. P.**; Lansac-Tôha, F. M.; Meira, B. R.; Buosi, P. B.; Segóvia, B. T.; Cabral, A. F.; Machado Velho, L. F.: CHANGES IN THE PLANKTONIC CILIATES COMMUNITY ALONG A TROPHIC GRADIENT IN A GREAT TROPICAL RIVER (ID: 27617)

100 MICROBIAL BIOGEOCHEMISTRY OF TIDAL FLATS AND SHALLOW SEDIMENTS: PHYSICAL FORCING BY TIDES AND PHOTOPERIOD

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399 **Papaspyrou, S.**; García-Robledo , E.; Bohorquez , J.; Jiménez-Arias , J. L.; Calenti, D.; Corzo, A.: IS THE SEDIMENT AN INEXHAUSTIBLE NUTRIENT SUPPLY FOR BENTHIC MICROALGAE? (ID: 26003)

400 **Beraldo Bittar, T.**; Robertson, C. Y.; Thompson, M. E.; Tait, Z. S.; Savidge, W. B.; Edwards, C. R.; Stubbins, A. P.; Brandes, J. A.: TIDAL, DIURNAL AND SEASONAL DYNAMICS OF AUTOTROPHIC AND HETEROTROPHIC MICROBIAL COMMUNITIES IN A TIDAL SALTMARSH-CREEK ECOSYSTEM. (ID: 26350)

401 **Bohórquez, J.**; McGenity, T. J.; Sokratis, P.; García-Robledo, E.; Corzo, A.; Underwood, G., J. C.: HETEROTROPHIC BACTERIAL COMMUNITY CHANGES IN RESPONSE TO DIATOM-DERIVED CARBOHYDRATES FROM INTERTIDAL SEDIMENTS (ID: 26059)

402 **Corzo, A.**; Crespo, J. M.; Bohórquez, J.; García-Robledo, E.; Soria-Píriz, S.; Gómez, E.; Papaspyrou, S.: CHANGES IN OXYGEN CONCENTRATION AND NET METABOLISM AT THE SEDIMENT-WATER INTERFACE DURING TIDAL TRANSITIONS (ID: 26000)

108 OCEAN ACIDIFICATION AND LOWER TROPHIC LEVELS: IDENTIFYING THE KNOWLEDGE GAPS - POSTER SESSION

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415 **Kim, D.**: ARAGONITE UNDERSATURATION IN JINHAE BAY, SOUTH KOREA (ID: 25662)

416 **Wells, M. L.**; Trick, C. G.; Trainer, V. L.; Ikeda, C. E.; Schellenbach, A.; Thornton, K.; Bill, B. D.: THE EFFECT OF OCEAN ACIDIFICATION ON THE AVAILABILITY OF AMBIENT FE IN UPWELLING WATERS (ID: 27453)

417 **de la Broise, D.**; Sutton, J. N.; Thuroczy, C. E.; Boye, M.: A NEW BIOREACTOR DESIGN FOR CULTIVATING MARINE PHOTOTROPHS UNDER CO2-DRIVEN CONSTANT PH AND TRACE METAL CLEAN CONDITIONS (ID: 26707)

116 IMPACT OF MICROBIAL BIODIVERSITY ON AQUATIC ECOSYSTEM FUNCTIONING AND BIOGEOCHEMISTRY

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Location: Poster Area (Floor 2)

444 **Kopprio, G. A.**; Okuno, K.; Streitenberger , M. E.; Baldini, M.; Biancalana, F.; Yamasaki, S.; Lara, R. J.: VIBRIO SPP. IN TWO ESTUARIES OF THE ARGENTINIAN PATAGONIA: HUMAN HEALTH RISKS AND IMPLICATION ON CLIMATE CHANGE (ID: 25558)

118 LIFE AT SMALL SCALE: MICROSCALE INSIGHTS INTO AQUATIC SYSTEMS

Chair(s): Mimi Koehl, cnidaria@berkeley.edu
Thomas Kiorboe, tk@aqua.dtu.dk>
Roman Stocker, romans@MIT.EDU
Stuart Humphries, S.Humphries@hull.ac.uk

Location: Poster Area (Floor 2)

445 **Orchard, M. J.**; Humphries , S.; Schuech, R.; Menden-Deuer, S.: THE INFLUENCE OF VISCOSITY ON PROTISTAN SWIMMING AND SENSORY ABILITIES (ID: 26083)

446 **García-Herrera, N.**; Kunzmann, A.; Ferse, S.; Genin, A.: PHYSIOLOGICAL EFFECTS OF THE MUTUALISTIC RELATIONSHIP BETWEEN *DASCYLLUS MARGINATUS* AND *STYLOPHORA PISTILLATA* IN THE NORTHERN RED SEA (ID: 27179)

447 **Romero-Niembro, V. M.**; Mayén-Estrada, R.; Vicencio-Aguilar, M.; Reyes-Santos, M.; González-Palma, C. A.; Medina-Durán, J. H.: REGIONAL AND GLOBAL DISTRIBUTION OF TEN SPECIES OF CILIATES FROM ZUMPANGO LAKE, MEXICO (ID: 26478)

120 KEY PLAYERS IN BENTHIC PROCESSES: MICRO VS. MACRO

Chair(s): Diana Vasquez Cardenas, diana.vasquez@nioz.nl
Francesc Montserrat, francesc.montserrat@nioz.nl

Location: Poster Area (Floor 2)

452 **Middelboe, A. L.**; Møhlenberg, F.; Rasmussen, E. K.; Birkeland, M. J.: PREDICTING IMPACTS OF DREDGING ACTIVITIES ON UNDERWATER LIGHT CLIMATE AND GROWTH OF BENTHIC MACROALGAE (ID: 26191)

453 **Bonaglia, S.**; Nascimento, F.; Bartoli, M.; Klawonn, I.; Brüchert, V.: INTERACTIVE EFFECTS OF MEIOFAUNA AND MACROFAUNA ON NITROGEN CYCLING IN MARINE SEDIMENTS (ID: 27343)

454 **Ziebis, W.**; Dentinger, J.; Wankel, S. D.: DOES BIOTURBATION ACTIVITY ENHANCE NITROUS OXIDE FLUXES FROM BENTHIC ENVIRONMENTS? (ID: 27528)

455 **Mori, F.**; Yamaki, K.; Ueda, R.; Kondo, R.; Umezawa, Y.; Matsuoka, K.; Suzaki, K.; Nakata, H.; Wada, M.: SEASONAL VARIATION IN MICROBIAL COMMUNITY RESPIRATION OF DEAD ZONE SEDIMENTS OF OMURA BAY, JAPAN (ID: 26501)

456 **Herren, C. M.**; Webert, K. C.; Drake, M. D.; Einarsson, A.; Ives, A. R.: MUTUALISM BETWEEN CHIRONOMID LARVAE AND BENTHIC ALGAE AT LAKE MYVATN, ICELAND (ID: 26448)

121 NATURAL AND ANTHROPOGENIC DISTURBANCES ON DEEP-SEA ECOSYSTEMS

Chair(s): Dick van Oevelen, Dick.van.Oevelen@nioz.nl
Andrew Sweetman, Andrew.Sweetman@iris.no

Location: Poster Area (Floor 2)

457 **Juan-Díaz, X.**; Paradis, S.; Masqué, P.; Puig, P.; Gorelli, G.; Company, J. B.: ENHANCED IMPACT OF FISH-TRAWLING IN SEDIMENT ACCUMULATION RATES IN THE DEEP SEA IN THE LAST DECADE: THE CASE OF THE FOIX CANYON, NW MEDITERRANEAN (ID: 26335)

123 MULTI-METHODS CONNECTIVITY ESTIMATES TO IMPROVE MARINE PROTECTION DESIGN

Chair(s): Katell Guizien, guizien@obs-banyuls.fr
Sophie Arnaud-Haond, s-arnaud@univ-montp2.fr

Location: Poster Area (Floor 2)

458 **Barbut, L. M.**; Delerue-Ricard, S.; Vanden Bavière, A.; Maes, G.; Robbens, J.; Volckaert, F. A.; Lacroix, G.: INTEGRATING FIELD DATA TO PARAMETERIZE A LARVAL TRANSPORT MODEL OF SOLE AND IMPROVE KNOWLEDGE ON CONNECTIVITY IN THE NORTH SEA (ID: 25879)

459 **Taymans, M. M.**; Wolter, J.; Thomas, C.; Hanert, E.: TOWARDS THE ESTIMATION OF INTER-REEF CONNECTIVITY OF REEF FISHES POPULATIONS FOR IMPROVING THE DESIGN OF MARINE PROTECTED AREAS NETWORKS (ID: 27089)

460 **Guizien, K.**; Conchon, A.; Carpentier, A.; Acou, A.; Reveillac, E.; Feunteun, E.: COUPLING METAPOPULATION MODELLING AND POPULATION GENETICS TO GUIDE ALOSA FALLAX PROTECTION IN THE GULF OF LIONS (ID: 26958)

126 SCALES OF VARIABILITY IN SOURCES AND SINKS OF METHANE IN LAKES, RESERVOIRS AND RIVERS

Chair(s): Bradford Sherman, csiro.brad@icloud.com
Tonya Delsontro, tdelsontro@gmail.com

Location: Poster Area (Floor 2)

461 **Atkins, M. A.**; Santos, I. R.; Maher, D. T.: GROUNDWATER METHANE IN A POTENTIAL COAL BED METHANE EXTRACTION REGION (ID: 26465)

462 Mello, N. A.; Brighenti, L. S.; Barbosa, F. A.; **Bezerra-Neto, J. F.**: SPATIO-TEMPORAL VARIABILITY OF METHANE EBULLITION FROM A BRAZILIAN URBAN RESERVOIR: THE ROLE OF TEMPERATURE AND SILTATION (ID: 26206)

463 Milucka, J.; Kirf, M.; Lu, L.; Krupke, A.; Lam, P.; Littmann, S.; Kuypers, M. M.; **Schubert, C. J.**: METHANE OXIDATION COUPLED TO OXYGENIC PHOTOSYNTHESIS IN ANOXIC WATERS (ID: 25467)

130 IN SITU STUDIES OF THE IMPACTS OF OCEAN ACIDIFICATION: OBSERVATIONS, CO2 VENTS, AND FOCE EXPERIMENTS

Chair(s): James P. Barry, barry@mbari.org
David Kline, dkline@ucsd.edu
Jean-Pierre Gattuso, gattuso@obs.vlfr.fr

Location: Poster Area (Floor 2)

468 **Wallace, R. B.**; Gobler, C. J.: CONTRASTING PATTERNS OF DIURNAL VARIABILITY IN DO, PH AND PCO_2 AMONG COASTAL HABITATS (ID: 26981)

469 **Tait, K.**; Stahl, H.; Taylor, P.; Watanabe, Y.; Hayashi, M.; Widdicombe, S.: INVESTIGATION OF THE IMPACT OF A CONTROLLED SUB-SEABED RELEASE OF CO2 ON MICROBIAL COMMUNITIES (ID: 27111)

470 **Diaz-Castaneda, V.**; Delille, J.; Gazeau, F.; Cox, E.; Gattuso, J.: EFFECTS OF OCEAN ACIDIFICATION ON THE POLYCHAETES SPIROBRANCHUS TRIQUETER AND SPIRORBIS SPIRORBIS. (ID: 26495)

471 **Chace, P. J.**; Butterfield, D. A.: GEOCHEMICAL IMPACTS OF SHALLOW VOLCANIC GAS VENTS ON CORAL REEFS AT MAUG ISLAND (ID: 27561)

472 **Gambi, M. C.**; Teixidó, N.: NEW VOLCANIC CO₂ VENT SYSTEMS ALONG THE COAST OFF THE ISCHIA ISLAND (ITALY) TO ASSESS THE IMPACTS OF OCEAN ACIDIFICATION (ID: 25856)

473 **Horn, H. G.**; Sander, N.; Algueró-Muñiz, M.; Löder, M.; Boersma, M.; Aberle, N.: EFFECTS OF OCEAN ACIDIFICATION ON NORTH SEA MICROZOOPLANKTON COMMUNITIES (ID: 26333)

131 FRONTIERS IN INVASION ECOLOGY RESEARCH: THEORETICAL FRAMEWORKS, METHODS AND APPLICATIONS

Chair(s): Anthony Ricciardi, tony.ricciardi@mcgill.ca
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Jaimie Dick, j.dick@qub.ac.uk
Belinda Gallardo, belinda@ebd.csic.es
Andy Green, ajgreen@ebd.csic.es

Location: Poster Area (Floor 2)

474 Drolet, D.; DiBacco, C.; Locke, A.; McKenzie, C. H.; McKindsey, C. W.; **Moore, A. M.**; Webb, J. L.; Therriault, T. W.: CMIST: A NEW SCREENING-LEVEL RISK ASSESSMENT TOOL FOR MARINE INVERTEBRATE SPECIES (ID: 26171)

475 **Morden, A. L.**; Hendry, A. P.; Ricciardi, A.: VARIATION IN HYPOXIA TOLERANCE ACROSS INVASIVE ASIAN CLAM POPULATIONS (ID: 25478)

477 **Mychek-Londer, J. G.**; Heath, D. D.; Qureshi, S. A.; MacIsaac, H. J.: USE OF RNA BARCODING TO REDUCE BALLAST WATER INDUCED AQUATIC INVASIVE SPECIES TRANSFER AND SPREAD. (ID: 27383)

479 **Gallmetzer, I.**; Haselmair, A.; Tomasovych, A.; Stachowitsch, M.; Zuschin, M.: BIVALVE DEATH ASSEMBLAGES SUGGEST EARLY APPEARANCE OF THE INVASIVE SPECIES *ANADARA TRANSVERSA* (SAY, 1822) IN THE NORTHERN ADRIATIC SEA (ID: 26860)

133 AQUATIC SCIENCE EDUCATION AND OUTREACH: EXPANDING INTERNATIONAL SCIENCE LITERACY

Chair(s): Bob Chen, bob.chen@umb.edu
Adrienne Sponberg, sponberg@aslo.org
Linda Duguay, duguay@usc.edu

Location: Poster Area (Floor 2)

486 **Rossi, F.**; Sembeil, B.; Dumons, L.; Paix, L.; Urbaniak, O.; Carcaillet, F.: UNDERSTANDING CITIZEN LITERACY TO INCREASE THEIR AWARENESS IN SEAGRASS CONSERVATION ISSUES FOR THE THAU LAGOON, SOUTH OF FRANCE (ID: 26195)

487 **Capello, M.**; Cutroneo, L.; Massa, F.; Castellano, M.; Canepa, G.; Di Luca, G.; Basile, M.; Costa, S.; Povero, P.; Tucci, S.: PUBLIC APPROACH TO INVOLVE DREDGING STAKEHOLDERS AND CITIZENS IN THE DEVELOPMENT OF A PORT AREA (ID: 26203)

488 **Huete-Stauffer, T. M.**; Bunse, C.; Closek, C.; Gradoville, R.; Mohamed, R.; Moreno, C.; Taylor, J.; Wilburn, P.; Budinich-Abarca, M. A.; Burrel, T.; Gazitúa-Zavala, C. M.; Gimpel, C.; Kim, H.; Liao, W. H.; Peoples, L.; Vislova, A.: GENOMES TO BIOMES: A SUMMER COURSE ON MICROBIAL OCEANOGRAPHY (ID: 25863)

489 **Kemp, P. F.**; Baker, L. J.: ECOLOGICAL DISSERTATIONS IN THE AQUATIC SCIENCES (ID: 27599)

490 **Steen, A. D.**; Murray, P. J.; Ferriero, N.; Malcolm X Shabazz Aquatic Geochemistry Team, A.; Rosalsky, J.; Lloyd, K. G.: INVOLVING AT RISK HIGH SCHOOL STUDENT POPULATIONS IN PRIMARY RESEARCH: A CASE STUDY USING EXTRACELLULAR ENZYME ASSAYS (ID: 27752)

134 UNDERGRADUATE RESEARCH IN MARINE AND AQUATIC SCIENCES - POSTER SESSION

Chair(s): David Fields, dfields@bigelow.org
Lisa Rom, elrom@nsf.gov

Location: Poster Area (Floor 2)

491 **Gray, L. D.**; Munroe, D. M.; Rowell, K.: SEDIMENT CHARACTERISTICS GOVERNING BIOLOGICAL PRODUCTIVITY IN ANCIENT CLAM GARDENS (ID: 27388)

492 **Hoeglund, A. E.**; Poulton, N. J.; Countway, P. D.; Anderson, S. R.; Haugen, E. M.: PROTOZOAN GRAZING ON SYNECHOCOCCUS: MOLECULAR DIVERSITY OF GRAZERS & THEIR IMPACT ON THE SEASONAL BLOOM IN BOOTH BAY, ME (ID: 27201)

493 **Dylla, N. P.**; Fox, R.; Fisher, T.: A POTENT GREENHOUSE GAS SOURCE: NITROUS OXIDE EMISSION DURING BASE FLOW AND STORM FLOW IN THE CHOPTANK RIVER BASIN (ID: 27257)

494 **Egan, K.**; Moseman-Valtierra, S.: GREENHOUSE GAS EMISSIONS VARY WITH SALT MARSH ZONATION IN WAQUOIT BAY, MASSACHUSETTS, USA (ID: 27229)

495 **Patton, S. R.**; Miller, R. J.; Page, H. M.: CARBON TURNOVER IN TISSUES OF THREE SUSPENSION FEEDERS IN SOUTHERN CALIFORNIA (ID: 27461)

496 **Gustafson, A. E.**; Roesler, C.; Goodwin, D.: EVALUATING THE DEEP CHLOROPHYLL MAXIMUM: AN ANALYSIS OF FACTORS RESPONSIBLE FOR ITS FORMATION IN THE CENTRAL EQUATORIAL PACIFIC OCEAN (ID: 27750)

497 **Marquis, N. D.**; Fernandez-Robledo, J. A.: A SURVEY OF EASTERN OYSTERS(CRASSOSTREA VIRGINICA) IN MAINE FOR PATHOGENIC PROTOZOA (ID: 25520)

498 **Yazzie, A. T.**; Gallo, N.; Levin, L. A.: USING STABLE ISOTOPE ANALYSIS TO ASSESS CROSS-SLOPE TROPHIC PATTERNS IN BENTHIC AND DEMERSAL FISH COMMUNITIES IN AN UPWELLING REGION (ID: 25731)

499 **Funkhouser, C. H.**; Labonté, J.; Martínez Martínez, J.; Sievert, S.; Zhang, Y.; Stepanauskus, R.: BIOGEOGRAPHICAL CHARACTERIZATION AND IDENTIFICATION OF PHAGES IN SINGLE AMPLIFIED GENOMES OF EPSILONPROTEOBACTERIA FROM DEEP SEA VENTS (ID: 25578)

500 **Vomacka, E. R.**; Cheng, S.; Menden-Deuer, S.; Rynearson, T. A.: UNRAVELING COMPLEX BEHAVIORS THROUGH TRANSCRIPTOME AND GENE EXPRESSION ANALYSIS: THE CASE OF SALINITY TOLERANCE OF THE RAPHIDOPHYTE HETEROSIGMA AKASHIWO (ID: 25950)

501 **Tran, K. M.**; Sato, K.; Levin, L.; Schiff, K.: EVALUATING THE DISTRIBUTION OF DEPTH AND SPECIES DENSITY OF ECHINOIDS (SEA URCHIN) ALONG THE COAST OF SAN DIEGO, CA IN RESPONSE TO LOW OXYGEN CONCENTRATIONS (ID: 25660)

502 **Bock, M. E.**; Fitzgerald , C. L.; Roman, M. R.: EFFECTS OF ENVIRONMENTAL OXYGEN PARTIAL PRESSURE ON NAUPLII RESPIRATION RATES OF THE PLANKTONIC COPEPOD, *ACARTIA TONSA* (ID: 25665)

503 **Erskine, S. J.**; Whitney, L. P.; Lomas, M. W.: SPATIAL ABUNDANCE OF PICOEUKARYOTES IN THE NORTH ATLANTIC (ID: 26291)

504 **Seidman, D. N.**; Record, N. R.: A MODEL OF POPULATION DYNAMICS FOR THE LIFE STAGES OF *SALPA FUSIFORMIS* IN THE GULF OF MAINE (ID: 26473)

505 **Gyles, S. A.**; Perryman, W.: CAN NEAR-TERM PRGNANT GRAY WHALES (ESCHRICHTIUS ROBUSTUS) BE DISTINGUSHED FROM OTHER SOUTHBOUND GRAY WHALES IN VERTICAL AERIAL PHOTOGRAPHS BASED ON SHAPE? (ID: 25962)

506 **Brighi, C.**; Diaz, J. M.; Apprill, A.; Hansel, C.: TEMPERATURE AND LIGHT EFFECTS ON EXTRACELLULAR SUPEROXIDE PRODUCTION BY ALGAL AND BACTERIAL SYMBIONTS IN CORALS: IMPLICATIONS FOR CORAL BLEACHING (ID: 25916)

507 **Wessel, B. M.**; Williams, M. R.: FACTORS RESPONSIBLE FOR THE DEVELOPMENT OF IRON FLOCCULATE IN STREAMS WITH AND WITHOUT REGENERATIVE STORMWATER CONVEYANCE (RSC) STRUCTURES (ID: 25905)

138 FOOD WEB INTERACTIONS AND TROPHIC LINKAGES

Chair(s): Bill Richardson, wrichardson@usgs.gov

Location: Poster Area (Floor 2)

525 **Zhang, S. W.**; Liu, H. B.; Guo, C.; Wu, C. J.; Xu, J.: DIFFERENTIAL GRAZING BY NOCTILUCA SCINTILLANS ON MONOSPECIFIC AND MIXED DIET (ID: 26320)

526 **Maceda-Veiga, A.**; Webster, G.; Canals, O.; Salvadó, H.; Weightman, A. J.; Cable, J.: IMPACT OF TEMPERATURE AND NITRATE POLLUTION ON THE MICROBIAL AND MICRO-METAZOAN COMMUNITIES OF FRESHWATER ECOSYSTEMS (ID: 25998)

527 **Yang, E.**; Kang, S.: MICROZOOPLANKTON COMMUNITIES AND THEIR HERBIVORY IN THE CHUKCHI BORDERLAND AND MENDELEYEV RIDGE, ARCTIC OCEAN (ID: 25592)

528 Vannucchi, P. E.; **Peralta-Maraver, I.**; Tierno de Figueroa, J. M.; López-Rodríguez, M. J.: DYNAMIC OF THE MACROINVERTEBRATE COMMUNITY AND FOOD WEB OF A MEDITERRANEAN STREAM (ID: 25778)

529 **Fenoy, E.**; Casas, J. J.; Moyano, F. J.: DIGESTIVE ENZYME ACTIVITIES AS INDICATORS OF TROPHIC RESOURCE USE BY SHREDDERS FROM HEADWATER STREAMS LOCATED IN REGIONS OF CONTRASTING ARIDITY (ID: 27358)

530 **Gerea, M.**; Queimaliños, C. P.; Soto Cárdenas, C.; Unrein , F.: PREY SELECTIVITY OF MIXOTROPHIC FLAGELLATES AS THE MAIN PREDATORS OF PICOPLANKTON IN PATAGONIAN OLIGOTROPHIC SHALLOW LAKES (ID: 27264)

531 **Legezynska, J.**; Zaborska, A.; Wlodarska-Kowalczuk, M.; Pazdro, K.: SMALL- AND MESOSCALE VARIABILITY OF BENTHIC FOOD WEBS IN ARCTIC (ID: 26779)

143 COMMUNITY ECOLOGY

Chair(s): Pia Bartels, pia.bartels.pb@gmail.com

Location: Poster Area (Floor 2)

566 **Del Arco, A. I.**; Parra, G.; Downing, A. L.: EFFECTS OF BIODIVERSITY AND ENVIRONMENTAL VARIABILITY ON THE STRUCTURE, COMPOSITION AND STABILITY OF AQUATIC FOOD WEBS (ID: 25942)

567 **Galindo Estronza, A. M.**; Alfaro, M.; Schizas, N. V.: A MORPHOLOGICAL AND MOLECULAR CONTRIBUTION ON BENTHIC OSTRACODS WITH EMPHASIS ON THE POPULATIONS OF CARIBBEAN MESOPHOTIC REEFS (ID: 25953)

568 **Oganjan, K.**; Lauringson, V.; Kotta, J.; Pärnoja, M.: FACTORS AFFECTING ZEBRA MUSSEL RECRUITMENT TO ARTIFICIAL SUBSTRATE (ID: 26078)

569 **Jyrkänkallio-Mikkola, J. M.**; Heino, J.; Soininen, J. H.: WITHIN- AND ACROSS-STREAM VARIATION IN BETA DIVERSITY OF DIATOMS (ID: 26493)

570 **Amadeo, F. E.**; Dias, J. D.; Segovia, B. T.; Simoes, N. R.; Lansac-Toha, F. A.: EFFECTS OF BROMELIAD FLOWERING EVENT ON THE COMPOSITION OF AQUATIC LARVAE INSECT (ID: 27348)

571 **López, C.**; McCabe, D.: IMPACTS OF MOLLUSCA AND GASTROPODA SHELL PRODUCTION AND THEIR POSSIBLE ROLE AS ECOSYSTEM ENGINEERS IN MISSISQUOI BAY (ID: 27640)

572 **Nasi, F.**; Aleffi, I. F.; Bettoso, N.; Cibic, T.; Del Negro, P.: MACROZOOBENTHIC COMMUNITY RESPONSE TO CHANGING ENVIRONMENTAL CONDITIONS IN A LONG TERM ECOLOGICAL RESEARCH COASTAL SITE (ID: 25688)

573 **Pascual, J.**; Lastra, M.; Briones, M. J.; Page, H. M.: WARMING COULD ENHANCE INTER-SPECIFIC COMPETITIVE ABILITIES OF THE CORDGRASS *SPARTINA PATENS* (ID: 26762)

574 **Shull, D. H.**; Yang, S.; Walser, A.; Lim, S.: EFFECTS OF SEDIMENT PORE WATER HYDROGEN SULFIDE ON GROWTH AND PHOTOSYNTHETIC EFFICIENCY OF THE EELGRASS ZOSTERA MARINA (ID: 26486)

575 **Sakai, Y.**; Karube, Z.; Shibata, J.; Takeyama, T.; Tayasu, I.; Yachi, S.; Nakano, S.; Okuda, N.: THE IMPACT OF LAND USES ON BENTHIC MACROINVERTEBRATE DIVERSITY IN THE COASTAL ECOSYSTEM OF LAKE BIWA, JAPAN (ID: 27736)

THURSDAY ORALS

003 PEOPLE POWER: THE ROLE OF CITIZEN SCIENTISTS IN AQUATIC SCIENCE - GLOBAL OPPORTUNITIES AND PERSPECTIVES

Chair(s): Steven Loiselle, loiselle@unisi.it
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Davi Gasparini Fernandes Cunha, davig@sc.usp.br
Yuchao Zhang, yczhang@niglas.ac.cn

Location: Seminario 6-7 (Floor 1)

08:30 **Loiselle, S. A.**; Hall, C.; Baruch, A.; Bailey, N.: GREAT THINGS DONE BY A SERIES OF SMALL STEPS: RESULTS FROM THE FRESHWATER WATCH, A GLOBAL CITIZEN SCIENCE RESEARCH PROGRAMME* (ID: 26829)

08:45 **Thorpe, A. P.**; Jones, J. R.; Obrecht, D. V.: LESS PHOSPHORUS, MORE ALGAE: LONG-TERM CITIZEN SCIENCE PROGRAM MONITORS RESERVOIR BEFORE AND AFTER PHOSPHORUS REDUCTION (ID: 27331)

09:00 **Cunha, D. G.**; Marques, J. F.; Resende, J. C.; Falco, P. B.: URBAN RIVERS AND STREAMS MONITORING: CASE STUDY OF ENGAGEMENT OF BRAZILIAN CITIZEN SCIENTISTS* (ID: 25646)

09:15 **Frost, P. C.**; DeSellas, A. M.; Jones, F. C.; Paterson, A. M.; Rusak, J. A.: WATER QUALITY MONITORING WITH CITIZEN SCIENTISTS IN ONTARIO, CANADA: DIFFERENT APPROACHES TO GETTING THE JOB DONE (ID: 27501)

09:30 **Rodriguez-Ortiz, N. M.**; Walteros-Rodríguez, J. M.; Ramos, C.; Ramírez , A.: PARTICIPATIVE BIOMONITORING IN LATIN AMERICA: NEW TOOLS AND OPPORTUNITIES (ID: 26437)

09:45 **Zhang, Y.**; Li, J.; Ma, R.: COMBINING CITIZEN SCIENCE AND LAND USE DATA TO IDENTIFY DRIVERS OF EUTROPHICATION IN THE HUANGPU RIVER SYSTEM (ID: 25757)

10:30 **Hsueh, D. Y.**; Farnham, D. J.; Gibson, R. A.; McGillis, W. R.; Zheng, Y.; Buchanan, R.; Eddowes, D.; Zain, N.; Loiselle, S.; Butkiewicz, L.: NYC URBAN WATER QUALITY: MONITORING THE FLOW OF CSOS WITH CITIZEN SCIENTISTS (ID: 27684)

10:45 **Cigliano, J. A.**: THE CONCH AND THE BARNACLE: LESSONS-LEARNED FROM TWO MARINE CITIZEN SCIENCE PROJECTS (ID: 27593)

11:00 **de Vargas, C.**; Decelle, J.; Carmichael, M.; Le Bescot, N.; Berger, C.; Di Iorio, E.; Beaumont, C.; Troublé, R.; Karsenti, E.; Boss, E.: PLANKTON PLANET: SAIL FOR SCIENCE (ID: 27527)

11:15 **Busch, J. A.**; Bernard, E.; Ceccaroni, L.; Jeansou, E.; Piera, J.; Price, I.; Novoa, S.; Thijsse, P.; van der Woerd, H.; Wernand, M.; Zielinski, O.: CITCLOPS: CITIZEN SCIENCE APPROACH TO CHARACTERISE PHYTOPLANKTON DYNAMICS IN THE EBRO DELTA, NW MEDITERRANEAN (ID: 27314)

11:30 **Simon, C.**; Bardají, R.; Piera, J.: ESTIMATING WATER TRANSPARENCY FROM CITIZEN SCIENCE UNDERWATER PICTURES (ID: 25621)

11:45 **Branchini, S.**; Meschini, M.; Covi, C.; Piccinetti, C.; Zaccanti, F.; Goffredo, S.: RECREATIONAL MARINE CITIZEN SCIENCE: IMPLICATIONS FOR CONSERVATION MANAGEMENT AND ENVIRONMENTAL EDUCATION. (ID: 25788)

005 PROTIST-OMICS: A MULTIDISCIPLINARY EXPLORATION OF THE AQUATIC MICROEUKARYOTIC WORLD

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Ramon Massana, ramonm@icm.csic.es

Location: Room C (Floor -3)

08:30 **Sieracki, M. E.**; Massana, R.; Logares, R.; Stepanauskas, R.; de Vargas, C.; Poulton, N.: SAMPLING THE DIVERSITY OF SINGLE OCEANIC PROTISTS FOR GENOMIC ANALYSIS* (ID: 27188)

08:45 **Krabberød, A. K.**; Orr, R. J.; Bjørklund, K. R.; Kristensen, T.; Shalchian-Tabrizi, K.: TAMING THE UNCULTURABLES - SINGLE CELL TRANSCRIPTOMICS AND GENOMICS OF UNCULTURABEL PROTISTS (ID: 26788)

09:00 **Grossmann, L.**; Beisser, D.; Jensen, M.; Nerat, N.; Bock, C.; Wodniok, S.; Hoffmann, D.; Rahmann, S.; Boenigk, J.: UNDERSTANDING PROTISTS: LINKING TRANSCRIPTOMICS, METATRANSCRIPTOMICS, AND METABARCODING (ID: 26040)

09:15 **Alexander, H.**; Haley, S. T.; Rouco-Molina, M.; Dyhrman, S. T.: EUKARYOTIC METATRANSCRIPTOME PROFILING IDENTIFIES THE UNIQUE RESPONSES OF PHYTOPLANKTON FUNCTIONAL GROUPS TO DEEP WATER UPWELLING AT STATION ALOHA (ID: 27246)

09:30 **Annenkova, N. V.**; Ahrén, D.; Rengefors, K.: EVOLUTIONARY RELATIONSHIPS OF RECENTLY DIVERGED DINOFLAGELLATES RESOLVED USING PHYLOTRANSCRIPTOMIC ANALYSIS (ID: 25571)

09:45 **Orr, R.**; Yabuki, A.; Krabberød, A.; Nederbragt, L.; Van de Peer , Y.; Shalchian-Tabrizi, K.: GENOME DYNAMICS IN EARLY EUKARYOTIC EVOLUTION: IMPORTANCE OF ENIGMATIC LINEAGES (ID: 26965)

10:30 **Cabello, A. M.**; Logares, R.; Romac, S.; Massana, R.: GLOBAL DISTRIBUTION AND INTRASPECIFIC VARIABILITY OF MARINE PELAGOPHYTES (ID: 26999)

10:45 **Gimmler, A.**; Korn, R.; Stoeck, T.: GLOBAL DIVERSITY PATTERNS OF MARINE CILIATE PLANKTON (ID: 27297)

11:00 **Egge, E. S.**; Bittner, L.; Andersen, T.; Romac, S.; de Vargas, C.; Edvardsen, B.: DIVERSITY OF HAPTOPHYTES IN EUROPEAN COASTAL WATERS (ID: 27490)

11:15 **Giner, C. R.**; Logares, R.; Balague, V.; Massana, R.: SEASONAL DIVERSITY PATTERNS OF MARINE PICOEUKARYOTES FROM A MEDITERRANEAN COASTAL SITE (ID: 26991)

11:30 **Fuss, J.**; Mangot, J. F.; Bjorbækmo, M. M.; Freeman, M.; Bass, D.; Shalchian-Tabrizi, K.; Klaveness, D.: THE ENIGMATIC BASAL ALVEOLATE PARASITE X-CELL: CAN MULTIPLE GENOMIC APPROACHES REVEAL MORE? (ID: 27380)

11:45 **Bendif, E. M.**; Romac, S.; Audic, S.; Mahe, F.; Probert, I.; de Vargas, C.: A METABARCODING APPROACH TO ASSESS MICRO-DIVERSITY OF THE COSMOPOLITAN COCCOLITHOPHORE EMILIANIA/GEPHYROCAPSA COMPLEX (ID: 27409)

15:00 **Kuwata, A.**; Ichinomiya, M.; Yoshikawa, S.; Yamada, K.; Kawachi, M.; Saitoh, K.; Nakamura, Y.; Sato, N.; Tajima, N.; Sawada, K.; Vaulot, D.; Lopes, A.; Audic, S.; de Vargas, C.: EXPLORING THE EVOLUTIONARY LINK BETWEEN PARMALES AND THE SUCCESS OF DIATOMS IN MARINE ECOSYSTEMS (ID: 27560)

15:15 **Lopes, A. S.**; Gourvil, P.; Romac, S.; Pollina, T.; Corre, E.; Rodriguez-Hernandez, F.; Garrido, J. L.; Audic, S.; de Vargas, C.; Vaulot, D.: ECOLOGICAL DIVERSITY OF PRASINOPHYTES CLADE VII, THE DOMINANT GREEN ALGAE IN OPEN OCEANS. (ID: 27110)

15:30 **Forster, D.**; Stoeck, T.; BioMarKs Consortium, .: BENTHIC PROTISTAN COMMUNITIES HARBOR A HIGHER DIVERSITY THAN THEIR PLANKTONIC COUNTERPARTS (ID: 27208)

15:45 **Westphal, S.**; Wohlrab, S.; Koch, B. P.; Cembella, A.; John, U.: DISCRIMINATION OF BIODIVERSITY PATTERNS AMONG MICROEUKARYOTIC PLANKTON IN ARCTIC COASTAL WATERS (ID: 27016)

16:00 **Filker, S.**; Stoeck, T.; Willis, A.; Bunge, J.; Vila, I.; Sommaruga, R.: PROTISTAN PLANKTON BIODIVERSITY PATTERNS IN MOUNTAIN LAKES DISCRIMINATE BIOGEOGRAPHIC REGIONS (ID: 26595)

16:15 **Piredda, R.**; D'Erchia, A. M.; Manzari, C.; Pesole, G.; Tomasino, M. P.; Montresor, M.; Kooistra, H. W.; Sarno, D.; Zingone, A.: SEASONAL VARIABILITY OF PROTISTAN ASSEMBLAGES IN THE GULF OF NAPLES THROUGH HTS OF THE V4 AND V9 TAGS OF THE 18S RDNA GENE (ID: 27006)

17:00 **Rengefors, K.**; Lebret, K.; Härnström, K.; Svensson, M.; Ahrén, D.: EXPLORATION OF INVASION PATTERNS OF A HARMFUL ALGAL BLOOM SPECIES USING RAD-TAG SEQUENCING AND POPULATION GENOMICS* (ID: 27093)

17:15 **Takagi, H.**; Kimoto, K.; Fujiki, T.; Yuasa, T.; Kurasawa, A.; Hirano, H.: PHOTOSYMBIOSIS IN PLANKTIC FORAMINIFERS: NEW ASPECTS FROM CULTURE AND FAST REPETITION RATE FLUOROMETRY (ID: 26683)

17:30 **Joli, N.**; Logares, R.; Babin, M.; Lovejoy, C.: BATHYCOCCUS AND MICROMONAS IN AN WINTER ARCTIC METAGENOME (ID: 25876)

17:45 **Bjorbækmo, M. M.**; Hartikainen, H.; Krabberød, A. K.; Bass, D.; Shalchian-Tabrizi, K.: THE DIVERSITY OF HIDDEN PROTIST IN SEAWEED (ID: 26946)

18:00 Flegontova, O.; Malviya, S.; Flegontov, P.; Audic, S.; Wincker, P.; Bowler, C.; de Vargas, C.; Lukeš, J.; **Horák, A.**: EXTREME DIVERSITY AND ABUNDANCE OF PLANKTONIC DIPLONEMIDS IN THE WORLD OCEANS AS REVEALED BY THE TARA OCEANS META-BARCODING DATASET (ID: 27127)

18:15 **Pitz, K. J.**; Brosnahan, M. L.; Anderson, D. M.: SAXITOXIN GENE STRUCTURE AND REPRESENTATION IN NON-TOXIC AND TOXIC DINOFLAGELLATE SPECIES (ID: 27375)

008 THE GLOBAL OCEAN ECOSYSTEM: PATTERNS, DRIVERS AND CHANGE

Chair(s): Carlos M. Duarte, c.duarte@csic.es
Susana Agusti, sagustii@imedea.uib-csic.es
Xose Anton Alvarez-Salgado, xsalgado@iim.csic.es

Location: Auditorium Manuel de Falla (Floor 1)

08:30 **Menden-Deuer, S.**; Rowlett, J. M.: IS VARIETY THE SPICE OF LIFE? INTRA-SPECIFIC VARIATION MAINTAINS HIGH BIO-DIVERSITY IN THE PLANKTON (ID: 25727)

08:45 **Bode, A. M.**; Mompean, C.; Alvarez-Ossorio, M. T.; Fernandez de Puelles, M. L.; Echevarria, F.; Gonzalez-Gordillo, J. I.; Hernandez-Leon, S.; Irigoien, X.; Acuna, J. L.: VERTICAL VARIABILITY OF TROPHIC POSITIONS OF ZOOPLANKTON IN THE DEEP OCEAN (ID: 26730)

09:00 **Biard, T.**; Stemmann, L.; Picheral, M.; Mayot, N.; Kiko, R.; Vandromme, P.; Haus, H.; Tara Ocean Consortium; Not, F.: RHIZARIA, THE ELUSIVE STARS OF THE OCEAN (ID: 26850)

09:15 **Lins, L.**; Esteves, A. M.; Vanreusel, A.: DIFFERENCES IN PRIMARY PRODUCTIVITY REGULATING BENTHIC STANDING STOCKS IN THE SOUTHERN OCEAN (ID: 26449)

09:30 **Hennon, G. M.**; Howard, E.; Ribalet, F.; Stanley, R.; Armbrust, E. V.: CONTINUOUS FLOW CYTOMETRY AND GAS FLUX MEASUREMENTS ACROSS NUTRIENT AND TEMPERATURE GRADIENTS IN THE ATLANTIC OCEAN (ID: 27402)

09:45 **Teira, E.**; Hernando-Morales, V.; Cornejo-Castillo, F. M.; Alonso-Sáez, L.; Sarmento, H.; Valencia-Vila, J.; Catalá, T. S.; Hernández-Ruiz, M.; Varela, M. M.; Ferrera, I.; Morán, X. AG.; Gasol, J. M.: EMPIRICAL LEUCINE-TO-CARBON CONVERSION FACTORS FOR ESTIMATING HETEROTROPHIC BACTERIAL PRODUCTION IN SURFACE WATERS OF THE WORLD OCEANS (ID: 26606)

10:30 **Brum, J. R.**; Ignacio-Espinoza, J. C.; Roux, S.; Doulcier, G.; Bork, P.; Bowler, C.; Karsenti, E.; Sunagawa, S.; Wincker, P.; Sullivan, M. B.: GLOBAL PATTERNS AND ECOLOGICAL DRIVERS OF OCEAN VIRAL COMMUNITIES (ID: 26235)

10:45 Salazar, G.; Cornejo-Castillo, F. M.; Gomes, A.; Benítez-Barrios, V.; Fraile-Nuez, E.; Catalá, T. S.; Moran, X. G.; Duarte, C. M.; Acinas, S. A.; **Gasol, J. M.**: THE PROKARYOTIC COMPONENT OF THE GLOBAL BATHYPELAGIC OCEAN: ABUNDANCE, ACTIVITY AND DIVERSITY (ID: 26523)

11:00 **Guidi, L.**; Chaffron, S.; Bittner, L.; Eveillard, D.; Gorsky, G.; Bowler, C.; Karsenti, E.; The TARA ocean consortium, T.: PLANKTON COMMUNITY AND GENE NETWORKS ASSOCIATED WITH CARBON EXPORT IN THE GLOBAL OCEAN (ID: 27014)

11:15 **Arandia-Gorostidi, N.**; Weber, P. K.; Alonso-Sáez, L.; Morán, X. A.; Huete-Stauffer, T. M.; González, N.; Mayali, X.: EFFECT OF TEMPERATURE ON AUTOTROPHIC AND HETEROTROPHIC ACTIVITY BY MARINE MICROBES USING SINGLE-CELL ANALYSIS BY NANOSIMS (ID: 27541)

11:30 **Alvarez Fernandez, S.**; Hátún, H.: RHYTHM IN THE WATER: SYNCHRONOUS CHANGES IN NORTH-EASTERN ATLANTIC PLANKTON COMMUNITIES (ID: 25684)

11:45 **Delgado-Huertas, Antonio, A. D.**; Granados, Arsenio, A. G.; Metcalf, Amanda, A. M.; Mesa, Elena, E. M.; Galí, Marti, M. G.; Simó, Rafel, R. S.; Fernández, Bieito, B. F.; Tell, Elena, E. T.; Duarte, Carlos M., C. M.: STABLE ISOTOPES OF DISSOLVED NITROGEN IN OCEANIC WATERS (ID: 25777)

15:00 **Scharfe, M.**; Kraberg, A.: ASPECTS OF THE DECADAL VARIABILITY OF A MARINE ECOSYSTEM - RESULTS AND CONCLUSIONS FROM THE SOUTHERN NORTH SEA (ID: 26564)

15:15 **Mesa, E.**; Delgado, A.; Granados, A.; García-Corral, L.; Carrillo de Albornoz, P.; Sanz Martín, M.; Wassmann, P.; Reigstad, M.; Duarte, C.: EVALUATION OF PLANKTONIC METABOLISM IN THE ARCTIC USING THE 18O METHOD (ID: 26576)

15:30 **Fernandez de Puelles, M. L.**; Gazá, M.; Gonzalez-Gordillo, J.; Hernandez-Leon, S.; Cozar, A.; Acuña, J. L.; Irigoien, X.: VERTICAL BIOGEOGRAPHICAL OVERVIEWOF THE ZOOPLANKTON COMMUNITY ACROSS THE ATLANTIC,PACIFIC AND INDIAN OCEAN (35ºN-40ºS) (ID: 27028)

* REPRESENTS INVITED PRESENTATIONS

15:45 **Hernández-León, S. M.**; Fraile-Nuez, E.; Garijo, J. C.; Ariza, A.; Irirgoien, X.; Olivar, P.; González-Gordillo, I.; Fernández de Puelles, M. L.; Bode, A.; Gasol, J. M.: DIEL VERTICAL MIGRANTS AND THE OCEAN CARBON PUMP: IS THERE A LADDER OF MIGRATION? (ID: 26727)

16:00 **Hauff, M. J.**; Llopiz, J. K.; Blanco-Bercial, L.; Bucklin, A.: GELATINOUS PREY OF FISHES: QPCR ANALYSIS OF AN OVERLOOKED PATHWAY IN MESOPELAGIC FOODWEBS (ID: 27688)

16:15 **Winder, M.**; Carstensen, J.; Galloway, A. W.; Jakobsen, H. H.; Cloern, J. E.: THE LAND-SEA INTERFACE: A UNIQUE PLACE FOR PRODUCING FISH (ID: 25881)

009 RESERVOIR LIMNOLOGY

Chair(s): John Harrison, john_harrison@wsu.edu
Bridget Deemer, bridget.deemer@email.wsu.edu
Cayelan Carey, cayelan@vt.edu
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Justin Brookes, justin.brookes@adelaide.edu.au
Francisco Rueda, fjrueda@ugr.es

Location: Andalucia 3 (Floor 1)

08:30 **Carey, C. C.**; Doubek, J. P.; Gerling, A. B.; Hamre, K. D.; Munger, Z. W.; Wilkinson, G. M.; Gantzer, P. A.; Little, J. C.; Pace, M. L.; Schreiber, M. E.: WHOLE-ECOSYSTEM OXYGENATION DEMONSTRATES THAT EPISODIC ANOXIC EVENTS PROMOTE INTERNAL LOADING OF METALS AND CARBON BURIAL IN A EUTROPHIC RESERVOIR (ID: 26117)

08:45 Toledo, J.; Bierlein, K. A.; Socolofsky, S. A.; Little, J. C.; **Rueda, F. J.**: SIGNATURES OF BUBBLE-PLUME OXYGENATION SYSTEMS ON LARGE-SCALE TRANSPORT PROCESSES IN LAKES AND RESERVOIRS* (ID: 27183)

09:00 **Martins, J. R.**; Vinçon-Leite, B.; Soulignac, F.; Lemaire, B. J.: BILLINGS RESERVOIR HYDRODYNAMICS: KEY TO SUSTAINABLE MANAGEMENT (ID: 27157)

09:15 **Hoyer, A. B.**; Schladow, S. G.; Rueda, F. J.: A HYDRODYNAMICS-BASED APPROACH TO EVALUATING THE RISK OF WATERBORNE PATHOGENS ENTERING DRINKING WATER INTAKES IN LAKES AND RESERVOIRS (ID: 27285)

09:30 **Gray, R. L.**; Mitrovic, S.; Hardwick, L.; Jones, H.: COLD WATER POLLUTION MITIGATION OF A LARGE DAM IN AUSTRALIA USING AN INNOVATIVE THERMAL CURTAIN; TEMPERATURE AND WATER QUALITY IMPROVEMENTS. (ID: 25420)

09:45 **Harrison, J. A.**; Deemer, B. R.; Birchfield, M. K.: RESERVOIR WATER LEVEL DRAWDOWN IS AN IMPORTANT AND MANAGEABLE CONTROL ON METHANE RELEASE TO THE ATMOSPHERE (ID: 27476)

10:30 **Castelo Branco, C. W.**; Leal, J. F.; Huszar, V. M.; Farias, D. S.; Sousa-Filho, I. F.; Oliveira, N. C.; Martírez, N.; Palermo, E. A.; Santos, P. T.; Gomes, A. R.: NEW LAKE IN A CHANGING WORLD: THE CASE STUDY OF THE FILLING AND STABILIZATION OF A BRAZILIAN SMALL-HYDROPOWER RESERVOIR (ID: 26405)

10:45 **Brown, M. E.**; Branstrator, D. K.: THE DYNAMICS OF AN INVASIVE ZOOPLANKTON IN RESERVOIRS (ID: 27460)

11:00 **El Ganainy, A. A.**; El Far, A. M.: ASSESSMENT OF LAKE NASSER FISHERY RESOURCES (ID: 27532)

11:15 **Obrecht, D. V.**; Jones, J. R.: FACTORS INFLUENCING RESERVOIR NUTRIENT CONCENTRATIONS IN MISSOURI, USA (ID: 27415)

11:30 **Jones, J. R.**; Obrecht, D. V.: LIMNOLOGY OF LAKE OF THE OZARKS, MISSOURI: SUMMARY OF A LONG-TERM DATASET (ID: 25419)

11:45 **Pierson, D. C.**; Samal, N. R.; Markensten, H.; Owens, E. M.: SIMULATING THE EFFECTS OF CLIMATE CHANGE ON THE PHYTOPLAKTON IN A NEW YORK CITY WATER SUPPLY RESERVOIR* (ID: 26996)

013 ASSESSING MARINE ECOSYSTEMS HEALTH IN AN INTEGRATIVE WAY

Chair(s): Angel Borja, aborja@azti.es
Benjamin Halpern, halpern@bren.ucsb.edu
Philippe Archambault, Philippe_Archambault@uqar.ca

Location: Room D (Floor -3)

08:30 **Subida, M. D.**; González-Duarte, M. M.; Fernandez, M.: PATTERNS OF RESPONSE TO HARVEST IN KELP FORESTS UNDER CONTRASTING MANAGEMENT REGIMES (ID: 27611)

08:45 Mozetic, P.; France, J.; Kogovsek, T.; Lipej, L.; Mavric, B.; Orlando-Bonaca, M.; Talaber, I.; **Malej, A.**: AN INTEGRATIVE APPROACH TOWARDS THE ASSESSMENT OF MARINE ECOSYSTEM HEALTH (NORTHERN ADRIATIC) (ID: 25851)

09:00 **Simboura, N.**; Pavlidou, A.; Tsapakis, M.; Pagou, K.; Assimakopoulou, G.; Zeri, C.; Lampou, A.; Panayotidis, P.: INTEGRATIVE ASSESSMENT OF THE ECOLOGICAL STATUS IN HELLENIC COASTAL WATERS: TRANSITION FROM THE WFD TO THE MSFD. (ID: 25587)

09:15 **Martin, G.**; Torn, K.: TOOL FOR ASSESSMENT OF MARINE BIODIVERSITY, CASE STUDY FROM NORTHERN BALTIC SEA (ID: 27066)

09:30 Andersen, J. H.; **Borja, A.**; Berg, T.; Carstensen, J.; Cochrane, S.; Murray, C.; Uyarra, M. C.: DEVELOPMENT OF AN INDICATOR-BASED TOOL FOR ASSESSMENT OF MARINE BIODIVERSITY STATUS (ID: 26109)

015 LONG-TERM STUDIES OF ENVIRONMENTAL STRESSORS ON LAKE ECOSYSTEMS: COMMON IMPACTS AND DYNAMICS

Chair(s): Sapna Sharma, sharma11@yorku.ca
Richard Vogt, richardvogt@trentu.ca
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Isabella Bertani, maggiesfarm@tin.it
Hongtao Duan, htduan@niglas.ac.cn

Location: Seminario 3-4-5 (Floor 1)

17:00 **Fölster, J.**; Futter, M. N.; Johnson, R. K.; Wilander, A.: HOW TO ACHIEVE HIGH QUALITY LONG TERM DATA – THE SWEDISH CASE (ID: 26132)

17:15 **Villa, P.**; Duan, H.; Loiselle, S. A.: A DECADAL ASSESSMENT OF WATER QUALITY STRESSORS OVER LAKE TAIHU AREA USING IN SITU AND MODIS SATELLITE DATA (ID: 25846)

17:30 **Haig, H. A.**; Wissel, B.; Simpson, G. L.; Leavitt, P. R.: MECHANISM OF CLIMATE REGULATION OF LAKE HYDROLOGY REVEALED BY STABLE ISOTOPES OF WATER: INSIGHTS FROM DECADAL-SCALE LANDSCAPE ANALYSIS (ID: 25751)

17:45 **Huser, B. J.**; Futter, M. N.; Khalili, M. I.; Weyhenmeyer, G. A.; Fölster, J.: LONG-TERM CHANGES TO NUTRIENTS IN LAKES: EFFECTS OF CLIMATE, DEPOSITION, AND IN-LAKE CYCLING ON OLIGOTROPHICATION OF NORTHERN BOREAL AND ALPINE LAKES (ID: 27695)

18:00 **Brothers, S. M.**; Sibley, P. K.; Vadeboncoeur, Y. M.: LONG-TERM PATTERNS IN PRIMARY PRODUCTIVITY IN THE LAURENTIAN GREAT LAKES: MULTIPLE STRESSORS, AND THE INCREASING ROLE OF BENTHIC PRODUCTIVITY (ID: 25900)

18:15 **Lenters, J. D.**; Read, J. S.; Sharma, S.; O'Reilly, C. M.; Hampton, S.; Gray, D.; McIntyre, P. B.; Hook, S. J.; Schneider, P.; GLTC Contributors, G. L.: ACCELERATED WARMING OF THE WORLD'S LAKES: A CENTURY OF DATA FROM IN SITU AND REMOTELY SENSED MEASUREMENTS (ID: 27555)

016 METACOMMUNITIES

Chair(s): Eva Lindstrom, Eva.Lindstrom@ebc.uu.se
Luc De Meester, Luc.DeMeester@bio.kuleuven.be

Location: Picasso (Floor -2)

10:30 **Declerck, S.**: AQUATIC COMMUNITY ECOLOGY AND THE METACOMMUNITY FRAMEWORK: WHERE ARE WE AND WHERE DO WE GO?[T] (ID: 27206)

11:00 **Andersson, M. G.**; Berga, M.; Lindström, E. S.; Langenheder, S.: THE SPATIAL STRUCTURE OF BACTERIAL COMMUNITIES IS INFLUENCED BY HISTORICAL ENVIRONMENTAL CONDITIONS (ID: 26234)

11:15 **Suzuki, S.**; Kaneko, R.; Kodama, T.; Hashihama, F.; Suwa, S.; Tanita, I.; Furuya, K.; Hamasaki, K.: ENVIRONMENTAL AND SPATIAL FACTORS STRUCTURING FREE-LIVING AND PARTICLE-ASSOCIATED COMMUNITIES OF BACTERIA IN THE PACIFIC OCEAN (ID: 26520)

11:30 **Smeti, E.**; Tsirtsis, G.; Papanikolopoulou, L.; Spatharis, S.: THE RELATIVE ROLE OF NICHE AND NEUTRAL PROCESSES IN SHAPING PLANKTON COMMUNITIES ALONG A SALINITY GRADIENT (ID: 26042)

11:45 Costa, L.; Kruk, C.; Kosten, S.; Lacerot, G.; Nabout, J.; Lürling, M.; Mazzeo, N.; **Huszar, V.**: THE ROLE OF ENVIRONMENT AND SPACE ON THE PHYTOPLANKTON DIVERSITY IN SHALLOW LAKES ALONG A LARGE LATITUDINAL GRADIENT (6000 KM) IN SOUTH AMERICA (ID: 26474)

15:00 **Mousing, E. A.**; Katherine Richardson, K.; Bendtsen, J.; Cetinic, I.; Perry, M. J.: THE EFFECT OF SUB-MESOSCALE SPATIAL HETEROGENEITY ON PHYTOPLANKTON DIVERSITY IN THE NORTH ATLANTIC (ID: 27339)

15:15 **Mehner, T.**: MECHANISMS OF DISPERSAL LIMITATION IN EUROPEAN LAKE FISH COMMUNITIES (ID: 25491)

15:30 **de Mendoza, G.**; Ventura, M.; Catalan, J.: ENVIRONMENTAL FACTORS PREVAIL OVER DISPERSAL CONSTRAINTS IN DETERMINING THE DISTRIBUTION AND ASSEMBLY OF TRICHOPTERA SPECIES IN MOUNTAIN LAKES (ID: 25857)

15:45 **Gascón, S.**; Arranz, I.; Cañedo-Argüelles, M.; Nebra, A.; Ruhí, A.; Rieradevall, M.; Caiola, N.; Sala, J.; Ibàñez, C.; Quintana, X. D.; Boix, D.: ENVIRONMENTAL CONSTRAINT DETERMINES METACOMMUNITY STRUCTURE IN WETLAND MICROCRUSTACEANS (ID: 27251)

16:00 **Arim, M.**; Borthagaray, A. I.; Quintana, X. D.; Boix, D.; Sala, J.; Gascón, S.: ALLOMETRIC CONSTRAINS TO LOCAL FOOD WEBS IN METACOMMUNITIES (ID: 27438)

16:15 **Borthagaray, A. I.**; Arim, M.; Sala, J.; Boix, D.; Quintana, X. D.; Gascón, S.: DETERMINANTS OF METACOMMUNITY NETWORK SHAPING LOCAL COMMUNITIES STRUCTURE (ID: 26839)

17:00 **Eggers, S. L.**; Horváth, Z.; Bengtsson, M. M.; Preiler, C.; Ptacnik, R.: THE ROLE OF DISPERSAL FOR THE MAINTENANCE OF DIVERSITY IN EXPERIMENTAL PLANKTON COMMUNITIES (ID: 25593)

17:15 **Fussmann, G. F.**; Scott, M. E.; Tadiri, C. P.; Kong, J.; Wang, H.: RIVERINE HOST-PARASITE METACOMMUNITIES: A MATHEMATICAL AND EXPERIMENTAL MODEL SYSTEM (ID: 25945)

17:30 **Hillebrand, H.**; Gülzow, N.: SPATIAL INSURANCE IN AQUATIC METACOOMUNITIES: BIODIVERSITY, RESILIENCE AND RECOVERY (ID: 26518)

17:45 **Limberger, R.**; Millette, K.; Cristescu, M.; Hahn, M.; Wickham, S. A.: INTERACTIVE EFFECTS OF ENVIRONMENTAL CHANGE AND HABITAT CONNECTIVITY ON THE DIVERSITY OF EXPERIMENTAL AQUATIC COMMUNITIES (ID: 26808)

18:00 **De Meester, L.**; Pantel, J.: EVOLUTION IN A METACOMMUNITY CONTEXT: FROM PROOF-OF-PRINCIPLE TO THE FIELD (ID: 25715)

18:15 **Leibold, M. A.**; Downing, A. L.; Brown, B. L.: LOW-LEVEL IMMIGRATION FROM A METACOMMUNITY ALTERS PLANKTON COMMUNITIES IN PONDS* (ID: 26396)

022 THE BIOGEOCHEMISTRY OF DISSOLVED ORGANIC MATTER (DOM)

Chair(s): Thorsten Dittmar, thorsten.dittmar@uni-oldenburg.de
Aron Stubbins, aron.stubbins@skio.uga.edu

Location: Auditorium Federico Garcia Lorca (Floor 0)

08:30 **Spencer, R. G.**; Stubbins, A.; Fellman, J. B.; Dittmar, T.; Raymond, P. A.; Hood, E.: STORAGE, RELEASE AND SOURCE OF ORGANIC CARBON IN GLACIER ENVIRONMENTS[T] (ID: 26446)

09:00 **Kothawala, D. N.**; Ji, X.; Laudon, H.; Ågren, A.; Futter, M. N.; Köhler, S. J.; Tranvik, L. J.: THE ROLE OF LAND COVER, HYDROLOGY AND IN-STREAM PROCESSING ON THE QUALITY OF DISSOLVED ORGANIC MATTER IN A NESTED BOREAL STREAM NETWORK (ID: 26856)

09:15 **Isidorova, A.**; Bravo, A. G.; Riise, G.; Bouchet, S.; Björn, E.; Sobek, S.: EFFECTS OF LAKE BROWNING ON THE ACCUMULATION AND FATE OF CARBON AND MERCURY IN BOREAL LAKE SEDIMENTS (ID: 26213)

09:30 **Mostovaya, A.**; Koehler, B.; Tranvik, L.: DISSOLVED ORGANIC CARBON REACTIVITY CONTINUUM: CHEMICAL DIVERSITY AND KINETICS OF DEGRADATION (ID: 27052)

09:45 **Stubbins, A.**; Mann, P. J.; Dittmar, T.; Eglinton, T. I.; McIntyre, C.; Zimov, N.; Spencer, R. G.: RADIOCARBON AND MOLECULAR SIGNATURES OF ANCIENT PERMAFROST-DERIVED DISSOLVED ORGANIC CARBON BIODEGRADATION (ID: 26921)

10:30 **Mann, P. J.**; Vonk, J. E.; Holmes, R. M.; Zimov, N.; Davydova, A.; McIntyre, C.; Eglington, T. I.; Stubbins, A.; Spencer, R. G.: PREFERENTIAL LOSS OF ANCIENT TERRESTRIAL CARBON IN ARCTIC HEADWATER STREAMS (ID: 26851)

10:45 **Niggemann, J.**; Dittmar, T.; Vähätalo, A. V.; Riedel, T.: A PHOTOCHEMICALLY RESISTANT COMPONENT IN RIVERINE DISSOLVED BLACK CARBON (ID: 26631)

11:00 **Waggoner, D. C.**; Chen, H.; Hatcher, P. G.: HYDROXYL RADICAL INITIATED TRANSFORMATION OF LIGNIN DERIVED DOM (ID: 25656)

11:15 **Koehler, B.**; Broman, E.; Tranvik, L. J.: SUNLIGHT-INDUCED CARBON DIOXIDE EMISSIONS FROM INLAND WATERS (ID: 25472)

THURSDAY

* REPRESENTS INVITED PRESENTATIONS

11:30 **Hartman, B. E.**; Chen, H.; Hatcher, P. G.: NON-THERMOGENIC BLACK CARBON IN PEAT AND COAL DERIVES FROM PHOTOCHEMICAL OXIDATION OF DOM (ID: 25620)

11:45 Kasurinen, V.; Aarnos, H.; **Vähätalo, A. V.**: SUNLIGHT-INDUCED PRODUCTION OF BIOLOGICALLY LABILE PHOTOPRODUCTS FROM RIVERINE DOM (ID: 27034)

15:00 **Gonsior, M.**; Valle das Neves , J.; Schmitt-Kopplin, P.; Hertkorn, N.; Bastviken, D.; Luek, J.; Timko, S.; Harir, M.; Enrich-Prast, A.: DISSOLVED ORGANIC MATTER VARIABILITY IN THREE DIFFERENT AMAZON REGIONS ANALYZED BY ULTRAHIGH RESOLUTION MASS SPECTROMETRY AND EEM-PARAFAC (ID: 25632)

15:15 **Wagner, S.**; Riedel, T.; Niggemann, J.; Vähätalo, A.; Dittmar, T.; Jaffé, R.: LINKING THE MOLECULAR SIGNATURE OF HETEROATOMIC DOM TO WATERSHED CHARACTERISTICS IN WORLD RIVERS (ID: 25868)

15:30 **Knudsen-Leerbeck, H.**; Bronk, D. A.; Markager, S.: SIZE-FRACTIONATED PRODUCTION AND BIOAVAILABILITY OF DISSOLVED ORGANIC MATTER IN THE YORK RIVER, VIRGINIA (ID: 26842)

15:45 **Demeter, K.**; Sieczko, A.; Mayr, M.; Peduzzi, P.: BACTERIAL RESPIRATION AND CARBON METABOLISM IN FLOODPLAIN WATERS: RESULTS FROM AN EXPERIMENTAL APPROACH (ID: 26249)

16:00 **Peter, S.**; Isidorova, A.; Agstam, O.; Guillemette, F.; Sobek, S.: LAKE SEDIMENTS AS SOURCE OF DISSOLVED ORGANIC CARBON – THE MAGNITUDE AND FATE OF ORGANIC CARBON DIFFUSING FROM SEDIMENTS INTO ANOXIC LAKE WATER (ID: 27086)

16:15 **Larsen, S.**; Andersen, T.; Hessen, D. O.: DOM UNDER CHANGING CLIMATIC CONDITIONS. (ID: 27245)

035 FROM PAST TO PRESENT: OCEAN PRODUCTIVITY AND BIOGEOCHEMISTRY

Chair(s): Francisca Martinez-Ruiz, fmruiz@ugr.es
Adina Paytan, apaytan@ucsc.edu
Gert de Lange, G.J.deLange@uu.nl
Eva Calvo, ecalvo@icm.csic.es
Isabel Cacho, icacho@ub.edu

Location: Picasso (Floor -2)

08:30 **Stoll, H. M.**; Bolton, C.; Gonzalez-Lemos, S.; Mendez-Vicente, A.; Mejia, L. M.; Abrevaya, L.; Fuertes, M. A.; Flores, J. A.; Paytan, A.; Eisenhaer, A.: ADAPTATION OF CALCIFICATION MECHANISMS IN COCCOLITHOPHORES TO CO2, PAST AND PRESENT* (ID: 26663)

08:45 **Zeebe, R. E.**: A PALEO-PERSPECTIVE ON THE MAGNITUDE AND RATE OF ANTHROPOGENIC CO2 EMISSIONS (ID: 25758)

09:00 **Povea, P.**; Cacho , I.; Moreno, A.; Pena, L.; Menéndez, M.; Calvo, E.; Canals, M.; Robinson, R. S.; Flores, J. A.; Méndez, F. J.: ATMOSPHERE-OCEAN COUPLING CONTROLLING EARLY PLEISTOCENE CHANGES IN THE DEEP CARBON STORAGE OF THE EASTERN EQUATORIAL PACIFIC (EEP) (ID: 27106)

09:15 **Lopes, C.**; Kucera, M.; Mix, A. C.: CLIMATE CHANGE DECOUPLES OCEANIC PRIMARY AND EXPORT PRODUCTIVITY AND ORGANIC CARBON BURIAL (ID: 26942)

09:30 **Cermeno, P.**; Falkowski, P. G.; Romero, O. E.; Schaller, M. F.; Vallina, S. M.: CONTINENTAL EROSION AND THE CENOZOIC RISE OF MARINE DIATOMS (ID: 27040)

09:45 **Sanchez-Baracaldo, P.**: EVOLUTIONARY ORIGIN OF MARINE PLANKTONIC CYANOBACTEIRA (ID: 26761)

038 ADVANCES IN FLUX MEASUREMENTS IN AQUATIC ENVIRONMENTS USING THE EDDY CORRELATION TECHNIQUE

Chair(s): Peter Berg, pb8n@virginia.edu
Markus Huettel, mhuettel@fsu.edu
Moritz Holtappels, mholtapp@mpi-bremen.de

Location: Andalucia 3 (Floor 1)

15:00 **Baldocchi, D. D.**: EDDY COVARIANCE, A METHOD FOR MEASURING ECOSYSTEM-ATMOSPHERE FLUXES OF TRACE GASES[T] (ID: 25628)

15:30 **Glud, R. N.**; Attard, K.; Rovelli, L.; Hancke, K.; McGinnis, D. F.; Holtappels, M.: OXYGEN EXCHANGE AND CARBON MINERALIZATION AT THE SEABED: ASSESSMENTS BY THE EDDY CORRELATION APPROACH* (ID: 25978)

15:45 **Attard, K. M.**; Glud, R. N.; Hancke, K. H.; McGinnis, D. F.; Rovelli, L.; Rysgaard, S.: BENTHIC PRIMARY PRODUCTION IN TEMPERATE AND ARCTIC COASTAL MARINE ECOSYSTEMS QUANTIFIED USING THE EDDY CORRELATION TECHNIQUE (ID: 26555)

16:00 **Delgard, M. L.**; Berg, P.; McGlathery, K. J.: ECOSYSTEM METABOLISM IN EELGRASS (*ZOSTERA MARINA*) MEADOWS MEASURED BY EDDY CORRELATION TECHNIQUE (ID: 26406)

16:15 **Huettel, M. H.**; Berg, P.: EDDY CORRELATION AND CHAMBER FLUX MEASUREMENTS IN REEF LAGOON SANDS (ID: 25507)

17:00 **Reimers, C. E.**; Ozkan-Haller, H. T.; Berg, P.: EFFECTS OF ENERGETIC WAVE MOTIONS ON AQUATIC EDDY CORRELATION MEASUREMENTS * (ID: 25734)

17:15 **Holtappels, M.**; Noss, C.; Hancke, K.; Cathalot, C.; McGinnis, D. F.; Lorke, A.; Glud, R. N.: AQUATIC EDDY CORRELATION: QUANTIFYING THE ARTIFICIAL FLUX CAUSED BY STIRRING SENSITIVE O2 SENSORS (ID: 25999)

17:30 **Kokic, J.**; Sahlée, E.; Brand, A.; Sobek, S.: SEDIMENT-WATER GAS EXCHANGE IN TWO SWEDISH LAKES MEASURED BY EDDY CORRELATION (ID: 25809)

17:45 **Koopmans, D.**; LaBuhn, S.; Berg, P.; Klump, J. V.: THE DRIVERS OF BENTHIC OXYGEN FLUX IN A HYPEREUTROPHIC BAY (ID: 27674)

18:00 **Potes, M.**; Salgado, R.; Costa, M. J.: EXCHANGES OF ENERGY AND MASS BETWEEN THE ATMOSPHERE AND LAKE, CASE STUDY OF ALQUEVA RESERVOIR, PORTUGAL (ID: 27513)

18:15 **McGillis, W. R.**; Langdon, C.; Martz, T.; Hsueh, D. Y.; Loose, B.; Takeshita, Y.; Donham, E.; Price, N.; Smith, J.; Manzello, D.; Gledhill, D.; Enochs, I.; Moyer, R.; Turk, D.; Fajans, J.; Yates, K.; Karger, F. M.; Fong, P.; Baker, A.; Markowitz, M.; Smith, T.; Glynn, P.; Mate, J.; Rodriguez, M.; Toro-Farmer, G.; Brandtneris, V. W.; Palacio, A.; Paine, J.: AN INNOVATIVE APPROACH TO ASSESSING CORAL REEF HEALTH AT SEVEN SITES AROUND THE WORLD (ID: 27710)

042 COMPETITION WITHIN PLANKTONIC COMMUNITIES: WHAT ARE THE EFFECTS ON ECOSYSTEM FUNCTIONING AND BIOGEOCHEMICAL PROCESSES?

Chair(s): Richard Rivkin, rrivkin@mun.ca
Louis Legendre, legendre@obs-vlfr.fr

Location: Machado (Floor -2)

[T] REPRESENTS TUTORIAL PRESENTATIONS

10:30 **Sommer, U.**: THE EFFECT OF PHYTOPLANKTON COMPETITION ON BIODIVERSITY AND ECOSYSTEM FUNCTIONS[T] (ID: 26530)

11:00 **Griffiths, J. R.**; Hajdu, S.; Downing, A. E.; Hjerne, O.; Larsson, U.; Winder, M.: COASTAL AND OFFSHORE PHYTOPLANKTON COMMUNITY INTERACTIONS AND ENVIRONMENTAL SENSITIVITY DIFFER IN THE NORTHERN BALTIC SEA (ID: 25470)

11:15 **Vasconcelos, F. R.**; Diehl, S.; Rodríguez, P.; Karlsson, J. R.: SPATIALLY ASYMMETRIC CROSS-HABITAT COMPETITION BETWEEN BENTHIC AND PELAGIC ALGAE: FEEDBACKS BETWEEN LIGHT AND NUTRIENT SUPPLY (ID: 26963)

11:30 **Sandaa, R. A.**; Töpper, B.; Larsen, A.; Våge, S.; Pree, B.; Thingstad, T. F.: DIFFERENCES IN TOP DOWN VIRAL REGULATION AS A RESULT OF COMPETITION BETWEEN PLAYERS IN THE MICROBIAL FOOD-WEB (ID: 26046)

11:45 Thingstad, T. F.; Pree, B.; **Våge, S.**: COMBINING INTERNAL AND EXTERNAL CONTROL OF ACTIVITY, ABUNDANCE AND COMPOSITION IN THE PELAGIC PROKARYOTE COMMUNITY* (ID: 25698)

15:00 **Legendre, L.**; Rivkin, R. B.: FLOWS OF BIOGENIC CARBON IN THE WORLD OCEANS: ROLE OF THE MICROBIAL COMPETITION SWITCHES IN PELAGIC FOOD WEBS (ID: 25991)

15:15 **Artioli, Y.**; Allen, J. I.: MODELLING THE IMPACT OF PLANKTONIC INTERPSECIFIC COMPETITION ON ECOSYSTEM FUNCTIONS AND RESPONSES TO GLOBAL CHANGES (ID: 27217)

15:30 **Gypens, N.**; Ghyoot, C.: HOW PHOSPHORUS LIMITATION CAN CONTROL CLIMATIC GAS EMISSION (ID: 25899)

15:45 **Jordi, A.**; Anglès, S.; Garcès, E.; Sampedro, N.; Reñé, A.; Basterretxea, G.: ROLE OF COMPETITION PROCESSES ON PHYTOPLANKTON DYNAMICS THROUGH ADVANCED DATA ASSIMILATION AND ADAPTIVE MODELING (ID: 26351)

16:00 **Prieto, A.**; Barber-Lluch, E.; Hernández-Ruiz, M.; Martínez-García, S.; Fernández, E.; Teira, E.: ASSESSING THE ROLE OF PHYTOPLANKTON-BACTERIOPLANKTON COUPLING IN THE RESPONSE OF MICROBIAL PLANKTON TO NUTRIENT ADDITIONS (ID: 26217)

16:15 **Rivkin, R. B.**; Anderson, M. R.: COMPETITION BETWEEN BACTERIA AND PHYTOPLANKTON: CHARACTERISTICS, CONTROLS AND CONSEQUENCES. (ID: 26310)

17:00 **Bronk, D. A.**; Sipler, R. E.; Sanderson, M. P.; Roberts, Q. N.; Baer, S.: AFFECT OF TERRESTRIAL DISSOLVED ORGANIC MATTER ON THE COMPETITION BETWEEN PHYTOPLANKTON AND BACTERIA FOR NITRATE IN THE COASTAL CHUKCHI SEA* (ID: 27581)

17:15 **Jin, H.**; Chen, J.; Zhuang, Y.; Gao, S.; Wang, B.; Tian, S.: THE EFFECT OF SEA ICE RETREAT ON PHYTOPLANKTON COMMUNITIES IN THE WESTERN ARCTIC OCEAN IN SUMMER (ID: 27654)

17:30 **Larsen, A.**; Egge, J. K.; Nejstgaard, J. C.; Di Capua, I.; Thyrhaug, R.; Bratbak, G.; Thingstad , T. F.: PREDATOR´S INFLUENCE ON OSMOTROPHS´ COMPETITION FOR MINERAL NUTRIENTS IN ARCTIC MARINE MICROBIAL PELAGIC FOOD WEBS (ID: 25853)

17:45 **Saito, H.**; Hashihama, F.; Ehama, M.; Sasaki, Y.; Sugahara, T.; Ogawa, H.; Fukkuda, H.; Kanda, J.: DYNAMICS OF SILICON AND SILICEOUS ORGANISMS IN THE NORTH PACIFIC OCEAN: COMPETITION FOR NITROGEN IN THE DIN DEPLETED SUBTROPICAL REGION (ID: 25968)

18:15 **Chen, J.**; Jin, H.; Wang, K.; Huang, D.; Ni, X.: MONITORING OF EUTROPHICATION AND ITS ECOLOGICAL RESPONCES IN THE CHANGJIANG ESTUARY, CHINA * (ID: 27152)

057 THE OLIGOTROPHIC LEVANTINE SEA: STATE, CHALLENGES, AND MANAGEMENT

Chair(s): Angelos Hannides, hannides@hawaii.edu
Daniel Hayes, dhayes@ucy.ac.cy
Cecelia Hannides, ceceliah@hawaii.edu
Carlos Jimenez, c.jimenez@cyi.ac.cy

Location: Andalucia 2 (Floor 1)

08:30 **Krom, M. D.**; Pierce, J.; Van Cappellen, P.; Poulton, S.; Kress, N.; Goodman, B.: NUTRIENT CYCLING IN THE EASTERN MEDITERRANEAN * (ID: 25614)

09:00 **Kress, N.**; Silverman, J.: EXCESS NITROGEN OVER PHOSPHORUS: N:P RATIOS IN THE LEVANTINE BASIN (EASTERN MEDITERRANEAN) REVISITED (ID: 26587)

09:15 Petihakis, G.; **Christodoulaki, S.**; Triantafyllou, G.; Tsiaras, K.; Mihalopoulos, N.; Kanakidou, M.: ATMOSPHERIC DEPOSITION AND MEDITERRANEAN SEA WATER PRODUCTIVITY – AN OVERVIEW OF ADAMANT PROJECT (ID: 26602)

09:30 **Silverman, J.**; Kress, N.: LARGE HORIZONTAL VARIABILITY IN DEEP WATER TOTAL ALKALINITY AND DISSOLVED INORGANIC CARBON IN THE LEVANTINE BASIN (ID: 27531)

09:45 **Hannides, A. K.**; D'Ortenzio, F.; Hayes, D. R.; Mortier, L.; Testor, P.; Taillandier, V.: LEVANTINE BIOGEOCHEMICAL CYCLING ELUCIDATED BY GLIDER DATA FOR THE PERIOD 2009-2014 (ID: 27150)

10:30 **Rilov, G.**: OCEAN WARMING AND MULTI-SPECIES COLLAPSES AT THE EDGE OF THE SEA – EVIDENCE OF A REGIME SHIFT IN THE LEVANT? (ID: 27744)

10:45 **Hadjioannou, L.**; Jimenez, C.; Cvitkovic, I.; Despalatovic, M.; Evriviadou, M.; Andreou, V.; Petrou, A.: *CLADOCORA CAESPITOSA*, A MEDITERRANEAN CORAL UNDER THREAT? WAKE-UP CALL FROM RECENT MASS MORTALITY EVENTS (ID: 27159)

11:00 **Corrales, X.**; Coll, M.; Ofir, E.; Goren, M.; Edelist, D.; Heymans, J. J.; Gal, G.: MODELING THE STRUCTURE AND FUNCTIONING OF THE ISRAELI MARINE CONTINENTAL SHELF ECOSYSTEM: INSIGHTS OF THE IMPACT OF ALIEN SPECIES AND FISHING (ID: 25700)

11:15 **Ouba, A.**; Abboud-Abi Saab, M.; Stemmann, L.: INTERANNUAL (1999-2014) AND SEASONAL VARIATIONS OF ZOOPLANKTON IN THE LEVANTINE SEA UNDER CLIMATIC CHANGES (ID: 25892)

11:30 **Hannides, C. C.**; Zervoudaki, S.; Frangoulis, C.; Lange, M. A.; Siokou, I.: MESOZOOPLANKTON STABLE ISOTOPE COMPOSITION IN THE EASTERN MEDITERRANEAN (ID: 27411)

11:45 **Jimenez, C.**; Achilleos, K.; Brook, G.; Petrou, A.; Hadjioannou, L.; Abu Alhaija, R.: ECOLOGICAL ENGINEERING IN THE DARK: BIOGENIC STALACTITES IN A SUBMERGED MARINE CAVE (CYPRUS) (ID: 27392)

* REPRESENTS INVITED PRESENTATIONS

058 MICROBIAL INTERACTIONS ACROSS THE DOMAINS OF LIFE

Chair(s): Susanne Wilken, swilken@mbari.org
Valeria Jimenez, vjimenez@mbari.org
Alexandra Worden, azworden@mbari.org

Location: Room B (Floor -3)

09:00 **Martin Platero, A. M.**; Cleary, B.; Kauffman, K. M.; Kearney, S.; Preheim, S. P.; Alm, E. J.; Polz, M. F.: RAPID TURNOVER OF MICROBIAL COMMUNITIES IN COASTAL OCEAN PLANKTON (ID: 25638)

09:15 **Lima-Mendez, G.**; Faust, K.; Henry, N.; Decelle, J.; Colin, S.; Carcillo, F.; Chaffron, S.; Ignacio-Espinosa, J. C.; Roux, S.; Vincent, F.; Bittner, L.; Darzi, Y.; Wang, J.; Audic, S.; Berline, L.; Bontempi, G.; Coppola, L.; Cornejo-Castillo, F. M.; d'Ovidio, F.; Demeester, L.; Garet-Delmas, M.J..; Guidi, L.; Pesant, S.; Salazar, G.; Dimier, C.; Picheral, M.; Searson, S.; Kandels-Lewis, S.: TOP-DOWN DETERMINANTS OF COMMUNITY STRUCTURE IN THE GLOBAL PLANKTON INTERACTOME (ID: 27252)

09:30 **Muñoz-Marin, M. C.**; Thompson, A. W.; Zehr, J. P.: TRANSCRIPTOMIC ANALYSIS IN THE CYANOBACTERIUM UCYN-A (ID: 26430)

09:45 **Brauer, V. S.**; Stomp, M.; Bouvier, T.; Fouilland, E.; Leboulanger, C.; Confurius-Guns, V.; Weissing, F. J.; Stal, L. J.; Huisman, J.: INTERACTIONS BETWEEN A MARINE NITROGEN-FIXING CYANOBACTERIUM AND ITS ASSOCIATED BACTERIAL COMMUNITY (ID: 26709)

10:45 **Hernández-Ruiz, M.**; Barber-Lluch, E.; Prieto, A.; Varela, M. M.; Fernández, E.; Teira, E.: MICROBIAL PLANKTON COMMUNITY RESPONSES TO NUTRIENT AND B12-VITAMIN ADDITIONS (ID: 26971)

11:00 **Allen, A. E.**; Bertrand, E. M.; McCrow, J. P.; Moustafa, A.: PHYTOPLANKTON- BACTERIAL COUPLING MEDIATES MICRONUTRIENT LIMITATION IN THE SOUTHERN OCEAN (ID: 27534)

11:15 **Hmelo, L. R.**; Amin, S.; Tseng, B. S.; Harrison, J. J.; van Tol, H.; Armbrust, E. V.; Parsek, M. R.: BIOFILM FORMATION IS AN IMPORTANT FACTOR IN THE SYNERGISTIC RELATIONSHIP BETWEEN *SULFITOBACTER*STRAIN SA11 AND *PSEUDO-NITZSCHIA MULTISERIES* (ID: 27677)

11:30 **Baker, L. J.**; Kemp, P. F.: BACTERIAL COLONIZATION OF DIATOM SURFACES: STRATEGIES, WINNERS AND LOSERS (ID: 26438)

11:45 **Vincent, F.**; Mendez, G. L.; Colin, S.; de Vargas, C.; Raes, J.; Bowler, C.: DIATOM INTERACTIONS IN THE OPEN OCEAN: AN ECOLOGICAL NETWORK BASED APPROACH TO STUDY DIATOM COMMUNITY (ID: 27757)

15:00 **Decelle, J.**; Mordret, S.; Henry, N.; Romac, S.; Carmichael, M.; Colin, S.; Berney, C.; Garet-Delmas, M.; De Vargas, C.: THE SYMBIOTIC LIFE OF SYMBIODINIUM IN THE OCEANIC PLANKTON WITH A NEW SPECIES OF CALCIFYING CILIATE (ID: 26676)

15:15 **Beinart, R. A.**; Pachiadaki, M. G.; Bernhard, J. M.; Leadbetter, E. R.; Edgcomb, V. P.: INSIGHTS INTO THE METABOLIC FUNCTIONING OF A MULTI-PARTNER CILIATE SYMBIOSIS FROM OXYGEN-DEPLETED SEDIMENTS (ID: 27354)

15:30 **Hamilton, M. M.**; Hennon, G. M.; Morales, R.; Needoba, J. A.; Peterson, T.; Schatz, M.; Swalwell, J.; Zuber, P.; Armbrust, E. V.; Ribalet, F.: INVESTIGATING THE INTERACTIONS BETWEEN THE CILIATE *MESODINIUM* MAJOR AND CRYPTOPHYTE ALGAE IN THE COLUMBIA RIVER ESTUARY. (ID: 27442)

15:45 **Hansen, P. J.**; Ojamäe, K.; Berge, T.; Trampe, E.; Nielsen, L. T.; Lips, I.; Kuhl , M.: PHOTOREGULATION IN A KLEPTOCHLOROPLASTIDIC DINOFLAGELLATE, DINOPHYSIS ACUTA (ID: 27038)

16:00 **Park, M. G.**; Kim, M.; Kim, S.: TROPHIC INTERACTIONS OF THE FACULTATIVE MIXOTROPHIC DINOFLAGELLATE FRAGILIDIUM DUPLOCAMPANAEFORME WITH DINOFLAGELLATES DINOPHYSIS SPP. AND A CILIATE MESODINIUM (ID: 26582)

16:15 **Fischer, R.**; Hillebrand, H.; Giebel, H.; Ptacnik, R.: DEFINING THE NICHE OF MIXOTROPHIC BACTERIVORES (ID: 27537)

17:00 **Grossart, H. P.**; Rieck, A.; Wurzbacher, C.: FUNGAL DIVERSITY AND FUNCTION IN AQUATIC SYSTEMS (ID: 25974)

17:15 **Frenken, T.**; Velthuis, M.; Aben, R.; Kosten, S.; Van Donk, E.; Van de Waal, D. B.: IMPACT OF GLOBAL WARMING ON THE FUNGAL INFECTION OF A PHYTOPLANKTON SPRING BLOOM (ID: 26155)

17:30 **Alacid, E.**; Park, M. G.; Turon, M.; Garcés, E.: *PARVILUCIFERA SINERAE* IS A GENERALIST PARASITE BUT SHOWS CLEAR PREFERENCES AMONG ITS DINOFLAGELLATES HOSTS (ID: 25832)

17:45 **George, A.**; De Palmas, S.; Chen, C. A.: CHARACTERIZING BACTERIA COMMUNITIES OF CORAL DISEASES IN CHINA AND TAIWAN (ID: 27250)

18:00 **Davis, J.**; Vicente, J.; Hill, R. T.: PHOTOSYNTHETIC SEA SLUG *E. CRISPATA* HARBORS SIMILAR BACTERIAL COMMUNITIES IN TWO GEOGRAPHICALLY DISTINCT CARIBBEAN LOCATIONS (ID: 25937)

066 STRENGTHENING THE PALAEOLIMNOLOGICAL CONTRIBUTION TO GLOBAL CHANGE

Chair(s): Jordi Catalan, j.catalan@creaf.uab.cat
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Carmen Pérez-Martínez, cperezm@ugr.es
Eduardo L Piovano, eduardopiovano@gmail.com

Location: Albeniz (Floor -2)

08:30 Schilder, J. C.; van Hardenbroek, M.; Bodelier, P.; Kirilova, E. P.; Leuenberger, M.; Lotter, A. F.; **Heiri, O.**: PRODUCTIVITY CHANGES AFFECT THE IMPORTANCE OF METHANOGENIC CARBON IN THE FOOD WEB OF A SMALL TEMPERATE LAKE* (ID: 26917)

08:45 **Rioual, P.**; Chu, G.; Mingram, J.; Han, J.; Liu, J.: DIATOM SEASONALITY ASSESSED FROM SEDIMENT TRAPS AND IMPLICATIONS FOR THE INTERPRETATION OF AN ANNUALLY LAMINATED SEDIMENTARY RECORD FROM CHINA* (ID: 26463)

09:00 **Catalan, J.**; Pla-Rabès, S.; Rivera-Rondón, C. A.; Camarero, L.: RECONSTRUCTING INORGANIC CARBON CHANGES IN LAKES USING THE DIATOM RECORD* (ID: 26022)

09:15 **Milan, M.**; Bigler, C.; Szeroczynska, K.; Salmaso, N.; Tolotti, M.: MULTI-PROXY APPROACH TO EVALUATE THE EFFECTS OF CLIMATE CHANGE AND NUTRIENT ENRICHMENT ON THE PLANKTONIC COMMUNITY IN LAKE GARDA (ITALY) AT SECULAR SCALE.* (ID: 27181)

09:30 **Rivera-Rondón, C. A.**; Catalan, J.: THE RATIO BETWEEN CHRYSOPHYCEAN CYSTS AND DIATOMS AS AN INDEX FOR WATER LEVEL RECONSTRUCTION (ID: 26488)

09:45 **Lami, A.**; Buchaca, T.; Marchetto, A.; Musazzi, S.; Catalan, J.; Guilizzoni, P.: DIFFERENTIAL PATTERNS IN THE RESPONSE TO GLOBAL CHANGE OF HIGH ALTITUDE LAKES IN TWO MOUNTAIN RANGES IN EUROPE* (ID: 26179)

10:30 **Wendt-Potthoff, K.**; Scharf, B. W.; Boehrer, B.; Völkner, C.; Tittel, J.; Merkt, J.: VARVE FORMATION IN THE ACIDIC (PH 2.7) PIT LAKE 111 (LUSATIA, GERMANY)* (ID: 25811)

10:45 **Reavie, E. D.**; Sgro, G. V.; Allinger, L. E.; Bramburger, A. J.; Shaw Chraïbi, V. L.: SHOULD WE BE CONCERNED ABOUT CLIMATE-DRIVEN REORGANIZATION OF AQUATIC PRIMARY PRODUCERS?* (ID: 25861)

11:00 **Moorhouse, H. L.**; McGowan, S.; Jones, M. D.; Taranu, Z.; Barker, P.; Leavitt, P. R.; Gregory-Eaves, I.; Brayshaw, S.; Haworth, E. Y.: LANDSCAPE-SCALE PALAEOLIMNOLOGY IN LAKES OF THE WINDERMERE CATCHMENT TO IDENTIFY THE DRIVERS OF RECENT LIMNOLOGICAL CHANGE. * (ID: 25789)

11:15 **Pérez-Martínez, C.**; Jiménez, L.; Rühland, K. M.; Jeziorski, A.; Michelutti, N.; Conde-Porcuna, J. M.; Smol, J. P.: MULTI-PROXY EVIDENCE OF 20TH CENTURY CLIMATE WARMING IN SIERRA NEVADA ALPINE LAKES* (ID: 26058)

11:30 **Pla-Rabes, S.**; Monteith, D.; Flower, R.; Rose, N.; Catalan, J.: REMOTE LAKE PHYTOPLANKTON VARIABILITY MATCHES THE NORTHERN HEMISPHERE CLIMATE CHANGE PATTERN* (ID: 26105)

11:45 **Rubio-Inglés, M. J.**; Shanahan, T. M.; Sáez, A.; Pueyo, J. J.; Raposeiro, P. M.; Hernández, A.; Sánchez-López, G.; Gonçalves, V. M.; Masqué, P.; Giralt, S.: TEMPERATURE RECONSTRUCTION BY GDGTS FOR THE LAST 700 YEARS IN AZORES ARCHIPELAGO: AN EXAMPLE OF A CONTINENTAL RECORD IN THE NORTH ATLANTIC.* (ID: 26615)

15:00 **Toney, J. L.**; McColl, J. L.; Seki, O.; Couto, J.; Bendle, J. A.; Henderson, A. C.; Phoenix, V. R.; Uchida, M.; Kawamura, K.: TEMPERATURE AND HYDROLOGICAL VARIABILITY FROM LAKE TOYONI, HOKKAIDO, JAPAN OVER THE LAST 1,000 YEARS* (ID: 26056)

15:15 **García-Alix, A.**; Toney, J. L.; Jiménez-Moreno, G.; Anderson, R. S.; Moosen, H.; Seki, O.: PRELIMINARY RECONSTRUCTION OF THE PRECIPITATION/ EVAPORATION BALANCE DURING THE HOLOCENE IN SIERRA NEVADA (S SPAIN)* (ID: 26106)

15:30 **Stevenson, M. A.**; McGowan, S.; Swann, G. E.; Pearson, E. J.: VARIABILITY IN ARCTIC LAKE CARBON PROCESSING DURING THE HOLOCENE ALONG A LANDSCAPE GRADIENT, DISKO ISLAND, WEST GREENLAND* (ID: 26675)

15:45 Frugone, M.; Carrevedo, M.; Latorre, C.; Maldonado, A.; Cárdenas, D.; Bernárdez, P.; Prego, R.; Barreiro-Lostres, F.; Giralt, S.; **Valero-Garcés, B. L.**: RECENT AND HOLOCENE ENVIRONMENTAL VARIABILITY IN HIGH ALTITUDE ANDEAN LAKES: LAGUNA DEL MAULE, CENTRAL CHILE (ID: 27503)

16:00 **Jimenez-Moreno, G.**; Ramos-Roman, M. J.; Garcia-Alix, A.; Toney, J. L.; Anderson, R. S.; Jimenez-Espejo, F. J.; Martinez-Ruiz, F.; Kaufman, D.; Bright, J.; Larrasoaña, J. C.: A NEW LONG SEDIMENT RECORD FROM EL PADUL, SIERRA NEVADA (SOUTHERN SPAIN)* (ID: 25466)

071 PHYSIOLOGICAL RESPONSES OF PHYTOPLANKTON TO RESOURCE AVAILABILITY

Chair(s): Kimberly Halsey, halseyk@science.oregonstate.edu
Amanda Cockshutt, acockshu@mta.ca
Mario Giordano, m.giordano@me.com
Ondrej Prasil, prasil@alga.cz
Bethan Jones, bethan.jones@science.oregonstate.edu

Location: Seminario 3-4-5 (Floor 1)

08:30 **Vardi, A.**: REDOX-BASED SENSING OF ENVIRONMETAL STRESS- FROM ORGANELLE SIGNALING TO CELL FATE DECISION * (ID: 25884)

08:45 **Huete-Ortega, M.**; McKew, B. A.; Finch, S. J.; Metodieva, G.; Metodiev, M.; Geider, R. J.: PROTEOMIC AND PHOTOPHYSIOLOGICAL CHANGES IN *EMILIANIA HUXLEYI* CCMP 1516 UNDERLYING PHOTOACCLIMATION TO INCREASING LIGHT INTENSITIES (ID: 26318)

09:00 **Lacour, T.**; Ferland, J.; Larivière, J.; Babin, M.: ARCTIC DIATOM ADAPTATION AND ACCLIMATION TO IRRADIANCE AND TEMPERATURE (ID: 26309)

09:15 **Domínguez-Martín, M. A.**; Gómez-Baena, G.; Diez, J.; Seidel, G.; Burkovski, A.; Beynon, R. J.; García-Fernández, J. M.: DIVERSITY OF REGULATORY MECHANISMS OF C/N METABOLISM IN DIFFERENT PROCHLOROCOCCUS ECOTYPES (ID: 26072)

09:30 **Eichner, M. J.**; Kranz, S. K.; Thoms, S.; Rost, B.: PHYSIOLOGY OF A N_2-FIXER UNDER OCEAN ACIDIFICATION – THE ROLES OF INTERNAL CARBON FLUXES AND ENERGY ALLOCATION (ID: 27549)

09:45 **Felcmanova, K.**; Kotabova, E.; Lukes, M.; Kana, R.; Halsey, K.; Prasil, O.: REGULATION OF PHOTOSYNTHESIS AND PRIMARY PRODUCTION OF PROKARYOTE MICROORGANISM *PROCHLOROCOCCUS MARINUS*(ID: 26538)

10:30 **Dyhrman, S. T.**; Alexander, H.; Jenkins, B. D.; Rynearson, T. A.: LEVERAGING TRANSCRIPTOME DATA TO IDENTIFY RESOURCE PARTITIONING OF PHYTOPLANKTON NICHE SPACE IN THE FIELD* (ID: 27234)

10:45 **Wirtz, K. W.**: RICHNESS IN PHYTOPLANKTON STOICHIOMETRIC RESPONSES EXPLAINED BY INTERMITTENCY AND VARIABLE CO-LIMITATION (ID: 25979)

11:00 **Giordano, M.**; Prioretti, L.: ALGAE AND SULFATE: SOME INSIGHTS ON ALGAL ATP SULFURYLASE (ID: 26239)

11:15 **Wilken, S.**; Schuurmans, J. M.; Matthijs, H. C.; Worden, A. Z.: HOW LIGHT AND PREY AVAILABILITY SHAPE THE PHYSIOLOGY OF MIXOTROPHIC FLAGELLATES (ID: 26477)

11:30 **Barber-Lluch, E.**; Hernández-Ruiz, M.; Prieto, A.; Martínez-García, S.; Sobrino, C.; Teixeira, I.; Fernández, E.; Teira, E.; Arbones, B.; Figueiras, F.: RESPONSE PATTERNS OF AUTOTROPHIC MICROBIAL PLANKTON TO NUTRIENT INPUTS: CONSTRUCTING A PREDICTIVE TOOL (ID: 26287)

11:45 **Jones, B. M.**; Fisher, N. L.; Halsey, K. H.: PHYSIOLOGICAL AND TRANSCRIPT-RELATED RESPONSES OF *THALASSIOSIRA PSEUDONANA* TO NITRATE LIMITATION (ID: 26419)

15:00 **Graff, J. R.**; Fisher, N. L.; Milligan, A. J.; Behrenfeld, M. J.; Halsey, K. J.: OUT OF THE DARKNESS: SHEDDING LIGHT ON PHYTOPLANKTON PHOTOACCLIMATION IN THE NATURAL MARINE ENVIRONMENT (ID: 27330)

* REPRESENTS INVITED PRESENTATIONS

15:15 **Dugenne, M.**; Thyssen, M.; Grégori, G. J.: PHYSIOLOGICAL-BASED ESTIMATIONS OF GROWTH RATES IN NATURAL AND CONTROLLED PHYTOPLANKTONIC POPULATIONS BY AUTOMATED FLOW CYTOMETRY (ID: 27062)

15:30 **Lawrenz, E.**; Charvát, F.; Prášil, O.: RECONCEILING PHOTOSYNTHETIC ELECTRON TRANSFER WITH CARBON FIXATION AND OXYGEN EVOLUTION IN MARINE PHYTOPLANKTON (ID: 25679)

15:45 **Köhler, J.**: ESTIMATION OF MINIMUM LIGHT REQUIREMENTS OF PHYTOPLANKTON IN MIXED WATER LAYERS (ID: 27151)

16:00 **Sabbe, K.**; Barnett, A.; Blommaert, L.; Méléder, V.; Lepetit, B.; Dupuy, C.; Gaudin, P.; Vyverman, W.; Lavaud, J.: GROWTH FORM DETERMINES PHYSIOLOGICAL PHOTOPROTECTIVE CAPACITY IN MARINE INTERTIDAL DIATOMS (ID: 26228)

16:15 **Stomp, M.**; Matthijs, H.; Stal, L. J.; Huisman, J.: SPECTRAL TUNING OF CYANOBACTERIAL PIGMENTS SHAPED BY VIBRATIONS OF THE WATER MOLECULE (ID: 26715)

072 PHYSICAL AND BIOLOGICAL PROCESSES ASSOCIATED WITH THE EXCHANGE THROUGH STRAITS: THE CASE OF GIBRALTAR AND OTHER NARROW STRAITS.

Chair(s): Fidel Echevarría, fidel.echevarria@uca.es
Jesús García-Lafuente, glafuente@ctima.uma.es
Carlos M. García, carlos.garcia@uca.es
Bouchta El Moumni, bmoumni@yahoo.fr

Location: Press Room (Floor 2)

15:00 **Echevarría, F.**; García Lafuente, J. M.; Garcia, C. M.; El Moumni, B.; Bruno, M.: PHYSICAL AND BIOLOGICAL PROCESSES ASSOCIATED WITH THE EXCHANGE THROUGH STRAITS* (ID: 27570)

15:15 **Macias, D.**; Garcia-Gorriz, E.; Stips, A.: DISCRIMINATING LOCAL AND REMOTE ATMOSPHERIC FORCING OF THE ATLANTIC JET DYNAMICS IN THE ALBORAN SEA [T] (ID: 26487)

15:45 **huertas cabilla, E.**; flecha, s.; Rios, A.; Garcia-Lafuente, J.; Hilmi, K.; de la Paz, M.; Perez, F.: GIFT (GIBRALTAR FIXED TIME SERIES): A SENSOR FOR GLOBAL CHANGE IN THE MEDITERRANEAN SEA (ID: 26701)

16:00 **Mercado, J. M.**; Cortés, D.; Gómez, F. J.; Salles, S.; Yebra, L.; León, P.; Putzeys, S.: DISCRIMINATING EFFECTS OF HYDROLOGICAL VARIABILITY AND ANTROPOGENIC PRESSURES ON NUTRIENT BUDGET AND PLANKTON PRODUCTION IN THE BAY OF ALGECIRAS (ID: 26010)

16:15 Sánchez Garrido, J. C.; **Naranjo, C.**; Macías, D.; García-Lafuente, J.: MODELLING THE BIOLOGICAL RESPONSE TO TIDAL FORCING IN THE STRAIT OF GIBRALTAR-ALBORAN SEA SYSTEM (ID: 25820)

17:00 **Park, K.**; Powers, S. P.; Bosarge, G. S.; Jung, H.: EFFECT OF A HURRICANE-INDUCED PASS ON HABITAT QUALITY FOR OYSTERS IN A NORTHERN GULF OF MEXICO ESTUARY (ID: 25748)

17:15 **Sanchez-Leal, R. F.**; Bellanco-Esteban, M. J.; Sanchez-Garrido, J. C.; Sammartino, S.; Naranjo-Rosa, C.; Garcia-Lafuente, J.; Ruiz-Villarreal, M.; Gonzalez-Pola, C.; Peliz, A.; Relvas, P.: THE SPREADING PATTERN OF THE MEDITERRANEAN OUTFLOW WATER (MOW) WEST OF THE STRAIT OF GIBRALTAR. (ID: 27101)

17:30 **Oguz, T.**; Macias, D.; Garcia-Lafuente, J.; Pasqual, A.; Tintore, J.: FUELING PLANKTON PRODUCTION BY A MEANDERING FRONTAL JET: A CASE STUDY FOR THE ALBORAN SEA (WESTERN MEDITERRANEAN) (ID: 26443)

17:45 **Akhir, M. F.**; Kok, P. H.; Zainol, Z.: SHALLOW SHELF UPWELLING DYNAMICS AND COOL WATER MIXING BETWEEN TWO DIFFERENT REGION THROUGH KARIMATA STRAITS (ID: 26513)

18:00 **Psarra, S.**; Zervakis, V.; Lagaria, A.; Frangoulis, C.; Giannakourou, A.; Gogou, A.; Karageorgis, A.; Kokkini, Z.; Krasakopoulou, E.; Mara, P.; Parinos, C.; Pitta, E.; Pitta, P.; Tragou, E.; Tsiola, A.; Triantaphyllou, M.; Zeri, C.: EFFECTS OF THE BLACK SEA WATER INFLOW ON THE ECOSYSTEM FUNCTIONING OF THE NE AEGEAN SEA (NE MEDITERRANEAN) (ID: 27553)

18:15 **del Rosal Salido, J.**; Zarzuelo Romero, C.; Díez Minguito, M.; Ortega Sánchez, M.; Losada Rodríguez, M.: RESIDUAL CIRCULATION IN THE BAY OF CADIZ (SW SPAIN): FIELD DATA ANALYSIS AND NUMERICAL MODELING (ID: 26183)

075 MARINE MICROBIAL BIODIVERSITY, BIOINFORMATICS, AND BIOTECHNOLOGY

Chair(s): Frank Oliver Glockner, fog@mpi-bremen.de
Chris Bowler, cbowler@biologie.ens.fr
Linda Amaral Zettler, amaral@mbl.edu

Location: Andalucia 1 (Floor 1)

10:30 Sunagawa, S.; **Coelho, L. P.**; Chaffron, S.; Kultima, J. R.; Labadie, K.; Salazar, G.; Djahanschiri, B.; Zeller, G.; Mende, D.; Alberti, A.; Cornejo-Castillo, F. M.; Costea, P. I.; Cruaud, C.; d'Ovidio, F.; Engelen, S.; Ferrera, I.; Gasol, J. M.; Guidi, L.; Hildebrand, F.; Kokoszka, F.; Lepoivre, C.; Lima-Mendez, G.; Poulain, J.; Poulos, B. T.; Royo-Llonch, M.; Sarmento, H.; Vieira-Silva, S.; Celine, D., et al: STRUCTURE AND FUNCTION OF THE GLOBAL OCEAN MICROBIOME* (ID: 27509)

11:00 **Kirilovsky, A.**; Pelletier, E.; Caputi, L.; Paz-Yepes, J.; Boccara, M.; Aury, J. M.; Bowler, C.; Wincker, P.; Not, F.; Iudicone, D.: METABOLIC RESPONSE OF A PLANKTONIC ECOSYSTEM TO ENVIRONMENTAL PERTURBATION* (ID: 26092)

11:15 **Amaral-Zettler, L. A.**; Slikas, B.; Carlson, L.; Blum, L.; Booth, M.; Boyer, J.; Carlson, C.; Ducklow, H.; Tittensor, D.: GLOBAL PATTERNS AND PREDICTORS IN BACTERIAL BIODIVERSITY * (ID: 26164)

11:30 **Kottmann, R.**; Schnetzer, J.; Pop Ristov, A.; Glöckner, F. O.: THE MICRO B3 INFORMATION SYSTEM: MANAGING THE DATA FLOW OF THE OCEAN SAMPLING DAY* (ID: 26126)

11:45 **Chaouni, B.**; ZAID, E.; GHAZAL, H.: CHARACTERIZATION OF MICROBIAL DIVERSITY IN MOROCCAN LAGOONS USING METAGENOMICS APPROACH* (ID: 27391)

15:00 **Balestreri, C.**; Schroeder, J.; Schroeder, D. C.: MICROBIAL DIVERSITY IN THE WESTERN CHANNEL OBSERVATORY AS OBSERVED BY NGS* (ID: 27193)

15:15 Hugerth, L. W.; Alneberg, J.; Larsson, J.; Pinhassi, J.; **Andersson, A. F.**: RECONSTRUCTION OF BALTIC SEA BACTERIOPLANKTON GENOMES FROM TIME-SERIES METAGENOMES UNCOVERS A GLOBAL BRACKISH MICROBIOME* (ID: 27387)

THURSDAY

[T] REPRESENTS TUTORIAL PRESENTATIONS

15:30 **Partensky, F.**; Grebert, T.; Humily, F.; Farrant, G. K.; Ratin, M.; Bisch, A.; Pitt, F. D.; Scanlan, D. J.; Garczarek, L.: ADAPTATION TO LIGHT COLOR IN THE OCEAN: INSIGHTS FROM COMPARATIVE ANALYSES OF MARINE SYNECHOCOCCUS GENOMES AND PHYCOBILISOME GENE REGIONS FROM THE FIELD* (ID: 26818)

15:45 **Martin-Cuadrado, A.**; Garcia-Heredia, I.; Gonzaga Molto, A.; López-Úbeda, R.; Kimes, N.; López-García, P.; Moreira, D.; Rodriguez-Valera, F.: NEW CLASSES OF MARINE EURYARCHAEOTA GROUP II FROM THE MEDITERRANEAN DCM* (ID: 27053)

16:00 **Logares, R.**; Perera-Bel, J.; Pernice, M. C.; Giner, C. R.; Sánchez, P.; Salazar, G.; Sebastián, M.; Acinas, S. G.; Gasol, J. M.; Massana, R.; Cornejo-Castillo, F. M.; Duarte, C. M.: WHAT CAN METAGENOMES TELL US ABOUT DEEP-SEA PROTISTS? A GLOBAL PERSPECTIVE* (ID: 26757)

16:15 **Hardge, K.**; Stock, A.; Neuhaus, S.; Weinisch, L.; Peeken, I.; Stoeck, T.; Metfies, K.: FROM MELT PONDS TO THE WATER COLUMN: PROTIST DIVERSITY IN THE CENTRAL ARCTIC OCEAN* (ID: 26620)

17:00 **Fernandez-Guerra, A.**; Kottmann, R.; Barberan Torrents, A.; Casamayor, E. O.; Glöckner, F. O.: EXPLORING THE DARK SIDE OF THE METAGENOMES* (ID: 26094)

17:15 **Jaillon, O.**; Vannier, T.; Wincker, P.: A FIRST LARGE SCALE CHARACTERIZATION OF EUKARYOTIC UNKNOWN GENES OF PLANKTON * (ID: 25623)

17:30 **Mangot, J. F.**; Logares, R.; Sieracki, M. E.; Wincker, P.; de Vargas, C.; Massana, R.: TOWARDS A COMPLETE DESCRIPTION OF THE GENOMES OF MARINE UNCULTURED STRAMENOPILES USING SINGLE CELL GENOMICS* (ID: 27065)

17:45 Veluchamy, A.; Rastogi, A.; Lin, X.; Thomas, Y.; Murik, O.; Lombard, B.; Loew, D.; Allen, A. E.; Bowler, C.; **Tirichine, L.**: PHAEODACTYLUM TRICORNUTUM, A MODEL SYSTEM FOR STUDYING THE GENETIC AND EPIGENETIC BASES OF ADAPTATION IN OCEANIC PLANKTON COMMUNITIES* (ID: 25436)

18:00 **Schroeder, J. L.**; Balestreri, C.; Yilmaz, P.; Paszkiewicz, K. H.; Moore, K. A.; Thorpe, S. E.; Glockner, F. O.; Schroeder, D.: IN NEXT GENERATION AMPLICON SEQUENCING PROJECTS IS REPLICATION A NECESSARY EXPENSE?* (ID: 25860)

18:15 **Wesnigk, J. B.**: CAPACITY BUILDING IN ENVIRONMENTAL BIOINFORMATICS AND MARINE BIOTECHNOLOGY* (ID: 25591)

086 A MEETING POINT FOR FRESHWATER BIOGEOCHEMISTRY AND MICROBIAL BIODIVERSITY: WHO IS DOING THE WORK, AT WHAT PACE ARE THEY WORKING?

Chair(s): Jordi Catalan, j.catalan@creaf.uab.cat
Diane McKnight, Diane.Mcknight@colorado.edu
Lluis Camarero, camarero@ceab.csic.es

Location: Andalucia 2 (Floor 1)

15:00 **Kleinteich, J.**; Stelmach-Pessi, I.; Velazquez, D.; Javaux, E.; Storme, J. Y.; Darchambeau, F.; Borges, A. V.; Compère, P.; Golubic, S.; Wilmotte, A.: CYANOBACTERIA – THE CONSTRUCTORS OF TRAVERTINES? (ID: 27480)

15:15 **Meziti, A.**; Tsementzi, D.; Kormas, K.; Konstantinidis, K.; Karayanni, H.: SHIFTS IN PHYLOGENETIC DIVERSITY AND FUNCTIONAL GENE CONTENT ALONG SPACE AND TIME IN A HUMAN-IMPACTED RIVER IN NORTHWEST GREECE (ID: 25561)

15:30 **Merbt, S. N.**; Ribot, M.; Casamayor, E. O.; Marti, E.; Bernal, S.: MAIN ROLE OF EPILITHIC BIOFILMS IN WHOLE-REACH NITRIFICATION IN AN URBAN STREAM UNDER HIGH NITROGEN LOAD CONDITIONS (ID: 27042)

15:45 **Hernández-del Amo, E.**; Gich, F.; Bañeras, L.: COMMUNITY COMPOSITION DETERMINES NITRITE FATE IN A FREE WATER SURFACE CONSTRUCTED WETLAND (ID: 26394)

16:00 **Sala-Faig, M.**; Camarero, L.; Casamayor, E. O.; Catalan, J.: MOLECULAR AND ISOTOPIC ANALYSIS REVEAL HIGH NITRIFICATION ACTIVITY PERFORMED BY AMMONIA-OXIDIZING BACTERIA IN A DEEP OLIGOTROPHIC MOUNTAIN LAKE (ID: 26226)

16:15 **Welti, N. D.**; Siljanen, H.; Rajasakaren, S.; Biasi, C.; Martikainen, P.: MECHANISMS OF NITROUS OXIDE UPTAKE IN BOREAL PEATLANDS QUANTIFIED BY ISOTOPIC AND MOLECULAR METHODS (ID: 25668)

17:00 Vila, M.; Pulido, C.; Chappuis, E.; Casamayor, E. O.; **Gacia, E.**: MACROPHYTE LANDSCAPE MODULATES ECOSYSTEM-LEVEL NITROGEN LOSSES THROUGH TIGHTLY COUPLED PLANT-MICROBE INTERACTIONS (ID: 27247)

17:15 **Palacin-Lizarbe, C.**; Camarero, L.; Casamayor, E. O.; Catalan, J.: DENITRIFICATION IN MOUNTAIN LAKES FROM THE PYRENNES: RATES & GENE COPIES (ID: 26088)

17:30 **Giménez-Grau, P.**; Felip, M.; Pla-Rabés, S.; Camarero, L.; Catalan, J.: PROKARYOTE PHYLOGENETIC MAJOR GROUPS' RESPONSE TO P AND N EXPERIMENTAL ENRICHMENTS IN AN ULTRAOLIGOTROPHIC LAKE (ID: 26314)

17:45 **Fillol, M.**; Villanueva, L.; Hopmans, E. C.; Borrego, C. M.; Sinninghe Damsté, J. S.: CHARACTERIZATION OF ARCHAEAL COMMUNITIES IN SEDIMENT FROM A KARSTIC LAKE USING ISOPRENOID GDGT MEMBRANE LIPID AND GENE-BASED MOLECULAR ANALYSES (ID: 26053)

18:00 **Peura, S.**; Sinclair, L.; Eiler, A.: VERTICAL COMPARTMENTALIZATION IN THE WATERCOLUMN OF HUMIC LAKES (ID: 26659)

18:15 **Ruiz-Jiménez, C.**; Hernández-del Amo, E.; Bañeras, L.; Sánchez-Carrillo, S.: TOWARDS AN UNDERSTANDING OF THE N TRANSFORMATION IN AN OLIGOTROPHIC LAKE OF SPAIN: 15N REACH-SCALE ENRICHMENT AND QUANTIFICATION OF N CYCLING FUNCTIONAL GENES (ID: 25865)

089 INFOCHEMICAL CONTROLS ON BIOGEOCHEMCIAL PROCESSES IN AQUATIC AND MARINE ECOSYSTEMS

Chair(s): Benjamin Van Mooy, bvanmooy@whoi.edu
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Matt Johnson, mattjohnson@whoi.edu
Tracy Mincer, tmincer@whoi.edu
Assaf Vardi, Assaf.Vardi@weizmann.ac.il

Location: Room D (Floor -3)

15:00 **Pohnert, G.**: CHEMICAL SIGNALS IN THE SEA - FROM MICROSCOPIC GRADIENTS TO GLOBAL REGULATION* (ID: 27682)

15:15 Echevarria, M. L.; **Taylor, A. R.**: PLANKTON SENSORY BIOLOGY: UNRAVELING CELLULAR RESPONSES TO ENVIRONMENTAL CUES* (ID: 26274)

THURSDAY

* REPRESENTS INVITED PRESENTATIONS

15:30 **Van Mooy, B. A.**; Bidle, K. D.; Dyhrman, S. T.; Johnson, M. D.; Mincer, T. J.; Vardi, A.: CONNECTIONS BETWEEN INFOCHEMICAL COMMUNICATION AND UPPER OCEAN ELEMENTAL IMPORT AND EXPORT. (ID: 27458)

15:45 **Edwards, B. R.**; Collins, J. R.; Fredricks, H. F.; Ossolinski, J. E.; McNair, H.; Brzezinski, M. A.; Krause, J. W.; Thamatrakoln, K.; Bidle, K. D.; Van Mooy, B. A.: COMPARATIVE LIPIDOMICS LINK BLOOM DECLINE TO INFOCHEMICAL PRODUCTION IN THE CALIFORNIA UPWELLING ZONE (ID: 27405)

16:00 **Amin, S. A.**; Hmelo, L. R.; Durham, B. P.; van Tol, H. M.; Carlson, L. T.; Heal, K. R.; Ingalls, A. I.; Parsek, M. R.; Moran, M. A.; Armbrust, E. V.: INTERACTION AND SIGNALING BETWEEN A COSMOPOLITAN DIATOM AND ASSOCIATED BACTERIA (ID: 27445)

16:15 **Johnson, M. D.**; Edwards, B. R.; Beaudoin, D. J.; Van Mooy, B. A.; Vardi, A.: INFOCHEMICAL SIGNALING MEDIATES MICROZOOPLANKTON INTERACTIONS WITH DIATOMS (ID: 27363)

17:00 **Harvey, E. L.**; Poulson-Ellestad, K.; Mincer, T.; Van Mooy, B.; Bidle, K. D.; Johnson, M.: THE COMBINED INFLUENCE OF MORPHOLOGY AND CHEMISTRY IN MEDIATING HETEROTROPHIC PROTIST GRAZING INTERACTIONS (ID: 25669)

17:15 **Poulson-Ellestad, K. L.**; Harvey, E. L.; Ranson, H. J.; Johnson, M. D.; Mincer, T. J.: LISTENING IN ON COCCOLITHOPHORE-GRAZER INTERACTIONS (ID: 27116)

17:30 **Frada, M. J.**; Rosenwasser, S.; Ben-Dor, S.; Vardi, A.: REGULATION OF SEXUAL LIFE CYCLE IN THE BLOOM-FORMING COCCOLITHOPHORE *EMILIANIA HUXLEYI* IN RESPONSE TO VIRAL INFECTION (ID: 25678)

17:45 **Nissimov, J. I.**; Fredricks , H.; Van Mooy, B.; Bidle, K. D.: THE IMPACT OF BIOCHEMICAL DIVERSITY ON INFOCHEMICAL PRODUCTION AND VIRAL DEMISE OF EMILIANIA HUXLEYI (ID: 27328)

18:00 **Murik, O.**; Tirichine, L.; Thomas, Y.; Bailleul, B.; Petroutsos, D.; Prihoda, J.; Finazzi, G.; Bowler, C.: THE ROLE OF CALCIUM SIGNALING IN CHLOROPLAST-MITOCHONDRIA INTERACTIONS DURING THE ADAPTATION OF DIATOMS TO CHANGING ENVIRONMENTAL CONDITIONS (ID: 26069)

18:15 **Mincer, T. J.**; Poulson-Ellestad, K. L.; Ranson, H. J.: ETHYLENE PRODUCTION AND RESPONSE IN MARINE PHYTOPLANKTON: A POTENTIAL UNIVERSAL SIGNAL (ID: 27440)

095 NITROGEN LIMITATION IN FRESHWATER - IS NITROGEN REDUCTION ECOLOGICALLY MEANINGFUL?

Chair(s): Claudia Wiedner, wiedner@tu-cottbus.de
Andrew M. Dolman, andrew.dolman@tu-cottbus.de
Helmut Fischer, helmut.fischer@bafg.de

Location: Room D (Floor -3)

10:30 **Wurtsbaugh, W. A.**; McCarthy , M. J.: THE IMPORTANCE OF PHOSPHORUS AND NITROGEN FOR CONTROLLING ALGAL GROWTH AND EUTROPHICATION (ID: 26479)

10:45 **Dolman, A. M.**; Wiedner, C.: NITROGEN-, PHOSPHORUS- OR CO LIMITATION OF PHYTOPLANKTON BIOMASS AND THE IMPLICATIONS FOR NUTRIENT TARGETS. (ID: 26717)

11:00 **Filstrup, C. T.**; Oliver, S. K.; Stanley, E. H.; Stow, C. A.; Wagner, T.; Webster, K. E.; Downing, J. A.: REGIONAL DIVERGENCE IN NITROGEN SUBSIDY-STRESS EFFECTS ON LAKE PHYTOPLANKTON (ID: 27602)

11:15 **Kolzau, S.**; Wiedner, C.; Rücker, J.; Voss, M.; Dolman, A. M.: NITROGEN FIXATION ALONG GRADIENTS OF N:P RATIO AND LIGHT AVAILABILITY (ID: 27265)

11:30 **Aalto, S. L.**; Rissanen, A.; Juusela, V.; Tiirola, M.: NITROGEN TRANSFORMATIONS IN FRESHWATER SEDIMENTS UNDER TEMPORAL AND SPATIAL WASTE WATER GRADIENT (ID: 26692)

11:45 **Mutz, D.**; Horbat, A.; Matzinger, A.; Remy, C.; Rouault, P.; Meyerhoff, J.; Matranga, M.; Venohr, M.: IS FURTHER NITROGEN REDUCTION IN SURFACE WATERS ECONOMICALLY JUSTIFIABLE? (ID: 25675)

098 ECOSYSTEM-SCALE APPROACHES TO ECOSYSTEM-SCALE QUESTIONS

Chair(s): Jens C. Nejstgaard, nejstgaard@igb-berlin.de
Paraskevi Pitta, vpitta@hcmr.gr
Hans H Jakobsen, hhja@dmu.dk

Location: Machuca (Floor -2)

08:30 **Mooij, W.**; Van Gerven, L.; Janssen, A.; Kuiper, J.: ECOSYSTEM MODELS TO ADDRESS ECOSYSTEM QUESTIONS IN FRESHWATER ECOSYSTEMS (ID: 26995)

08:45 **Deyle, E. R.**; Munch, S. B.; Ye, H.; Sugihara, G.: QUANTIFYING CHANGING INTERACTIONS IN DYNAMIC ECOSYSTEMS (ID: 27545)

09:00 **Gutiérrez Cánovas, C.**; Sánchez-Fernández, D.; Millán, A.; Velasco, J.; Bonada, N.: A NEW METHOD FOR ESTIMATING FUNCTIONAL COMPONENTS AT TAXON AND COMMUNITY LEVELS USING INTRASPECIFIC TRAIT DATA (ID: 25636)

09:15 **Jones, S. E.**; Craig, N.; Kelly, P. T.; Solomon, C. T.; Weidel, B. C.; Zwart, J. A.: SPATIAL SURVEYS VS. WHOLE ECOSYSTEM EXPERIMENTS: DOES SPACE SUBSTITUTE FOR TIME WHEN PREDICTING LAKE RESPONSES TO ELEVATED TERRESTRIAL DOM SUPPLY (ID: 27477)

09:30 **Deininger, A.**; Karlsson, J.; Bergström, A. K.: EFFECTS OF WHOLE-LAKE N ENRICHMENT ON BASAL PELAGIC PRODUCTION AND CONSUMER RESOURCE USE IN BOREAL LAKES (ID: 27226)

09:45 **Vesterinen, J. P.**; Devlin, S. P.; Syväranta, J.; Jones, R. I.: DOMINANCE OF LITTORAL PRIMARY PRODUCTION IN A HIGHLY HUMIC BOREAL LAKE (ID: 26043)

10:30 **Diehl, S.**; Berger, S. A.; Giling, D.; Stibor, H.: AN EXPERIMENTAL DEMONSTRATION OF SVERDRUP'S CRITICAL DEPTH PRINCIPLE (ID: 25414)

10:45 **Thrane, J. E.**; Hessen, D. O.; Andersen, T.: THE ABSORPTION OF LIGHT IN LAKES: NEGATIVE EFFECT OF DISSOLVED ORGANIC CARBON ON PRIMARY PRODUCTIVITY (ID: 26157)

11:00 **Hilt, S.**; Attermeyer, K.; Brothers, S.; Gaedke, U.; Grossart, H. P.; Köhler, J.; Lischke, B.; Scharnweber, K.; Vanni, M. J.; Mehner, T.: UNDERSTANDING TERRESTRIAL SUBSIDIES TO AQUATIC CONSUMERS: LESSONS FROM WHOLE-LAKE EXPERIMENTS IN EUTROPHIC LAKES (ID: 26212)

11:15 **Jakobsen, H. H.**; Blanda, E.; Pedersen, M. F.; Hansen, B. W.: FROM PHYTOPLANKTON TO FISH LARVAL SURVIVAL: HOW EXCESS NUTRIENTS MAY DISCONNECT FOOD WEB CASCADING (ID: 27414)

11:30 **Mostajir, B.**; et al, ..: PLANKTONIC FOOD WEB RESPONSES TO ORGANIC AND INORGANIC PHOSPHORUS ADDITIONS IN THE EASTERN MEDITERRANEAN SEA (CRETAN SEA): AN IN SITU MESOCOSM STUDY (ID: 26328)

11:45 **Pitta, P.**; Dimitriou, P. D.; Giannakourou, A.; Lagaria, A.; Papageorgiou, N.; Psarra, S.; Santi, I.; Tsapakis, M.; Tsiola, A.; Violaki, K.: DOES SAHARAN DUST HAVE ANY EFFECT ON THE BIOLOGICAL PRODUCTIVITY OF THE EASTERN MEDITERRANEAN? A FOOD WEB STUDY BASED ON A MESOCOSM EXPERIMENT (ID: 26037)

15:00 Hart, J.; Prairie, Y. T.; **Beisner, B. E.**: A WHOLE ECOSYSTEM APPROACH REVEALS NOVEL EFFECTS OF ELEVATED CO_2 ON FRESHWATER PLANKTON COMMUNITIES (ID: 25862)

15:15 **Lichtschlag, A.**; James, R. H.; Connelly, D.; Stahl, H.; Haeckel, M.; Blackford, J.: A LARGE-SCALE EXPERIMENT TO ASSESS THE EFFECTS OF CO_2 LEAKAGE ON THE BENTHIC ENVIRONMENT (ID: 26279)

15:30 **Segovia, M.**; Lorenzo, M. R.; Maldonado, M. T.; Larsen, A.; Lazaro, F. J.; Iñiguez, C.; Palma, A.; Garcia-Gomez, C.; Berger, S. A.; Et, a. l.: EFFECT OF INCREASED CO_2 AND IRON LEVELS ON THE MARINE PLANKTON FOOD WEB DURING A MESOCOSM EXPERIMENT (ID: 26264)

15:45 **McCoy, S. J.**; Allesina, S.; Pfister, C. A.: ACIDIFICATION SUPPLANTS TROPHIC CONTROL OF COMPETITIVE INTERACTIONS AMONG CORALLINE ALGAE (ID: 25545)

16:00 **Nejstgaard, J. C.**; Berger, S. A.; Giling, D. P.; Penske, A.; Lenz, M.; Hornick, T.; Grossart, H. P.; Kasprzak, P.; Gessner, M. O.: STORM IN A TEAPOT: SIMULATING AN EXTREME WEATHER EVENT IN A LARGE-SCALE MESOCOSM PLATFORM (ID: 27591)

16:15 **Berger, S. A.**; Nejstgaard, J. C.; Giling, D. P.; Penske, A.; Lentz, M.; Sareyka, J.; Selmezy, G. B.; Kasprzak, P.; Grossart, H. P.; Gessner, M. O.: IMPACT OF AN EXTREME WEATHER EVENT ON LAKE PHYTOPLANKTON IN A LARGE-SCALE MESOCOSM EXPERIMENT (ID: 27598)

17:00 **Giling, D. P.**; Nejstgaard, J. C.; Berger, S. A.; Penske, A.; Lentz, M.; Grossart, H.; Kasprzak, P.; Engelhardt, C.; Kirillin, G.; Gessner, M. O.: EXTREME WEATHER EVENTS INCREASE NET ECOSYSTEM PRODUCTIVITY IN LAKE ECOSYSTEMS: EVIDENCE FROM A LARGE-SCALE ENCLOSURE EXPERIMENT (ID: 27566)

17:15 **Striebel, M.**; Spörl, G.; Hodapp, D.; Hartmann, L.; Hein, T.; Hillebrand, H.: INTERACTING EFFECTS OF DIVERSITY, PRODUCTIVITY AND DISTURBANCE ON PLANKTON COMMUNITIES (ID: 26819)

17:30 **Raddatz, S.**; Pansch, A.; Guy-Haim , T.; Rilov, G.; Wahl, M.: BENTHIC COMMUNITY RE-ORGANIZATION AND RE-FUNCTIONING UNDER CLIMATE CHANGE INDUCED STRESS – A MULTIFACTORIAL APPROACH USING NOVEL MESOCOSMS (ID: 26673)

17:45 **Lewandowska Aleksandra, A. M.**; Boyce, D. G.; Hansen, T.; Hofmann, M.; Matthiessen, B.; Sommer, U.; Worm, B.: HOW OCEAN WARMING SHAPES PLANKTON COMMUNITIES (ID: 26786)

18:00 **Hedström, P.**; Bystedt, D.; Byström, P.: CLIMATE CHANGE HAS NEGATIVE CONSEQUENCES FOR WINTER SURVIVAL IN FISH (ID: 25885)

18:15 **Gessner, M. O.**; Nejstgaard, J. C.: THE VALUE OF MESOCOSM EXPERIMENTS TO ADDRESS ECOSYSTEM-SCALE QUESTIONS (ID: 27615)

105 VIRUSES AND VIRAL MEDIATED PROCESSES IN AQUATIC SYSTEMS

Chair(s): Curtis A Suttle, suttle@Science.ubc.ca
Dolors Vaque, dolors@icm.csic.es
Steven W Wilhelm, wilhelm@utk.edu

Location: Auditorium Manuel de Falla (Floor 1)

17:00 **Brussaard, C.**: AQUATIC VIRUSES AND THEIR ENVIRONMENT[T] (ID: 27341)

17:30 **Winter, C.**; Köstner, N.; Kruspe, C. P.; Muck, S.; Urban, D.; Herndl, G. J.: MIXING OF WATER MASSES AND ITS EFFECTS ON PROKARYOTIC MORTALITY DUE TO VIRUSES (ID: 25773)

17:45 **Ankrah, N. Y.**; Dearth, S.; Erik, Z. R.; Wilhelm, S. W.; Campagna, S. R.; Buchan , A.: METABOLISM OF VIRAL LYSATES BY MARINE BACTERIOPLANKTON COMMUNITIES (ID: 27472)

18:00 **Köstner, N.**; Scharnreitner, L.; Jürgens, K.; Labrenz, M.; Herndl, G. J.; Winter, C.: VIRUSES AS PROKARYOTIC MORTALITY FACTOR IN THE REDOXCLINE OF THE CENTRAL BALTIC SEA (ID: 25607)

18:15 **Lara, E.**; Sà, E. L.; Salazar, G.; Sánchez, P.; Holmfeldt, K.; Duhaime, M. B.; Ignacio-Espinoza, J. C.; Sullivan, M. B.; Vaqué, D.; Acinas, S. G.: *PSEUDOALTEROMONAS* PHAGES: PHAGE-HOST INTERACTIONS, COMPARATIVE GENOMICS AND BIOGEOGRAPHY (ID: 25844)

110 CANYONS AND THEIR DEEP-SEA FANS: WHEN GEOLOGY MEETS BIOLOGY

Chair(s): Christophe Rabouille, rabouill@lsce.ipsl.fr
Karine Olu, karine.olu@ifremer.fr
Amanda Demopoulos, ademopoulos@usgs.gov
Francois Baudin, francois.baudin@upmc.fr

Location: Press Room (Floor 2)

08:30 **Rabouille, C.**; Olu, K.; Baudin, F.; Congolobe-group, A.: GENERAL PRESENTATION OF THE CONGOLOBE PROJECT: A MULTIDISCIPLINARY STUDY OF THE CONGO DEEP-SEA FAN LOBES (ID: 25477)

08:45 **Dennielou, B.**; DROZ, L.; JACQ, C.; PICOT, M.; LE SAOUT, M.; SAOUT, J.; RABOUILLE, C.; OLU, K.: CONGOLOBE: DETAILED ANALYSIS OF CHANNELIZATION AND MASS WASTING PROCESSES AT THE DISTAL LOBES OF THE CONGO DEEP-SEA FAN. (ID: 27095)

09:00 Croguennec, C.; **Ruffine, L.**; Dennielou, B.; Caprais, J.; Brandily, C.; Le Bruchec, J.; Bollinger, C.; Germain, Y.; Droz, L.; Olu, K.; Rabouille, C.: EVIDENCE OF SEDIMENTARY INSTABILITIES AT THE MORE DISTAL LOBE OF THE CONGO DEEP-SEA FAN USING PORE WATER PROFILES (ID: 26678)

09:15 **Karageorgis, A. P.**; Kontoyiannis, H.; Stavrakakis, S.; Krasakopoulou, E.; Lykousis, V.: PARTICLE DYNAMICS AND FLUXES IN THE SOUTHERN CRETAN MARGIN: THE ROLE OF INTERMITTENT CANYON ACTIVITY (ID: 26797)

09:30 **Stetten, E.**; Huguet, A.; Vétion, G.; Wang, H.; Baudin, F.; Pruski, A.: ORGANIC MATTER SOURCES AND REACTIVITY IN SEDIMENTS FROM THE TERMINAL LOBE COMPLEX OF THE CONGO DEEP SEA FAN (ID: 25828)

09:45 **Pozzato, L.**; Berrached, C.; Tisnérat-Laborde , N.; Toussaint, F.; Bombled, B.; Cathalot, C.; Dumoulin, J.; Olu, K.; Rabouille, C.: HOTSPOTS OF ORGANIC MATTER REMINERALIZATION IN THE CONGO DEEP-SEA FAN SYSTEM (ID: 25476)

[*] REPRESENTS INVITED PRESENTATIONS

10:30 **Taillefert, M.**; Beckler, J. S.; Cathalot, C.; Michalopoulos, P.; Corvaisier, R.; Caprais, J. C.; Olu, K.; Rabouille, C.: IRON-SULFUR COUPLING IN DEEP-SEA FANS DOMINATED BY MASSIVE TERRIGENOUS DEPOSITS (ID: 27619)

10:45 **Bessette, S.**; Morrison, H. G.; Godfroy, A.; Toffin, L.: INSIGHTS INTO MICROBIAL COMMUNITIES OF MARINE SEDIMENT FROM THE UNEXPLORED CONGO DEEP-SEA FAN LOBES (ID: 27005)

11:00 **Olu, K.**; Decker, C.; Morineaux, M.; Ain Baziz, M.; Menot, L.; Caprais, J. C.; Cathalot, C.; Krylova, E.; Rabouille, C.: VARIABILITY OF MACROFAUNAL COMMUNITY STRUCTURE IN REDUCING SEDIMENTS OF THE CONGO DEEP-SEA FAN AND SIMILARITIES WITH COLD-SEEP COUNTERPARTS (ID: 26695)

11:15 **Demopoulos, A. W.**; Bourque, J. R.; Kovacs, K.; Phillips, R.; Robertson, C. M.: SEDIMENT MACROFAUNAL COMMUNITIES ASSOCIATED WITH HARD-BOTTOM HABITATS IN NORFOLK CANYON, USA (ID: 27102)

11:45 **Prouty, N. G.**; Campbell-Swarzenski, P.; Mienis, F.; Davies, A.; Demopoulos, A.; Robertson, C.; Duineveld, G.; Ross, S.; Brooke, S.: SOURCES OF ORGANIC MATTER TO DEEP-SEA CORALS LIVING IN SUBMARINE CANYONS OF THE MID-ATLANTIC BIGHT REGION, U.S. (ID: 27449)

132 MICROBIAL DIVERSITY AND DYNAMICS IN EXTREME ENVIRONMENTS

Chair(s): Isabel Reche, ireche@ugr.es
Josefa Antón, anton@ua.es

Location: Albeniz (Floor -2)

17:00 **Huerta-Diaz, M. A.**; Valdivieso-Ojeda, J.; Delgadillo-Hinojosa, F.; Segovia-Zavala, J. A.: HIGH MOLYBDENUM ENRICHMENTS IN THE HYPERSALINE REGION OF GUERRERO NEGRO, BAJA CALIFORNIA SUR, MEXICO* (ID: 25460)

17:15 **Edwardson, C. F.**; Hollibaugh, J. T.: METATRANSCRIPTOMIC ANALYSIS OF BACTERIAL ARSENIC AND SULFUR CYCLING ALONG A REDOX GRADIENT IN ALKALINE, HYPERSALINE, MONO LAKE, CA* (ID: 27579)

17:30 **Meier, J.**; Wendt-Potthoff, K.: SULFATE REDUCING BACTERIA FROM ACIDIC PIT LAKES – ACIDOPHILIC OR RATHER ACIDOTOLERANT?* (ID: 27120)

17:45 **Soria-Píriz, S.**; García-Robledo, E.; Papaspyrou, S.; Úbeda, B.; Jíménez-Arias, J. L.; Bohórquez, J.; Gálvez, J. A.; Gómez, E. H.; Revsbech, N. P.; Corzo, A.: ECOLOGY OF A DEEP CHLOROPHYLL MAXIMUM DEVELOPED DURING STRATIFICATION IN AN ACID MINE DRAINAGE IMPACTED RESERVOIR (HUELVA, SPAIN)* (ID: 26065)

18:00 **Santos, F.**; Martínez-García, M.; Ramos, M. D.; Villamor, J.; Moreno-Paz, M.; Parro, V.; Antón, J.: MICROARRAY TOOLS TO UNVEIL VIRUS-HOST INTERACTIONS IN HYPERSALINE ENVIRONMENTS (ID: 26859)

18:15 **Nigro, O. D.**; Jungbluth, S. P.; Lin, H. T.; Hsieh, C. C.; Mueller, J.; Schvarcz, C.; Rappe, M. S.; Steward, G. F.: CHARACTERIZATION OF A DEEP SUBSURFACE VIRAL COMMUNITY FROM THE BASEMENT FLUIDS OF THE JUAN DE FUCA RIDGE FLANK* (ID: 27652)

139 PLANKTON ECOLOGY - PHYTOPLANKTON

Chair(s): Lisette Senerpont Domis, L.deSenerpontDomis@nioo.knaw.nl

Location: Machado (Floor -2)

08:30 **Morgan-Kiss, R. M.**; Stahl, S. E.; Kiss, A. J.: PHOTOOXIDATIVE STRESS RESPONSE IN MESOPHILIC AND PSYCHROPHILIC ALGAL STRAINS OF CHLAMYDOMONAS RAUDENSIS: LINKING TRANSCRIPTOMICS WITH COMPARATIVE PHYSIOLOGY (ID: 27069)

08:45 **Eick, K. C.**; Pohnert, G.: THE STIMULATORY EFFECT OF THE DIATOM SKELETONEMA COSTATUM ON THE DIATOM THALASSIOSIRA WEISSFLOGII - POSITIVE ALLELOPATHY OR ADAPTION TO A COMPETITOR? (ID: 25681)

09:00 **Low-Decarie, E.**; Bell, G.; Fussmann, G.: FRESHWATER PHYTOPLANKTON RESPONSE TO CHANGE IN CO2 CONCENTRATION (ID: 25624)

09:15 **Latasa, M.**; Cabello, A.; Scharek, R.; Cabeza, C.; González, F.; Massana, R.: VERTICAL ALIGNMENT OF PHYTOPLANKTON GROUPS WITHIN THE DEEP CHLOROPHYLL MAXIMUM (ID: 25504)

09:30 **Hodapp, D. M.**; Hillebrand, H.; Blasius, B.; Ryabov, A.: ENVIRONMENTAL AND TRAIT DIMENSIONALITY CONSTRAIN COMMUNITY STRUCTURE AND THE BIODIVERSITY-PRODUCTIVITY RELATIONSHIP (ID: 26778)

09:45 **Rumyantseva, A. S.**; Henson, S. A.; Martin, A. P.; Heywood, K. J.; Damerell, G. M.; Kaiser, J.; Painter, S. C.; Taylor, J. R.; Thompson, A. F.: SEAGLIDERS IN THE BLOOMING NORTH ATLANTIC OCEAN. (ID: 25826)

140 PLANKTON ECOLOGY - ZOOPLANKTON

Chair(s): Amy Burgess, burgess5@uoregon.edu

Location: Seminario 6-7 (Floor 1)

15:00 **Alurralde, G.**; Fuentes, V. L.; Olariaga, A.; Orejas, C.; Movilla, J.; Schloss, I.; Tatián, M.: ASSIMILATION OF DIFFERENT FOOD SOURCES BY THE ANTARCTIC KRILL (EUPHAUSIA SUPERBA): IMPLICATIONS FOR BENTHO-PELAGIC COUPLING IN AN ANTARCTIC COASTAL ECOSYSTEM (ID: 27079)

15:15 **Teurlincx, S.**; Velthuis, M.; van de Waal, D.; Declerck, S.: CHOOSING YOUR FOODSOURCE: DIFFERENCES IN FEEDING SELECTIVITY AFFECTING COMMUNITY STOICHIOMETRY AND COMPOSITION IN PHYTO- AND ZOOPLANKTON (ID: 26589)

15:30 **García-Comas, C.**; Chiba, S.; Sugisaki, H.; Hashioka, T.; Sasai, Y.; Smith, S. L.: DYNAMIC RELATIONSHIP OF FUNCTIONAL DIVERSITY WITH SPECIES DIVERSITY IN COPEPOD COMMUNITIES ACROSS THE OYASHIO-KUROSHIO OCEANIC FRONT, WESTERN SUBARTIC PACIFIC (ID: 26613)

15:45 **Liu, X.**; Beyrend, D.; Dur, G.; Ban, S.: TEMPERATURE-MEDIATED FOOD EFFECTS ON SOMATIC AND POPULATION GROWTH RATES IN TEMPERATE FRESHWATER COPEPOD *EODIAPTOMUS JAPONICUS* (ID: 25977)

16:00 **IRISSON, J. O.**; FAILLETTAZ, R.; LUO, J. Y.; GUIGAND, C.; COWEN, R. K.: DIEL FINE-SCALE DISTRIBUTION OF ZOOPLANKTON OVER A MESOSCALE FRONT EXPLORED THROUGH HIGH FREQUENCY IMAGING (ID: 27114)

16:15 **Gómez, M.**; Packard, T. T.; Osma, N.; Fernández-Urruzola, I.; Herrera, A.; Romero-Kutzner, V.; Martínez, I.; Maldonado, F.; Tamés-Espinosa, M.; Viera-Rodriguez, M. A.: FROM BACTERIA TO ZOOPLANKTON, THE IMPACT OF FOOD-LIMITATION ON THEIR PHYSIOLOGY AND BIOCHEMISTRY (ID: 25903)

17:15 **Druga, B.**; Spaak, P.; Pomati, F.: DYNAMICS OF ZOOPLANKTON GENOTYPES IN THE PRESENCE OF CYANOBACTERIA (ID: 26855)

17:30 **Sánchez, M. I.**; Pons, I.; Petit, C.; Martínez-Haro, M.; Taggart, M.; Green, A. J.: MULTIPLE STRESSORS IN NATIVE AND INVASIVE BRINE SHRIMP ARTEMIA: INTERACTIVE EFFECTS OF CLIMATE CHANGE, PARASITES AND POLLUTION (ID: 26023)

17:45 **Di Mauro, R. P.**; Kupchik, M.; Benfield, M.: TWO SEMI-AUTOMATED SYSTEMS, ONE GOAL: IDENTIFY ZOOPLANKTON (ID: 26295)

18:00 **Bierschenk, B. M.**; Closs, G. P.: TURBULENCE ACTS AS ORIENTATION AID FOR SWIMMING MYSIDAE (ID: 27347)

18:15 **Takahashi, K.**; Ichikawa, T.: DIEL COLOUR CHANGES IN MALE *SAPPHIRINA NIGROMACULATA* (CYCLOPOIDA, COPEPODA) (ID: 25754)

142 CHEMICAL OCEANOGRAPHY/GEOTRACES

Chair(s): Andrea Kochinsky, a.koschinsky@jacobs-university.de

Location: Auditorium Federico Garcia Lorca (Floor 0)

17:00 **Koschinsky, A.**; Poehle, S.: DISTRIBUTION OF DISSOLVED ZR AND NB IN THE OCEANIC WATER COLUMN UNDER CONSIDERATION OF THE COLLOIDAL PHASE (ID: 26060)

17:15 **Poehle, S.**; Koschinsky, A.: NON-CONSERVATIVE DISTRIBUTION OF DISSOLVED W AND MO IN THE ATLANTIC OCEAN (ID: 26002)

17:30 **Resing, J. A.**; Sedwick, P. N.; Sohst, B. M.; Jenkins, W. J.; Tagliabue, A.; German, C. R.; Moffett, J.: TRANSPORT OF HYDROTHERMAL IRON, MANGANESE AND ALUMINUM ACROSS THE EASTERN SOUTH PACIFIC OCEAN DURING THE U.S. GEOTRACES EASTERN PACIFIC ZONAL TRANSECT CRUISE (ID: 27653)

17:45 **Castrillejo, M.**; Casacuberta, N.; Christl, M.; Vockenhuber, C.; Synal, H. A.; Masqué, P.; Garcia-Orellana, J.: FIRST COMPREHENSIVE MAPPING OF ^{236}U AND ^{129}I IN THE MEDITERRANEAN SEA (ID: 26267)

18:00 **Casacuberta, N.**; Rutgers van der Loeff, M.; Masqué, P.; Herrmann, J.; Lachner, J.; Henderson, G.; Walther, C.; Vockenhuber, C.; Synal, H. A.; Christl, M.: ^{236}U AS A NEW OCEANOGRAPHIC TRACER: FIRST DATA IN THE NORTH SEA, THE ARCTIC OCEAN AND THE WESTERN NORTH ATLANTIC OCEAN (ID: 26554)

18:15 **Burd, A. B.**: SIZE CLASSES AND SIZE SPECTRA: HOW SIMPLE A THEORY DO WE NEED TO INTERPRET OBSERVATIONS AND ESTIMATE GEOCHEMICAL RATES? (ID: 27322)

* REPRESENTS INVITED PRESENTATIONS

THURSDAY POSTERS

028 THE BLACK BOXES HAVE JUST BEEN OPENED: LINKING ORGANIC MATTER COMPOSITION AND MICROBIAL DIVERSITY IN AQUATIC ENVIRONMENTS

Chair(s): Eva Ortega-Retuerta, ortegaretuerta@icm.csic.es
Jutta Niggemann, jutta.niggemann@uni-oldenburg.de
Hans Peter Grossart, hgrossart@igb-berlin.de
Ingrid Obernosterer, ingrid.obernosterer@obs-banyuls.fr
Lihini Aluwihare, laluwihare@ucsd.edu

Location: Poster and Exhibit Area (Floor 1)

137 **Sharrar, A. M.**; Aeppli, C.; Orcutt, B. N.: INFLUENCE OF TEMPERATURE AND NUTRIENTS ON THE CHEMISTRY AND MICROBIOLOGY OF CRUDE OIL BIODEGRADATION IN COASTAL SEDIMENT (ID: 25484)

138 **Sanchez-Perez, E. D.**; Pujo-Pay, M.; Conan, P.; Marassé, C.: SPATIAL AND TEMPORAL VARIABILITY OF CDOM FLUORESCENCE IN A COASTAL STATION (NW MEDITERRANEAN) (ID: 26232)

139 **Reinthaler, T.**; Frank, A. H.; Garcia, J.; Herndl, G. J.: PROKARYOTIC PRODUCTIVITY-DIVERSITY RELATIONSHIP IN THE NORTH ATLANTIC WATER MASSES (ID: 26030)

140 **Richert, I.**; Hubalek, V.; Saw, J.; Ettema, T.; Wendeberg, A.; Bertilsson, S.: TIGHTLY LINKED RESPONSE BY MICROBIAL COMMUNITIES IN COMPOSITION AND FUNCTIONAL POTENTIAL TO HIGH POLYCYCLIC AROMATIC HYDROCARBONS LOADS IN LAKE SEDIMENT (ID: 27009)

141 **Garzón Cardona, J. E.**; Alonso, C.; Martinez, A. M.; Pantoja, S.; Ferrroto, C.; Guinder, V.; Freije, H. R.; Lara, R. J.: STRONG LINKS BETWEEN DOM AND MICROBIAL COMMUNITIES IN A SOUTH ATLANTIC COASTAL AREA (EL RINCÓN, ARGENTINA) (ID: 27273)

029 WHEN, AND WHY THEN? PHENOLOGY AND EVOLUTIONARY ADAPTATIONS TO SEASONALITY IN AQUATIC ECOSYSTEMS

Chair(s): Oystein Varpe, oystein.varpe@unis.no
Monika Winder, monika.winder@su.se

Location: Poster and Exhibit Area (Floor 1)

142 Heinrich, F.; Eiler, A.; Andersson, A. F.; **Bertilsson, S.**: OXYGEN DEPLETION IN STRATIFIED LAKES ALTERS BACTERIAL DIVERSITY AND COMMUNITY COMPOSITION (ID: 27282)

143 **Niehoff, B.**: GONAD DEVELOPMENT IN JUVENILE CALANUS GLACIALIS DURING OVERWINTERING IN A HIGH ARCTIC FJORD (ID: 27294)

144 **Oghenekaro, E. U.**; Acheampong, A. O.; Oseji, O. F.; Chigbu, P.: LIFE HISTORY AND REPRODUCTIVE BIOLOGY OF MARINE PODONIDS (EVADNE NORDMANNI AND PSEUDEVADNE TERGESTINA) IN MARYLAND COASTAL LAGOONS. (ID: 27726)

145 **Grenvald, J. C.**; Darnis, G.; Berge, J.; Renaud, P.: ZOOPLANKTON VERTICAL MIGRATION IN THE POLAR NIGHT – IS MIGRATION MORE "RANDOM" THAN DIEL DURING THE DARKEST PERIOD OF WINTER? (ID: 26994)

146 **Aberle, N.**; Malzahn, A. M.; Lewandowska, A. M.; Sommer, U.: SOME LIKE IT HOT: THE PROTOZOOPLANKTON-COPEPOD LINK IN A WARMING OCEAN (ID: 26270)

147 **Tirelli, V.**; Kogovšek, T.; de Olazabal, A.; Cozzi, S.; Malej, A.: SEASONAL CHARACTERISTICS OF MESOZOOPLANKTON IN THE NORTHERNMOST MEDITERRANEAN GULF (GULF OF TRIESTE, ADRIATIC SEA) (ID: 27074)

148 **Varpe, O.**: OPTIMAL LIFE HISTORIES IN SEASONAL ENVIRONMENTS: MODELLING COPEPOD STRATEGIES (ID: 26900)

149 **Kimmel, D. G.**; Tarnowski, M.; Newell, R. I.: REGIONAL SCALE WEATHER VARIABILITY INFLUENCES EASTERN OYSTER (*CRASSOSTREA VIRGINICA*) LARVAL SETTLEMENT IN CHESAPEAKE BAY (ID: 25634)

031 RESTORATION OF LAKES, RESERVOIRS, AND COASTAL ECOSYSTEMS BY REDUCING INTERNAL NUTRIENT RECYCLING

Chair(s): Henning S. Jensen, hsj@biology.sdu.dk
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Michael Hupfer, hupfer@igb-berlin.de
Martin Sondergaard, ms@dmu.dk
Frede O. Andersen, foa@biology.sdu.dk

Location: Poster and Exhibit Area (Floor 1)

150 **Funes, A.**; de Vicente, J.; Álvarez-Manzaneda Salcedo, M. I.; Cruz-Pizarro, L.; de Vicente, I.: IRON MAGNETIC PARTICLES AS A NEW TOOL FOR LAKE RESTORATION. A MICROCOSM EXPERIMENT AS PREVIOUS STEP FOR FUTURE IN SITU APPLICATION. (ID: 25770)

151 **Álvarez-Manzaneda Salcedo, M. I.**; Ramos-Rodriguez, E.; López-Rodríguez, M. J.; Parra, G.; Funes, A.; De Vicente Álvarez-Manzaneda, I.: ECOTOXICOLOGICAL EFFECTS OF MAGNETIC MICROPARTICLES ON CHIRONOMUS SP. AND DAPHNIA MAGNA (ID: 25606)

152 **Waters, K. E.**; Willby, N. J.; Yasseri, S.; Cole, S.; Gunn, I. D.; Kelly, A.; Madgwick, G.; Meis, S.; Pitt, J.; Sime, I.; Spears, B. M.: ASSESSING MACROPHYTE RECOVERY IN LAKES TREATED WITH PHOSLOCK (ID: 26783)

153 **Moore, A. L.**; Kelly, A.; Phillips, G.; Spears, B. M.: LONG-TERM EFFECTS OF DREDGING ON SEDIMENT PHOSPHORUS IN A SHALLOW LAKE – BARTON BROAD, NORFOLK, UK (ID: 27000)

154 **De Brabandere, L.**; Bonaglia, S.; Kononets, M.; Viktorsson, L.; Thamdrup, B.; Hall, P.: RESPONSE OF BENTHIC NITROGEN CYCLING TO A WHOLE-FJORD OXYGENATION EXPERIMENT (ID: 27281)

033 THE ROLE OF NATURAL ECOSYSTEMS IN COASTAL PROTECTION: MECHANISMS, QUANTIFICATION AND APPLICATION

Chair(s): Iris Moeller, im10003@cam.ac.uk
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Edward P. Morris, edward.morris@uca.es

Location: Poster and Exhibit Area (Floor 1)

163 **Canals, M. F.**; Morell, J.; Quiñones, E.: DEVELOPMENT AND IMPLEMENTAION OF A NUMERICAL SURFZONE WAVE FORECASTING SYSTEM FOR PUERTO RICO AND THE UNITED STATES VIRGIN ISLANDS (ID: 26401)

164 Krestenitis, Y. N.; Androulidakis, Y. S.; Kombiadou, K. D.; **Makris, C. V.**; Baltikas, V.: OPERATIONAL FORECAST SYSTEM OF STORM TIDES IN THE AEGEAN SEA (GREECE) (ID: 26887)

330 Donker, J. J.; **van der Vegt, M.**; van der Deijl, E. C.; Hoekstra, P.: MUSSEL HUMMOCKS AFFECT FLOW PATTERNS AND FOOD UPTAKE IN INTERTIDAL MUSSEL BEDS. (ID: 26545)

038 ADVANCES IN FLUX MEASUREMENTS IN AQUATIC ENVIRONMENTS USING THE EDDY CORRELATION TECHNIQUE

Chair(s): Peter Berg, pb8n@virginia.edu
Markus Huettel, mhuettel@fsu.edu
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Location: Poster and Exhibit Area (Floor 1)

192 **Lee, J.**; Noh, J.; Choi, D.; Baek, H.; Lee, C.; Choi, Y.; Na, T.: COMPARISONS OF NET ECOSYSTEM METABOLISMS IN TYPICAL HABITATS OFF TROPIC SAMOA ISLAND AND THEIR IMPLICATIONS FOR ECOLOGICAL FUNCTIONS (ID: 25580)

193 **LaBuhn, S.**; Koopmans, D.; Berg, P.; Klump, J. V.: CONSTRUCTING AN OXYGEN BUDGET FOR GREEN BAY, LAKE MICHIGAN (ID: 27483)

041 LAKE ICE DYNAMICS: HYDROLOGY OF COLD WATER BODIES

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203 **Engelhardt, C.**; Poeschke, F.; Graves, K.; Äijala, C.; Kirillin, G.: DIRECT MEASUREMENTS OF SEICHE-DRIVEN MIXING UNDER LAKE ICE (ID: 26162)

204 **Shumskaia, N.**; Fedorova, I.; Lavinen, N.; Skorospekhova, T.: HYDROCHEMICAL CHARACTERISTICS OF ANTARCTICA OASES LAKES NEARBY RUSSIAN STATIONS. (ID: 26628)

042 COMPETITION WITHIN PLANKTONIC COMMUNITIES: WHAT ARE THE EFFECTS ON ECOSYSTEM FUNCTIONING AND BIOGEOCHEMICAL PROCESSES?

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205 **Li, Q.**; Legendre, L.; Jiao, N. Z.: PHYTOPLANKTON RESPONSES TO NITROGEN AND IRON LIMITATION IN THE PACIFIC OCEAN (ID: 26630)

206 **Wang, K.**; Chen, J.: SUMMER NUTRIENT DYNAMICS AND BIOLOGICAL CARBON UPTAKE RATE IN THE CHANGJIANG RIVER PLUME INFERRED USING A THREE END-MEMBER MIXING MODEL (ID: 26935)

207 **Narcy, F.**; De Schryver, V.; Leynaert, A.; Floch'lay, A.; Pondaven, P.; Stibor, H.: CONTRASTING EFFECTS OF DOC INPUT ON PLANKTON DEPENDING ON P LIMITATION LEVELS (ID: 27590)

208 **Pree, B.**; Larsen, A.; Egge, J. K.; Simonelli, P.; Madhusoodhanan, R.; Våge, S.; Thingstad, T. F.: A MESOCOSM EXPERIMENT WITH HIGH MICROBIAL RESILIENCE TO TOP-DOWN PERTURBATIONS (ID: 27050)

209 **Russo, E.**; Franke, K.; Hager, H.; Stibor, H.; Schultes, S.: ZOOPLANKTON COMMUNITY CHANGES OVER TIME AFTER MORPHOLOGICAL GROUPS MANIPULATION (ID: 27129)

210 **Shou, L.**; Liao, Y.; Chen, J.: EFFECT OF MODERATE HYPOXIA ON MACROBENTHIC COMMUNITY STRUCTURE IN THE YANGTZE RIVER ESTUARY (ID: 27147)

211 **Jiang, Z.**; Chen, J.; Zhou, F.; Tao, B.: PHYTOPLANKTON DISTRIBUTION IN RELATION TO SUMMER HYPOXIA OFF THE CHANGJIANG ESTUARY (ID: 27146)

212 **Kerkhof, L. J.**; González Benítez, N.; McGuinness, L. R.; Bronk, D. A.; Paul, J. H.; Morell, J. M.; Corredor, J. E.: DETERMINING IN SITU GROWTH PATTERNS IN COASTAL BACTERIA AND EUKARYOTES BY RAPID 15N STABLE ISOTOPE PROBING (ID: 27301)

213 **Currie, W. J.**; Bowen, K.; Niblock, H.: CENTIMETRES TO KILOMETRES: SPATIAL ANALYSIS OF A PLANKTONIC ECOSYSTEM ALONG THE CROSS-BASIN 2013 CSMI TRANSECT (ID: 26339)

214 **Muñiz, O.**; Revilla, M.; Franco, J.; Laza-Martínez, A.; Mendiola, D.; Solaun, O.; Valencia, V.: PHYTOPLANKTON COMMUNITIES IN RELATION WITH PHYSICO-CHEMICAL CONDITIONS WITHIN AN OFFSHORE BIVALVE FARMING AREA, IN THE NORTH OF SPAIN (ID: 25534)

047 AQUATIC CHEMICAL ECOLOGY - HOW ORGANIC COMPOUNDS REGULATE TROPHIC INTERACTIONS

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Location: Poster and Exhibit Area (Floor 1)

227 **Morillo-García, S.**; Bartual, A.; Ortega, M. J.; Cózar, A.: MACROECOLOGICAL PATTERNS OF PHYTOPLANKTON-DERIVED POLYUNSATURATED ALDEHYDES IN RELATION WITH RESOURCES AND TEMPERATURE (ID: 26074)

228 **Le Jeune, A. H.**; Martin Creuzburg , D.; Saulinier, G.; Perrière, F.; Desvilettes , C.; Bourdier, G.; Bec, A.: EXPLORING EICOSANOID SYNTHESIS PATHWAYS DURING THE DEVELOPMENT OF DAPHNIA MAGNA (ID: 26639)

229 **Kagiorgi, M.**; Tsiola , A.; Callol, A.; Kalantzi, I.; Mylona, K.; Pergantis, S.; Toncelli , C.; Pitta , P.; Tsapakis, M.: THE IMPACT OF SILVER NANOPARTICLES ON THE PICO-PLANKTONIC COMMUNITY OF THE EASTERN MEDITERRANEAN SEA, STUDIED WITH THE USE OF A MICROCOSM EXPERIMENT (ID: 27260)

230 **Franze, G.**; Lavrentyev, P. J.; Pierson, J. J.; Stoecker, D. K.: SPECIES-SPECIFIC EFFECTS OF DIATOM-PRODUCED CYTOTOXIC SECONDARY METABOLITES ON MICROZOOPLANKTON GROWTH RATES (ID: 27360)

050 NITROGEN-CYCLE FEEDBACKS: DRIVERS OF CHANGE?

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236 Bernard, R. J.; **Mortazavi, B.**: NITROGEN CYCLING IN THE GULF OF MEXICO ESTUARIES: HOW DO NITRATE REDUCTION PATHWAYS DIFFER BETWEEN RIVER-DOMINATED AND GROUNWATER-DOMINATED ESTUARIES? (ID: 27185)

237 **Peng, X.**; Fuchsman, C. A.; Devol, A. H.; Ward, B. B.: NITRIFICATION RATES IN THE EASTERN TROPICAL SOUTH PACIFIC OXYGEN MINIMUM ZONE (ID: 26393)

238 **Kamp, A.**; Glud, R. N.; Bristow, L. A.; Thamdrup, B.; Stief, P.: CONTRIBUTION OF DIATOMS TO ANAEROBIC NITRATE METABOLISM IN SINKING AGGREGATES (ID: 25843)

239 Benavides, M.; Bonnet, S.; **Moisander, P. H.**; Berthelot, H.; Grosso, O.: SIGNIFICANT MESOPELAGIC N^2 FIXATION IN THE BISMARCK AND SOLOMON SEAS (SW PACIFIC) (ID: 25849)

240 **Sippo, J. Z.**; Santos, I. R.; Tait, D. R.; Maher, D. T.; Holloway, C.; Macklin, P. A.; Williams, D.: ARE PRISTINE MANGROVE WATERS A GLOBAL SOURCE OR SINK OF NITROUS OXIDE? (ID: 25972)

241 **Landolfi, A.**; Koeve, W.; Dietze, H.; Kähler, P.; Oschlies, A.: EXPANDING THE NICHE OF MARINE N2 FIXERS (ID: 26632)

242 **de la Paz Arandiga, M.**; Huertas, E. I.; Flecha, S.; Ríos, A. F.; Pérez, F. F.: DISTRIBUTION OF NITROUS OXIDE IN ATLANTIC AND MEDITERRANEAN WATERS THROUGH THE STRAIT OF GIBRALTAR (ID: 27148)

243 **Mulholland, M. R.**; Widner, B.; Bernhardt, P. W.; Jayakumar, A.; Chang, B.: DINITROGEN FIXATION IN OXYGEN DEFICIENT WATERS OF THE EASTERN TROPICAL SOUTH PACIFIC OCEAN (ID: 27535)

244 **Garate, M. H.**; Moseman-Valtierra, S. M.; Moen, A.; Ventura, R. E.: INVERTEBRATES MAY INCREASE NITROUS OXIDE FLUXES FROM NITROGEN-IMPACTED COASTAL SUBTIDAL AND INTERTIDAL ECOSYSTEMS (ID: 27589)

245 **Moen, A. L.**; Garate, M.; Moseman-Valtierra, S.: EPIPHYTIC CONTRIBUTIONS TO THE PRODUCTION OF NITROUS OXIDE BY BENTHIC INVERTEBRATES, *MYTILUS EDULIS* AND *MERCENARIA MERCENARIA* (ID: 27457)

418 **Suter, E. A.**; Montes, E.; Pachiadaki, M.; Edgcomb, V. P.; Taylor, G. T.: ASSESSING NITROGEN LOSS FROM THE CARIACO BASIN USING ^{15}N ISOTOPIC PAIRING AND GENE EXPRESSION APPROACHES (ID: 26197)

058 MICROBIAL INTERACTIONS ACROSS THE DOMAINS OF LIFE

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257 **Jimenez, V.**; Sudek, S.; Bachy, C.; Choi, C. J.; Worden, A. Z.: PHYTOPLANKTON DIVERSITY, GROWTH AND MORTALITY IN NORTH PACIFIC MESOTROPHIC AND OLIGOTROPHIC REGIONS. (ID: 25944)

258 Sarañana-Alonso, A. A.; Dorado-García, I.; Carrillo, P.; Villar-Argaiz, M.; **Medina-Sánchez, J. M.**: MICROBIAL BIOMANIPULATION UNDER EUTROPHICATION: RESPONSE OF MICROBIAL COMMUNITY COMPOSITION TO AN EXPERIMENTAL GRADIENT OF LABILE ORGANIC CARBON ENRICHMENT (ID: 26222)

259 **Gerphagnon, M.**; Rad-Menéndez, C.; Sime-Ngando, T.; Gachon, C. M.: "FROM MICROSCOPE TO NGS: A CASE STUDY OF DIATOM-CHYTRID PAIRINGS" (ID: 26143)

260 **De Corte, D.**; Elisabeth, N. H.; Sintes, E.; Koski, M.; Herndl, G. J.: INTERACTIONS BETWEEN COPEPODS AND BACTERIA IN THE NORTH ATLANTIC OCEAN DURING DIEL VERTICAL MIGRATION (ID: 27073)

060 NEW INSIGHTS AND PERSPECTIVES IN ECOLOGICAL STOICHIOMETRY

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265 **Currier, C. M.**; Learned, J. K.; Elser, J. J.: RICH IN PHOSPHORUS, POOR IN PERFORMANCE: ASSESSING *DAPHNIA SPP.* RESPONSES TO PHOSPHORUS-ENRICHED FOOD UNDER FIELD CONDITIONS (ID: 26485)

266 **Pavlidou, A.**; Hatzianestis, I.: N:P RATIOS RELATED TO DSP TOXIN PRODUCTION (ID: 27332)

061 GLOBAL CLIMATE CHANGE: OCEAN ACIDIFICATION EXPERIMENTS AT CO2 VENTS

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267 **Martins, M.**; Leitão, F.; Hall-Spencer, J. M.; Couto, R.; Martins, G. M.; Carreiro-Silva, M.; Monteiro, J.; Parra, H.; Chícharo, L.; Range, P.; Pena, V.; Guilini, K.: CHRONIC EFFECTS OF OCEAN ACIDIFICATION ON BENTHIC ASSEMBLAGES: A CASE STUDY IN CENTRAL ATLANTIC VOLCANIC CO2 VENTS (ID: 26684)

268 **Campoy, A. N.**; Cruz, J.; Teodósio, M. A.; Barcelos e Ramos, J.; Gallo, F.; Viveiros, F.; Silva, C.; Rodriguez, L. M.; Ferreira, T.; Range, P.; Domingues, R. B.; B, Barbosa. A.; Schlosser, C.: OBSERVATIONAL AND MANIPULATIVE EXPERIMENTS USING PLANKTONIC ASSEMBLAGES IN NEARSHORE NORTH ATLANTIC CO2 VENTS (ID: 26654)

269 **Rodríguez Ramos, J. C.**; Bingham, B.; Dimond, J.: IRRADIANCE AND TEMPERATURE AFFECT H_2O_2 PRODUCTION OF SYMBIOTIC ALGAE HOSTED BY SEA ANEMONE *ANTHOPLEURA ELEGANTISSIMA* (ID: 26827)

270 **Celis-Plá, P. S.**; Hall-Spencer, J.; Horta , P.; Milazzo , M.; Korbee, N.; Figueroa , F. L.: NUTRIENT LEVELS AFFECT SEAWEED RESPONSES TO OCEAN ACIDIFICATION (ID: 26049)

066 STRENGTHENING THE PALAEOLIMNOLOGICAL CONTRIBUTION TO GLOBAL CHANGE

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Location: Poster and Exhibit Area (Floor 1)

280 **Lenz, J.**; Grosse, G.; Jones, B. M.; Wetterich, S.: PALEOLIMNOLOGICAL DYNAMICS IN THE ALASKAN ARCTIC (ID: 27416)

THURSDAY

T REPRESENTS TUTORIAL PRESENTATIONS

281 **Diaz de Quijano, D.**; Felip, M.; Catalan, J.: PHOSPHATASE IN *CYCLOTELLA* SPP. AND ITS IMPLICATIONS FOR THE GLOBAL CHANGE INTERPRETATIONS OF PALEOLIMNOLOGICAL RECORDS (ID: 26742)

282 **Ramos-Roman, M. J.**; García-Alix, A.; Jimenez-Moreno, G.; Anderson, R. S.; Toney, J. L.; Jimenez-Espejo, F. J.: LATE HOLOCENE CLIMATE CHANGE AND HUMAN IMPACT IN ALPINE BOG SEDIMENTS: BORREGUIL DE LA CALDERA, SIERRA NEVADA (SOUTHEASTERN IBERIAN PENINSULA) (ID: 25462)

283 **Jiménez, L.**; Conde-Porcuna, J. M.; Pérez-Martínez, C.: RECENT CHANGES IN RIO SECO LAKE (SIERRA NEVADA, SPAIN): PALEOLIMNOLOGICAL EVIDENCES (ID: 26096)

284 **Mata, M. P.**; Morellón, M.; Vegas, J.; Ballesteros, P.; Sánchez, J.; Valero , B. L.; Moreno , A.; Rodriguez-García, J. A.; Rieradevall, M.; Tarrats, P.: RECENT ENVIRONMENTAL CHANGES IN THE SEDIMENTARY RECORD OF THE ENOL LAKE (PICOS DE EUROPA NATIONAL PARK, SPAIN) (ID: 26018)

071 PHYSIOLOGICAL RESPONSES OF PHYTOPLANKTON TO RESOURCE AVAILABILITY

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Location: Poster and Exhibit Area (Floor 1)

291 **Shen, C.**; Hopkinson, B. M.: THE COSTS AND BENEFITS OF PRODUCING EXTRACELLULAR CARBONIC ANHYDRASE FOR CO2 UPTAKE IN CENTRIC DIATOMS AND MODULATION BY CO2 CONCENTRATION (ID: 27342)

292 **Cockshutt, A. M.**; Li, G.; Brown, C. M.; Campbell, D. A.: LIGHT DEPENDENCE OF RESOURCE ALLOCATIONS AND PROTEIN MAINTENANCE COSTS FOR PHYTOPLANKTON (ID: 27334)

294 **Jiang, Y.**; Ho, A. Y.; Yin, K.; Harrison, P. J.: INFLUENCE OF TEMPERATURE AND DIFFERENT NITROGEN SOURCES ON THE GROWTH, BIOCHEMICAL COMPOSITION OF THALASSIOSIRA WEISSFLOGII (ID: 27668)

295 **Halsey, K. H.**; Fisher, N. L.; Jones, B. M.: PHOTOSYNTHETIC ENERGY ALLOCATION STRATEGIES: RESOURCE AND TRAIT-BASED DEPENDENCIES (ID: 27628)

296 **Price, L. M.**; Filippino, K. C.; Mulholland, M. R.: THE LAFAYETTE RIVER: THE SPECIES SUCCESSION OF PHYTOPLANKTON COMMUNITIES IN CORRELATION TO ENVIRONMENTAL AND PHYSICAL TRIGGERS (ID: 27049)

297 **Bibby, T. S.**; Ryan-Keogh, T. J.; Richier, S.; Macey, A. I.; Moore, C. M.: STOICHIOMETRY OF PHOTOSYNTHETIC CATALYSTS ACROSS OCEANIC GRADIENTS OF NUTRIENT, LIGHT AND TEMPERATURE (ID: 26978)

298 **Yun-Chi, L.**; Chang, J.; Lee-Kuo, K.: EVALUATING THE RELATIONSHIP BETWEEN 18S RRNA/RDNA RATIO AND POPULATION GROWTH IN MARINE PHYTOPLANKTON (ID: 25434)

299 Combe, C.; Hartmann, P.; Bernard, O.; Rabouille, S.; Talec, A.; Pruvost, E.; **sciandra, A.**: LONG-TERM ADAPTIVE RESPONSE TO HIGH-FREQUENCY LIGHT SIGNALS IN THE UNICELLULAR PHOTOSYNTHETIC EUKARYOTE*DUNALIELLA SALINA* (ID: 25779)

300 **David, H.**; Laza-Martinez, A.; Kromkamp, J. C.; Orive, E.: PHOTOPHYSIOLOGY OF THE BENTHIC DINOFLAGELLATE *COOLIA MONOTIS* FROM THE ATLANTIC IBERIAN PENINSULA (ID: 25810)

301 **Dávila-Santiago, E.**; Sastre, M. P.; Vélez-Villamil, S. M.: BIOESSAYS OF THE EFFECT OF COMMERCIAL GRADE 5% DEET MOSQUITO REPELLENT ON "IN VITRO" POPULATIONS OF THE DINOFLAGELLATE GYMNODINIUM INSTRIATUM (ID: 25956)

302 **Pérez-Lorenzo, M.**; Cermeño, P.; Chouciño, P.; Mouriño-Carballido, B.; Sobrino, C.; Marañón, E.: USING CHEMOSTATS TO INVESTIGATE THE TEMPERATURE-DEPENDENCE OF PHYTOPLANKTON METABOLIC RATES UNDER NUTRIENT-LIMITED GROWTH (ID: 26128)

072 PHYSICAL AND BIOLOGICAL PROCESSES ASSOCIATED WITH THE EXCHANGE THROUGH STRAITS: THE CASE OF GIBRALTAR AND OTHER NARROW STRAITS.

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303 **Kodama, T.**; Kuga, M.; Watanabe, T.; Igeta, Y.; Honda, N.; Iguchi, N.; Morimoto, H.; Okazaki, M.; Katoh, O.: SHALLOW TSUSHIMA STRAIT INDUCES BASIN-WIDE SUBSURFACE NUTRIENT INVERSION LAYER IN THE TSUSHIMA WARM CURRENT DURING SUMMER (ID: 25761)

304 **Bellanco, M. J.**; Sanchez-Leal, R. F.: TERMOHALINE AND TRANSPORT VARIABILITY IN THE EASTERN GULF OF CADIZ FROM IN-SITU AND SATELLITE OBSERVATIONS. (ID: 26975)

305 **Ramirez-Romero, E.**; Valcarcel-Perez, N.; Macias, D. M.; Bruno, M.; Garcia, C. M.: TRANSPARENT EXOPOLYMER PARTICLES (TEP) IN THE STRAIT OF GIBRALTAR: GENERAL DISTRIBUTION AND THEIR ROLE IN AGGREGATION PROCESSES (ID: 27003)

306 **Navarro, G.**; Vicent, J.; Caballero, I.; Morris, E. P.; Sabater, N.; Bruno, M.; Vazquez, A.: HYPERSPECTRAL IMAGING OF INTERNAL WAVES IN THE STRAIT OF GIBRALTAR (ID: 26690)

075 MARINE MICROBIAL BIODIVERSITY, BIOINFORMATICS, AND BIOTECHNOLOGY

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316 **Budinich, M.**; Eveillard, D.; Larhlimi, A.; Bourdon, J.: RELATIONS IN MICROBIAL ECOSYSTEM: APPLICATION IN A HOT SPRING COMMUNITY (ID: 26168)

317 **Ferrera, I.**; Giner, C. R.; Reñé, A.; Flo, E.; Logares, R.; Massana, R.; Gasol, J. M.; Camp, J.; Garcés, E.: MARINE PLANKTONIC BIODIVERSITY MONITORING AND ASSESSMENT OF ECOSYSTEM HEALTH STATUS THROUGH HIGH-THROUGHPUT SEQUENCING (ID: 26089)

319 **Sieradzki, E.**; Sachdeva, R.; Fichot, E.; Fuhrman, J.: HUMAN IMPACT ON MARINE MIROBIAL COMMUNITY COMPOSITION (ID: 25730)

320 **Hamasaki, K.**; Kaneko, R.; Fujimura, R.; Shiozaki, T.; Takasu, H.; Kogure, K.: DYNAMICS OF BACTERIOPLANKTON COMMUNITY STRUCTURES IN RELATION TO ENVIRONMENTAL FACTORS OFF THE COAST OF TOHOKU AREA, NORTHERN JAPAN (ID: 26989)

321 **Lankiewicz, T. S.**; Cottrell , M. T.; Kirchman, D. L.: GROWTH RATES OF ABUNDANT MARINE BACTERIAL CLADES IN PURE CULTURES AND IN THE DELAWARE ESTUARY (ID: 26985)

322 **Lee, T. L.**; Tas, N.; Falcon, L. I.; Parker, A. E.; Cornwell, J.; Wilkerson, F. P.: SALINITY AND "ECO-TYPE" CONSTRAINTS ON BENTHIC MICROBIAL COMMUNITIES (ID: 26429)

323 **Agogue, H.**; Hugoni, M.; Dupuy, C.; Lavergne, C.: THE C3 GROUP : A RARE BUT ACTIVE THAUMARCHAEAL GROUP IN INTERTIDAL MUDDY SEDIMENT (ID: 26667)

324 Fotedar, R.; **Breiner, H. W.**; Filker, S.; Zeyara, A.; Al Malaki , A.; Abdel-Moati, M. A.; Bukhari, S. J.; Febbo, E.; Boekhout, T.; Stoeck, T.: PROTISTAN AND BACTERIAL PLANKTON COMMUNITIES IN COASTAL WATERS OF QATAR (ARABIAN GULF) (ID: 26714)

083 ENVIRONMENTAL CONSEQUENCES OF ANTHROPOGENIC STRUCTURE IN THE OFFSHORE ENVIRONMENT: A REGIONAL COMPARISON

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338 **Weber, S. C.**; Fernandez, A.; Battles, J. J.; Peterson, L.; Roberts, B. J.; Peterson, R. N.; Hollander, D. J.; Chanton, J. P.; Joye, S. B.; Montoya, J. P.: TIMESCALES OF ECOSYSTEM RESPONSE: AN OIL AND GAS BLOWOUT EVENT COMPARISON (ID: 27600)

339 **Cruz-Marrero, W.**; Bradley, B. G.: IN SITU HABITAT CHARACTERIZATION OF MID-ATLANTIC OFFSHORE WIND POWER SITES (ID: 26382)

340 **Mesner, N. O.**; Arentsen, P. R.; Gillies, R. R.: THE EFFECTS OF URBANIZATION ON WATERSHED FUNCTIONS: THE RELATIONSHIP BETWEEN IMPERVIOUS SURFACE AREA AND WATER QUALITY (ID: 26854)

341 **Giraud, M.**; Boye, M.; Garçon, V.; Auvray, C.; Lejart, M.; De la Broise, D.: OCEAN THERMAL ENERGY CONVERSION, THE POTENTIAL IMPACT ON MICROPLANKTON OF BOTTOM WATER DISCHARGE AT SUB-SURFACE (ID: 26233)

342 **Ndimele, P. E.**; Pedro, M. O.: HEAVY METAL ACCUMULATION IN ORGANS OF OREOCHROMIS NILOTICUS (LINNAEUS, 1758) FROM INDUSTRIAL EFFLUENT-POLLUTED AQUATIC ECOSYSTEM IN LAGOS, NIGERIA (ID: 25555)

089 INFOCHEMICAL CONTROLS ON BIOGEOCHEMCIAL PROCESSES IN AQUATIC AND MARINE ECOSYSTEMS

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358 **Bormans, M.**; Briand, E.; Humbert, J. F.; Gerwick, W.: DEGRADATION OF CYANOBACTERIAL SECONDARY METABOLITES BY A NATURAL BACTERIAL COMMUNITY ASSOCIATED WITH MICROCYSTIS (ID: 26071)

359 **Collins, J. R.**; Fredricks, H. F.; Ducklow, H. W.; Van Mooy, B. A.: BIOTIC AND ABIOTIC PRODUCTION OF OXYLIPIN INFOCHEMICALS ALONG THE WESTERN ANTARCTIC PENINSULA (ID: 26138)

360 **Campagna, S. R.**; May, A. L.; Richardson, L. L.; Van Mooy, B. A.; Buchan, A.: APPLICATION OF METABOLOMICS AND KINETIC FLUX PROFILING TO PROBE THE LINKAGE OF SIGNALING AND METABOLISM IN AQUATIC MICROBIAL INTERACTIONS (ID: 26454)

361 **John, u.**; Lu, Y.; Wohlrab, S.; Groth, M.; Guillou, L.; Glöckner, G.: A GENOMIC VIEW INTO THE PROCESSES DRIVING THE INFECTION OF ALEXANDRIUM BY THE PARASITOID AMOEBOPHRYA (ID: 26889)

362 **Hunter, J. E.**; Frada, M. J.; Fredricks, H. F.; Vardi, A.; Van Mooy, B. A.: MOLECULAR INSIGHTS ON VIRAL INFECTION AND LIFE CYCLE IN *EMILIANIA HUXLEYI* FROM TARGETED AND UNTARGETED LIPIDOMICS (ID: 26629)

363 **Johns, C. T.**; Knapp, V.; Mui, A.; Natale, F.; Fredricks, H.; Van Mooy, B. A.; Bidle, K. D.: MUTUAL INTERPLAY BETWEEN VIRUSES AND CELLULAR PIC QUOTAS IN EMILIANIA HUXLEYI (ID: 27356)

364 **Liu, Q.**; Nishibori, N.; Imai, I.; Hollibaugh, J. T.: POLYAMINES OF MARINE PHYTOPLANKTON AND THE RESPONSE OF POLYAMINE POOLS TO ENVIRONMENTAL STRESSES AND NUTRIENT LIMITATIONS (ID: 27300)

365 **Schieler, B. M.**; Bidle, K. D.: NITRIC OXIDE SIGNALING DURING GROWTH AND VIRAL-INDUCED DEMISE OF *EMILIANIA HUXLEYI* (ID: 27200)

091 BIO-OPTICS, OPTICAL BIOGEOCHEMISTRY, AND REMOTE SENSING OF OPTICALLY COMPLEX WATERS

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Location: Poster and Exhibit Area (Floor 1)

371 **Brandão, L. P.**; Brighenti, L. S.; Costa, P.; Bezerra-Neto, J. F.: THE ROLE OF DISSOLVED AND PARTICULATE MATTER IN THE VARIATION OF VISIBLE AND ULTRAVIOLET RADIATION IN TROPICAL LAKE (ID: 26268)

372 **Ortiz-Rosa, S.**; Armstrong, R.; López-Rosado, R.: SPATIAL AND TEMPORAL VARIATIONS IN REMOTE SENSING REFLECTANCE IN A TROPICAL ESTUARINE AREA: CHLOROPHYLL AND CHROMOPHORIC DISSOLVED ORGANIC MATTER SIGNALS (ID: 25649)

373 **Capuzzo, E.**; Stephens, D.; Silva, T.; Barry, J.; Forster, R. M.: DECREASE IN WATER CLARITY OF THE SOUTHERN AND CENTRAL NORTH SEA DURING THE TWENTIETH-CENTURY (ID: 25429)

374 **Laber, C. P.**; Schofield, O. M.; Bidle, K. D.: DETECTION OF COCCOLITHOVIRUS INFECTION USING FOURTH DERIVATIVE SPECTRAL ABSORPTION (ID: 27573)

375 **Sastri, A. R.**; Krogh, J.; Phillips, S.; Costa, M.: HIGH-RESOLUTION MONITORING OF BIO-OPTICAL PROPERTIES IN DYNAMIC COASTAL SYSTEM: FERRY-BASED MEASUREMENTS IN THE STRAIT OF GEORGIA, CANADA (ID: 27190)

095 NITROGEN LIMITATION IN FRESHWATER - IS NITROGEN REDUCTION ECOLOGICALLY MEANINGFUL?

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383 **Rücker, J.**; Knie, M.; Nixdorf, B.; Kolzau, S.; Voss, M.; Wiedner, C.: NITROGEN FIXATION IN TWO POLYMICTIC LAKES (ID: 26967)

384 **Thomsson, G. C.**; Diehl, S.; Kahlert, M.; Karlsson, J.; Liess, A.: OPPOSITE TRENDS IN LIGHT VS NITROGEN LIMITATION PROMOTE N2 FIXERS ALONG A BOREAL CDOM GRADIENT (ID: 25618)

098 ECOSYSTEM-SCALE APPROACHES TO ECOSYSTEM-SCALE QUESTIONS

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385 **Korneeva, Y. A.**; Simonova, N. N.; Degteva, G. N.: CONDITIONS AND FACTORS OF THE PARASITIC DISEASES PREVALENCE IN THE COASTAL AREAS IN ARCTIC CLIMATE CHANGE (ID: 25822)

386 **Bobyreva, N. S.**; Degteva, G. N.: INTERCONNECTION OF PARASITIC DISEASES AND CLIMATE CHANGE ON THE ARCTIC COASTAL TERRITORIES OF THE RUSSIAN FEDERATION. (ID: 25877)

387 **Tsikopoulou, I.**; Santi, I.; Kalogeropoulou, V.; Geropoulos, A.; Dimitriou, P. D.; Moraitis, M.; Papageorgiou , N.; Pitta , P.; Karakassis, I.: BACTERIAL VIABILITY IN HYPOXIC MARINE SEDIMENTS: A MESOCOSM EXPERIMENT (ID: 27025)

388 **Lorenzo, M. R.**; Maldonado, M. T.; Lazaro, F. J.; Cullen, J. T.; Segovia, M.: TRACE-METAL DYNAMICS IN RESPONSE TO INCREASED CO_2 AND IRON AVAILABILITY IN A COASTAL MESOCOSM EXPERIMENT (ID: 27510)

389 **Charles, C.**; Gillis, D. M.; Blanchfield, P. J.; Hrenchuk, L. E.: A METHOD OF SPATIAL CORRECTION FOR ACOUSTIC POSITIONING TELEMETRY (ID: 27630)

390 Paterson, M.; Higgins, S.; **Rennie, M. D.**; McCandless, M.; Rodgers, C.; Hrenchuk, L.; Mollot, R.; Charles, C.: THE EXPERIMENTAL LAKES AREA: OVER 45 YEARS OF WHOLE ECOSYSTEM MONITORING AND MANIPULATION EXPERIMENTS AND A FOCUS ON THE FUTURE (ID: 27697)

391 **Kalogeropoulou, V.**; Lampraki, S.; Tsikopoulou, I.; Santi, I.; Dimitriou, P.; Papageorgiou, N.; Pitta, P.; Karakassis, I.: MEIOFAUNAL ASSEMBLAGES IN HYPOXIC COASTAL SEDIMENTS: A BENTHIC MESOCOSM EXPERIMENT (ID: 27489)

101 MICROSCOPIC PLASTIC DEBRIS AND ITS IMPACT ON AQUATIC ECOSYSTEMS

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404 **Gabel, F.**; Eibes, P.; Blodau, C.: SPATIAL DISTRIBUTION OF FLOATING MICROPLASTICS ALONG THE COURSE OF A SANDY LOWLAND STREAM (ID: 26252)

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406 **Schrank, I.**; Imhof, H.; Löder, M.; Laforsch, C.: MICROPLASTIC IN BAVARIAN WATERS – CONTAMINATION, SOURCE AND EFFECTS ON ORGANISMS (ID: 26804)

407 **Frère, L. Z.**; Paul-Pont, I.; Lambert, C.; Huvet, A.: MICROPLASTICS: A THREAT FOR THE BAY OF BREST, FRANCE? (ID: 26990)

408 **Syberg, K.**; Khan, F. R.; Selck , H.; Palmqvist, A.; Banta, G.; Daley, J.; Sano, L.; Duhaime, M.; Burton, A.: MICROPLASTIC: ADDRESSING ECOLOGICAL RISK THROUGH LESSONS LEARNED (ID: 26590)

409 Fischer, M.; **Scholz-Böttcher, B. M.**: SIMULTANEOUS TRACE ANALYSIS OF NINE COMMON PLASTICS IN ENVIRONMENTAL SAMPLES VIA PYROLYSIS GAS CHROMATOGRAPHY MASS SPECTROMETRY (PY-GCMS) (ID: 27498)

105 VIRUSES AND VIRAL MEDIATED PROCESSES IN AQUATIC SYSTEMS

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410 Gilg, I. C.; Archer, S. D.; **Martínez Martínez, J.**; Floge, S. A.; Fields, D. M.; Vermont, A. I.; Waller, J.; Wilson, W. H.: NEW INSIGHTS INTO THE MECHANISM DRIVING THE REDUCTION OF PHOTOCHEMICAL EFFICIENCY IN EMILIANIA HUXLEYI DURING VIRAL INFECTION (ID: 27655)

411 **Haramaty, L.**; Johns, C. T.; Starovoytov, V.; Natale, F.; Bidle, K. D.: INFECTIVITY AND STABILITY OF COCCOLITHOVIRUSES (ID: 27370)

412 Palesse, S.; Pradeep Ram, A. S.; Colombet, J.; **Sime-Ngando, T.**: HOST PROKARYOTE PHYSIOLOGY REGULATES VIRAL LIFE STRATEGIES: EVIDENCE FROM A TEMPERATE FRESHWATER LAKE (LAKE PAVIN, FRANCE) (ID: 25689)

413 Vermont, A. I.; Waller, J. D.; Martínez Martínez , J.; Gilg, I. C.; Leavitt, A. H.; Floge, S. A.; Archer, S. A.; Wilson, W. H.; **Fields, D. M.**: VIRUS INFECTED ALGAE DETERS GRAZING BY MARINE COPEPODS. (ID: 27417)

414 **Vaque, D.**; Lara, E.; Sa, E.; Hendriks , I.; Holding, J.; Agusti, S.; Arrieta, J. M.; Wassmann, P. F.; Duarte, C. M.: COULD EXPERIMENTAL WARMING AND ACIDIFICATION PRODUCE CHANGES IN THE VIRUS LIFE CYCLE IN THE ARCTIC? (ID: 25568)

110 CANYONS AND THEIR DEEP-SEA FANS: WHEN GEOLOGY MEETS BIOLOGY

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425 **Baudin, F.**; Stetten, E.; Martinez, P.; Charlier, K.; Schnyder, J.; Pruski, A.; Congolobe Group, ..: BULK GEOCHEMICAL CHARACTERIZATION OF SEDIMENTARY ORGANIC MATTER IN THE TERMINAL LOBES OF THE CONGO DEEP-SEA FAN (ID: 26137)

427 **Wilson, J. L.**; Stevens, B. G.: AGE DETERMINATION OF RED DEEP-SEA CRAB (CHACEON QUINQUEDENS) BY GROWTH RING ANALYSIS. (ID: 26347)

428 **Kanari, M.**; Bookman, R.; Ben-Avraham, Z.; Tibor, G.; Niemi, T. M.; Goodman-Tchernov, B. N.; Al-Zoubi , A.; Ash, A.; Taha, N.; Marco, S.: RECONSTRUCTING A HOLOCENE EARTHQUAKE RECORD IN THE NORTHERN GULF OF AQABA-EILAT FROM SUBMARINE CORES (ID: 25567)

429 **Bourque, J. R.**; Demopoulos, A. W.; Stamler, K. M.; Robertson, C. M.; Mienis, F.; Duineveld, G.: MEIOFAUNAL COMMUNITY STRUCTURE AND FUNCTION IN RELATION TO SEDIMENT BIOGEOCHEMISTRY IN BALTIMORE CANYON, USA (ID: 27119)

430 **Serrano, M. A.**; Bergillos, R. J.; Díez-Minguito, M.; Ortega-Sánchez, M.; Losada, M. A.: THE EFFECT OF A SHELF-INDENTING CANYON IN THE PROPAGATION OF LONG WAVES: THE CASE OF JOLUCAR CANYON (GRANADA, SPAIN) (ID: 25802)

431 **Muñoz, M.**; Reul, A.; Vargas-Yañez, M.; Plaza, F.; Rodríguez, V.; Bautista, B.; Moya, F.; Palomino-Torres, R. L.; Jiménez-Gómez, F.; Rodríguez, J.: COMPOSITION, SIZE STRUCTURE AND NICTIMERAL MIGRATION OF ZOOPLANKTON IN THE GARRUCHA CANYON (SOUTHERN SPAIN). (ID: 27098)

432 Decker, C.; Potier, N.; Zorn, N.; Caprais, J. C.; Leize-Wagner, E.; Lallier, F.; Rabouille, C.; **Olu, K.**; Andersen, A. C.: GLOBINS AND THEIR CHARACTERISTICS IN TWO VESICOMYID BIVALVE SPECIES, ENABLING THEIR LIFE IN THE REDUCED ENVIRONMENT OF THE CONGO DEEP-SEA FAN (ID: 26514)

433 **Brandily, C.**; Cathalot, C.; De Prunelé, A.; Ruffine, L.; Le Bruchec, J.; Bessette, S.; Croguennec, C.; Pignet, P.; Caprais, J. C.; Rabouille, C.: PORE FLUID GEOCHEMISTRY FROM SURFACE SEDIMENT IN THREE SELECTED HABITATS AT A DEEP-SEA CONGO LOBE: SIMILARITIES AND DIFFERENCES (ID: 26832)

434 **Raimonet, M.**; Ragueneau, O.; Jacques, V.; Corvaisier, R.; Moriceau, B.; Khripounoff, A.; Pozzato, L.; Rabouille, C.: RAPID TRANSPORT AND HIGH ACCUMULATION OF AMORPHOUS SILICA IN THE CONGO DEEP-SEA FAN: A PRELIMINARY BUDGET (ID: 26521)

119 INTEGRATED PERSPECTIVES OF EASTERN BOUNDARY UPWELLING SYSTEMS

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448 **Barton, E. D.**; Castro, C. G.; Figueiras, F. G.; Alvarez Salgado, X. A.; Perez, F. F.; Largier, J.; Torres, R.; Pazos, Y.; Gil Coto, M.: THE RÍA DE VIGO: A CANARY IN THE COAL MINE? (ID: 26752)

449 **Arístegui, J.**; Sangrá, P.; Alonso-González, I.; Baños, I.; Barceló, B.; Hernández-Hernández, N.; Montero, M. F.; Barton, E. D.: THE HIDDEN LIFE IN EDDIES (ID: 27303)

450 **Packard, T. T.**; Osma, N.; Fernández-Urruzola, I.; Maldonado, F.; Martinez, I.; Herrera, A.; Tames, M.; Kutzner, V.; Bru, E.; Gómez, M.: NUTRIENT RETENTION EFFICIENCY, A NEW OCEAN METRIC DERIVED FROM PLANKTON RESPIRATION AND CARBON FLUX (ID: 25747)

451 **Castro, C. G.**; Collins, C. A.; Pennington, T. A.; Michisaki, R.; Chavez, F. P.: TEMPORAL VARIABILITY OF DOWNWARD FLUXES OF ORGANIC CARBON OFF MONTEREY BAY (ID: 26559)

128 PLANKTONIC BIODIVERSITY: SPATIAL & TEMPORAL COMPONENTS

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Location: Poster Area (Floor 2)

464 **Preza, E.**; Kordbacheh, A.; Walsh, E. J.: CRYPTIC SPECIATION IN GNESIOTROCHAN ROTIFERS (ID: 26423)

465 **Chaparro, G.**; Fontanarrosa, M. S.; O´Farrell, I.: COLONIZATION AND SUCCESSION OF ZOOPLANKTON AFTER DROUGHT IN A FLOODPLAIN LAKE: INFLUENCE OF HYDROLOGY AND MACROPHYTE DYNAMICS (ID: 25812)

466 **Kaneko, R.**; Suzuki, S.; Nagata, T.; Honda, M.; Hamasaki, K.: SPATIOTEMPORAL DYNAMICS OF PLANKTONIC ARCHAEA IN THE WESTERN NORTH PACIFIC OCEAN (ID: 26592)

467 Shin, K. H.; **Park, S. Y.**; Choi, B. H.; Lee, Y. J.; Lee, W. C.; Kim, H. C.: ESTIMATION OF ANNUAL PRIMARY PRODUCTIVITY IN COASTAL OYSTER FARM AREA, KOREA PENINSULA (ID: 26913)

132 MICROBIAL DIVERSITY AND DYNAMICS IN EXTREME ENVIRONMENTS

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480 **Anton, J.**; Schmitt-Kopplin, P.; Lucio, M.; Rosselló-Móra, R.: METABOLOMICS AS A TOOL TO UNVEIL PROKARYOTIC MICRODIVERSITY AND DYNAMICS IN HYPERSALINE ENVIRONMENTS (ID: 26849)

481 **Kurosawa, N.**; Kubo, S.; Chaya, A.; Kawamata, A.; Kosugi, M.; Imura, S.: COMMUNITY STRUCTURES OF PROKARYOTES AND PROTISTAN MICROPLANKTON IN THE ANTARCTIC SALINE LAKE NURUME-IKE REVEALED BY SSU RIBOSOMAL RNA GENE CLONE ANALYSIS (ID: 26440)

482 **Sánchez-Castro, I.**; Amador-García, A.; López-Fernández, M.; Phrommavanh, V.; Nos, J.; Descostes, M.; Merroun, M. L.: BACTERIAL DIVERSITY IN POREWATERS FROM URANIUM MILL TAILINGS REVEALED BY CULTURE-DEPENDENT APPROACHES (ID: 27317)

483 **Batanero, G. L.**; Green, A. J.; Suttle, C. A.; Mazuecos, I. P.; Vittecoq, M.; Amat, J.; Reche, I.: PROKARYOTES AND VIRUSES IN SALINE WETLANDS OF THE WESTERN MEDITERRANEAN BASIN (ID: 26300)

484 **León-Palmero, E.**; Batanero, G. L.; Green, A. J.; Rendón-Martos, M.; Reche, I.: GUANOTROPHICATION BY FLAMINGOS AND THE HYDROLOGICAL BUDGET CONTROL NUTRIENT AND MICROBIAL DYNAMICS IN AN ATHALASSOHALINE LAGOON (ID: 25894)

485 **Teufel, A. G.**; Li, W.; Morgan-Kiss, R. M.: CLIMATE CHANGE IN ANTARCTICA: IMPACT OF NUTRIENT AVAILABILITY ON ANTARCTIC LAKE PHYTOPLANKTON COMMUNITIES (ID: 25859)

136 ADVANCES IN BLUE CARBON RESEARCH: THE ROLE OF COASTAL ECOSYSTEMS IN THE CARBON CYCLE

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508 **Egea, L. G.**; Jimenez Ramos, R.; Hernandez, I.; Vergara, J. J.; Brun, F. G.: PLAYING WITH A FUTURE SCENARIO: RESPONSE OF THE SEAGRASS *CYMODOCEA NODOSA* TO THE JOINT ACTION OF CLIMATE CHANGE STRESSORS (ID: 26581)

509 **Landis, E. C.**; Sommerfield, C. K.; Tucker, K.: SPATIAL VARIATION OF CARBON ACCUMULATION IN GREAT MARSH, DELAWARE, USA (ID: 26416)

510 **Kim, B.**; Hyun, J.; Kim, S.; Mok, J.; Lee, K.; Kang, C.: SULFATE REDUCTION AT TWO SEAGRASS BEDS (INDIGENOUS *ZOSTERA MARINA* AND INVADING *HALOPHILA NIPPONICA*) IN THE SOUTHERN COAST OF KOREA (ID: 27701)

511 **Cotovicz Jr, L. C.**; Knoppers, B. A.; Brandini, N.; Santos, S. J.; Abril, G.: A LARGE ANNUAL CO2 SINK IN A HYPERTROPHIC TROPICAL COASTAL EMBAYMENT (GUANABARA BAY, RIO DE JANEIRO, BRAZIL) (ID: 27596)

137 NEXT GENERATION IN SITU SENSORS FOR AQUATIC SYSTEMS

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512 **Sánchez Polo, A. M.**; López Peñalver, J. J.; Medina Castillo, A. L.; Sánchez Polo, M.; Fernández Sánchez, J. F.; Rivera Utrilla, J.: SILVER-NANOPARTICLES FOR HALIDES REMOVAL FROM DRINKING WATER (ID: 26746)

513 **Coll Crespi, M.**; Tercier-Waeber, M. L.; Pankratova, N.; Pomati, F.; Bakker, E.: INNOVATIVE APPROACH TO STUDY TRACE METAL DYNAMIC AND THEIR SYNERGISTIC INTERACTION WITH PHYTOPLANKTON COMMUNITIES. (ID: 26619)

514 **Fischer, J. P.**; Thar, R.; Holtappels, M.; Borisov, S.; Klimant, I.: ROBUST AND FAST RESPONDING FIBER OPTODES – TOOLS, METHODS, AND APPLICATIONS (ID: 26758)

515 **Pankratova, N.**; Crespo, G. A.; Tercier-Waeber, M. L.; Crespi, M. C.; Pomati, F.; Bakker, E.: ELECTROCHEMICAL NUTRIENT SENSORS FOR IN-SITU MONITORING OF AQUATIC ECOLOGICAL PROCESSES (ID: 26698)

516 Clarke, J.; **Achterberg, E. P.**; Mowlem, M.: DEVELOPMENT OF HIGH RESOLUTION IN SITU FLUORESCENCE PH SENSOR (ID: 26716)

517 **Kane, M. K.**; Yopak, R.; Casagrande, D. S.; Roman, C.; Menden-Deuer, S.: *IN SITU* QUANTIFICATION OF WINTER VERTICAL DISTRIBUTIONS OF ANTARCTIC KRILL AS SEEN THROUGH A NEW STEREO CAMERA SYSTEM (ID: 27230)

518 **Walker, S. A.**; Wallace, D.; Azetsu-Scott, K.: OXYGEN ISOTOPE MEASUREMENTS IN SEAWATER USING CAVITY RING-DOWN SPECTROSCOPY (CRDS) (ID: 27396)

519 **Bombar, D.**; Taylor, C.; Wilson, S. T.; Robidart, J. C.; Turk-Kubo, K. A.; Karl, D. M.; Zehr, J. P.: MEASUREMENTS OF N_2 FIXATION IN THE OLIGOTROPHIC NORTH PACIFIC SUBTROPICAL GYRE USING A FREE-DRIFTING SUBMERSIBLE INCUBATION DEVICE (ID: 26380)

520 **Fritzsche, E.**; Schutting, S.; Jokic, T.; Strobl, M.; Borisov, S. M.; Klimant, I.: NEW HIGH PERFORMANCE OPTICAL PCO_2 SENSORS BASED ON BF_2-CHELATES OF DIHYDROXY-AZA-DIPYRROMETHENES (ID: 25453)

521 **Mistlberger, G.**; Müller, B. J.; Holly, C.; Klimant, I.: MULTI-CHANNEL MINIATURIZED ALGAE DETECTION MODULE (ID: 26121)

522 **Athavale, R.**; Wehrli, B.; Crespo, G. A.; Bakker, E.; Brand, A.: IN- SITU PROFILING ACROSS THE REDOXCLINE OF STRATIFIED LAKES USING SOLID CONTACT ION SELECTIVE ELECTRODES - NEW OPPORTUNITIES FOR SENSOR DEVELOPMENT (ID: 26110)

523 **Müller, B.**; Mistlberger, G.; Klimant, I.: EVALUATION OF DIFFERENT OPTICAL DETECTION METHODS FOR THE MARINE BIOTOXIN SAXITOXIN (ID: 26340)

524 **Prado, E.**; Nixon, J.; Mongin, S.; Tercier Weaber, M.; Nardin, C.: BIOMACROMOLECULES BASED DETECTION OF POLLUTION IN MARINE AQUATIC ENVIRONMENTS (ID: 26251)

139 PLANKTON ECOLOGY - PHYTOPLANKTON

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533 **Cunningham, A.**; Mitchell, C.: SPECTRAL DEPENDENCE OF PHYTOPLANKTON LIGHT HARVESTING AND ITS IMPLICATIONS FOR PRIMARY PRODUCTION IN CDOM-COLOURED WATERS (ID: 27145)

534 **Hunter-Cevera, K. R.**; Sosik, H. M.; Neubert, M. G.; Solow, A. R.; Olson, R. J.; Shalapyonok, A.: ANNUAL ABUNDANCE CYCLE OF TEMPERATE *SYNECHOCOCCUS* DETERMINED BY SEASONAL CHANGES IN DIVISION RATE (ID: 26857)

535 **Fiedler, D.**; Pritzkow, W.; Zwirnmann, E.; Köhler, J.: DON – UTILIZATION, INTERACTION AND IMPACT ON PHYTOPLANKTON (ID: 26529)

536 **Sánchez-Viruet, I. C.**; Glibert, P. M.: RESPONSE OF PHYTOPLANKTON COMMUNITY TO NUTRIENT QUALITY AND QUANTITY CHANGE IN MARYLAND/ VIRGINIA COASTAL BAYS (ID: 27546)

537 **Noh, J. H.**; Choi, D. H.; Yang, E. C.; Lee, C. M.: ECOSYSTEM RESPONSES TO ENVIRONMENTAL CHANGES IN THE EAST CHINA SEA (ID: 27672)

538 **Sakai-Kimura, S.**; Takee, H.; Ban, S.; Koyama, M.; Toda, T.: EFFECTIVE NUTRIENT REMOVAL FROM ANAEROBIC DIGESTATES OF AQUATIC MACROPHYTES USING GREEN MICROALGAE (ID: 27728)

539 **Pineda, A.**; Rodrigues, L. C.; Bortolini, J. C.: HYDROLOGICAL FACTORS ARE THE MAIN DRIVERS OF PHYTOPLANKTON IN BRAZILIAN SUBTROPICAL RESERVOIRS (ID: 27556)

540 **Carrera, A.**; Rivera, F.; Rosa, B.; Sastre, M.: RECOVERY OF THE *PYRODINIUM BAHAMENSE* (DINOPHYCEAE) POPULATION AFTER A SEVERE DECLINE, IN LAGUNA GRANDE, PUERTO RICO (ID: 27606)

541 Hevia-Orube, J.; David, H.; Laza-Martinez, A.; Miguel, I.; Seoane, S.; **Orive, E.**: COMPARATIVE MOLECULAR AND MORPHOLOGICAL ANALYSES OF SOLITARY FORMS OF CENTRIC DIATOMS WITH PARTICULAR EMPHASIS ON THE PHENOTIPIC PLASTICITY (ID: 25806)

542 **Satoh, Y.**; Otosaka, S.; Suzuki, T.: ACCUMULATION OF IODINE INTO PHYTOPLANKTON IN THE COASTAL REGION IN THE NORTH PACIFIC (ID: 25677)

543 **Rothenberger, M. B.**; Calomeni, A. J.; Swaffield, T.: TOP-DOWN AND BOTTOM-UP REGULATION OF PHYTOPLANKTON ASSEMBLAGES IN A EUTROPHIC ESTUARY (ID: 25411)

544 **Masuda, T.**; Šedivá, B.; Felcmanová, K.; Lawrenz, E.; Kotabová, E.; Kana, R.; Bernát, G.; Rabouille, S.; Claquin, P.; Prášil, O.: PHOTOSYNTHETIC METABOLISM IN THE UNICELLULAR DIAZOTROPHIC CYANOBACTERIA*CROCOSPHAERA WATSONII* CCY0601 AND *CYANOTHECE* SP. ATCC 51142 (ID: 26221)

545 **Katayama, T.**; Taguchi, S.: ROLE OF DIATOXANTHIN FORMATION THROUGH THE XANTHOPHYLL CYCLE AND DE NOVO SYNTHESIS IN THE PROTECTION OF PHOTOSYNTHESIS IN THREE MARINE DIATOMS (ID: 25992)

546 **Hammerstein, S. K.**; Vogt, H.; Büttner-Koch, C.; Stockenreiter, M.; Stibor, H.: TESTING TECHNIQUES FOR ESTABLISHING DIVERSITY GRADIENTS WITHIN NATURAL PHYTOPLANKTON COMMUNITIES (ID: 25922)

547 **Cabrerizo, M. J.**; Redondo-Hasselerharm, P.; Carrillo, P.; Villafañe, V. E.; Medina-Sánchez, J. M.; Helbling, E. W.: PHOTOSYNTHETIC RESPONSES OF PHYTOPLANKTON FROM HIGH-MOUNTAIN LAKES TO THE COMBINED IMPACT OF VERTICAL MIXING, UVR, CO2 AND NUTRIENTS: A TRANSPLANT EXPERIMENT (ID: 26357)

140 PLANKTON ECOLOGY - ZOOPLANKTON

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548 Intxausti, L.; Villate, F.; **Iriarte, A.**; Uriarte, I.: ANCHOVY LARVAE PRESERVATION IN ETHANOL AND FORMALIN: DIFFERENCES IN BODY MEASUREMENT INDEXES (ID: 26332)

549 **Suzuki, S.**; Kurosawa, N.: ANALYSIS OF GENETIC DIVERSITY OF THE PLANKTONIC COPEPOD *ACARTIA STEUERI* (COPEPODA, CALANOIDA, ACARTIIDAE) (ID: 26420)

550 **Hsieh, H.**; Chen, H.; Meng, P.: CHANGES OF HYDROGRAPHIC CONDITIONS AND LARVAL FISH ASSEMBLAGES IN THE COASTAL WATERS SOUTHWEST OF TAIWAN AFTER THE TYPHOON TEMBIN (ID: 25444)

551 **Rodriguez, A. E.**; Otero, E.: AN EVALUATION OF ZOOPLANKTON ENTRAINMENT BY THE COOLING WATER INTAKE SYSTEM OPERATED BY ECOELECTRICA, LP. (ID: 27432)

552 **Webb, A. E.**; Fields, D. M.; Lasley-Rasher, R. S.: TOO SCARED TO EAT; CAN PREDATOR KAIROMONES AFFECT PRIMARY PRODUCTION THROUGH CHANGES IN COPEPOD GRAZING? (ID: 26338)

553 **Hildebrandt, N.**; Thomisch, K.; Niehoff, B.: MESOZOOPLANKTON ABUNDANCE AND DISTRIBUTION IN FRAM STRAIT IN COMPARISON BETWEEN A COLD AND A WARM YEAR (ID: 27576)

554 **Wickline, A. T.**; Cohen, J. H.: SEASONALITY IN THE ZOOPLANKTON COMMUNITY OF DELAWARE BAY (USA): AN APPLICATION OF ZOOSCAN ANALYSIS TO A DYNAMIC AND UNDERSTUDIED ESTUARINE SYSTEM (ID: 27224)

555 Wuerz, M. T.; Huebner, E.; **Huebner, J. D.**: AN EXAMINATION OF THE HISTOLOGY OF MALE *DAPHNIA MAGNA* (ID: 27176)

142 CHEMICAL OCEANOGRAPHY/GEOTRACES

Chair(s): Andrea Kochinsky, a.koschinsky@jacobs-university.de

Location: Poster Area (Floor 2)

556 **Menzel, J. L.**; Schlosser, C.; Planquette, H.; Cheize, M.; Boutorh, J.; Shelley, R.; Contreira, L.; Gledhill, M.; Sarthou, G.; Achterberg, E. P.: HIGH RESOLUTION DISSOLVED ALUMINUM (DAL) MEASUREMENTS ALONG THE GEOVIDE SECTION (GEOTRACES SECTION GA01) AND AEROSOLS DEPOSITION RATES TO THE NORTH ATLANTIC (ID: 27368)

557 **Abat, J. R.**; Cabrera, O. C.; Villanoy, C. L.: TOPOGRAPHIC WAKE OFF BENHAM BANK, PHILIPPINES (ID: 27734)

558 **Solera, L. A.**; Villanoy, C. L.: INVESTIGATING FATE OF LARVAE IN A HIGHLY VARIABLE EDDYING REGIME (ID: 27730)

559 **Morell, J. M.**; Pomales, L. O.; Canals, M. F.; Capella, J. E.: SKILL ASSESSMENT OF EXISTING OPERATIONAL CIRCULATION MODELS FOR THE EASTERN CARIBBEAN IN SUPPORT OF THE IOOS-CARICOOS COASTAL MODELLING PROGRAM (ID: 26705)

560 **Androulidakis, Y. S.**; Krestenitis, Y. N.; Kourafalou, V.: ETESIAN WINDS AND COASTAL UPWELLING OVER THE NE AEGEAN SEA: MONITORING AND MODELING (ID: 26911)

561 **Cheize, M.**; Planquette, H. F.; Fitzsimmons, J.; Sherrell, R. M.; Sarthou, G.; Bucciarelli, E.; Lambert, C.; Le Goff, M.; Viollier, E.: CONTRIBUTION OF SUSPENDED MARINE PARTICLES TO THE DISSOLVED TRACE METALS POOL: AN EXPERIMENTAL STUDY WITH SEDIMENTS FROM CONTRASTING ENVIRONMENTS (ID: 26806)

562 **Xie, R. C.**; Galer, S. J.; Abouchami, W.; Rijkenberg, M.; De Jong, J.; de Baar, H. J.: BIOGEOCHEMICAL AND CIRCULATION CONTROL ON CADMIUM ISOTOPE DISTRIBUTION IN THE WESTERN SOUTH ATLANTIC (ID: 26890)

563 **Venturini, N.**; Nuñez, L.; Salaroli, A. B.; F. Angeli, J. L.; Sasaki, S. T.; Taniguchi, S.; Bícego, C. M.; L. Figueira, R. C.; Pantoja, S.: ORGANIC MATTER DIAGENETIC STATE IN A TROPICAL ESTUARY, NORTHEASTERN BRAZIL: EVIDENCE FROM AMINO ACID BIOGEOCHEMISTRY IN SURFACE SEDIMENTS (ID: 25415)

564 **Gourain, A.**; Planquette, H.; Cheize, M.; Menzel, J.; Boutorh, J.; Shelley, R.; Pereira Contreira, L.; Sarthou, G.; Bassoullet, C.: SIZE FRACTIONATED PARTICULATE IRON ALONG THE GEOVIDE SECTION (GEOTRACES SECTION GA01) (ID: 26795)

565 **Sousa, L.**; Weingartner, T. J.; Winsor, P.; Danielson, S. L.; Dobbins, E. L.; Irvine, C. B.: INTER-ANNUAL VARIABILITY IN SURFACE CIRCULATION IN THE CHUKCHI AND BEAUFORT SEAS: SATELLITE-TRACKED DRIFTER MEASUREMENTS (ID: 25955)

FRIDAY ORALS

006 ECOLOGICAL IMPACTS OF DROUGHTS ON FRESHWATER ECOSYSTEMS

Chair(s): Jose Luiz Attayde, attayde@cb.ufrn.br
Erik Jeppesen, ej@dmu.dk
Meryem Beklioglu, meryem@metu.edu.tr

Location: Andalucia 2 (Floor 1)

15:00 **Jeppesen, E.**; Bucak, T.; Coppens, J.; Levi, E.; Çakiroglu, I.; Tavsanoglu, N.; Bezirci, G.; Erdogan, S.; Filiz, N.; Menezes, R.; Brucet, S.; Naselli-Flores, L.; Papastergiadou, E.; Kostas, .; Stefanidis, .; Nõges, T.; Nõges, P.; Attayde, J. L.; Kernan, M.; Søndergaard, M.; Beklioğlu, M.: ECOLOGICAL IMPACTS OF DROUGHT ON LAKES INDUCED THROUGH WATER ABSTRACTION AND CLIMATE CHANGE (ID: 27761)

15:15 **Attayde, J. L.**; Brasil, J.; Huszar, V.: DROUGHT-INDUCED WATER LEVEL REDUCTION FAVOR CYANOBACTERIAL BLOOMS IN LAKES AND RESERVOIRS OF A SEMI ARID TROPICAL REGION (ID: 25562)

15:30 Medeiros, L. M.; Mattos, A.; Lurling, M.; **Becker, V.**: IS THE FUTURE BLUE-GREEN OR BROWN? THE EFFECT OF EXTREME EVENTS ON PHYTOPLANKTON DYNAMICS IN A SEMI-ARID MAN-MADE LAKE (ID: 25448)

15:45 **Barbosa, L. G.**; Pereira da Silva, K. D.; Dantas, E. W.: PHYTOPLANKTON IN INTERMITTENT SHALLOW LAKES IN THE BRAZILIAN CAATINGA (ID: 27762)

16:00 **Coppens, J.**; Bucak, T.; Tavsanoglu, Ü. N.; Trolle, D.; Beklioglu, M.: IMPACT OF CLIMATE CHANGE ON THE HYDROLOGICAL AND NUTRIENT BALANCE OF TWO SHALLOW MEDITERRANEAN LAKES USING CATCHMENT AND LAKE MODELLING APPROACHES (ID: 26724)

16:15 **Teferi, M.**; DeClerck, S. A.; De Bie, T.; Lemmens, P.; Gebrekidan, A.; Asmelash, T.; Dejenie, T.; Gebrehiwot, K.; Bauer, H.; Deckers, J. A.; Snoeks, J.; De Meester, L.: STRONG EFFECTS OF OCCASIONAL DRYING ON SUBSEQUENT WATER CLARITY AND CYANOBACTERIAL BLOOMS IN COOL TROPICAL RESERVOIRS* (ID: 27760)

17:15 **Joehnk, K. D.**; Ye, Q.; Nicol, J.: ANALYSING THE IMPACT OF DROUGHTS AND ENVIRONMENTAL WATERS ON SALINITY, WATER LEVEL, MACROPHYTE AND FISH HABITATS IN THE COORONG, SOUTH AUSTRALIA (ID: 27704)

17:30 **Mora-Gómez, J.**; Duarte, S.; Cassio, F.; Pascoal, C.; Romaní, A. M.: DROUGHT DURATION AFFECTS MICROBIAL PROCESSING OF PLANT LITTER IN A TEMPERATE STREAM (ID: 27070)

17:45 **Corti, R.**; Gelbrecht, J.; Premke, K.; Behounek, B.; Del Mar Sánchez-Montoya, M.; Grossart, H. P.; Singer, G.: DOES MIXING DIFFERENTLY PRECONDITIONED LEAVES AFFECT DOWNSTREAM MICROBIAL DECOMPOSITION IN PERENNIAL RIVERS? (ID: 26988)

18:00 **Pesce, S.**; Zoghlami, O.; Bender, C.; Margoum, C.; Artigas, J.; Chaumot, A.; Foulquier, A.: COMBINED EFFECTS OF DROUGHT AND FUNGICIDE EXPOSURE ON AQUATIC LEAF LITTER DECOMPOSITION (ID: 26569)

18:15 **Martínez, A.**; Kominoski, J. S.; Larrañaga, A.: EFFECTS OF EUCALYPTUS DISSOLVED ORGANIC MATTER ON AQUATIC BIOFILM METABOLISM: IMPLICATIONS OF WATER SCARCITY (ID: 27747)

011 THE IMPACT OF GLOBAL CHANGE ON TOXIC PHYTOPLANKTON

Chair(s): Val H. Smith, vsmith@ku.edu
Dedmer B. Van de Waal, d.vandewaal@nioo.knaw.nl
Hans W. Paerl, hans_paerl@unc.edu

Location: Picasso (Floor -2)

08:30 Harris, T. D.; Smith, V. H.; Graham, J. L.; **Van de Waal, D. B.**; Tedesco, L. P.; Clercin, N.: COMBINED EFFECTS OF THE NITROGEN TO PHOSPHORUS RATIO AND NITROGEN SPECIATION ON THREE CYANOBACTERIAL METABOLITE CONCENTRATIONS IN EUTROPHIC RESERVOIRS (ID: 27165)

08:45 **Paerl, H. W.**; Gardner, W. S.; McCarthy, M. J.; Otten, T. G.; Peierls, B. L.; Rossignol, K. L.; Hall, N. S.; Wilhelm, S. W.: NUTRIENT CONTROLS OF TOXIC CYANOBACTERIAL BLOOMS IN THE CONTEXT OF GLOBAL CHANGE: MOVING BEYOND THE "PHOSPHORUS ONLY" PARADIGM (ID: 25573)

09:00 **Gardner, W. S.**; McCarthy, M. J.; Paerl, W. S.; Lu, K.; Newell, S. E.; Lin, X.; Bruesewitz, D.; Hou, L.: COMMUNITY AMMONIUM DEMAND (CAD), REFLECTS N-LIMITATION IN EUTROPHIC AQUATIC ECOSYSTEMS (ID: 25579)

09:15 **Newell, S. E.**; McCarthy, M. J.; Lu, Z.; Gardner, W. S.: NITRIFICATION IN LAKE TAIHU, CHINA (ID: 27512)

09:30 **Glibert, P. M.**; Maranger, R.; Sobota, D. J.; Bouwman, L.: THE HABER BOSCH – HARMFUL ALGAL BLOOM (HB-HAB) LINK (ID: 27384)

09:45 **Steffen, M. M.**; Bourbonnierre, R. A.; Watson, S. B.; Krausfeldt, L. E.; Paerl, H. W.; Wilhelm, S. W.: METATRANSCRIPTOMIC AND TARGETED INSIGHTS INTO WHAT MAKES *MICROCYSTIS* BLOOM* (ID: 27267)

10:30 **Urrutia Cordero, P.**; Ekvall, M. K.; Hansson, L. A.: CLIMATE CHANGE IMPACTS ON LAKE PHYTOPLANKTON DIVERSITY AND TOXIC CYANOBACTERIA: A MESOCOSM APPROACH (ID: 26894)

10:45 **Otten, T. G.**; Dreher, T. W.: PAIRING PHYSICOCHEMICAL DATA AND METAGENOMICS TO ELUCIDATE THE ENVIRONMENTAL DRIVERS OF TOXIN-PRODUCING CYANOBACTERIAL BLOOMS (ID: 27723)

11:00 **Faassen, E. J.**; Lürling, M.: CYANOBACTERIA AND MICROCYSTINS: DO THEY LIKE IT HOT, NUTRITIOUS OR BOTH? (ID: 26178)

11:15 **Verspagen, J.**; Van De Waal, D.; Visser, P.; Huisman, J.: RISING CO_2 CONCENTRATIONS WILL INTENSIFY PHYTOPLANKTON BLOOMS IN EUTROPHIC AND HYPERTROPHIC LAKES* (ID: 25600)

11:30 **Eberlein, T.**; Van de Waal, D. B.; John, U.; Rost, B.: HARMFUL ALGAL BLOOMS UNDER GLOBAL CHANGE: INTERACTIVE EFFECTS OF OCEAN ACIDIFICATION AND NUTRIENT LIMITATION ON TWO DINOFLAGELLATE SPECIES (ID: 26785)

11:45 **Griffith, A. W.**; Gobler, C. J.: EFFECTS OF TEMPERATURE ON THE GROWTH AND TOXICITY OF THE DINOFLAGELLATE, *COCHLODINIUM POLYKRIKOIDES*. (ID: 27290)

Location: Andalucia 1 (Floor 1)

17:00 **Gallego, I.**; Brasil, J.; Huszar, V.; Attayde, J. L.; Fuentes-Rodríguez, F.; Juan, M.; Pérez-Martínez, C.; Sánchez-Castillo, P. M.; Casas, J. J.: GLOBAL WARMING AND EUTROPHICATION INDUCE SHIFTS FROM CHLOROPHYCEANS TO CYANOBACTERIAL DOMINANCE IN SEMI-ARID TEMPERATE CLIMATE (ID: 26166)

17:15 **Rigosi, A.**; Carey, C. C.; Ibelings, B. W.; Brookes, J. D.: CYANOBACTERIA: CAN NUTRIENT REDUCTION OFFSET TEMPERATURE INCREASE? (ID: 25406)

17:30 **Johnson, A. N.**; Parker, A.; Wilkerson, F.: CLIMATE CHANGE EFFECTS ON THE SAN FRANCISCO ESTUARY DELTA PHYTOPLANKTON COMMUNITY: THE ROLE OF TEMPERATURE AND SALINITY TOLERANCE ON GROWTH (ID: 26407)

17:45 **Ralston, D. K.**; Brosnahan, M. L.; Anderson, D. M.: USING GROWING DEGREE DAYS TO COLLAPSE INTERANNUAL VARIABILITY IN THE DEVELOPMENT AND DECLINE OF AN ESTUARINE HARMFUL ALGAL BLOOM (ID: 26127)

18:00 **Cembella, A. D.**; John, U.; Krock , B.; Tillmann, U.; Westphal, S.; Koch, B.; Wohlrab, S.; Zielinski, O.: DEFINING EMERGING BIOGEOGRAPHICAL PATTERNS OF HARMFUL ALGAL BLOOMS ASSOCIATED WITH GLOBAL CHANGE REGIMES IN ARCTIC AND SUB-ARCTIC COASTAL SYSTEMS* (ID: 27337)

026 REGIME SHIFTS IN LAKES, RIVERS, AND OCEANS

Chair(s): David Seekell, das9xx@virginia.edu
Vasilis Dakos, vasilis.dakos@gmail.com
Jessica Gephart, jag5sa@virginia.edu

Location: Room B (Floor -3)

08:30 **Verbeek, L.**; Vanhamel, M.; Striebel, M.; De Meester, L.; Hillebrand, H.: STABILIZING EFFECTS OF PHYTOPLANKTON DIVERSITY IN SMALL FARMLAND PONDS (ID: 26815)

08:45 **Ishikawa, K.**; Haga, H.: CHANGES IN THE ECOSYSTEM OF THE SOUTH BASIN OF LAKE BIWA: FOCUS ON ALGAL BLOOMS AND SUBMERGED MACROPHYTE OVERGROWTH (ID: 26512)

09:00 **Ives, S. C.**; May, L.; Heal, K. V.; Elliott, A.; Spears, B. M.: INVESTIGATING MULTIPLE CRITICAL TRANSITIONS IN LOCH LEVEN (1968-2013) (ID: 26775)

09:15 **Shatwell, T.**; Adrian, R.; Kirillin, G.: CARDINAL PLANKTON EVENTS MEDIATE MIXING REGIME SHIFTS IN TEMPERATE SHALLOW LAKES (ID: 27393)

09:30 **Martinez, G.**; Sotomayor, D.; Santos, C.; Macciavelli, R.: NUMERIC NUTRIENT CRITERIA FOR RESERVOIRS IN PUERTO RICO: AN ASSESSMENT BASED ON DESIGNATED USE IMPAIRMENT (ID: 25855)

09:45 **Rippey, B.**; Macintosh, K.; Forasacco, E.; McElarney, Y.; Vaughan, L.; Gallagher, K.: A NEW FRAMEWORK FOR LAKE ECOLOGICAL CHANGE DUE TO EUTROPHICATION (ID: 25993)

10:30 **Gsell, A. S.**; Dakos, V.; Özkundakci, D.; Hansson, L. A.; Nõges, P.; Reid, P. C.; Schindler, D. E.; Van Donk, E.; Walters, A.; Adrian, R.: EARLY WARNING SIGNALS PRECEDE CRITICAL TRANSITIONS IN NATURAL AQUATIC ECOSYSTEMS (ID: 26028)

10:45 **Pace, M. L.**; Batt, R. D.; Buelo, C.; Carpenter, S. R.; Cole, J. J.; Kurtzweil, J. T.; Wilkinson, G. M.: EARLY WARNINGS OF PHYTOPLANKTON BLOOMS? A WHOLE LAKE EXPERIMENT (ID: 25633)

11:00 Dakos, V.; Glazer, S. M.; **Hsieh, C.**; Sugihara, G.: NONLINEARITY, VARIABILITY, AND AUTOCORRELATION AS SIGNATURES OF CRITICAL TRANSITIONS IN THE DYNAMICS OF EXPLOITED POPULATIONS (ID: 25996)

11:15 **Ye, H.**; Beamish, R. J.; Glaser, S. M.; Grant, S. C.; Hsieh, C. H.; Richards, L. J.; Schnute, J. T.; Sugihara, G.: APPARENT REGIME SHIFTS OR NONLINEAR STATE-DEPENDENCE? ENVIRONMENTAL DRIVERS OF FRASER RIVER SOCKEYE SALMON RECRUITMENT (ID: 27646)

11:30 **Soudijn, F. H.**; Heino, M.; Dieckmann, U.; de Roos, A. M.: COLLAPSES OF LARGE PISCIVOROUS FISH POPULATIONS DUE TO OVERFISHING CAN BE PREVENTED AND REVERSED BY HARVESTING THEIR PREY (ID: 25538)

11:45 **Den Haan, J.**; Visser, P. M.; Brocke, H. J.; Pander, J.; Brunner, R.; De Wit, M.; Mes, D.; De Baat, M. L.; Vermeij, M. J.; Huisman, J.: SHIFTS IN PRIMARY PRODUCTIVITY DURING THE TRANSITION FROM CORAL TO ALGAL DOMINANCE IN A REEF COMMUNITY (ID: 25423)

15:00 **Khouri, R. S.**; Beaulieu, C.; Henson, S. A.; Martin, A. P.: SHIFTS IN PHYTOPLANKTON POPULATIONS OF THE NORTHEAST ATLANTIC AND NORTH SEA (ID: 25839)

15:15 **Bennett, S.**; Wernberg, T.; Harvey, E.; Santana-Garcon, J.; Saunders, B.: TROPICAL HERBIVORES: DRIVERS OR PASSENGERS OF CLIMATE MEDIATED PHASE-SHIFTS ON TEMPERATE REEFS? (ID: 26498)

15:30 **Ross, O. N.**; Fraysse, M.; Pinazo, C.; Pairaud, I.: HOW INTRUSIONS OF THE NORTHERN CURRENT LEAD TO REGIME SHIFTS IN THE BIOGEOCHEMISTRY OF THE GULF OF LION (ID: 27220)

15:45 **Carballeira, R.**; Vázquez-Loureiro, D.; López-Rodríguez, M. C.; Otero, X. L.; Blanco, R.; Bao, R.; Leira, M.: REGIME SHIFTS, TRENDS AND INTERANNUAL VARIATIONS IN SHALLOW LAGOON IN NW SPAIN (ID: 26927)

16:00 **Barquín, J.**; Álvarez-Martínez, J. M.; Álvarez-Cabria, M.; Peñas, F. J.; Silió, A.; Rodríguez-Castillo, T.; González, A. M.; Estévez, E.; Lezcano, M.: FORESTS CONFER RESILIENCE TO THE FUNCTIONING OF RIVER ECOSYSTEMS (ID: 26898)

16:15 **Robinson, C. T.**; Scheurer, T.; Ortlepp, J.: EXPERIMENTAL FLOWS INCREASE RESILIENCE OF A REGULATED RIVER TO CATASTROPHIC DISTURBANCE (ID: 25753)

17:15 **Thoms, M. C.**; Cossart, R.: REGIME SHIFTS IN A TERMINAL FLOODPLAIN WETLAND COMPLEX (ID: 27071)

17:30 **Stips, A. K.**; Macias, D.; Lilover, M. J.: REPRODUCIBLE DETECTION OF REGIME SHIFTS (ID: 26141)

17:45 **Lucena-Moya, P.**; Brawata, R.; Kath, J.; Harrison, E.; ElSawah, S.; Dyer, F.: THRESHOLD ESTIMATES TO FACE CHALLENGES IN BAYESIAN NETWORKS (ID: 26325)

028 THE BLACK BOXES HAVE JUST BEEN OPENED: LINKING ORGANIC MATTER COMPOSITION AND MICROBIAL DIVERSITY IN AQUATIC ENVIRONMENTS

Chair(s): Eva Ortega-Retuerta, ortegaretuerta@icm.csic.es
Jutta Niggemann, jutta.niggemann@uni-oldenburg.de
Hans Peter Grossart, hgrossart@igb-berlin.de
Ingrid Obernosterer, ingrid.obernosterer@obs-banyuls.fr
Lihini Aluwihare, laluwihare@ucsd.edu

Location: Machuca (Floor -2)

10:30 **Orellana, M. V.**; Baliga, N. S.: MICROBIAL ECOLOGY AND OCEAN BIOGEOCHEMISTRY: A SYSTEMS PERSPECTIVE (ID: 26467)

10:45 **Kujawinski, E. B.**; Longnecker, K.; Johnson, W.; Fiore, C. L.; Futrelle, J.: IDENTIFICATION OF NOVEL MICROBIAL METABOLITES IN THE OCEAN (ID: 27612)

* REPRESENTS INVITED PRESENTATIONS

11:00 **Mayali, X.**; Weber, P. K.; Bryson, S.; Pan, C.; Pett-Ridge, J.; Hettich, R.; Mueller, R.: THE USE OF STABLE ISOTOPE SUBSTRATES TO LINK MICROBIAL POPULATIONS WITH THEIR DOM INCORPORATION PATTERNS USING NANOSIMS AND MICROARRAYS (CHIP-SIP) (ID: 27625)

11:15 **Hoarfrost, A.**; Arnosti, C.: MICROBIAL EXTRACELLULAR ENZYMATIC HYDROLYSIS OF ORGANIC CARBON ALONG DEPTH AND LATITUDINAL GRADIENTS IN THE SOUTH ATLANTIC (ID: 26223)

11:30 **Borrull, E.**; Aparicio-Bernat, F. L.; Antequera, C.; Marrasé, C.; Gasol, J. M.; Sala, M. M.: SEASONAL PATTERNS OF FREE-LIVING AND ATTACHED BACTERIAL ACTIVITY IN THE COASTAL NW MEDITERRANEAN (ID: 26870)

11:45 **Mestre, M.**; Gasol, J. M.; Sala, M. M.: SEASONAL CHANGES IN THE BACTERIAL COMMUNITIES INHABITING PARTICULATE MATTER OF DIFFERENT SIZES (ID: 26326)

15:00 **Amaral, V.**; Graeber, D.; Calliari, D.; Alonso, C.: MAJOR GROUPS OF AQUATIC BACTERIA RESPOND TO DIFFERENT DOM COMPONENTS IN A SUBTROPICAL ESTUARY (ID: 27283)

15:15 **Aparicio-Bernat, F. L.**; Borrull, E.; Romero, E.; Nieto-Cid, M.; Stedmon, C. A.; Gasol, J. M.; Marrasé, C.: MECHANISMS DRIVING THE FATE OF THE ORGANIC MATTER IN DEEP SEA WATERS: QUALITY AND QUANTITY OF THE SUBSTRATES (ID: 25823)

15:30 **Marrase, C.**; Aparicio-Bernat, F. L.; Borrull, E.; Romero, E.; Nieto-Cid, M. M.; Gasol, J. M.; Cortes, N.; Caixach, J.; Sala, M. M.; Rios, A. F.: TOTAL DOM REMINERALIZATION IN THE OCEAN: IS IT POSSIBLE? (ID: 27492)

15:45 Logue, J. B.; Stedmon, C. A.; Kellerman, A. M.; Nielsen, N. J.; Laudon, H.; **Lindström, E. S.**; Kritzberg, E. S.: THE SIGNIFICANCE OF AQUATIC BACTERIAL COMMUNITY COMPOSITION TO THE DEGRADATION OF TERRESTRIALLY-DERIVED DISSOLVED ORGANIC MATTER (ID: 27012)

16:00 **Simon, M.**; Wemheuer, B.; Meier, D.; Klempert, P.; Wemheuer, F.; Billerbeck, S.; Giebel, H. A.; Scherber, C.; Daniel, R.: DIFFERENT ENVIRONMENTAL AND BIOGEOCHEMICAL ADAPTATION OF TOTAL AND ACTIVE BACTERIOPLANKTON COMMUNITIES ACROSS A LATITUDINAL GRADIENT IN THE NORTH SEA (ID: 26243)

16:15 **Osterholz, H.**; Singer, G.; Wemheuer, B.; Daniel, R.; Meinhard, S.; Niggemann, J.; Dittmar, T.: TERRIGENOUS INPUT AND MICROBIAL PROCESSING – DRIVING FORCES OF DISSOLVED ORGANIC MATTER COMPOSITION IN THE NORTH SEA (ID: 25464)

17:00 **Wegley Kelly, L.**; Nelson, C. E.; Haas, A. F.; Smith, J. E.; Carlson , C. A.; Rohwer, F.: TAXONOMIC AND FUNCTIONAL GENE ANALYSIS OF THE MICROBIAL COMMUNITIES STIMULATED BY THE DOM RELEASED FROM THREE BENTHIC CORAL REEF PRIMARY PRODUCERS (ID: 27671)

17:15 **Fox, C.**; Lewicki, J. P.; Hussain, A.; Burdige, D.; Magen, C.; Chanton, J.; Komada, T.: CHARACTERIZATION OF WHOLE POREWATER DISSOLVED ORGANIC MATTER IN ANOXIC SEDIMENTS BY 1H NMR (ID: 25755)

17:30 **Mayr, M.**; Sieczko, A.; Demeter, K.; Besemer, K.; Teubner, I.; Meisterl, K.; Peduzzi, P.: FACTORS DRIVING THE BACTERIOPLANKTON COMMUNITY COMPOSITION IN A DANUBE FLOODPLAIN (AUSTRIA) (ID: 26952)

17:45 **Singer, G. A.**; Besemer, K.; Wilhelm, L.; Dittmar, T.; Battin, T. J.: LINKING HIGH RESOLUTION DESCRIPTIONS OF DISSOLVED ORGANIC MATTER AND MICROBIAL COMMUNITY COMPOSITION IN ALPINE STREAM ENVIRONMENTS (ID: 27540)

18:00 **Steen, A. D.**; Murray, P. J.; Ferriero, N.; Malcolm X Shabazz Aquatic Geochemistry Team, .; Rosalsky, J.; Mulligan, K. H.; Hagen, S. M.; Ziervogel, K.; Lloyd, K. G.: ACTIVITIES OF EXTRACELLULAR PEPTIDASES ACROSS AQUATIC ENVIRONMENTS: DO DIVERSE HETEROTROPHIC COMMUNITIES SHARE SIMILAR TASTES? (ID: 27400)

18:15 **del Giorgio, P. A.**; Hutchins, R.; Ruiz Gonzalez, C.; Niño, J. P.; Dittmar, T.; Stubbins, A.: PATTERNS IN BACTERIA AND MOLECULES ALONG THE TERRESTRIAL-AQUATIC CONTINUUM IN BOREAL AQUATIC NETWORKS (ID: 27333)

029 WHEN, AND WHY THEN? PHENOLOGY AND EVOLUTIONARY ADAPTATIONS TO SEASONALITY IN AQUATIC ECOSYSTEMS

Chair(s): Oystein Varpe, oystein.varpe@unis.no
Monika Winder, monika.winder@su.se

Location: Seminario 6-7 (Floor 1)

08:30 **Atkinson, A.**; Harmer, R. A.; Widdicombe, C. E.; McEvoy, A. J.; Smyth, T. J.; Cummings, D. G.; Somerfield , P. J.; Maud, J. L.; McConville, K.: QUESTIONING THE ROLE OF PHENOLOGY SHIFTS AND TROPHIC MISMATCH IN A PLANKTONIC FOOD WEB (ID: 26198)

08:45 **Mackay, E. B.**; Thackeray, S. J.; Henrys, P.: UNDERSTANDING PHYTOPLANKTON COMMUNITY PHENOLOGY: CREATING A LONG TERM INDEX OF SEASONAL TIMING RELATED TO TRAITS AND PHYSICAL DRIVERS (ID: 26794)

09:00 **Kuhn, A. M.**; Fennel, K.; Mattern, J. P.: MODEL INVESTIGATIONS OF THE NORTH ATLANTIC SPRING BLOOM INITIATION (ID: 25442)

09:15 **Zarubin, M.**; Lindemann, Y.; Genin, A.: MIXING, CRITICAL DEPTH AND SPRING PHYTOPLANKTON BLOOM IN A DEEP-MIXING OLIGOTROPHIC SEA (ID: 25468)

09:30 **Hylander, S.**; Kiørboe, T.; Snoeijs Leijonmalm, P.; Sommaruga, R.; Nielsen, T. G.: IS THERE A TRADE-OFF BETWEEN FEEDING AND UV-EXPOSURE IN CALANUS SPECIES DURING THE ARCTIC SPRING BLOOM? (ID: 26814)

09:45 **Arnott, S. E.**; Nelson, W. A.; Grubb, L.: CONNECTING LIFE-HISTORY TRAITS TO ECOSYSTEM FUNCTION TO UNDERSTAND LAKE RESPONSE TO CLIMATE CHANGE (ID: 25880)

10:30 **Dam, H. G.**; Finiguerra, M.; Cournoyer, B.; Avery, D.: PREDICTING RESPONSE TO WARMING IN THE COPEPOD GENUS ACARTIA: INTERPLAY OF PLASTICITY AND CLIMATOLOGY (ID: 27298)

11:00 **Ejsmond, M. J.**; McNamara, J. M.; Søreide, J.; Varpe, Ø.: EXPLAINING BODY SIZE AND REPRODUCTION OF THE COPEPODS CALANUS SPP.: PREDICTIONS FROM A LIFE HISTORY MODEL (ID: 27420)

11:15 **Halvorsen, E.**: SIGNIFICANCE OF LIPID STORAGE LEVELS FOR REPRODUCTIVE OUTPUT IN THE ARCTIC COPEPOD CALANUS HYPERBOREUS (ID: 26647)

FRIDAY

11:30 **Freese, D.**; Søreide , J. E.; Sartoris, F. J.; Niehoff, B.: INDICATION FOR THE TIMING OF DIAPAUSE - SEASONAL DEVELOPMENT OF METABOLIC ACTIVITY IN THE ARCTIC COPEPOD *CALANUS GLACIALIS* (ID: 26904)

11:45 **Mattfeldt, T.**; Teschke, M.; Waller, N.; Kawaguchi, S.; Meyer, B.: INCREASED SEAWATER TEMPERATURES CAUSE TEMPORAL SHIFTS IN CATABOLIC PATHWAYS OF ANTARCTIC KRILL EUPHAUSIA SUPERBA (ID: 27500)

031 RESTORATION OF LAKES, RESERVOIRS, AND COASTAL ECOSYSTEMS BY REDUCING INTERNAL NUTRIENT RECYCLING

Chair(s): Henning S. Jensen, hsj@biology.sdu.dk
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Martin Sondergaard, ms@dmu.dk
Frede O. Andersen, foa@biology.sdu.dk

Location: Seminario 6-7 (Floor 1)

15:00 **Spears, B. M.**: CONTROLLING INTERNAL PHOSPHORUS LOADING IN LAKES USING GEO-ENGINEERING: LESSONS FROM MULTIPLE WHOLE LAKE EXPERIMENTS (ID: 26920)

15:15 **Lürling, M.**; Waajen, G.; Maliaka, V.; Van Oosterhout, F.: A FLOCK & LOCK TECHNIQUE TO CONTROL INTERNAL LOADING (ID: 26142)

15:30 **Waajen, G.**; Lürling, M.: FLOCK & LOCK TECHNIQUE TO CONTROL INTERNAL PHOSPHORUS LOADING: MORE THAN FIVE YEARS EXPERIENCE FROM A WHOLE-LAKE APPLICATION (ID: 26196)

15:45 **van Oosterhout, F.**; Lurling, M.: EFFECTIVENESS, DURABILITY AND TOXICOLOGY OF THE PAC –LMB FLOCK & LOCK IN LAKE RAUWBRAKEN (ID: 26035)

16:00 **Reitzel, K.**; Nielsen, U. G.; Dithmer, L.: PHOSPHATE REMOVAL BY PHOSLOCK – EFFECTS OF DISSOLVED ORGANIC CARBON (ID: 26077)

16:15 **de Vicente, I.**; de Vicente, J.; Funes, A.; Merino Martos, A.; Alvarez-Manzaneda Salcedo, M. I.; Cruz Pizarro, L.: NEW ADSORBENTS FOR REMOVING PHOSPHORUS FROM AQUEOUS SOLUTIONS: THE CASE OF MAGNETIC MICROPARTICLES (ID: 25610)

17:00 **Riemann, B.**; Carstensen, J.; Dahl, K.; Fossing, H.; Hansen, J. W.; Jakobsen, H. H.; Josefson, A.; Krause-Jensen, D.; Markager, S.; Stæhr, P. A.: RECOVERY OF DANISH COASTAL ECOSYSTEMS AFTER REDUCTIONS IN NUTRIENT LOADING: TRENDS AND TIME LAGS (ID: 25530)

17:15 **Vonk, J. A.**; Admiraal, W.; Van der Geest, H. G.: SEDIMENT'S HISTORY DEFINES LAKE'S FUTURE: LONG-TERM DEVELOPMENT OF SHALLOW RESERVOIRS IN RIVER DELTAS (ID: 27558)

17:30 **Rydin, E.**; Kumblad, L.: WATER COLUMN NUTRIENT RESPONSES TO DISSOLVED ALUMINUM INJECTION INTO ANOXIC BALTIC SEA SEDIMENT (ID: 25473)

17:45 **Hupfer, M.**; Lewandowski, J.; Kleeberg, A.; Reitzel, K.: LONG-TERM EFFICIENCY OF A LAKE RESTORATION BY CHEMICAL PHOSPHORUS PRECIPITATION: SCENARIO ANALYSES WITH A PHOSPHORUS BALANCE MODEL (ID: 26802)

18:00 **Sondergaard, M.**; Bjerring, R.; Jeppesen, E.: IMPACT OF BIOLOGICAL STRUCTURE ON INTERNAL NUTRIENT CYCLING IN SHALLOW LAKES (ID: 26583)

18:15 **Jensen, H. S.**; Hupfer, M.; Huser, B.; Søndergaard, M.; Vicente, I.; Reitzel, K.; Andersen, F. Ø.: RESTORATION OF LAKES AND RESERVOIRS BY REDUCING INTERNAL NUTRIENT RECYCLING – SOME DIRECTIONS FOR FUTURE RESEARCH (TUTORIAL) (ID: 26743)

033 THE ROLE OF NATURAL ECOSYSTEMS IN COASTAL PROTECTION: MECHANISMS, QUANTIFICATION AND APPLICATION

Chair(s): Iris Moeller, im10003@cam.ac.uk
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Tjeerd Bouma, Tjeerd.Bouma@nioz.nl
Mindert de Vries, Mindert.deVries@deltares.nl
Bregje van Wesenbeeck, Bregje.vanWesenbeeck@deltares.nl
Edward P. Morris, edward.morris@uca.es

Location: Seminario 3-4-5 (Floor 1)

08:30 **Moeller, I.**: THE COASTAL PROTECTION FUNCTION OF SALT MARSHES: CONSIDERING BIO-PHYSICAL COMPLEXITY (ID: 25604)

08:45 **Osorio-Cano, J. D.**; Alcerreca-Huerta, J. C.; Zapata, L. M.; Osorio-Arias, A. F.; Toro, F. M.; Oumeraci, H.: NUMERICAL MODELLING OF WAVE ENERGY DISSIPATION OVER A SUBMERGED REEF, STUDY CASE: TESORO ISLAND, COLOMBIA (ID: 26301)

09:00 **Temmerman, S.**; Smolders, S.; Stark, J.; Bouma, T. J.; Meire, P.: ECOSYSTEM-BASED ADAPTATION TO INCREASING COASTAL FLOOD RISKS: LOCAL INSIGHTS AND GLOBAL POTENTIALS* (ID: 26013)

09:15 **Vanegas Giraldo, C. A.**; Osorio Arias, A. F.; Urrego Giraldo, L. E.; Toro Botero, F. M.; Osorio Cano, J. D.: WAVE DISSIPATION ACROSS RHIZOPHORA MANGROVE PATCH AT ISLA GRANDE, COLOMBIA (ID: 26896)

09:30 **van Wesenbeeck, B. K.**; de Boer, W.; Narayan, S.; van der Star, W. R.; de Vries, M. B.: COASTAL AND RIVERINE ECOSYSTEMS AS ADAPTIVE FLOOD DEFENSES UNDER A CHANGING CLIMATE (ID: 25784)

09:45 **Ondiviela, B.**; Losada, I. J.; Maza, M.; Javier, L. L.; Bouma, T.; Trinogga, J.; Juanes, J. A.; Puente, A.: ECOHYDRAULICS MODELLING OF LIVING PLANTS FOR WAVE AND CURRENT ATTENUATION: GUIDELINES AND RECOMMENDATIONS (ID: 26682)

10:30 **Losada, I. J.**; Maza, M.; Lara, J. L.; Bouma, T.; Ondiviela, B.; Trinogga, J.: COASTAL PROTECTION SERVICES BY SALT MARSHES: A LARGE-SCALE EXPERMIENTAL ANASYSIS (ID: 26729)

10:45 **van der Vegt, M.**; Donker, J.; van der Deijl, E.; Hoekstra, P.: ENHANCED WAVE ATTENUATION BY MUSSEL BEDS SIGNIFICANT FOR ITS OWN SURVIVAL (ID: 27365)

11:00 **Morris, E. P.**; Caballero, I.; Benavente, J.; Navarro, G.; Bouma, T.; Peralta, G.: COASTAL MACROPHYTES CONTRIBUTE TO THE LONG TERM GEOMORPHOLOGICAL STABILITY OF CADIZ BAY (ID: 26892)

11:15 **Bergillos, R. J.**; Serrano, M. A.; Ortega-Sánchez, M.; López-Ruiz, A.; Lobo, F. J.; Losada, M. A.: THE ROLE OF COMPLEX INNER SHELF BATHYMETRY IN COASTAL PROTECTION: THE CARCHUNA SYSTEM (GRANADA, SPAIN) (ID: 25797)

11:30 **Bouma, T. J.**; van Belzen, J.; Balke, T.; Callaghan, D. P.; Temmerman, S.; Herman, P. M.: SHORT-TERM MUDFLAT DYNAMICS DRIVE LONG-TERM CYCLIC SALT MARSH DYNAMICS: UNDERLYING MECHANISMS & IMPLICATIONS FOR COASTAL DEFENSE (ID: 26389)

* REPRESENTS INVITED PRESENTATIONS

11:45 **Rodil, I. F.**; Jaramillo, E.; Hubbard, D. M.; Dugan, J. E.; Melnick, D.; Velasquez, C.: INTERACTION BETWEEN EXTREME EVENTS AND COASTAL ARMOURING ON DUNE PLANT COMMUNITIES: THE 2010 MAULE EARTHQUAKE IN CENTRAL CHILE* (ID: 26284)

15:00 **Wamsley, T. V.**: QUANTIFYING THE CONTRIBUTION OF NATURAL ECOSYSTEMS IN COASTAL RISK REDUCTION* (ID: 27275)

15:15 **Tintore Parra, A.**; Reyes Merlo, M. A.; Jimenez Robles, A. M.; Ortega Sanchez, M. O.; Losada Rodriguez, M. A.: MANAGEMENT STRATEGIES FOR HIGHLY ALTERED ESTUARIES: THE CASE OF PUNTA UMBRIA (HUELVA, SPAIN). (ID: 26139)

15:30 **Venn, C.**; Whisner, J. B.; Mattesini, M. M.; McElhaney, D.; Cornell, S. R.: ESTABLISHMENT OF A HYDROLOGIC NETWORK TO MONITOR THE EFFECTS OF SEA-LEVEL CHANGE ON VEGETATION IN A MID-ATLANTIC SALT MARSH NEAR WALLOPS ISLAND, VIRGINIA, USA (ID: 27090)

15:45 **Ibáñez, C.**; Callaway, J.; Fennessy, S.; Caiola, N.: THE RESPONSE OF DELTAIC WETLANDS TO RELATIVE SEA LEVEL RISE: NATURAL MECHANISMS AND MANAGEMENT OPTIONS IN MEDITERRANEAN ECOSYSTEMS (ID: 26772)

16:00 **Mattesini, M. M.**; Venn, C.; Whisner, J. B.; Shepard, M.: ASSESSING SALT MARSH VEGETATION AND QUANTIFYING THE EFFECTS OF STORMS AND SEA LEVEL RISE IN COASTAL VIRGINIA, USA, USING SATELLITE IMAGERY (ID: 27121)

16:15 **De Vries, M. B.**; Van Der Wal, D.; Moller, I.; Van Wesenbeeck, B. K.; Peralta, G.; Morris, E. P.; Smith, G.; Bouma, T. J.: PREDICTION OF FLOOD PROTECTION SERVICES DELIVERED BY FORESHORE ECOSYSTEMS USING SPACE BASED SENSORS (ID: 25696)

041 LAKE ICE DYNAMICS: HYDROLOGY OF COLD WATER BODIES

Chair(s): Klaus D. Joehnk, klaus.joehnk@csiro.au
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Donald C. Pierson, dpierson@dep.nyc.gov

Location: Press Room (Floor 2)

15:00 **Duguay, C. R.**; Surdu, C.: MONITORING ICE COVER ON SHALLOW ARCTIC LAKES WITH REMOTE SENSING: THE WAY FORWARD* (ID: 25652)

15:15 **Surdu, C. M.**; Duguay, C. R.; Fernández Prieto, D.: EVIDENCE OF RECENT CHANGES IN THE ICE REGIME OF HIGH ARCTIC LAKES FROM SPACEBORNE SATELLITE OBSERVATIONS (ID: 27249)

15:30 **Kouraev, A. V.**; Zakharova, E. A.; Naumenko, M. A.; Shimaraev, M. N.; Kostianoy, A. G.; Suknev, A. Y.; Remy, F.: ICE AND SNOW REGIME OF EURASIAN WATER BODIES FROM SATELLITE AND IN SITU OBSERVATIONS (ID: 26115)

15:45 **Kirillin, G. B.**: CIRCULATION IN ICE-COVERED FRESHWATER LAKES.* (ID: 26129)

16:00 **Lindgren, E. A.**; Leppäranta, M.; Kokkonen, T.: TRANSMISSION OF SOLAR RADIATION THROUGH MELTING ICE IN AN ARCTIC LAKE (ID: 25488)

16:15 **Boehrer, B.**; Klaveness, D.; Fukuyama, R.; Rahn, K.; Golmen, L.; Løvik, J. E.; Chikita, K.: THERMOBARIC STRATIFICATION IN LAKES (ID: 26987)

17:00 **Tominaga, K.**; Andersen, T.; Blumentrath, S.; Englund, G.; Finstad, A. G.; Hessen, D. O.; Laken, B. A.; Larsen, S.; Stordal, F.; Yang, H.: PHYSICAL STATUS OF LAKES IN NORTHERN EUROPE FOR THE NEXT 100 YEARS (ID: 27306)

17:15 **Obryk, M. K.**; Doran, P. T.; Hicks, J. A.; McKay, C. P.; Priscu, J. C.: PERENNIAL ICE COVERS ON STRATIFIED LAKES OF THE TAYLOR VALLEY, ANTARCTICA: RESPONSE TO CHANGING CLIMATE (ID: 25909)

17:30 **Lyons, W. B.**; Welch, K. A.; Fair, A. C.; Webster-Brown, J.; Dowling, C. B.; Doran, P. T.; Priscu, J. C.: USING THE GEOCHEMISTRY OF ANTARCTIC LAKES AS INDICATORS OF RECENT CLIMATIC VARIATION (ID: 26248)

17:45 **Shadrina, A.**; Fedorova, I.; Golosov, S.; Boike, J.: THERMAL REGIME OF ARCTIC LAKES FOR INSTANCE THE RIVER LENA DELTA, YAKUTIA, RUSSIA (ID: 27758)

18:00 **Fedorova, I. V.**; Chetverova, A. A.; Frolova, L. A.; Dmitriev, V. V.; Morgenstern, A.; Shumskaya , N. K.; Skorospekhova, T. V.; Bobrova, O. N.; Shadrina, A. A.: EMERGENCE OF THE POLAR LIMNOSYSTEMS AS A RESULT OF CHANGES IN PALEOECOLOGICAL AND CURRENT INFLUENCES (ID: 27233)

18:15 **Doran, P. T.**; Mikucki, J. A.; Tulaczyk, S.; Priscu, J. C.; Obryk, M. K.; Dugan, H. A.; Virginia, R. A.; Auken, E.: NEW OBSERVATIONS OF HYDROLOGIC CONNECTIVITY IN MCMURDO DRY VALLEY LAKES (ID: 25919)

047 AQUATIC CHEMICAL ECOLOGY - HOW ORGANIC COMPOUNDS REGULATE TROPHIC INTERACTIONS

Chair(s): Patrick Fink, patrick.fink@uni-koeln.de
Alexander Wacker, wackera@uni-potsdam.de

Location: Room D (Floor -3)

08:30 **Selander, E.**; Kubanek, J.; Hamberg, M.; Andersson, M.; Cervin, G.; Pavia, H.: CHEMICAL SIGNALS -MODULATING FOOD WEBS BEYOND DIRECT TROPHIC INTERACTIONS [T] (ID: 27171)

09:00 **Berglund, C.**; Selander, E.: THE CHEMICAL FINGERPRINT OF COPEPODS (ID: 27441)

09:15 **Wohlrab, S.**; Selander, E.; Dawodu, D.; Iversen, M.; John, U.: INFOCHEMICAL INDUCED TRAIT CHANGES IN *ALEXANDRIUM* (ID: 27352)

09:30 **Butera, E.**; Fink, P.; Di Natale, M.; Mutalipassi, M.; Massa Gallucci, A.; Porzio, L.; Zupo, V.: EPIPHYTE-BORNE VOLATILE INFOCHEMICALS INFLUENCE THE BEHAVIORAL PATTERNS OF SEAGRASS-ASSOCIATED MESOGRAZERS (ID: 25981)

09:45 **Fink, P.**; Moelzner, J.: OPTIMIZED FORAGING IN A BENTHIC HERBIVORE MEDIATED BY OXYLIPIN INFOCHEMICALS (ID: 26841)

10:30 **Bjærke, O.**; Jonsson, P. R.; Alam, A.; Selander, E.: PHYTOPLANKTON CHAIN FORMATION IS REGULATED TO EVADE PREDATION (ID: 26837)

10:45 **Pavia, H.**: CHEMISTRY RELEASES AN INVASIVE SEAWEED FROM NATIVE ENEMIES (ID: 27305)

11:00 **Toth, G. B.**: MICROGEOGRAPHICAL DIFFERENCES IN CHEMICALLY MEDIATED ESCAPE RESPONSES IN A SEA STAR (ID: 27374)

11:15 Charpentier, C. L.; **Cohen, J. H.**: FROM CHEMICAL CUE TO PREDATOR AVOIDANCE: HOW FISH KAIROMONES ALTER MARINE ZOOPLANKTON DEFENSE RESPONSES (ID: 26322)

FRIDAY

[T] REPRESENTS TUTORIAL PRESENTATIONS

11:30 Effertz, C.; **Von Elert, E.**: LIGHT INTENSITY CONTROLS ANTI-PREDATOR DEFENCES IN DAPHNIA (ID: 25886)

11:45 **Laforsch, C.**; Herzog, Q. T.: MORPHOLOGICAL PLASTICITY WITH A TWIST: PREDATOR SPECIFIC REVERSIBILITY OF INDUCIBLE DEFENSES IN DAPHNIA BARBATA (ID: 27269)

15:00 **Martínez-Crego, B.**; Weinberger , F.; Santos, R.: ANTI-HERBIVORY CHEMICAL METABOLITES IN THE SEAGRASS *CYMODOCEA NODOSA* (ID: 25795)

15:15 **Marzetz, V.**; Spijkerman, E.; Wacker, A.: DOES INTERSPECIFIC COMPETITION LEAD TO CHANGED COMPOSITION OF ESSENTIAL MINERAL AND BIOCHEMICAL NUTRIENTS IN PHYTOPLANKTON? (ID: 26747)

15:30 **Werbrouck, E.**; Van Gansbeke, D.; Tiselius, P.; De Troch, M.: EFFECT OF TEMPERATURE RISE ON FIRST-LEVEL CONSUMERS AND THEIR FOOD SOURCES AS REVEALED BY FATTY ACID TROPHIC MARKERS (ID: 25986)

15:45 **Schwarzenberger, A.**; Koussoroplis, A. M.; Wacker, A.: ADJUSTMENT OF DAPHNIA LIPASES TO DIFFERENCES IN FOOD-QUALITY (ID: 25480)

16:00 Denoux, C.; Martin-Creuzburg, D.; Koussoroplis, A. M.; Perrière, F.; Desvilettes, C.; Bourdier, G.; **Bec, A.**: DIETARY PHOSPHOLIPID-BOUND EPA EFFECTS ON SOMATIC GROWTH AND FECUNDITY OF DAPHNIA (ID: 26021)

16:15 **Parrish, C. C.**; Pethybridge, H.; Nichols, P. D.; Young, J. W.: REGIONAL DIFFERENCES IN ESSENTIAL FATTY ACIDS IN ALBACORE TUNA FROM THE SOUTHWESTERN PACIFIC OCEAN AND THE IMPORTANCE OF TEMPERATURE (ID: 26280)

17:00 **Grzesiuk, M.**; Spijkerman, E.; Wacker, A.; Wacker, A.: PHYTOPLANKTON CHRONICALLY EXPOSED TO PHARMACEUTICALS INFLUENCE LIFE HISTORY PARAMETERS OF THEIR CONSUMERS DAPHNIA. (ID: 25407)

17:15 **Grace, M. R.**; Robson, S. V.; Browne, K. J.: WATERWAYS ON DRUGS – EFFECTS ON KEY ECOSYSTEM PROCESSES (ID: 25947)

17:30 **Heynen, M.**; Fick, J.; Jonsson, M.; Klaminder, J.; Brodin, T.: FOOD-WEB TRANSFER OF THE NEUROACTIVE PHARMACEUTICAL OXAZEPAM IN FISH AND INVERTEBRATE PREDATORS (ID: 26641)

17:45 **Stoecker, D. K.**; Nejstgaard, J. C.; Madhusoodhanan, R.; Pohnert, G.; Wolfram, S.; Jakobsen, H. H.; Larsen, A.: INHIBITION OF MICROZOOPLANKTON GRAZING DURING SKELETONEMA AND PHAEOCYSTIS BLOOMS: FACT OR ARTIFACT? (ID: 25645)

18:00 **Lavrentyev, P. J.**; Franze, G.; Pierson, J. J.; Stoecker, D. K.: DIATOM ALLELOPATHY-INDUCED CASCADING EFFECTS IN PLANKTONIC FOOD WEBS (ID: 27346)

18:15 **Bartual, A.**; Vicente-Cera, I.; Prieto, L.: EXPERIMENTAL EVIDENCE THAT DIATOM DERIVED POLYUNSATURATED ALDEHYDES ALTER THE SIZE DISTRIBUTION OF TEPS (ID: 25611)

050 NITROGEN-CYCLE FEEDBACKS: DRIVERS OF CHANGE?

Chair(s): Angela Landolfi, alandolfi@geomar.de
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Valeria Ibello, valeria.ibello@ims.metu.edu.tr

Location: Andalucia 1 (Floor 1)

08:30 **Moore, C. M.**; Snow, J. T.; Achterberg, E. P.; Bibby, T. S.; Mahaffey, C. A.; Mills, M. M.; Schlosser, C.; Woodward, E. M.: ENVIRONMENTAL CONTROL OF DINITROGEN FIXATION OVER MULTIPLE SCALES IN THE ATLANTIC OCEAN* (ID: 26749)

08:45 **Oschlies, A.**; Landolfi, A.; Kriest, I.; Somes, C.; Dietze, H.; Koeve, W.: A MODELER'S PERSPECTIVE ON ENVIRONMENTAL CONTROLS OF N2 FIXATION (ID: 26940)

09:00 **Granger, J.**; Dabundo, R.; Lehmann, M. F.; Moisander, P.; Altabet, M.: THE CONTAMINATION OF COMMERCIAL 15N2 GAS STOCKS WITH 15N-NITRATE AND AMMONIUM – IMPLICATIONS FOR NITROGEN FIXATION MEASUREMENTS (ID: 27072)

09:15 **Moreira-Coello, V.**; Mouriño-Carballido, B.; Marañón, E.; Fernández, A.; Chouciño, P.; Varela, M. M.; Bode, A.: NITROGEN FIXATION IN THE UPWELLING REGION OFF NW IBERIA (ID: 26148)

09:30 **Fernández Castro, B.**; Pahlow, M.; Marañón, M.; Mouriño Carballido, B.; Oschlies, A.: PHOSPHORUS-LIMITED N2 FIXATION IN A FUTURE OCEAN (ID: 26664)

09:45 **Shiozaki, T.**; Takeda, S.; Itoh, S.; Kodama, T.; Liu, X.; Hashihama, F.; Furuya, K.: WHY DOES *TRICHODESMIUM* BECOME ABUNDANT IN THE KUROSHIO? (ID: 25764)

10:30 Gimenez, A.; **Baklouti, M.**; Moutin, T.; Berthelot, H.; Bonnet, S.: INVESTIGATING THE FATE OF DIAZOTROPH DERIVED N DURING THE VAHINE MESOCOSM EXPERIMENT USING A MECHANISTIC BIOGEOCHEMICAL MODEL (ID: 26649)

10:45 **Devol, A.**; Horak, R.; Ingalls, A.; Armbrust, V.; Moffett, J.; Stahl, D.: MEASUREMENTS OF AMMONIA OXIDATION AND NITRITE OXIDATION IN THE NORTH PACIFIC OCEAN (ID: 27424)

11:00 **Babbin, A. R.**; Peters, B. D.; Mordy, C. W.; Casciotti, K. L.; Ward, B. B.: HIGH-RESOLUTION NITRITE-CENTRIC NITROGEN CYCLING IN THE EASTERN TROPICAL SOUTH PACIFIC (ID: 26417)

11:15 **Fuchsman, C. A.**; Devol, A. H.; Penn, J.; Deutsch, C.; Ward, B. B.; Rocap, G.: INTEGRATING METAGENOMICS WITH BIOGEOCHEMISTRY TO UNDERSTAND THE DOUBLE N2 MAXIMA IN THE ETNP OXYGEN MINIMUM ZONE (ID: 27473)

11:30 **Stief, P.**; Kamp, A.; Glud, A.; Marzocchi, U.; Birch Lundgaard, A. S.; Thamdrup, B.; Glud, R. N.: SINKING DIATOM AGGREGATES: OVERLOOKED ANAEROBIC HOTSPOTS IN THE MARINE NITROGEN CYCLE (ID: 25771)

11:45 **Grundle, D. S.**; Altabet, M. A.; Fiedler, B.; Hauss, H.; Karstensen, J.; Krahmann, G.; Löscher, C.; Schütte, F.; Santos, C.; Kortzinger, A.; Bange, H.: LOW OXYGEN EDDIES: IMPLICATIONS FOR NITROUS OXIDE PRODUCTION (ID: 27092)

15:00 **Dale, A. W.**; Sommer, S.; Altabet, M. A.; Bourbonnais, A.; Lomnitz, U.; Wallmann, K.: BIOLOGICAL NITRATE TRANSPORT AND REDUCTION IN SEDIMENTS IN THE PERUVIAN OXYGEN MINIMUM ZONE (ID: 26194)

15:15 **Somes, C. J.**; Schmittner, A.; Oschlies, A.: ESTIMATING THE CHANGE TO THE GLOBAL OCEANIC FIXED NITROGEN INVENTORY DURING THE LAST GLACIAL MAXIMUM* (ID: 25712)

* REPRESENTS INVITED PRESENTATIONS

15:30 **Dekaezemacker, J.**; Loescher, C.; Schunk, H.; Callbeck, C.; Marchant, H.; Kalvelage, T.; Hach, P.; Schmitz-Streit, R.; Kuypers, M. M.; Lavik, G.: THE N BUDGET IN THE COASTAL OMZ OFF PERU: LINKING N2 FIXATION AND N-LOSS (ID: 26547)

15:45 **Bonaglia, S.**; Klawonn, I.; De Brabandere, L.; Deutsch, B.; Thamdrup, B.; Brüchert, V.: THE BALTIC SEA OXYCLINE HOSTS A COMPLETE MICROBIAL NITROGEN CYCLE (ID: 27318)

16:00 **Kähler, P.**; Koeve, W.: FEEDBACKS IN THE CYCLES OF N AND P IN ANOXIC WATERS – NEGATIVE OR POSITIVE? (ID: 26045)

16:15 **Montoya, J. P.**; Weber, S. C.; Fernandez, A.; Lee-Patterson, D. A.; Villareal, T. A.; Bracco, A.; Joye, S. B.: SPILLS, SEEPS, AND CYCLES: METHANE LINKS THE CARBON AND NITROGEN CYCLES THROUGH DIAZOTROPHY (ID: 27212)

060 NEW INSIGHTS AND PERSPECTIVES IN ECOLOGICAL STOICHIOMETRY

Chair(s): Manuel Villar Argaiz, mvillar@ugr.es
Dag Olav Hessen, d.o.hessen@ibv.uio.no

Location: Albeniz (Floor -2)

08:30 **Balseiro, E. G.**; Laspoumaderes, C.; Souza, M. S.; Modenutti, B. E.: FOOD QUALITY, UVR AND THE RESPONSE OF HERBIVORES TO GLOBAL CHANGE (ID: 25431)

08:45 **Lomas, M. W.**; Baer, S. E.; Talarmin, A.; Mouginot, C.; Terpis, K. X.; Martiny, A. C.: REGIONAL VARIATION IN PHYTOPLANKTON STOICHIOMETRY (ID: 25487)

09:00 **Baer, S. E.**; Lomas, M. W.; Terpis, K. X.; Mouginot, C.; Martiny, A. C.: STOICHIOMETRY OF PHYTOPLANKTON POPULATIONS IN THE NORTH ATLANTIC OCEAN (ID: 25489)

09:15 **Spilling, K.**; Kremp, A.; Klais, R.; Camarena, T.; Lipsewers, T.; Olli, K.; Tamminen, T.: CHANGE IN PHYTOPLANKTON COMMUNITY COMPOSITION MODIFIES CARBON PATHWAYS AND C : N : P : CHL-A STOICHIOMETRY OF COASTAL MATERIAL FLUXES (ID: 25496)

09:30 **Arteaga, L.**; Pahlow, M.; Oschlies, A.: CHANGES IN PHYTOPLANKTON STOICHIOMETRY INFERRED FROM AN OPTIMALITY-BASED MODEL (ID: 25617)

09:45 **Garcia, N. S.**; Martiny, A. C.: GROWTH MODULATION OF ELEMENTAL STOICHIOMETRY AND NUCLEIC ACID COMPOSITION OF MARINE SYNECHOCOCCUS (ID: 25644)

10:30 **Sperfeld, E.**; Clissold, F. J.; Halvorson, H. M.; Malishev, M.; Wagner, N. D.: NUTRITIONAL ECOLOGY - SCALING ANIMALS TO ECOSYSTEMS USING NUTRITIONAL GEOMETRY AND ECOLOGICAL STOICHIOMETRY (ID: 25663)

10:45 **Burson, A.**; Stomp, M.; Akil, L.; Brussaard, C. P.; Huisman, J.: SHIFTS OF THE N:P STOICHIOMETRY OF RIVERINE INPUTS HAVE CREATED AN OFFSHORE GRADIENT FROM PHOSPHORUS TO NITROGEN LIMITATION IN THE NORTH SEA (ID: 25703)

11:00 **Nifong, R. L.**; Cohen, M. J.: THE COUPLING OF AUTOTROPHIC STOICHIOMETRY AND ECOSYSTEM FUNCTION (ID: 25723)

11:15 **Boersma, M.**; Mathew, K. A.; Niehoff, B.; Schoo, K. L.: TEMPERATURE DRIVEN CHANGES IN DIETARY PREFERENCES IN COPEPODS (ID: 25740)

11:30 **Bullejos, F. J.**; Carrillo, P.; Gorokhova, E.; Medina-Sánchez, J. M.; Balseiro, E. G.; Villar-Argaiz, M.: ONTOGENETIC PATTERNS OF CONSUMER GROWTH RESPONSE TO RESOURCE QUALITY: STOICHIOMETRIC "GOLDEN MEANS" IN THE LIFE HISTORY. (ID: 25866)

11:45 **Van de Waal, D. B.**; Velthuis, M.; Frenken, T.; Van Donk, E.; De Senerpont Domis, L. N.: COMMUNITY COMPOSITON MATTERS: CONTRASTING EFFECTS OF WARMING AND NUTRIENT LIMITATION ON GROWTH AND STOICHIOMETRY OF PHYTOPLANKTON (ID: 26210)

15:00 **Laspoumaderes, C.**; Modenutti, B.; Elser, J.; Balseiro, E.: DOES THE STOICHIOMETRIC CARBON:PHOSPHORUS KNIFE EDGE APPLY FOR PREDACEOUS COPEPODS? (ID: 26275)

15:15 **Hessen, D. O.**; Larsen, S.; Andersen, T.: CLIMATE, NITROGEN DEPOSITION AND TERRESTRIAL VEGETATION AS MAJOR DRIVERS OF LAKE DOC AND STOICHIOMETRY (ID: 26299)

15:30 **Velasco Ayuso, S.**; Medina-Sánchez, J. M.; Carrillo, P.: EXTRACELLULAR ENZYME ACTIVITIES IN RESPONSE TO UVR AND C:N:P RATIOS IN A HIGH-MOUNTAIN LAKE (ID: 26400)

15:45 **Villar-Argaiz, M.**; Rajic, S.; González Olalla, J. M.; Medina-Sánchez, J. M.; Carrillo, P.; Cabrerizo, M. J.: DO ATMOSPHERIC DEPOSITIONS OR NUTRIENTS COMPENSATE FOR THE EFFECTS OF CO_2 ON THE GROWTH RATE OF *DAPHNIA MAGNA*? (ID: 26626)

16:00 **Cotner, J. B.**; Godwin, C. M.; Little, A.: BACTERIAL GROWTH AND STOICHIOMETRY IN DIVERSE FRESHWATER TROPHIC REGIMES (ID: 27198)

16:15 **Whitaker, E. A.**; Godwin, C. M.; Cotner, J. B.: WHAT IS THE RESOURCE STOICHIOMETRY EXPERIENCED BY HETEROTROPHIC BACTERIA IN AQUATIC ENVIRONMENTS? (ID: 27377)

17:00 **Benitez-Nelson, C. R.**; Thunell, R. C.; Pinckney, J.; Lorenzoni, L.; Montes, E.; Muller-Karger, F.; Scranton, M.; Taylor, G.; Varela, R.; Astor, Y.: ELEMENTAL COMPOSITION (C, N AND P) OF SINKING AND SUSPENDED PARTICULATE MATTER IN THE CARIACO BASIN, VENEZUELA (ID: 27446)

17:15 **Tromboni, F.**; Zandonà, E.; Lourenço-Amorim , C.; Silva-Junior, E. F.; Feijò de Lima , R.; Neres-Lima , V.; Moulton, T. P.; Gücker, B.; Boëchat , I.; Thomas, S. A.: ASSESSING NUTRIENT LIMITATION IN A PRISTINE TROPICAL STREAM – COMPARING NUTRIENT DIFFUSING SUBSTRATES WITH NUTRIENT UPTAKE ESTIMATES (ID: 27670)

17:30 **Spackeen, J. L.**; Xu, K.; Hutchins, D. A.; Sipler, R. E.; Bronk, D. A.: STOICHIOMETRIC UPTAKE OF CARBON, NITROGEN, AND PHOSPHORUS UNDER A MATRIX OF TEMPERATURE AND FE BY THREE ANTARCTIC PHYTOPLANKTON SPECIES (ID: 27729)

061 GLOBAL CLIMATE CHANGE: OCEAN ACIDIFICATION EXPERIMENTS AT CO2 VENTS

Chair(s): Stefano Goffredo, s.goffredo@unibo.it
Zvy Dubinsky, zvykalmog@gmail.com
Katharina Fabricius, K.Fabricius@aims.gov.au
Jason Hall Spencer, jason.hall-spencer@plymouth.ac.uk
Hajime Kayanne, kayanne@eps.s.u-tokyo.ac.jp

Location: Auditorium Federico Garcia Lorca (Floor 0)

08:30 **Law, C. S.**; Burrell, T. J.; Sander, S.; Maas, E. W.: BACTERIAL EXOENZYME ACTIVITY IN HIGH CO2 VENT WATERS (ID: 27471)

FRIDAY

08:45 **Hassenrück, C.**; Fink, A.; Tegetmeyer, H.; de Beer, D.; Ramette, A.: MICROBIAL COMMUNITY COMPOSITION AND FUNCTIONS IN SEDIMENTS OF NATURALLY CO_2-RICH CORAL REEFS (ID: 25512)

09:00 **Hall-Spencer, J. M.**; Fabricius, K.; Kayanne, H.; Milazzo, M.: LEARNING FROM CO2 SEEPS TO PREPARE SOCIETY FOR COMING DECADES OF OCEAN CHANGE (ID: 25896)

09:15 **Wall, M.**; Fietzke, J.; Fink, A.; Schmidt, G. M.; de Beer, D.; Fabricius, K.: BORON ISOTOPES IN TROPICAL CORALS: A PH PROXY OR INDICATOR OF FUTURE PHYSIOLOGICAL CONSTRAINTS? A CASE STUDY FROM THE PAPUA NEW GUINEA CO_2 SEEPS (ID: 27263)

09:30 **Strahl, J.**; Fabricius, K.: PHYSIOLOGICAL PERFORMANCE DIFFERS IN FOUR TROPICAL CORAL TAXA AT VOLCANIC CARBON DIOXIDE SEEPS (ID: 25682)

09:45 **Smith, J. N.**; Fabricius, K. E.; De'ath, G.; Cornils, A.; Richter, C.: OCEAN ACIDIFICATION CAUSES ABUNDANCE LOSS IN RESIDENTIAL ZOOPLANKTON LIVING WITHIN CORAL REEFS (ID: 26623)

10:30 **Fink, A.**; Lichtschlag, A.; Fabricius, K.; de Beer, D.: SEDIMENT BIOGEOCHEMISTRY ALONG A NATURAL PH GRADTIENT IN A TROPICAL CORAL REEF (ID: 26635)

10:45 **Guilini, K.**; Molari, M.; Meyer, S.; Weber, M.; Lott, C.; Wenzhöfer, F.; Ramette, A.; de Beer, D.; Boetius, A.; Vanreusel, A.: THE EFFECT OF LONG-TERM EXPOSURE TO ACIDIFIED SEAWATER ON MEIO- AND MACROFAUNA AT THE NATURAL CO2 SEEP SITES AT PANAREA, MEDITARRANEAN SEA (ID: 25446)

11:00 **Molari, M.**; Meyer, S.; Ramette, A.; Wenzhöfer, F.; de Beer, D.; Weber, M.; Guilini, K.; Vanreusel, A.; Cibic, T.; Boetius, A.: EFFECT OF NATURAL SEABED CO2 EMISSION ON BIOGEOCHEMISTRY AND MICROBIOTA OF MEDITERRANEAN SANDY SEDIMENTS: PANAREA ISLAND (ITALY) (ID: 26282)

11:15 **Gizzi, F.**; De Mas, L.; Marisaldi, L.; Lazzari, V.; Airi, V.; Caroselli, E.; Prada, F.; Falini, G.; Dubinsky, Z.; Goffredo, S.: EFFECTS OF OCEAN ACIDIFICATION ON THE REPRODUCTIVE OUTPUT OF THREE MEDITERRANEAN CORALS TRANSPLANTED AT AN UNDERWATER CRATER CHARACTERIZED BY CO2 EMISSIONS (ID: 26167)

11:30 **Caroselli, E.**; Prada, F.; Capaccioni, B.; Levy, O.; Falini, G.; Dubinsky, Z.; Kaandorp, J.; Goffredo, S.: GROWTH AND POPULATION DYNAMICS OF THE MEDITERRANEAN ENDEMIC SOLITARY CORAL BALANOPHYLLIA EUROPAEA LIVING ALONG A NATURAL PCO2 GRADIENT (ID: 26187)

11:45 **Prada, F.**; Caroselli, E.; Capaccioni, B.; Levy, O.; Fabricius, K. E.; Weaver, J. C.; Falini, G.; Dubinsky, Z.; Goffredo, S.: DIFFERENT SENSITIVITY OF MEDITERRANEAN SCLERACTINIAN CORALS TO SEASONAL CHANGES IN TEMPERATURE ALONG A NATURAL CO_2 GRADIENT (ID: 27141)

15:00 **Santos, R.**; Cabaço, S.; Mishra, A.; Vizzini, S.; Apostolaki, E. T.: POPULATION DYNAMICS OF SEAGRASSES IN THE VICINITY OF VOLCANIC VENTS: WHAT IS THE ROLE OF CO2? (ID: 26610)

15:15 **Olivé, I.**; Costa, M. M.; Barrote, I.; Santos, R.; Silva, J.: PRODUCTIVITY OF THE SEAGRASS *POSIDONIA OCEANICA* NEAR VOLCANIC VENTS: TWO DIFFERENT CASE STUDIES (ID: 26657)

15:30 **Silva, J.**; Costa, M. M.; Olivé, I.; Barrote, I.; Ruocco, M.; Lauritano, C.; Procaccinni, G.; Santos, R.: SEAGRASS PHOTOSYNTHETIC RESPONSES TO A NATURAL HIGH-CO2 ENVIRONMENT: PHYSIOLOGY MEETS GENE EXPRESSION (ID: 26974)

15:45 **Kamenos, N. A.**; Perna, G.; Gambi, M. C.; Micheli,, F.; Kroeker, K.: SKELETAL MINERALOGY AND ECOSYSTEM STRUCTURE DETERMINE CORALLINE ALGAL PERSISTENCE IN CO_2 ENRICHED ENVIRONMENTS (ID: 27153)

16:00 **Tomas, F.**; Hernan Martinez, G.; Buia, M. C.; Terrados, J.: OCEAN ACIDIFICATION MODIFIES WITHIN-PLANT HERBIVORY PATTERNS IN THE SEAGRASS POSIDONIA OCEANICA. (ID: 27664)

16:15 **Iglesias-Prieto, R.**; Galindo-Martínez, C. T.; Carricart-Ganivet, J. P.; Enríquez, S.: BIO-OPTICAL MODELS OF CORAL CALCIFICATION AS A TOOL FOR ATTRIBUTING CHANGES IN CALCIFICATION RATES TO ENVIRONMENTAL VARIABLES (ID: 27709)

17:00 **Manzello, D. P.**; Enochs, I. C.; Bruckner, A.; Renaud, P.; Kolodziej, G.; Budd, D.; Carlton, R.; Glynn, P.: GALÁPAGOS CORAL REEF PERSISTENCE AFTER ENSO WARMING ACROSS AN ACIDIFICATION GRADIENT (ID: 27258)

17:15 **Enochs, I. C.**; Manzello, D. P.; Johnston, L.; Price, N.; Donham, E. M.; Kolodziej, G. E.; Clark, S. J.; Young, C.: NATURALLY ACIDIFIED CORAL REEFS AT MAUG ATOLL: SIMILARITIES AND DIFFERENCES WITH OTHER HIGH-CO_2 SYSTEMS (ID: 26298)

17:30 **Parra, G.**; Guerrero, F.; Jiménez-Gómez, F.; Sánchez-Moyano, E.; Jiménez-Melero, R.; Galotti, A.; Conradi, M.: INDIRECT AND SUBLETHAL EFFECTS OF LONG-TERM CO2 EXPOSURE: FROM INCREASING THE RISK OF BEING GRAZED TO CHANGES IN BEHAVIOUR. (ID: 25741)

17:45 **Carreiro-Silva, M.**; Monteiro, J.; Parra, H.; de Potter , K.; Viveiros, F.; Raimundo, J.; Caetano, M.; Nogueira, M.; Oliveira, A. P.; Bongiorni , L.: OCEANA-LAB: AN OCEAN ACIDIFICATION LABORATORY IN THE NE ATLANTIC (FAIAL ISLAND, AZORES) (ID: 27270)

063 RESPIRATION AND THE OCEANIC DE-OXYGENATION PROBLEM

Chair(s): Wolfgang Koeve, wkoeve@geomar.de
Paul Kähler, pkaehler@geomar.de

Location: Machado (Floor -2)

17:00 **Kriest, I.**; Oschlies, A.: REGULATION OF GLOBAL OCEANIC NITROGEN AND OXYGEN BY MARINE BIOGEOCHEMICAL PROCESSES* (ID: 26852)

17:15 **Bardin, A. M.**; Primeau, F. W.; Moore, J. K.: A STUDY OF OXYGEN CONCENTRATIONS IN THE INDIAN OCEAN USING A LIMITED-DOMAIN TRANSPORT MATRIX TECHNIQUE (ID: 26368)

17:30 **Garcia-Robledo, E.**; Revsbech, N. P.; Tiano, L.; Paulmier, A.; Stewart, F.; Lehner, P.; Larndorfer, C.; Klimant, I.: SECONDARY CHLOROPHYLL MAXIMUM IN OXYGEN MINIMUM ZONES: PHOTOSYNTHESIS AND AEROBIC RESPIRATION AT NANOMOLAR OXYGEN LEVELS (ID: 26044)

17:45 **Martínez-García, S.**; Karl, D. M.: MICROBIAL RESPIRATION IN THE EUPHOTIC ZONE AT STATION ALOHA (ID: 26025)

18:00 **Klimant, I.**; Staudinger, C.; Lehner, P.; Larsen, M.; Garcia-Robledo, E.; Glud, R. N.; Revsbech, N. P.; Borisov, S. M.: RELIABLE QUANTIFICATION OF DISSOLVED OXYGEN IN "ANOXIC SYSTEMS" WITH OPTODES (ID: 26861)

* REPRESENTS INVITED PRESENTATIONS

18:15 **Koeve, W.**; Kähler, P.: A PUZZLE OF OCEANIC OXYGEN UTILIZATION (ID: 26055)

083 ENVIRONMENTAL CONSEQUENCES OF ANTHROPOGENIC STRUCTURE IN THE OFFSHORE ENVIRONMENT: A REGIONAL COMPARISON

Chair(s): Donna M. Schroeder, donna.schroeder@boem.gov
Ann Scarborough Bull, ann.bull@boem.gov

Location: Andalucia 3 (Floor 1)

17:00 **Schroeder, D. M.**; Bull, A. S.; Zaleski, S. S.: A REVIEW OF ENVIRONMENTAL CONSEQUENCES OF ANTHROPOGENIC STRUCTURE IN THE OFFSHORE ENVIRONMENT (ID: 27681)

17:15 **Page, H. M.**; Zaleski, S.; Miller, R. J.; Dugan, J. E.; Simons, R.; Schroeder, D. M.; Doheny, B.: THE EXOTIC BRYOZOAN *WATERSIPORA SUBTORQUATA* ON OFFSHORE OIL PLATFORMS: DISTRIBUTIONAL CHANGES, DISPERSAL PATHWAYS, AND MANAGEMENT CONSIDERATIONS (ID: 27278)

17:30 **Vodopivec, M.**; Malej, A.; Peliz, Á. J.: OFFSHORE MARINE CONSTRUCTIONS AS STEPPING-STONES FACILITATING DISPERSAL OF MOON JELLYFISH POLYPS (ID: 26765)

17:45 **Bull, A. S.**; Schroeder, D. M.: UNEXPECTED CONSEQUENCES: CONSERVING FISHERIES WITH OFFSHORE PETROLEUM PLATFORMS (ID: 25461)

18:00 **Paxton, A. B.**; Smith, D. M.: MIRROR, MIRROR ON THE REEF: FISH UTILIZATION OF NOVEL PERCEIVED HABITAT ON AN ARTIFICIAL REEF IN ALBANIA (ID: 26376)

18:15 **Claisse, J. T.**; Pondella, D. J.; Love, M.; Zahn, L. A.; Williams, C. M.; Williams, J. P.; Bull, A. S.: OIL PLATFORMS OFF CALIFORNIA ARE AMONG THE MOST PRODUCTIVE MARINE FISH HABITATS GLOBALLY (ID: 27248)

091 BIO-OPTICS, OPTICAL BIOGEOCHEMISTRY, AND REMOTE SENSING OF OPTICALLY COMPLEX WATERS

Chair(s): Stefan Simis, stsi@pml.ac.uk
Peter Hunter, p.d.hunter@stir.ac.uk

Location: Picasso (Floor -2)

15:00 **Gernez, P.**; Barillé, L.; Lerouxel, A.; Mazeran, C.; Larnicol, M.; Doxaran, D.: REMOTE SENSING OF SUSPENDED PARTICULATE MATTER AND CHLOROPHYLL-A IN TURBID OYSTER-FARMING ECOSYSTEMS (ID: 25931)

15:30 **Mitchell, C.**; Cunningham, A.: INTERPRETATION OF TEMPORAL AND SPATIAL VARIABILITY OF REMOTE SENSING SIGNALS IN AN OPTICALLY COMPLEX SHELF SEA IN TERMS OF PHYTOPLANKTON AND MINERAL PARTICLES. (ID: 27103)

15:45 **Matthews, M. W.**; Bernard, S.; Evers-King, H.; Robertson Lain, L.: DISTINGUISHING CYANOBACTERIA FROM ALGAE IN OPTICALLY COMPLEX WATERS: A FRAMEWORK FOR A RADIATIVE TRANSFER INVERSION ALGORITHM (ID: 25691)

16:00 **Simis, S. G.**; Li, L.; Bresciani, M.; Giardino, C.; Li, L.; Matthews, M. W.: REMOTE SENSING OF SUN-STIMULATED FLUORESCENCE FROM PHYCOBILIPIGMENTS (ID: 26090)

16:15 **Hunter, P. D.**; Spyrakos , E.; O'Donnell , R.; Miller, C. A.; Scott, E. M.; Simis, S. G.; Groom, S. B.; Martinez, V. M.; Tyler, A. N.: THE VALIDATION OF REMOTE SENSING ALGORITHMS FOR RETRIEVAL OF BIOGEOCHEMICAL PROPERTIES IN DIFFERENT LAKE OPTICAL TYPES (ID: 27015)

17:00 **Kahlert, M.**; McKie, B. G.: COMPARING NEW AND CONVENTIONAL METHODS TO ESTIMATE BENTHIC ALGAL BIOMASS AND COMPOSITION IN FRESHWATERS (ID: 25532)

17:15 **Aulló-Maestro, M. E.**; Hunter, P. D.; Spyrakos, E.; Riddick, C. A.; Mercatoris, P.; Présing, M.; Kovács, A. W.; Horváth, H.; Tyler, A. N.: OPTICAL PROPERTIES AND PHOTOBLEACHING OF CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) IN LAKE BALATON (HUNGARY) (ID: 26586)

17:30 **Murray, C.**; Markager, S.; Stedmon, C. A.: PREDICTING SPECTRAL AND PAR LIGHT ATTENUATION IN GREENLANDIC COASTAL WATERS (ID: 25803)

17:45 **Minor, E. C.**; Austin, J. A.; Sun, L.; Mopper, K.: USING A DUAL-DYE LAGRANGIAN APPROACH TO MEASURE PAR EXPOSURE IN LAKE SUPERIOR'S SURFACE WATERS: SNAPSHOTS FROM SPRING AND SUMMER (ID: 25408)

098 ECOSYSTEM-SCALE APPROACHES TO ECOSYSTEM-SCALE QUESTIONS

Chair(s): Jens C. Nejstgaard, nejstgaard@igb-berlin.de
Paraskevi Pitta, vpitta@hcmr.gr
Hans H Jakobsen, hhja@dmu.dk

Location: Machuca (Floor -2)

08:30 **Mohr, S.**; Berghahn, R.; Feibicke, M.; Meinecke, S.; Loth, S.; Schmiediche, R.; Schmiedling, I.; Schmidt, R.: THE MESOCOSM DILEMMA: NEED AND TROUBLE OF SYNCHRONIZING ECOLOGICAL PROCESSES IN PREPARATION OF ECOTOXICOLOGICAL STUDIES[T] (ID: 26036)

09:00 **Xenopoulos, M. A.**; Rearick, D. C.; Paterson, M. J.; Frost, P. C.: FROM BOTTLES TO ECOSYSTEMS; THE EFFECTS OF SILVER NANOPARTICLES ACROSS SPATIAL EXPERIMENTAL SCALES (ID: 26831)

09:15 **Rearick, D. C.**; Frost, P. C.; Xenopoulos, M. A.: AN ECOSYSTEM SCALE EXPERIMENT: FATE AND EFFECTS OF SILVER NANOPARTICLES FOLLOWING WHOLE-LAKE ADDITION AT THE EXPERIMENTAL LAKES AREA (ID: 27253)

09:30 **Franzo, A.**; Cibic, T.; Rogelja, M.; Nasi, F.; Auriemma, R.; Fabbro, C.; Vojvoda, J.; Del Negro, P.: BENTHIC ECOSYSTEM FUNCTIONING AS A TOOL FOR SUSTAINABLE MANAGEMENT OF PORT AREAS (ID: 25463)

09:45 **Bierschenk, A. M.**; Matthaei, C. D.; Savage, C.: CATCHMENT LAND USE INFLUENCES ECOSYSTEM FUNCTIONING ALONG A FRESHWATER-MARINE CONTINUUM (ID: 27325)

101 MICROSCOPIC PLASTIC DEBRIS AND ITS IMPACT ON AQUATIC ECOSYSTEMS

Chair(s): Tamara Galloway, t.s.galloway@exeter.ac.uk
Dr Ceri Lewis, c.n.lewis@exeter.ac.uk
Matthew Cole, m.cole@exeter.ac.uk

Location: Machado (Floor -2)

08:30 **Rummel, C.**; Löder, M.; Gerdts, G.; Fricke, N.; Lang, T.: PLASTIC INGESTION BY PELAGIC AND DEMERSAL FISH FROM NORTH AND BALTIC SEA (ID: 27539)

08:45 **Watts, A. J.**; Lewis, C.; Urbina, M. A.; Goodhead, R. M.; Beckett, S. J.; Tyler, C. R.; Galloway, T. S.: UPTAKE ROUTES AND RETENTION OF MICROPLASTICS WITHIN THE SHORE CRAB *CARCINUS MAENAS* (ID: 26578)

[T] REPRESENTS TUTORIAL PRESENTATIONS

09:00 Höher, N.; von Moos, N.; Köhler, A.; **Broeg, K.**: EFFECTS OF POLYETHYLENE MICROPLASTICS ON IMMUNE RESPONSES AND HAEMOCYTES OF MYTILUS EDULIS (ID: 25503)

09:15 **Cole, M. J.**: IMPACT OF MICROPLASTICS ON FEEDING, ENERGY UPTAKE AND SURVIVAL IN MARINE BIOTA (ID: 25543)

09:45 **Hartmann, N. B.**; Nolte, T.; Soerensen, M.; Jensen, P. R.; Baun, A.: AQUATIC ECOTOXICITY TESTING OF NANOPLASTICS – LESSONS LEARNED FROM NANOECOTOXICOLOGY (ID: 27479)

10:30 **Zettler, E. R.**; Mincer, T. J.; Slikas, B.; Boyd, G.; Melvin, W.; Fields, J.; Saleem, K.; Dooley, K.; Amaral-Zettler, L. A.: MICROBE-MICROBE, MICROBE-ANIMAL INTERACTIONS IN THE PLASTISPHERE (ID: 26192)

10:45 **Oberbeckmann, S.**; Duhaime, M. B.; Osborn, A. M.; Labrenz, M.: EXPLORING THE PLASTIC MICROBIOME IN THE MARINE SYSTEM (ID: 27426)

11:00 **Kirstein, I. V.**; Kirmizi, S.; Wichels, A.; Erler, R.; Löder, M.; Gerdts, G.: DANGEROUS HITCHHIKERS? EVIDENCE FOR POTENTIALLY PATHOGENIC *VIBRIO* SPP. ON MICROPLASTIC PARTICLES (ID: 25799)

11:15 **Turk, V.**; Tinta, T.; Glavaš, N.; Kovac, N.; Francé, J.: BIOFOULING AND DEGRADATION OF BIOPLASTIC BY MARINE MICROBIAL COMMUNITY (ID: 26969)

11:30 **Andrady, A. L.**; Lavender-Law, K.; Donohue, J.: PHYSICAL FEATURES AND MECHANICAL INTEGRITY OF MARINE PLASTIC DEBRIS. (ID: 27741)

11:45 **Tagg, A. S.**; Sapp, M.; Harrison, J. P.; Ojeda, J. J.: ANALYSIS OF MICROPLASTICS IN WASTEWATER USING FPA-BASED MICRO-FT-IR IMAGING AND HYDROGEN PEROXIDE PRE-TREATMENT (ID: 25405)

15:00 Cózar, A.; **Sanz-Martín, M.**; González-Gordillo, J. I.; Ubeda, B.; Gálvez, J. Á.; Irigoien, X.; Duarte, C. M.: FLOATING PLASTIC DEBRIS IN THE MEDITERRANEAN SEA (ID: 25836)

15:15 **Piehl, S.**; Bochow, M.; Atwood, E.; Franke, J.; Siegert, F.; Englhart, S.; Laforsch, C.: CONTAMINATION OF AQUATIC ECOSYSTEMS WITH PLASTIC DEBRIS: GLOBAL AND LOCAL MONITORING USING REMOTE SENSING METHODS (ID: 26769)

15:30 **Imhof, H. K.**; Ivleva, N. P.; Wiesheu, A. C.; Schmid, J.; Niessner, R.; Laforsch, C.: COLORFUL POLYMER PARTICLES AND PAINT PARTICLES IN LIMNETIC ECOSYSTEMS (ID: 26543)

15:45 **Mani, T. A.**; Burkhardt-Holm, P.: MICROPLASTICS IN THE RHINE RIVER BETWEEN BASEL (CH) AND ROTTERDAM (NL) (ID: 26047)

16:00 **Löder, M. G.**; Gerdts, G.; Laforsch, C.: MICROSPECTROSCOPY FOR THE ANALYSIS OF MICROPLASTICS IN ENVIRONMENTAL SAMPLES (ID: 26643)

105 VIRUSES AND VIRAL MEDIATED PROCESSES IN AQUATIC SYSTEMS

Chair(s): Curtis A Suttle, suttle@Science.ubc.ca
Dolors Vaque, dolors@icm.csic.es
Steven W Wilhelm, wilhelm@utk.edu

Location: Auditorium Manuel de Falla (Floor 1)

08:30 **Prangishvili, D.**: VIRUS-HOST INTERACTIONS IN EXTREME GEOTHERMAL ENVIRONMENTS[T] (ID: 26271)

09:00 Rensen, E.; Mochizuki, T.; Prangishvili, D.; **Krupovic, M.**: PYROBACCULUM FILAMENTOUS VIRUS 1, A NEW MEMBER OF THE LIPOTHRIXVIRIDAE FAMILY (ID: 26209)

09:15 **Talmy, D.**; Follows, M. J.: THE INFLUENCE OF VIRAL REPRODUCTION STRATEGIES ON MARINE MICROBIAL COMMUNITY DYNAMICS (ID: 27495)

09:30 **Gainer, P. J.**; Pound, H. L.; DeBruyn, J. M.; LeCleir, G. R.; Zinser, E. R.; Johnson, Z. I.; Wilhelm, S. W.: BACTERIAL DIVERSITY AND VIRUSES: A STUDY OF PHAGE DYNAMICS IN THE NORTH PACIFIC OCEAN (ID: 25505)

09:45 Lopez-Bueno, A.; Rastrojo, A.; Peiro, R.; Arenas, M.; Velazquez, D.; Quesada, A.; **Alcami, A.**: ECOLOGICAL CONNECTIVITY SHAPES VIRAL ASSEMBLAGES AND VARIABILITY IN FRESHWATER ANTARCTIC ENVIRONMENTS (ID: 27436)

10:30 **Needham, D. M.**; Fuhrman, J. A.: DAILY SUCCESSIONAL PATTERNS OF MARINE VIRUS, BACTERIA, ARCHAEA, AND PROTISTAN COMMUNITIES FOLLOWING A DIATOM BLOOM VIA MARKER GENES AND SHOTGUN METAGENOMICS (ID: 26344)

10:45 **Boccara, M.**; Fedala, Y.; Bowler, C.; Boccara, A. C.: COUNTING AND CLASSIFYING VIRUSES FROM AQUATIC ENVIRONMENTS BY FULL FIELD INTERFEROMETRY AND BROWNIAN MOTION (ID: 26107)

11:00 **Calvo-Díaz, A.**; Huete-Stauffer, T. M.; Díaz-Pérez, L.; Morán, X. A.: VIRUS-PHYTOPLANKTON INTERACTIONS IN COASTAL WATERS OF THE SOUTHERN BAY OF BISCAY (ID: 26136)

11:15 Thamatrakoln, K.; Maniscalco, C.; Haramaty, L.; Allen, L.; Allen, A.; Van Mooy, B.; **Bidle, K.**: THE ROLE OF LIGHT AND PHOTOSYNTHESIS IN VIRAL INFECTION OF MARINE, EUKARYOTIC PHOTOAUTOTROPHS (ID: 27568)

11:30 **Staniewski, M. A.**; Short, C. M.; Fitzpatrick, M.; Short, S. M.: QUANTITATIVE MOLECULAR DETERMINATIONS OF PHYTOPLANKTON MORTALITY SUGGEST THAT VIRUSES CAN HAVE BOTH LYTIC AND STIMULATORY EFFECTS (ID: 26434)

11:45 **Kegel, J. U.**; Egge, E. S.; Sandaa, R. A.; Edvardsen, B.; John, U.: DIVERSITY OF HAPTOPHYTES IN THE NORTHERN HEMISPHERE AND THEIR CO-OCCURRING DNA VIRUSES. (ID: 26507)

15:00 **Hurwitz, B. L.**; Choi, I.; Youens-Clark, C. K.; Hartman, J. H.: BIG DATA ANALYTICS FOR VIRAL ECOLOGY[T] (ID: 25635)

15:30 **Lebredonchel, H.**; Grimsley, N.; Desdevises, Y.: THE IMPACT OF ENVIRONMENTAL VARIABLES ON PRASINOVIRUS-HOST DIVERSITY AND ABUNDANCE MEASURED BY MONTHLY GENOMIC ANALYSES OVER ONE YEAR (ID: 25457)

15:45 **Schatz, D.**; Malitsky, S.; Vardi, A.: LIFE CYCLE STRATEGIES OF A LARGE VIRUS THAT INFECTS THE BLOOM FORMING *EMILIANIA HUXLEYI* (ID: 25494)

16:00 **Coloma, S. E.**; Hiltunen, T.: THE KEY ROLE OF VIRAL PARASITES ON ECO-EVOLUTIONARY DYNAMICS IN TOXIC CYANOBACTERIAL POPULATIONS (ID: 25615)

16:15 **Short, S. M.**; Mirza, S.; Short, C. M.; Staniewski, M. A.: A NEWLY ISOLATED VIRUS INFECTING FRESHWATER PRYMNESIOPHYTE (HAPTOPHYTE) PHYTOPLANKTON SHARES FEATURES WITH BOTH PHYCODNAVIRUSES AND MIMIVIRUSES (ID: 27316)

FRIDAY

* REPRESENTS INVITED PRESENTATIONS

17:00 **Moniruzzaman, M.**; Gann, E.; LeCleir, G. R.; Brown, C. M.; Gobler, C. J.; Bidle, K. D.; Wilson, W. H.; Wilhelm, S. W.: PROBING THE DIVERSITY OF ALGAL MEGAVIRIDAE MEMBERS DURING A HARMFUL BROWN TIDE BLOOM (ID: 25930)

17:15 **Carlson, M. G.**; McCary, N.; Leach, T.; Rocap, G.: DIATOM-VIRUS INFECTION NETWORKS REVEAL PATTERNS OF VIRUS SEASONALITY AND HOST PERMISSIVITY (ID: 27448)

17:30 **Thamatrakoln, K.**; Maniscalco, C.; Fredricks, H. F.; Allen, L. Z.; Allen, A. E.; Van Mooy, B.; Bidle, K. D.: DIFFERENTIAL EFFECTS OF VIRAL INFECTION ON HOST PHYSIOLOGY IN TWO STRAINS OF THE DIATOM,*CHAETOCEROS TENUISSIMUS* (ID: 27722)

17:45 **Allen, L. Z.**; McCrow, J. P.; Moustafa, A.; Allen, A. E.: MULTI-STUDY ANALYSIS OF VIRAL/HOST INTERACTIONS AND IMPLICATIONS FOR VIRAL-MEDIATED EFFECTS ON HOST PHYSIOLOGY (ID: 27398)

18:00 **Payet, J. P.**; McMinds, R.; Bukerpile, D. E.; Vega-Thurber, R. L.: BIOGEOGRAPHY AND GENETIC DIVERSITY OF VIRUSES IN CORAL REEF ECOSYSTEMS OF THE SOUTH PACIFIC OCEAN (ID: 25672)

18:15 **Hewson, I.**; Button, J. B.: ON THE PERSISTENCE OF INVERTEBRATE-ASSOCIATED SINGLE-STRANDED DNA VIRUSES IN SEAWATER: HOW IS INFECTION PROPAGATED? (ID: 25508)

119 INTEGRATED PERSPECTIVES OF EASTERN BOUNDARY UPWELLING SYSTEMS

Chair(s): Eric Desmond Barton, barton@iim.csic.es
Javier Aristegui Ruiz, javier.aristegui@ulpgc.es
P. Ted Strub, tstrub@coas.oregonstate.edu

Location: Press Room (Floor 2)

08:30 **Pegliasco, C.**; Chaigneau, A.; Morrow, R.: MESOSCALE EDDIES IN THE FOUR MAJOR EASTERN BOUNDARY UPWELLING SYSTEMS : VERTICAL STRUCTURE AND EVOLUTION IN OBSERVATIONS (ID: 26781)

08:45 **Alvarez-Salgado, X. A.**; Arístegui, J.; Alonso-Perez, F.; Anabalon, V.; Baltar, F.; Benavides, M.; Espino, M.; Frojan, M.; Graña, R.; Montero, M. F.; Reinthaler, T.; Padín, X. A.; Sangrá, P.; Teixeira, I. G.; Troupin, C.; Barton, E. D.: A TALE OF THE BIOGEOCHEMISTRY AND MICROBIAL ECOLOGY OF A PARCEL OF WATER TRANSPORTED BY THE CAPE GUIR FILAMENT (NW AFRICA): A LAGRANGIAN VIEW (ID: 25697)

09:00 **Santana-Falcón, Y.**; Benavides, M.; Sangrà, P.; Mason, E.; Barton, E.; Arístegui, J.: ANNUAL CYCLE OF OFFSHORE TRANSPORT OF ORGANIC MATTER BY AN UPWELLING FILAMENT OFF CAPE GHIR (NW AFRICA) (ID: 25934)

09:15 **Zúñiga, D.**; Villacieros-Robineau, N.; Salgueiro, E.; Fernández-Bastero , S.; Bañuelos, R.; Alonso-Pérez, F.; Abrantes, F.; Figueiras, F. G.; Rosón, G.; Castro, C. G.: LONG TERM TIME SERIES OF VERTICAL PARTICLE FLUXES IN THE NW IBERIAN COASTAL UPWELLING SYSTEM (NE ATLANTIC) (ID: 26553)

09:30 **Villamaña, M.**; Mouriño-Carballido, B.; Cermeño, P.; Chouciño, P.; da Silva, J.; Fernández-Castro, B.; Gilcoto, M.; Graña, R.; Latasa, M.; Marañon, E.: ROLE OF INTERNAL WAVES ON MIXING, NUTRIENT SUPPLY AND PHYTOPLANKTON COMPOSITION DURING SPRING AND NEAP TIDES IN THE RÍA DE VIGO (NW IBERIAN PENINSULA) (ID: 26269)

09:45 **Lozano, J.**; Serret, P.; Aranguren-Gassis, M.; Herrera, J. L.; González, J.; Varela, R.; Perez-Lorenzo, M.; Garcia-Martin, E. E.; Hidalgo-Robatto, B. M.; Martinez-Castrillon, D.: SEASONAL VARIATION OF PHYTOPLANKTON SIZE-STRUCTURE AND PLANKTON METABOLISM IN THE RÍA DE VIGO (NW SPAIN) (ID: 27219)

10:30 **Davis, K. A.**; Banas, N. S.; Giddings, S. N.; Siedlecki, S. A.; MacCready, P.; Lessard, E. J.; Kudela, R. M.; Hickey, B. M.: FRESHWATER INFLUENCE ON COASTAL PRODUCTIVITY IN THE U.S. PACIFIC NORTHWEST UPWELLING ZONE (ID: 26846)

10:45 **Fewings, M. R.**; Washburn, L.; Dorman, C. E.; Gotschalk, C.; Brown, K. S.; Chen, K.; Bane, J.: WIND RELAXATIONS IN THE CALIFORNIA CURRENT UPWELLING SYSTEM (ID: 27499)

11:00 **Strub, P. T.**; James, C.: WIND-DRIVEN CHANGES IN SEA LEVEL ALONG EASTERN BOUNDARIES (ID: 25946)

11:15 **Figueiras, F. G.**; Arbones, B.; Castro, C. G.; Froján, M.; Teixeira, I. G.: ABOUT PIGMENTED NANOPLANKTON AND THE IMPORTANCE OF MIXOTROPHIC NUTRITION IN COASTAL UPWELLING SYSTEMS: THE CASE OF NW IBERIAN MARGIN (ID: 26618)

11:30 **Santos, A. P.**; Garrido, S.; Peliz, A.; Dos Santos, A.; Moita, T.; Teodósio, A.; Dominguez, R.; Pastor, J.; Ré, P.: PHYSICAL–BIOLOGICAL INTERACTIONS IN THE LIFE HISTORY OF SMALL PELAGIC FISH IN THE NORTHERN CANARY CURRENT UPWELLING ECOSYSTEM (ID: 27213)

11:45 Bednarsek, N.; **Ohman, M. D.**: CHANGES IN PTEROPOD DISTRIBUTIONS AND SHELL DISSOLUTION ACROSS A FRONTAL SYSTEM IN THE CALIFORNIA CURRENT ECOSYSTEM (ID: 27645)

128 PLANKTONIC BIODIVERSITY: SPATIAL & TEMPORAL COMPONENTS

Chair(s): W. Charles Kerfoot, wkerfoot@mtu.edu

Location: Andalucia 2 (Floor 1)

08:30 **Hobmeier, M. M.**; Kerfoot, W. C.; Yousef, F.; Hirsch, J. K.; Maki, R. P.: SPINY CLADOCERAN IMPACTS ON LAKE FOOD WEBS* (ID: 25738)

08:45 **Straile, D.**: NUMERICAL, PHENOTYPIC AND EVOLUTIONARY RESPONSE OF *DAPHNIA* TO OLIGOTROPHICATION * (ID: 27032)

09:00 **Frisch, D.**; Morton, P. K.; Roy Chowdhury, P.; Culver, B.; Munoz , J.; Jeyasingh, P. D.; Weider, L. J.: PALEOGENETIC RECORDS OF *DAPHNIA PULICARIA* IN TWO NORTH AMERICAN LAKES REVEAL THE IMPACT OF CULTURAL EUTROPHICATION * (ID: 27564)

09:15 **Kerfoot, W. C.**; Hobmeier, M. M.: AQUATIC PREDATORS AND PREY: USING INDUCTION TO TEST INTERACTION STRENGTHS* (ID: 25517)

09:30 **Marcolin, C. R.**; Jackson, G. A.; Lopes, R. M.: PLANKTON VERTICAL DISTRIBUTIONS ON THE BRAZILIAN CONTINENTAL SHELF DETERMINED BY COMBINING OBSERVATIONS FROM LASER OPTICAL PLANKTON COUNTER (LOPC) AND ZOOSCAN (ID: 25898)

09:45 **Wickham, S.**; Claessens, M.; Post, A. F.: LOW NUTRIENTS, STRONG SEASONALITY, HIGH DIVERSITY: CILIATES IN THE GULF OF AQABA* (ID: 27081)

10:30 **Idrisi, N.**: PLANKTONIC THIN LAYERS: MECHANISM FOR PHYTOPLANKTON COMMUNITY DIVERSITY* (ID: 26145)

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10:45 **Le Tortorec, A. H.**; Tahvanainen, P.; Kremp, A.; Simis, S. G.: DIVERSITY OF BIOLUMINESCENCE AND THE LUCIFERASE GENE IN BALTIC SEA *ALEXANDRIUM OSTENFELDII* POPULATIONS (ID: 25804)

11:00 **Pérez, L.**; Guinda, X.; Puente, A.; Juanes, J. J.: RELATIONSHIP BETWEEN HYDROMORPHOLOGICAL CONDITIONS AND THE STRUCTURE OF PHYTOPLANKTON COMMUNITIES IN ESTUARIES * (ID: 26865)

11:15 **Ptacnik, R.**; Olli, K.; Lehtinen, S.; Tamminen, T.: PHYTOPLANKTON DIVERSITY ALONG THE FRESHWATER-MARINE CONTINUUM* (ID: 25940)

11:30 **Izaguirre, I.**; Saad, J. F.; Schiaffino, M. R.; Unrein, F.; Lancelotti, J.: MICROBIAL PLANKTONIC COMMUNITIES OF LAKES FROM THE PATAGONIAN STROBEL PLATEAU (ARGENTINA): INFLUENCE OF FISH INTRODUCTION * (ID: 26374)

136 ADVANCES IN BLUE CARBON RESEARCH: THE ROLE OF COASTAL ECOSYSTEMS IN THE CARBON CYCLE

Chair(s): Charles Hopkinson, chopkins@uga.edu
Robert Chen, bob.chen@umb.edu
Carlos Duarte, carlos.duarte@uwa.edu.au
Nuria Marb, nmarba@imedea.uib-csic.es
Oscar Serrano, o.serranogras@ecu.edu.au

Location: Andalucia 3 (Floor 1)

08:30 **Arias-Ortiz, A.**; Masqué, P.; Garcia-Orellana, J.; Serrano, O.; Lovelock, C. E.; Mazarrasa, I.; Marbà, N.; Lavery, P.; Stevens, A.; Duarte, C. M.: USE OF ^{210}PB IN VEGETATED COASTAL SEDIMENTS: A BLUE CARBON ACCOUNTING METHODOLOGY (ID: 26273)

09:00 **Pidgeon, E. J.**; Howard, J. F.: BLUE CARBON: A TRANSFORMATIONAL TOOL FOR MARINE MANAGEMENT AND CONSERVATION GLOBALLY (ID: 27633)

09:15 **Strong, A. L.**: MANAGING COASTAL BLUE CARBON: CURRENT PRACTICES AND FUTURE OPPORTUNITIES (ID: 27643)

09:30 **Herrera Silveira, J. A.**; Teutli, C. H.; Adame, M. F.; Caamal, J. S.; Gutiérrez, J.; Morales, S. M.; Carrillo, L.; Pech, E.; Liceaga, M. A.; Arellano, L.: BLUE CARBON PROJECT IN YUCATAN PENINSULA, MEXICO. (ID: 26897)

10:30 **Rossi, F.**; Callier, M.; Ferraton, F.; Caro, A.; Dupuy, C.; Agogue, H.; Bouvy, M.: THE EFFECT OF MULTIPLE STRESSORS ON SHORT-TERM CARBON ASSIMILATION BY AN EELGRASS BENTHIC ECOSYSTEM (ID: 26175)

10:45 **Vizzini, S.**; Apostolaki, E. T.; Polymenakou, P.: CARBON SINK CAPACITY OF SEAGRASS MEADOWS IN NATURALLY ACIDIFIED CO_2 VENTS (ID: 26807)

11:00 **Ricart, a. m.**; Pérez, M.; Macreadie, P.; York, P.; Romero, J.: VARIABILITY OF SEDIMENT ORGANIC MATTER SOURCES ON SEAGRASS LANDSCAPES (ID: 27687)

11:15 **Belshe, E. F.**; Hoeijmakers, D.; Teichberg, M.: LINKING CARBON SINK CAPACITY TO COMMUNITY COMPOSITION WITHIN HIGHLY DIVERSE SEAGRASS MEADOWS OF THE INDO-PACIFIC (ID: 27044)

11:30 **Mazarrasa, I.**; Marbá, N.; García-Orellana, J.; Masqué, P.; Arias-Ortiz, A.; Duarte, C. M.: THE EFFECT OF WAVE EXPOSURE AND HUMAN ACTIVITY ON LONG-TERM SEAGRASS (P.OCEANICA) CARBON SINK CAPACITY (ID: 25768)

11:45 **Serrano, O.**; Rozaimi, M.; Arias-Ortiz, A.; Duarte, C. M.; Lavery, P.; Kendrick, G.; Masque, P.; Mateo, M. A.; Steven, A.: UNDERSTANDING THE CARBON SEQUESTRATION CAPACITY OF SEAGRASS MEADOWS (ID: 26258)

15:00 **Schiebel, H. N.**; Peri, F.; Chen, R. F.: DISSOLVED ORGANIC CARBON PRODUCTION FROM SALT MARSH SEDIMENTS (ID: 25481)

15:15 **Peri, F.**; Chen, R. F.; Gardner, G. B.; Schiebel, H. N.: A SYSTEMATIC APPROACH TO QUANTIFYING THE DISSOLVED ORGANIC CARBON FLUX FROM A NEW ENGLAND SALT MARSH (ID: 27443)

15:30 **Chen, R. F.**; Cable, J. E.; Cherrier, J.; Meile, C.; Schalles, J.; Gardner, G. B.; Wang, X. C.; Peri, F.; Schiebel, H. N.: A DISSOLVED ORGANIC CARBON (DOC) BUDGET FOR A PRISTINE SALT MARSH (ID: 26462)

15:45 **Wang, Z. A.**; Chu, S. N.; Kroeger, K. D.; Hoering, K. A.; Gonneea, M. E.: THE PARADOX OF SALT MARSHES AS A SOURCE OF ALKALINITY AND LOW PH, HIGH CARBON DIOXIDE WATER TO THE OCEAN (ID: 27338)

16:00 **Morris, J. T.**; Hagen, S.; Medeiros, S.; Weishampel, J.; Edwards, J.; Alizad, K.: FORECASTING CURRENT AND FUTURE CARBON STOCKS IN GULF COAST ESTUARIES (ID: 26241)

16:15 **Hopkinson, C.**; Forbrich, I.; Giblin, A.: SPATIAL SCALES AND PROCESS MEASUREMENT MISMATCHES IN WETLAND BLUE CARBON RESEARCH (ID: 27321)

137 NEXT GENERATION IN SITU SENSORS FOR AQUATIC SYSTEMS

Chair(s): Jay Pearlman, jay.pearlman@ieee.org
Douglas Connelly, douglas.connelly@noc.ac.uk
Marie-Louise Tercier Waeber, Marie-Louise.Tercier@unige.ch
Raquel de Sousa, rdesousa@leitat.org

Location: Room C (Floor -3)

08:30 **Bresnahan, P. J.**; Martz, T. R.: CHARACTERIZATION OF GAS DIFFUSION CELL GEOMETRY IN MICROFLUIDIC ANALYZERS FOR MARINE DISSOLVED INORGANIC CARBON (ID: 25552)

08:45 **Chu, S. N.**; Wang, Z. A.; Sonnichsen, F. N.; Bradley, A. M.; Hoering, K. A.; Lanagan, T. M.; Hammar, T. R.; Camilli, R.: A HIGH RESOLUTION, IN SITU SENSOR TO SIMULTANEOUSLY MEASURE TOTAL DISSOLVED INORGANIC CARBON AND PH IN AQUATIC ENVIRONMENTS (ID: 27494)

09:00 **Staudinger, C.**; Strobl, M.; Fischer, J. P.; Müller, B. J.; Lehner, P.; Thar, R.; Mistlberger, G.; Mayr, T.; Borisov, S. M.; Klimant, I.: A PH-OPTODE FOR SEAWATER MONITORING (ID: 26182)

09:15 **Yin, T.**; Rerolle, V.; Arundell, M.; Loucaides, S.; Cardwell, C. L.; Walk, J. A.; Slavik, G. J.; Wyatt, J. B.; Saw, K. A.; Mowlem, M. C.; Palmer, M. R.: AN AUTOMATED MICROFLUIDIC SPECTROPHOTOMETRIC SENSOR FOR IN SITU SEAWATER PH MEASUREMENTS (ID: 27533)

09:30 **Aßmann, S.**; Frank, C.; Petersen, W.; Körtzinger, A.; Linke, P.: TOTAL ALKALINITY AND PH DETERMINATION: AUTONOMOUS SENSORS FOR USE IN SEAWATER (ID: 27323)

09:45 **Mallios, A.**; Pizarro, O.; Arey, J. S.; Samanipour, S.; De Mol, B.; Hurtós, N.; Johnson-Roberson, M.; Dansereau, D. G.; Toohey, L.; Lemmin, U.; Camilli, R.: SYNOPTIC IDENTIFICATION OF GREENHOUSE GAS SOURCES AND SINKS IN LAKE LEMAN (ID: 27295)

* REPRESENTS INVITED PRESENTATIONS

10:30 **Beaton, A. D.**; Nightingale, A.; Slavik, G. J.; Saw, K.; Pascal, R.; Amalou, F.; Mowlem, M. C.: LAB-ON-CHIP CHEMICAL SENSORS: LATEST DEPLOYMENTS, TECHNOLOGICAL ADVANCES AND FUTURE TRENDS (ID: 25893)

10:45 **Chen Legrand, D.**; Barus, C.; Comtat, M.; Tailhades, E.; Fajerwerg, K.; Fau, P.; Kahn, M.; GARCON, V.: GOLD ELECTRODE MODIFIED WITH SILVER NANOPARTICLES FOR IN SITU NITRATE DETECTION IN SEA WATER (ID: 26103)

11:00 **Barus, C.**; Aguilar, D.; Savy, J. P.; Striebig, N.; Armengaud, M.; Comtat, M.; Garcon, V.: DEVELOPMENT OF MINIATURIZED AUTONOMOUS SILICATE AND PHOSPHATE SENSORS (ID: 26111)

11:15 **McCaul, M.**; Cleary , J.; McNamara, E.; Diamond , D.: SENSORS FOR IN-SITU MONITORING OF EUTROPHICATION IN MARINE ENVIRONMENTS (ID: 27585)

11:30 **Wollschläger, J.**; Röttgers, R.; Petersen, W.: USING AN INTEGRATING CAVITY APPROACH (PSICAM) FOR THE DETERMINATION OF CHL-A, SUSPENDED MATTER, AND PHYTOPLANKTON GROUPS IN THE NORTH SEA (ID: 26237)

11:45 **Meyer, D.**; Prien, R. D.; Dellwig, O.; Krüger, S.; Schulz-Bull, D. E.: ON THE IN SITU APPLICATION OF A WET CHEMICAL MANGANESE(II) ANALYZER IN THE BALTIC SEA USING A DEEP SEA TELEMETRY SYSTEM FOR HIGH SPEED SERIAL DATA TRANSMISSION (ID: 25786)

15:00 **Ramon-Marquez, T.**; Orriach-Fernandez, F. J.; Medina-Castillo, A. L.; Muñoz de la Peña Castrillo, A.; Fernandez-Sanchez, J. F.; Fernandez-Gutierrez, A.: A SENSING MICROFIBRE MAT PRODUCED BY ELECTROSPINNING FOR DETERMINATION OF HG2+ IN WATER SAMPLES (ID: 26566)

15:15 **Revsbech, N. P.**; Nielsen, M.; Lichtenberg, M.; Trampe, E.; Ward, D. M.; Kühl, M.: NEW HYDROGEN MICROSENSORS AND THEIR USE IN MARINE AND HOT SPRING MICROBIAL MATS (ID: 25988)

15:30 **Duffy, G.**; Fay, C.; Nightingale, A.; Mowlem, M.; Diamond, D.; Regan, F.: ON-CHIP OPTICAL SENSING METHODS FOR DETERMINATION OF PHOSPHATES IN FRESHWATER. (ID: 26378)

15:45 **Tercier-Waeber, M. L.**: INTEGRATED MODULAR CHEMICAL SENSING PROBES FOR IN SITU HIGH RESOLUTION MAPPING OF A RANGE OF ANTHROPOGENIC AND NATURAL CHEMICAL COMPOUNDS (ID: 26536)

16:00 **Fitzgerald, J.**; Maguire, I.; Heery, B.; Murphy, C.; Nwankire, C.; Ducrée, J.; O'Kennedy, R.; Regan, F.: NOVEL ONE-STEP CENTRIFUGAL SENSOR SYSTEM FOR THE DETECTION OF CYANOBACTERIAL TOXIN MICROCYSTIN-LR (ID: 27351)

16:15 Sánchez Polo, M.; **Velo Gala, I.**; López Peñalver, J. J.; Fernández Sánchez, J. F.; Medina Castillo, A. L.; Rivera Utrilla, J.: MOLECULAR IMPRINTED POLYMER TO REMOVE TETRACYCLINE FROM AQUEOUS SOLUTIONS (ID: 26766)

17:00 **Novellino, A.**; Confalonieri, F.; Povero, P.; D'Angelo, P.; Tercier-Waeber, M. L.: SCHEMA PROJECT: FROM REMOTE SENSING TO OCEAN OBSERVING SYSTEMS INTEROPERABILITY (ID: 26604)

17:15 **Zielinski, O.**; Golmen, L.; Goutx, M.; Heuermann, R.; Masson, M.; Petersen, W.; Sørensen, K.; Tedetti, M.; Voss, D.; Wollschläger, J.: LIGHT INTERACTIONS IN AQUATIC MEDIA: OPTICAL SENSORS WITHIN NEXOS (ID: 26872)

17:30 **Buck, J. J.**; Leadbetter, A.; Williams, C.: BORN SEMANTIC: LINKING DATA FROM SENSORS TO USERS AND BALANCING HARDWARE LIMITATIONS WITH DATA STANDARDS (ID: 26014)

17:45 **Del Rio, J.**; Toma, D. M.; Ruiz, P.; Corradino, L.; Pearlman, J.; Delory, E.: A NEW PASSIVE ACOUSTIC MONITORING SYSTEM (PAMS) BASED ON THE NEXOS SMART ELECTRONIC INTERFACE (ID: 26881)

18:00 Prinz, H.; Haunschmid, R.; **Schneider, P.**: ESTIMATION OF FISH BIOMASS IN A SHALLOW CANAL: A COMPARISON OF RESULTS FROM TRADITIONAL HYDROACOUSTICS AND IMAGING SONAR TECHNIQUES (ID: 27597)

18:15 **Ramey, E.**; DiMarco, S. F.; Dreger, K.; Lambert, S.; Zimmerle, H.; Howard, M. K.; Kobara, S.: GULF OF MEXICO COASTAL HYPOXIA GLIDER DEMONSTRATION EXPERIMENT OF SUMMER 2014 (ID: 27399)

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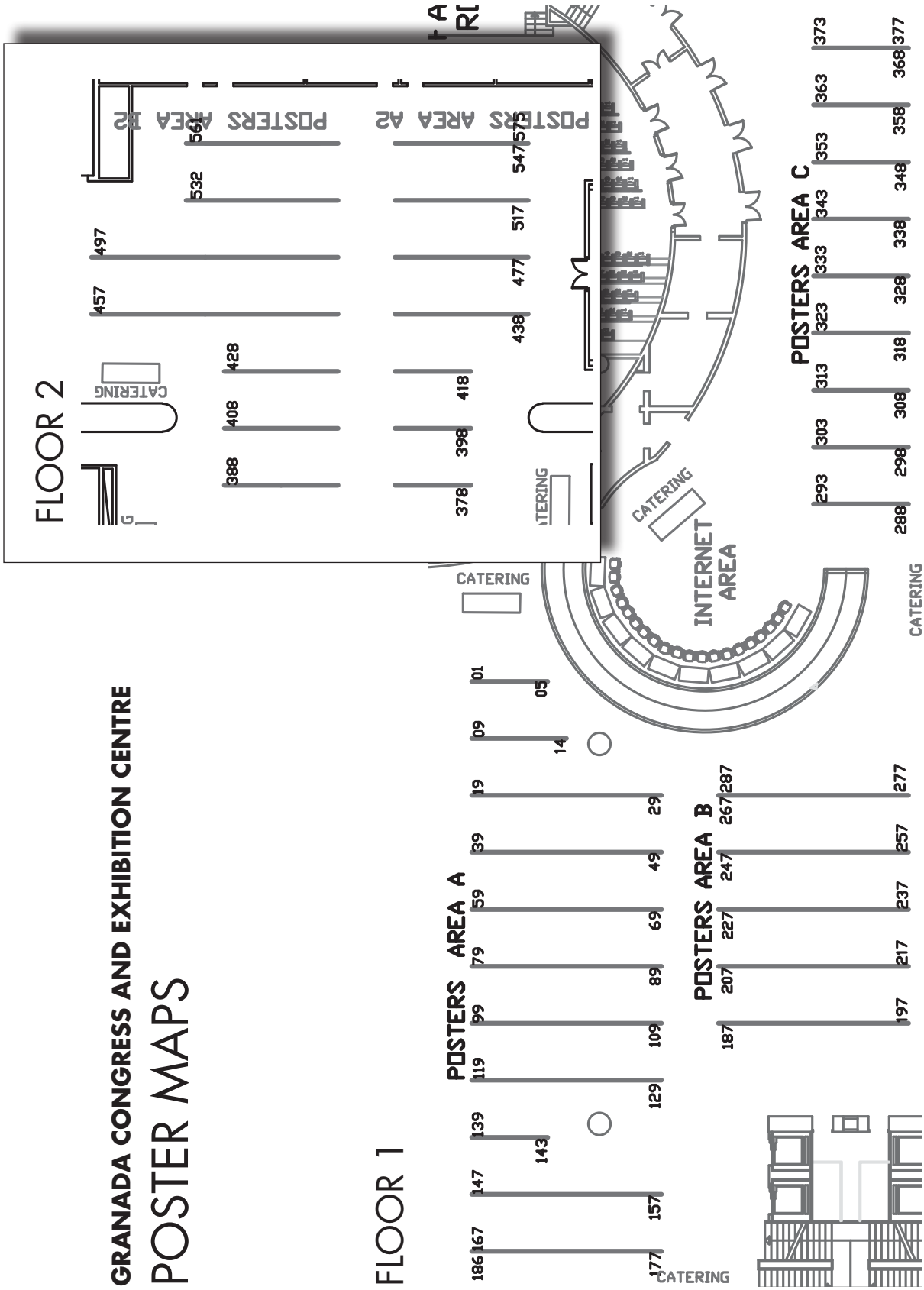
GRANADA CONGRESS AND EXHIBITION CENTRE

POSTER MAPS



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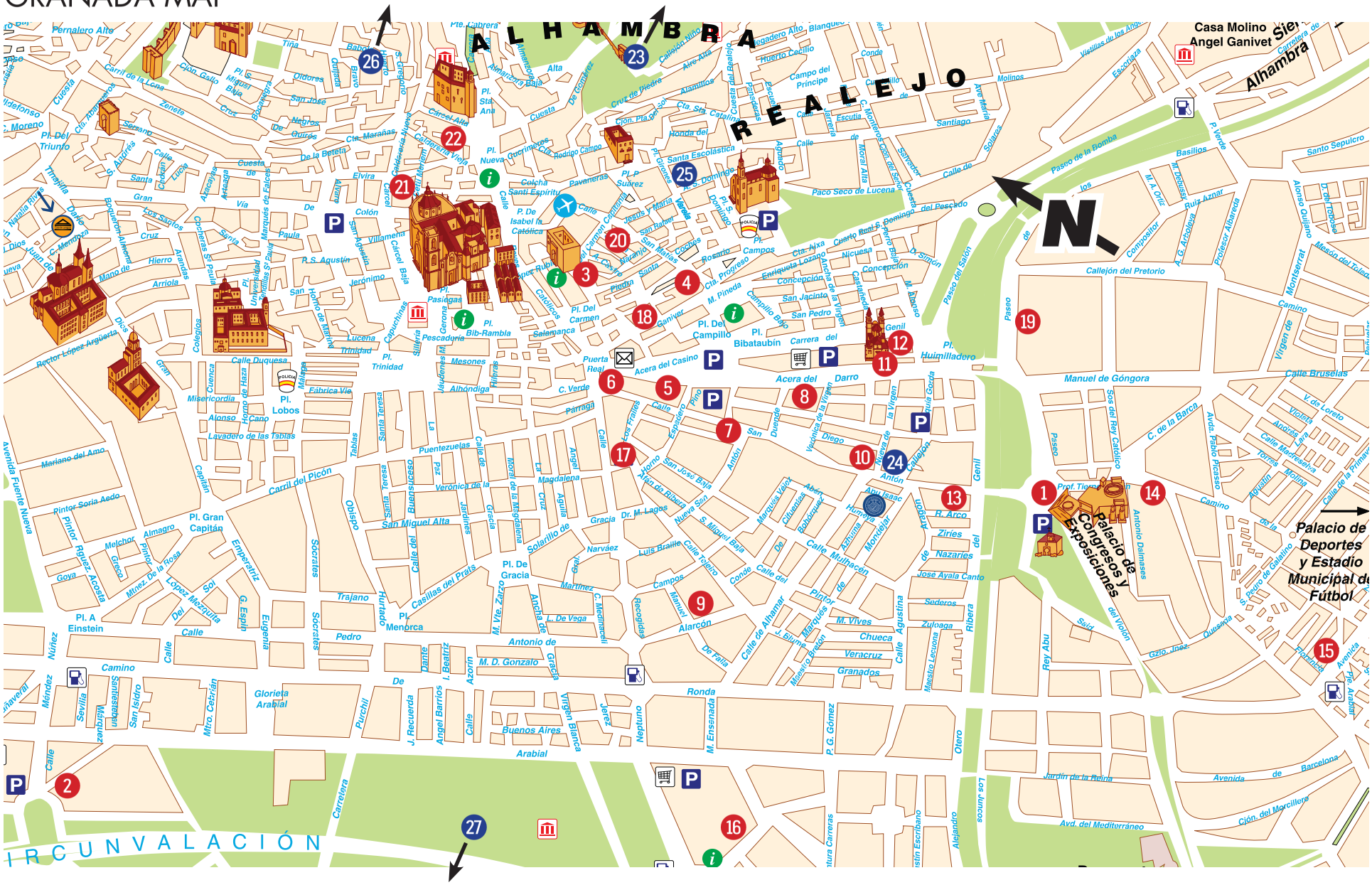
GRANADA MAP



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3. Hotel Hesperia Granada
4. Best Western Dauro II
5. Hotel Juan Miguel
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7. Hotel Villa Oniria
8. Hotel Carmen
9. Hotel Corona de Granada
10. Hotel Reina Mora
11. Dauro Hotel
12. Vincci Albayzin
13. Hotel San Anton
14. Hotel Saray
15. Andalucia Center
16. MA Nazaries Business & Spa Hotel Granada
17. Hotel Abades Recogidas
18. Meliã Granada
19. Macia Monasterio De Los Basilios
20. Gar-Anat Hotel De Peregrinos
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