ASLO 2013 AQUATIC SCIENCES MEETING

17-22 FEBRUARY 2013 - NEW ORLEANS - LOUISIANA

CONFERENCE PROGRAM

ASLO RETURNS TO THE BIG EASY!

Held at Ernest N. Morial Convention Center under the theme "Learning for the Future," this meeting will bring together scientists, engineers, students, educators, policy makers and other stakeholders to learn from the past and look to the future of aquatic sciences.

ASLO

Sponsored by the Association for the Sciences of Limnology and Oceanography

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WELCOME TO THE ASLO 2013 AQUATIC SCIENCES MEETING

ASLO is returning to the Big Easy for the first time since 1990! The Aquatic Sciences Meeting will be held on 17-22 February 2013 at the Ernest N. Morial Convention Center in New Orleans, Louisiana. Situated at the junction between the Mississippi River and the Gulf, the city of New Orleans is an ideal location to celebrate aquatic sciences. Under the theme "*Learning for the Future*," the meeting will bring together scientists, engineers, students, educators, policy makers and other stakeholders to learn from the past and look to the future of aquatic sciences. The Aquatic Sciences Meeting is a widely recognized venue for scientific exchange across all aquatic disciplines. Abstracts of papers presented during the meeting will be published on the conference Web site.

This program is produced for assistance on site at the meeting. It contains the scientific program as 10 January 2013. Changes after this date will be noted at the meeting. Additional information can be found on the conference Web site.

ABOUT THE SPONSOR

The 2013 Aquatic Sciences Meeting is sponsored by ASLO, Association for the Sciences of Limnology and Oceanography. ASLO is the leading professional organization for researchers and educators in the field of aquatic sciences, fostering a diverse, international scientific community that creates, integrates and communicates knowledge across the full spectrum of aquatic science.

2013 AQUATIC SCIENCES MEETING ORGANIZERS

CO-CHAIRS

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Qinglong Wu, Nanjing Institute of Geography and Limnology

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Sibel Bargu, Louisiana State University

R. Eugene Turner, Louisiana State University

Emily Smith, Louisiana State University

Sandra Gibson, Retired Public School Teacher, New Orleans

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QUESTIONS? WE'RE HERE TO HELP!

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.

The event management staff, located in the registration area, will also be happy to help you

PLENARY LECTURES AND PRESENTATIONS

To promote cross-disciplinary dialogs on issues of global importance, this meeting introduces a new format where duo speakers present on some days with complementary expertise to address the issues, covering both the natural science aspects and socio-economic aspects. Additionally, the meeting will begin on Sunday afternoon with a opening plenary session. Local aspects will be covered during plenary sessions on Monday and Wednesday from 12:00 to 13:30.

SUNDAY, 17 FEBRUARY 2013 - OPENING SESSION

DR. JOHN DOWNING

ASLO President, Regent's Excellence Professor of Ecology, Evolution, and Organismal Biology and Chair of the Environmental Science Graduate Program, Iowa State University

Presentation: ASLO President John Downing will provide opening remarks for the conference.

Biographical Information: John Downing is president of the Association for the Sciences of Limnology and Oceanography, a Board member of the Council of Scientific Society Presidents, and a member of the Consortium of Aquatic Science Societies. He is a Regent's Excellence Professor of Ecology, Evolution, and Organismal Biology, and the Department of Agricultural and Biosystems Engineering at Iowa State University. He is Chair of the Environmental Science Graduate Program. He is also an adjunct professor at Itasca Community College where he is helping create a water quality technology program to provide employment opportunities to students in an economically depressed region. His research interests include limnology, aquatic ecology, terrestrial ecology, microbial ecology, biogeochemistry, population conservation, and whole ecosystem restoration and management. He has advised many policy-makers and citizens groups concerning water quality management, and is a frequent consultant to firms and boards regionally, nationally, and internationally. He was recently awarded ASLO's Ruth Patrick award for his work in understanding and mitigating eutrophication in agricultural regions. He was formerly a professor at McGill University and the University of Montreal where he was Director of the Laurentian Biological Station.

RICHARD CAMPANELLA

Geographer and Senior Professor of Practice, Tulane School of Architecture, Tulane University

Presentation: New Orleans: A Historical Geography, 1700s-2000s

This illustrated presentation will explain the formation of the Mississippi Delta and the settlement and early development of New Orleans with respect to its deltaic environment throughout the eighteenth and nineteenth centuries. It will then describe, through time-sequence maps and graphs, the environmental manipulations of the "long twentieth century" and the ensuing geophysical deterioration of the delta, the population loss and urban decline of New Orleans, and the circumstances that led to the Katrina debacle. We will conclude with a synopsis of the progress made since 2005, and the path ahead.

Biographical Information: Richard Campanella, a geographer with the Tulane School of Architecture, is the author of six critically acclaimed books on New Orleans, including Bienville's Dilemma and Geographies of New Orleans. The only two-time winner of the Louisiana Endowment for the Humanities "Book of the Year" Award, Campanella has also received the Williams Prize for Louisiana History, the Mortar Board Award for Excellence in Teaching from Tulane University, and the Monroe Fellowship from the Tulane University New Orleans Center for the Gulf South. Some of his work may be viewed at http://richcampanella.com.

MONDAY, 18 FEBRUARY 2013 - MORNING PLENARY SESSION

DR. KAREN KIDD

Canada Research Chair and Professor of Biology, University of New Brunswick

Presentation: Is the Birth Control Pill an Effective Form of Contraception for Wild Fish?

It is well known that sewage effluents contain substances that affect the endocrine system and reproduction of wild fish. However, it is not well understood whether the responses observed at the organism level, such as feminization of male fish living downstream, can be linked to impacts at the population level. To investigate this, a whole lake experiment was done at the Experimental Lakes Area in northwestern Ontario, Canada from 1999-2010 and examined the effects of the synthetic estrogen ethynylestradiol (EE2) used in birth control pills on the fish populations and their supporting food web. Continuous additions of EE2 (5-6 ng/L) were made to the lake in the summers of 2001-2003; biochemical- and tissue-level endpoints were examined in several species of fish and population data were collected for all trophic levels before, during and after EE2 additions and contrasted to reference lake data. The experiment was successful at reproducing the impacts observed downstream of wastewater discharges. Male fish from the treated lake produced high concentrations of vitellogenin (an egg yolk protein precursor) and had delayed spermatocyte development. In addition, in the second and third summer of additions, reproductive failures occurred for the shortest-lived fish species, the fathead minnow, with a subsequent collapse in the population. Ongoing monitoring of the lake after EE2 additions stopped showed that the fathead minnow population has recovered. Continuous inputs of low levels of the estrogen used in birth control pills can impact the sustainability of fish populations.

Biographical Information: Karen Kidd has been a Canada Research Chair and Professor of Biology at the University of New Brunswick, Canada since 2004. Before this, she worked for 6 years as a research scientist with Fisheries and Oceans Canada. She received her B.Sc. in Environmental Toxicology from the University of Guelph and a Ph.D. in Environmental Biology and Ecology from the University of Alberta. Karen's research focuses on understanding the effects of municipal and industrial effluents, aquaculture and agricultural runoff on fish and invertebrate populations and food web structure of lakes, wetlands and rivers, and the factors affecting the accumulation of persistent contaminants such as chlorinated pesticides and mercury through freshwater communities in tropical through arctic systems. She led a whole lake experiment at the Experimental Lakes Area in northwestern Ontario, Canada to understand the effects of the estrogen used in birth control pills and released in municipal wastewaters on fish populations and their supporting food web.

MONDAY, 18 FEBRUARY 2013 - LUNCHTIME PLENARY SESSION

DR. CARL BRASSEAUX

Professor Emeritus of History, University of Louisiana at Lafayette and Oral History Fieldworker, Louisiana Sea Grant College Program

DR. DONALD W. DAVIS

Director of Oral Histories, Louisiana Sea Grant College Program, Louisiana State University

Presentation: People and Solutions: Cultural Hind-Casts Must Precede Restoration Forecasts

South Louisiana's coastal plain has witnessed two extinction events since 1699. The first—extending from 1699 to approximately 1915—was zoological, evidenced by the disappearance of numerous species indigenous to the area. The second—presently unfolding—is cultural, as the cultural landscape begins to implode in the wake of physical and economic changes wrought by Hurricanes Katrina, Rita, Gustav, Ike, and Isaac, the BP oil spill disaster, and the flood of 2011. In their presentations, Davis and Brasseaux will focus on the second watershed event. They will examine the occupation and development of the coastal wetlands, the subsequent emergence of unique regional cultures, and the threats posed to that way of life. In the end, Louisiana's near sea level wetlands can continue to function as a "working coast" only when the people living there become part of the solution.

Biographical Information: As Professor of History and Director of the Center for Cultural and Eco-Tourism, Carl is one of the world's leading authorities on French North America, with extensive expertise in the areas of Acadian/Cajun and Creole history and culture. His doctorate is from the Université de Paris, from which he was graduated with the highest distinction. Brasseaux has published thirty-three volumes of material on Louisiana and French North America. His 1,850-page biographical dictionary includes sketches of all persons known to have served the French monarchy in the Mississippi Valley and Gulf Coast regions during the eighteenth century. In addition, Brasseaux has published 101 chapters in books or articles in scholarly journals throughout North America and Europe. In 1976, he helped organize the Louisiane Bien-Aimée exhibit that occupied an entire floor of the Radio France building in Paris. This exhibit was awarded a gold medal by the United States Department of Commerce as the best United States exhibit sent abroad during the bicentennial year.

Biographical Information: Donald (Don) Davis has been involved in coastal-related research for more than forty years. His professional career was influenced by a number of coastal scientists while working on his Ph.D. in LSU's Department of Geography and Anthropology. Each of these individuals focused their individual research on some cultural or physical element in the landscape. From this exposure, Dr. Davis came to appreciate the importance of humankind on Louisiana's coastal wetlands. His research interest has focused on the wide array of renewable and non-renewable resources that are a vital part in the use of the marsh/swamp landscape complex. He and a colleague are currently working with Louisiana's Sea Grant College Program on an oral history project that focuses on learning to value heritage, tradition and culture in a place that, to some, does not matter but to the marsh dweller is home. In addressing this challenge he has recently published: *Washed Away? The Invisible People of Louisiana's Wetlands*.

TUESDAY, 19 FEBRUARY 2013 - MORNING PLENARY SESSION

DR. ANDREW WEAVER

Lansdowne Professor and Canada Research Chair, School of Earth and Ocean Sciences, University of Victoria

NANCY BARON

Outreach Director, COMPASS, and Lead Communications Trainer, Leopold Leadership Program.

Presentation: The Risks and Rewards of Communicating Your Science

Dr. Andrew Weaver: "Neither I, nor most of my colleagues in climate science, started our careers expecting to be drawn into the public spotlight. As an undergraduate studying physics and mathematics, I always wanted my science to be directly relevant to society. That's why as a graduate student, I chose to apply my mathematical expertise to problems in atmospheric science and physical oceanography. This path led to my ongoing research efforts to understand internal feedbacks within the climate system. But as many of us have experienced, science that is relevant to society also can also become highly politicized.

In this talk I will provide a personal account of some of the risks and rewards, successes and failures in science communication and interacting with the media. I will also address the importance of balancing the social obligation to communicate climate science and its inherent uncertainties--with the need to continue scientific inquiry."

Nancy Baron: "Not a day goes by that the public and policy makers could not benefit from the knowledge of scientists to inform current events and decisions that that have the power to shape our future. Yet too often, science is absent from the discussion. Public confusion and scientific frustration over hot button issues including climate change, ocean acidification and fisheries only underscore the need for society to be better informed by science.

How can scientists rise above the clamor to communicate more effectively? I will draw on a decade of experience in the trenches as a communications coach to share stories of scientists who have taken the leap – their struggles, successes and most importantly their lessons learned. This talk will provide useful techniques to help scientists better manage their messages, deliver them clearly and compellingly, and hopefully, renew their motivation to engage in society's most important debates."

Biographical information: Andrew Weaver is the Lansdowne Professor and Canada Research Chair in the School of Earth and Ocean Sciences at the University of Victoria. He was a Lead Author in the UN Intergovernmental Panel on Climate Change 2nd, 3rd and 4th and ongoing 5th scientific assessments. Weaver is a Fellow of the Royal Society of Canada, Canadian Meteorological and Oceanographic Society and the American Meteorological Society. He is a past recipient of NSERC Steacie, Killam and Guggenheim Fellowships as well as a CIAR Young Explorers Award, CMOS President's Prize, Royal Society of Canada Miroslaw Romanowski Medal and Huntsman Award for Excellence in Marine Science. He was appointed to the Order of British Columbia in 2008.

Biographical information: Nancy Baron is the outreach director for COMPASS and the lead communications trainer for the Leopold Leadership Program. Her book, *Escape from the Ivory Tower*, is a practical and entertaining guide for scientists who want to engage their audiences, ace their interviews, promote their papers and enter the political fray. She and her COMPASS team offer a wide range of workshops for academic scien-

tists as well as scientists who work for government and non-governmental organizations in North America and abroad. Her experience as both a biologist for Canadian National Parks and as a science writer motivated her to try to help bridge the gaps among scientists, journalists and policy makers. She is based at the National Center for Ecological Analysis and Synthesis (NCEAS) in Santa Barbara.

WEDNESDAY, 20 FEBRUARY 2013 - MORNING PLENARY SESSION

DR. SUSAN R. SINGER

Laurence McKinley Gould Professor of Natural Sciences, Department of Biology, Carleton College

Presentation: Promising Practices in Undergraduate Science and Engineering Education: Why Don't We Implement Them?

Improving undergraduate science and engineering education for all students is a national imperative, called out in many recent reports, including the President's Council of Advisors on Science and Technology's (PCAST) *Engage to Excel and Excel*. Globally we face profound challenges to provide adequate resources to a growing human population in the face of climate change, pollution, and loss of biodiversity that can be addressed, in part, by scientists, engineers, and a scientifically literate society. Undergraduate science education serves a range of purposes from providing foundational knowledge for all students, to preparing the future teachers who will be using the new *Framework for K-12 Science Education*, to preparing a STEM workforce. A shortage of STEM workers is predicted in the coming decade and improving retention of undergraduate STEM majors through improved STEM education in the first two years of college is a solution called out in the PCAST report. The National Research Council's *Discipline-based Education Research: Understanding and Improving Learning in Undergraduate Science and Engineering* report provides the evidence base for effective teaching practices in undergraduate science and engineering. This presentation will explore what is known about improving students' problem solving skills and conceptual understanding in science and engineering through more effective teaching and unpack the challenges to widespread uptake of these practices.

Biographical Information: Dr. Susan R. Singer, Laurence McKinley Gould Professor of Natural Sciences, joined the Department of Biology at Carleton in 1986 and has pursued a career that integrates science and education. She has B.S., M.S., and Ph.D. degrees, all from Rensselaer Polytechnic Institute and completed a teacher certification program in New York State. Susan has directed Carleton's Perlman Center for Learning and Teaching and worked at the National Science Foundation as a program officer in Developmental Mechanisms. Her biological research focuses on the evolution, genetics, and development of flowering in legumes with an interest in prairie legumes as a biofuel source. NSF supports her flowering research and her research on undergraduate genomics education. She co-authors an introductory biology text and is actively engaged in efforts to improve undergraduate science education. In 2004 she received the Excellence in Teaching award from the American Society of Plant Biology. Within Minnesota she coaches Northfield High School's Science Olympiad team and works with the Agricultural Utilization Research Institute's Renewable Energy Roundtable. Nationally she serves on the board of directors for Project Kaleidoscope, for the NSF-funded iPlant cyberinfrastructure collaborative, and for the National Academies' Board on Science Education. National Academies committee service has included contributions to the Committee on Undergraduate Science Education, the committee that authored America's Lab Report (chair), the committee that authored Taking Science to School (science consultant), a committee on agriculture education, and the committee on Promising Practices in STEM Undergraduate Education (chair).

WEDNESDAY, 20 FEBRUARY 2013 - LUNCHTIME PLENARY SESSION

SHIRLEY LASKA

Professor Emerita of Sociology, Founding Director Emerita, Center for Hazards Assessment, Response and Technology (UNO-CHART), University of New Orleans

Presentation: Catastrophe in the Making: The Engineering of Katrina

Defining Hurricane Katrina as a natural disaster has been rejected in multiple ways. One striking rejection of that definition is demonstrated by the role played by the Mississippi River Gulf Outlet (MRGO) in the damaging storm surge that drowned the City of New Orleans. The engineered waterway was an act *against* Nature rather than an act *of* Nature. This presentation will consider: 1) how this waterway came to be—the "growth machine," 2) the "Peter Principle" of construction momentum that led to the creation of a transportation technology ahead of a societal understanding of its negative implications and their mitigation, and 3) the refusal to take heed of the impending catastrophe when confronted with evidence from highly qualified scientists. Prospects for future 'control' of technology with coastal restoration will be considered in light of this history.

Biographical Information: Shirley Laska, Professor Emerita of Sociology and Founding Director Emerita of the UNO Center for Hazards Assessment, Response and Technology (UNO-CHART), is an environmental sociologist and specialist in long-term community recovery. UNO-CHART is an innovative applied research center that strives to support the resiliency of communities facing environmental challenges. Her post-Katrina research includes co-authoring *Catastrophe in the Making: The Engineering of Katrina and the Disasters of Tomorrow* about the Mississippi River Gulf Outlet and the flooding of New Orleans, as well as multiple peer-reviewed journal publications. She previously served for eight years as the Vice President of Research for the University of New Orleans and has received numerous awards including from the American Sociological Association, the Rural Sociological Society, and the Southern Sociological Society.

THURSDAY, 21 FEBRUARY 2013 - MORNING PLENARY SESSION

DR. JAMES SYVITSKI

Executive Director, Community Surface Dynamics Modeling System, University of Colorado at Boulder

Presentation Topic: Geo-engineering of Lowland Floodplains and Deltas

While recent debate has focused on the utility of geo-engineering in relationship to amelioration of greenhouse gas impacts, we should recognize that humans have been engineering the earth's surface for millennia. Humans have worked to change natural aquatic systems, particularly floodplains and delta plains, into unnatural conduits of water, sediment, carbon, nutrients and pollutants. While the engineering of rivers began some 3000 years ago with ancient civilizations, serious waterway engineering began in earnest between the 14th and 17th centuries, when great canals were built, rivers were straitened and levee systems were developed. Deforestation during these and later periods, introduced vast amounts of fresh sediment into these aquatic environments; fluvial sediment loads doubled on average. A major dam (>15 m in height) has been built every day for the last 110 years, on average, sequestering hundreds of GT of sediment and carbon in reservoirs and greatly limiting the transport of sediment to

the coast. This interception of upstream sediment has left modern rivers with cleaner water, reduced flood magnitudes, and discharge through fewer distributary channels that are armored with artificial levees. Today deltas are subsiding at rates four times larger than the sea level is rising, on average; subsurface mining (oil, gas or groundwater) being the main culprit. Tens of millions of hectares of our coastlines are flooded every year. Coastal retreat has accelerated from m/y to km/y as further impacted by the removal of protective coastal mangrove forests or wetlands, often to make room for shrimp farms. Human manipulation of our waterways have thus contributed to coastal land loss, reduced biodiversity, saltwater intrusion with soils turning saline, increased water temperatures, coastal erosion, loss of coastal infrastructure, and loss of wetlands. Only through understanding the global footprint of humans can we begin to develop effective policies and protocols for supporting global sustainability. We may also recognize our successes and failures at geo-engineering.

Biographical information: Professor James P.M. Syvitski received a Ph.D. at the University of British Columbia in 1978, where he developed a quantitative understanding of particle dynamics across the land-sea boundary. He has held a variety of appointments within Canadian universities (1978-95) and was a Senior Research Scientist within the Geological Survey of Canada and the Bedford Institute of Oceanography (1981-95). He served as Director of INSTAAR – a U Colorado - Boulder Earth and Environmental Systems Institute from 1995-2007, and presently holds CU faculty appointments in Geological Sciences, Applied Mathematics, Atmosphere & Ocean Sciences, Hydrological Sciences, and Geophysics. Professor Syvitski is presently Executive Director of CSDMS— Community Surface Dynamics Modeling System, an international effort to develop, support, and disseminate integrated software modules to the broader Geoscience community. Syvitski also is Chair of the International Geosphere-Biosphere Program that provides essential scientific leadership and knowledge of the Earth system to help guide society onto a sustainable pathway during rapid global change. Professor Syvitski received the 2009 Royal Society of Canada, Huntsman Medal for Outstanding Achievements in Marine Science, and is a Fellow of the American Geophysical Union.

FRIDAY, 22 FEBRUARY 2013 - MORNING PLENARY SESSION

DR. KLEMENT TOCKNER

Professor, Aquatic Ecology, Freie Universität Berlin, and Director, Leibniz-Institute of Freshwater Ecology and Inland Fisheries

Presentation Title: Domesticated Rivers: Rethinking Science and Management

Throughout the past centuries most large rivers have increasingly become human-dominated ecosystems as a result of land reclamation, floodplain drainage, hydropower production, and channelization for navigation. Their domestication, i.e. their optimization for few ecosystem services, has fundamentally altered habitat conditions and led to the formation of non-analogous biotic communities as well as to the truncation of vital ecosystem processes. The gains associated with domestication of freshwater ecosystems have been counter-balanced by deplorable trade-offs, the most severe of which are loss of biodiversity and decrease in related ecosystem services.

Domestication of ecosystems, combined with the rapid turnover of biotic communities, calls for a fundamental rethinking of the future management of freshwater ecosystems. Persistent emphasis on an idealistic vision of ecosystems may not be feasible for ecosystems that continuously change. Concurrently, river management competes with the more human-focused targets and directives in the energy, flood control and agricultural sectors. Therefore, there is an urgent need for innovative, adaptive strategies to sustainably manage rivers. Conservation efforts will need to be complemented by, or perhaps even replaced by, increasing levels of management intervention, in order to maintain, or create, the desired ecological values of freshwater ecosystems.

Biographical information: Klement Tockner is professor for aquatic ecology at the Freie Universität Berlin and director of the Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB), the largest freshwater ecology institute in Germany (www.igb-berlin.de). He received a PhD at the University of Vienna, and a titular professorship from ETH. He has special expertise on freshwater biodiversity, ecosystem functioning, and river and wetland restoration and management. He is editor-in-chief of the journal Aquatic Sciences, and he has published more than 180 scientific papers including 100+ ISI papers. Tockner was elected member of the Austrian Academy of Sciences as well as of several scientific committees including the crosscutting group on freshwater biodiversity of DIVERSITAS. At present, he coordinates a large EC-funded project on freshwater biodiversity (www.freshwaterbiodiversity.eu).

DR. MARK DAVIS

Senior Research Fellow, Tulane University Law School and Director, Tulane Institute on Water Resources Law and Policy

Presentation Title: Square Pegs, Round Holes: The Disconnect Between New Water Realities and Current Water Management

Until relatively recently under Euro-American traditions water has been treated as a public thing or a commons with few centralized points of management or prioritized uses. Growing populations and expanding industrialization have propelled a shift toward more intensive water management, a trend that greatly accelerated over the past 100 years or so. The resulting administrative structures and priorities were largely driven by the desire to foster growth and largely assumed that water could be commanded to serve that growth and the environmental and cultural costs, when they were acknowledged at all, could be effectively managed. The resulting sprawl of cities and the development and "reclamation" of wetlands and arid areas has produced unprecedented prosperity and production but there is increasing evidence that that growth, prosperity, and production will not be sustainable, at least with significant changes to way water resources are managed and most importantly to the underlying assumption that water in the future will be as available as it has been in the past.

Biographical Information: Mark Davis is a Senior Research Fellow at Tulane University Law School and Director of the Institute on Water Resources Law and Policy at the Law School. The mission of the Institute is to foster an appreciation of the importance of water resources and the vital roles that law and policy play in their management and stewardship. Prior to coming to the Law School, Davis served for fourteen years as Executive Director of the Coalition to Restore Coastal Louisiana, a broad based organization committed to the stewardship of Louisiana's coast. He is a member of the bar in Indiana, the District of Columbia, Illinois and Louisiana. Davis has taught as an adjunct faculty member at the Indiana University School of Business (Indianapolis), IIT Chicago-Kent School of Law, and Loyola Law School (New Orleans). He is currently an adjunct instructor at the Tulane University Law School. Davis has a BS and JD from Indiana University and an MLT from Georgetown University. Davis sits on a number of boards and commissions including: America's Wetland Foundation Board of Directors, Gulf Restoration Network Advisory Board, Coalition to Restore Coastal Louisiana Advisory Board, Governor's Advisory Commission on Coastal Restoration and Conservation, Legal and Land Rights Committee, LSU Sea Grant Legal Program Advisory Board, Louisiana State University School of the Coast and Environment Advisory Committee.

ASLO 2013 TICK TALK SESSIONS

We are introducing two exciting, potentially dangerous sessions for ASLO 2013, with the aim of stimulating discussion on the topic of the morning plenary among conference participants. These new sessions will have a format, with only three speakers in each session. Each speaker will have up to 10 slides and six (6) minutes (strictly enforced) to be speculative, creative, thought provoking, and to encourage attendees to think outside of the box on the topic of the associated plenary. Each speaker will have an additional four (4) minutes for questions. These sessions are not necessarily the venue to introduce new results. Rather they are a stage to put forth speculative ideas about how our science can affect the larger picture and to unleash your creativity to get the community talking.

SS83: ASM 2013 TICK TALK SESSION - CLIMATE CHANGE SCIENCE AND COMMUNICATION

Tuesday, 19 February 2013
13:30 to 14:00 - La Nouvelle Orleans Ballroom C

Speakers:
Dr. Brian Helmuth, University of South Carolina

Dr. Gretchen Hofmann, Dept. of Ecology, University of California at Santa Barbara

Dr. Don Boesch, University of Maryland Center for Environmental Science

SS84: ASM 2013 TICK TALK SESSION - GEO-ENGINEERING OF AQUATIC SYSTEMS

Thursday, 21 February 2013
13:30 to 14:00 - La Nouvelle Orleans Ballroom C

Speakers:
Dr. Ken Buesseler, Woods Hole Institute for Oceanography

Dr. Richard W. Murray, Boston University

Dr. Dan Conley, Lund University

SOCIETY AWARD PRESENTATIONS

ASLO 2013 society awards will be presented during the opening plenary session on Sunday, at the business meeting on Monday and during the morning plenary sessions Monday through Thursday.

Biographical information and award citations were included in the February issue of the *L&O: Bulletin*.

SUNDAY OPENING SESSION:

2013 A.C. Redfield Award presented to Bruce J. Peterson, Senior Scientist, The Ecosystems Center, Marine Biological Laboratory, Woods Hole, Massachusetts

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.

MONDAY PLENARY SESSION:

2013 Ruth Patrick Award presented to Asit Mazumder, NSERC-Industry Research Chair, Department of Biology, University of Victoria, Victoria, British Columbia, Canada

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.

2013 Yentsch-Schindler Early Career Award presented to Emily S. Bernhardt, Associate Professor, Department of Biology, Duke University, Durham, North Carolina

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 will be presented for the first time in 2013.

MONDAY BUSINESS MEETING:

2013 G. Evelyn Hutchinson Award presented to Curtis A. Suttle, Professor of Earth and Ocean Sciences, Microbiology and Immunology, and Botany; Senior Fellow of the Canadian Institute for Advanced Research; Associate Dean of Science, University of British Columbia, Vancouver, British Columbia, Canada

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.

TUESDAY PLENARY SESSION:

2013 Citation for Scientific Excellence presented posthumously to Scott W. Nixon, Narragansett, Rhode Island. (Dr. Nixon's daughter, Beth Nixon, will accept the award on his behalf.)

About the Award: This episodic award was initiated in 1987 to recognize members who could not fulfill their career potential because of early death or disability.

WEDNESDAY PLENARY SESSION:

2013 John Martin Award presented to Val Smith, Professor, Ecology and Evolutionary Biology, University of Kansas, Lawrence, Kansas for:

V.H. Smith, "Low Nitrogen to Phosphorus Ratios Favor Dominance by Blue-Green Algae in Lake Phyplankton," *Science* 221: 669-671 (August 12, 1983)

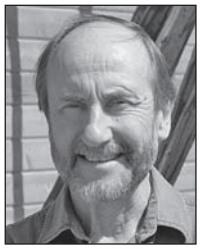
About the Award: The John Martin Award recognizes a paper in aquatic sciences that is judged to have had a high impact on subsequent research in the field. The model for such a paper is Martin et al (1991), which laid out the case for iron limitation of phytoplankton productivity in the ocean. The Martin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

2013 Raymond L. Lindeman Award presented to Jillian Petersen, Scientist, Max Planck Institute for Marine Microbiology Symbiosis Group, Bremen, Germany for:

J.M. Petersen, F.U. Zielinski, T. Pape, R. Seifert, C. Moraru, R. Amann, S. Hourdez, P.R. Girguis, S. D. Wankel, V. Barbe, E. Pelletier, D. Fink, C. Borowski, W. Bach, and N. Dubilier (2011) Hydrogen is an energy source for hydrothermal vent symbioses. *Nature* 476, 176-180.

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 age written by a scientist 35 years of age or less.

THURSDAY PLENARY SESSION:



2013 Ramón Margalef Award for Excellence in Education presented to Warwick Vincent, Professor of Biology, Canada Research Chair in Aquatic Ecosystem Studies, Laval University, Quebec, QC, Canada

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.

ABOUT THE CONFERENCE MEETING SITE

CONCESSIONS AND VENDORS AT THE CONVENTION CENTER

Coffee vendors and other concession areas will be available at the Convention Center throughout the week. They offer a wide variety of breakfast items, entrees, Cajun fare, soups, sandwiches, snacks, fruit, and beverages.

Starbucks is located on the first floor of the Convention Center in the Atrium. Concessions are available in the Food Court located in Lobby F and in the back of Exhibit Hall E. Daystar Coffee is located in Lobby D/E. Hours are subject to change. The concession area in Exhibit Hall E will not be open on Friday.

Starbucks ..... 07:30 – 16:00

Food Court ..... 09:00 – 16:00

Daystar Coffee ..... 07:30 – 16:00

Concessions - Exhibit Hall E ..... 09:00 – 16:00

EMAIL/INTERNET ACCESS

Complimentary wireless Internet access is limited but is available at the New Orleans Ernest N. Morial Convention Center in all public areas. To connect to Wi-Fi at the convention center you should enable your wireless access on your device and look for ASLO13. This is the network you will connect through. No password is necessary after you connect to the network, if you click on your browser, it will take you directly to the Internet.

Note: Wireless cannot be used for networking purposes.

Most hotels have Internet access available to guests. Check with your hotel to see what charges may apply.

TRANSPORTATION IN THE DOWNTOWN AREA

Visitors to New Orleans will notice the streetcars. They are a great way to see the city with three different lines: St. Charles, Canal Street, and the Riverfront, each of which originates downtown but takes you to different parts of the city. One-way fares are $1.25 and can be paid with exact change when you board. One, 3- and 5-day unlimited ride passes are also available for $5, $12 and $20 respectively. (These fares are subject to change.) If you prefer to take a cab, most journeys by cab are very affordable.

Busses also are available in the downtown area, but they do not run to the airport.

If you are driving to the meeting, a map showing parking near the convention center is available at http://www.aslo.org/meetings/neworleans2013/files/asm2013-parking_map-061112.pdf.

Ample parking is available at the Convention Center for a daily fee.

The destination address for GPS or online mapping is 900 Convention Center Blvd., New Orleans, LA 70130

CONFERENCE REGISTRATION AND CHECK IN

Registration and check in for the meeting will be available all week in the Prefunction Area of Exhibit Hall E on the first floor. Please check in upon your arrival at the meeting in order to receive your name badge and other important materials and information.

REGISTRATION HOURS:

Sunday, 17 February 2013 ..... 13:00 to 20:00

Monday, 18 February 2013
through Thursday, 21 February 2013 ..... 07:00 to 18:00

Friday, 22 February 2013 ..... 07:00 to 16:00

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. This will allow us to locate your name badge quickly and efficiently.

MESSAGE BOARDS

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

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.

COFFEE BREAKS

Coffee breaks are planned Monday through Friday from 09:30 to 10:00 immediately following the plenary and award presentation sessions and in the afternoon from 15:30 to 16:00. Complimentary coffee and tea will be served. Bottled water will not be served. Water will be provided in coolers, and attendees are encouraged to bring their own water bottles. Breaks will be set in Exhibit Hall E Monday through Thursday and will be in the foyer area of La Nouvelle Ballroom C on Friday.

LUNCHTIME DURING THE MEETING

12:00 to 13:30 Monday through Friday

We encourage you to stay at the convention center during the 1 ½ hour lunch break each day. This meeting offers many events that take place over lunch including several informative workshops, meetings, and plenary sessions that you will enjoy. The convention center offers a number places to purchase a quick lunch along with many other dining options nearby. You will also find comfortable places to relax and visit with fellow attendees and colleagues.

EXHIBITORS AND SPONSORS

Exhibits will be open in Exhibit Hall E of the Convention Center. Attendees will enjoy being able to visit with vendors during conference hours Monday through Thursday. Attendees will have access to the exhibit hall during the exhibit hall hours listed below. Morning and afternoon coffee breaks and poster sessions will be set in the exhibit area, as well. Exhibits will be open during the breaks and any time that the exhibit hall is open, including during lunch. Posters will be displayed in the Exhibit Hall as well, and poster receptions will take place Tuesday and Thursday evenings from 18:00 to 19:30.

Monday, 18 February ..... 09:30 – 17:30
Tuesday, 19 February ..... 09:30 – 19:30
Wednesday, 20 February..... 09:30 – 18:00
Thursday, 21 February ..... 09:30 – 19:30

ASLO 2013 EXHIBITOR ROSTER

American Meteorological Society (Booth 25)
1200 New York Avenue, NW
Suite 500
Washington, DC 20005
USA
Contact: Kira Nugnes
Phone: 202-737-1043
Email: dcmeetings@ametsoc.org
Website: http://metsoc.org/

Arizona Geological Survey (Booth 31)
416 W Congress St, Ste 100
Tucson, AZ 85701
USA
Contact: Kim Patten
Phone: 520-209-4125
Email: kim.patten@azgs.az.gov
Website: http://azgs.az.gov

ASLO: Association for the Sciences of Limnology and Oceanography (Booth 1 and 30)
5400 Bosque Boulevard, Suite 680
Waco, TX 76710-4446
USA
Contact: Helen Schneider Lemay
Phone: 254-776-3550
Fax: 254-776-3767
Email: business@aslo.org
Website: http://www.aslo.org

Join us at the ASLO booth on Thursday, 21 February 2013, from 19:00 to 20:00 for a champagne toast to launch the newest Limnology and Oceanography e-Book!

ASLO Students (Booth 2 and 29)
5400 Bosque Boulevard, Suite 680
Waco, TX 76710-4446
USA
Contact: ASLO Business Office
Phone: 254-776-3550
Fax: 254-776-3767
Email: business@aslo.org
Website: http://www.aslo.org

Blue Water Satellite, Inc. (Booth 36)
440 E. Poe Rd., Suite 203
Bowling Green, OH 43402
USA
Contact: Reid McEwen
Phone: 419-728-0060
Email: rmcewen@bluewatersatellite.com
Website: http://bluewatersatellite.com

CAMECA (Booth 14)
5500 Nobel Dr., Suite 100
Madison, WI 57311
USA
Contact: Jane Lindner
Phone: 608-274-6880
Fax: 608-442-0622
Email: jane.lindner@ametek.com
Website: http://www.cameca.com

CODAR Ocean Sensors (Booth 28)
1914 Plymouth Street
Mountain View, CA 94043
USA
Contact: Laura Pederson
Phone: 408-773-8240
Fax: 408-773-0514
Email: laura@codar.com
Website: http://codar.com/

Consortium for Ocean Leadership (Booth 20)
1201 New York Ave, NW
Washington, DC 20005
USA
Contact: Kristin Kracke
Phone: 202-787-1644
Email: kkracke@oceanleadership.org
Website: http://www.oceanleadership.org/

Duke University Press (Booth 1 and 30)
905 West Main Street, Suite 18B
Durham, NC 27701
USA
Contact: Katie Anderson
Phone: 919-687-8013
Fax: 919-680-6078
Email: Katie.Anderson@dukeupress.edu
Website: http://www.dukeupress.edu

Fluid Imaging Technologies, Inc. (Booth 23 and 24)
65 Forest Falls Drive
Yarmouth, ME 04096
USA
Contact: Harry Nelson
Phone: 207-846-6100
Email: harry@fluidimaging.com
Website: http://fluidimaging.com/

Gulf of Mexico Research Initiative (Booth 21)
1201 New York Ave, NW
Washington, DC 20005
USA
Contact: Leigh Zimmermann
Phone: 202-448-1225
Email: lzimmermann@oceanleadership.org
Website: http://gulfresearchinitiative.org/

Hach Hydromet (Booth 19)
5600 Lindbergh Drive
Loveland, CO 80539
USA
Contact: David Procyk
Phone: 970-669-3050
Email: dprocyk@hach.com
Website: http://www.hach.com

Hawaii Convention and Visitors Bureau (Booth 16)
Hawai'i Convention Center/SMG
1801 Kalakaua Ave.
Honolulu, HI 96815
USA
Contact: Gary Uyeda
Phone: 808.943.3048
Fax: 808.943.3099
Email: guyeda@hccsmg.com
Website: http://www.hawaiiconvention.com

Hydroptic (Booth 12)
8 Avenue du Commandant Taillefer
L'Isle en Doden 31230
France
Contact: Jérôme Coindat
+33 (0)9 6324 8220
+33 (0)5 6189 3788
Email: jerome.coindat@hydroptic.com
Website: http://hydroptic.com

JFE Advantech Co., Ltd. (Booth 26)
7-2-3 Ibukidai-Higashi
Kobe 651-2242
Japan
Contact: Koji Ochi
Phone: +81-78-997-8686
Fax: +81-78-997-8609
Email: ocean@jfe-advantech.co.jp
Website: http://www.jfe-advantech.co.jp/eng/index.html

Loligo Systems (Booth 6)
Niels Pedersen Alle 2
Tjele 8830
Denmark
Contact: Awantha Dissanayake
Phone: +45 8999 2565
Email: ad@loligosystems.com
Website: http://www.loligosystems.com/

Lotek Wireless/Sirtrack Ltd. (Booth 33)
114 Cabot Street
St. John's, Newfoundland
Canada
Contact: Padraic O'Flaherty
Phone: 709-746-9798
Email: poflaherty@lotek.com
Websites: http://lotek.com / http://www.sirtrack.com

Nortek (Booth 22)
27 Drydock Avenue
Boston, MA 02210
USA
Contact: Freda Zifteh
Phone: 617-206-5753
Fax: 617-275-8955
Email: freda@nortekusa.com
Website: http://nortekusa.com

Ocean Opportunities (Booth 17)
WHOI
266 Woods Hole Rd
Woods Hole, MA 02543
USA
Contact: James Yoder
Phone: 508-289-2200
Email: jyoder@whoi.edu
Website: http://www.whoi.edu

Oxford University Press (Booth 27)
198 Madison Avenue
New York, NY 10016
USA
Contact: Erin Norris
Phone: 800-451-7556
Email: gab.exhibitions.us@oup.com
Website: http://global.oup.com

Precision Measurement Engineering, Inc. (Booth 9)
1487 Poinsettia Ave., Suite 129
Vista, CA 92081
USA
Contact: Kristin Elliott
Phone: 760-727-0300
Fax: 760-727-0333
Email: kristinhead@pme.com
Website: http://pme.com/

RBR (Booth 11)
5-95 Hines Road
Ottawa, ON K2K 2M5
Canada
Contact: Emily MacPherson
Phone: 613-599-8900
Fax: 613-599-8929
Email: info@rbr-global.com
Website: http://rbr-global.com/

Rockland Scientific, Inc. (Booth 5)
520 Dupplin Road
Victoria, BC V8Z 1C1
Canada
Contact: Fabian Wolk
Phone: 250-370-1688
Email: Fabian@rocklandscientific.com
Website: http://rocklandscientific.com/

Sea-Bird Scientific (Booth 3 and 4)
13431 NE 20th Street
Bellevue, WA 98005
USA
Contact: Julie Rodriguez
Phone: 425-644-3207
Fax: 425-643-9954
Email: jrodriguez@seabird.com
Website: http://seabird.com/

Scientists and Environmentalists for Population Stabilization (Booth 15)
Biology Department
San Diego State University
San Diego, CA 92182-4614
USA
Contact: Stuart Hurlbert
Phone: 619-594-5409
Email: shurlbert@sunstroke.sdsu.edu
Website: http://www.bio.sdsu.edu/

Turner Designs, Inc. (Booth 7)
845 W. Maude Avenue
Sunnyvale, CA 94085
USA
Contact: Jenifer Sluga
Phone: 408-749-0994
Fax: 408-749-0998
Email: marketing@turnerdesigns.com
Website: http://turnerdesigns.com/

Unisense (Booth 8)
Unisense A/S
Tueager 1
Aarhus DK-8200
Denmark
Contact: Thomas Rattenborg
Phone: +45 8944 9500
Fax: +45 8944 9549
Email: tr@unisense.com
Website: http://www.unisense.com/

Unity Scientific (Booth 10)
117 Old State Rd.
Brookfield, CT 06804
USA
Contact: Tom Bloomer
Phone: 203-740-2999
Fax: 203-740-2955
Email: tbloomer@unityscientific.com
Website: http://unityscientific.com/

Xylem Incorporated / Aanderaa Data Instruments, Inc. (Booths 13 and 18)
182 East Street, Suite B
Attleboro, MA 02703
USA
Contact: Richard Butler
Phone: 508-226-9300
Fax: 508-226-9306
Email: infousa@xyleminc.com
Website: http://www.xyleminc.com

AUDUBON AQUARIUM OF THE AMERICAS RECEPTION

Wednesday, 20 February 2013
18:00 - 21:00 - Aquarium of the Americas
Cost: $70 USD per person
Tickets may be purchased until noon on Monday, 18 February 2013.

This will be a wonderful evening featuring New Orleans cuisine, bar stations scattered throughout the Aquarium of the Americas, and nice background music.

Upon entering the aquarium you will find yourself in an underwater paradise. When you arrive, you will be directed to the Caribbean Reef, where cocktails coupled with a 30-foot acrylic tunnel will take guests on an under-water journey through the 132,000 gallon exhibit. Moray eels, parrotfish and cownose rays are among the hundreds of specimens that surround you in this exhibit. Cascading waterfalls, rare orchids, and

infamous red bellied piranha offer an adventurous trek in the next gallery, the Amazon Rain Forest. Emerging from the Amazon, you will be greeted by the sights and sounds of playful penguins.

You will find food stations in the Living in Water gallery, set amongst the back drop of the Tropical Sharks and Seahorses area. Enjoy the reception, along with swimming penguins, circling sharks, mystifying sea dragons. After browsing the Living in Water Gallery, you will have the opportunity to encounter Buck and Emma, the Aquarium's two playful Sea Otters. From here you may walk at your leisure down the boat launch into the Mississippi River gallery. Rare white alligators, pre-historic Paddlefish and Longnose gar are among Louisiana's native species found here.

SPECIAL OPPORTUNITIES AND INFORMATION FOR STUDENTS

STUDENT SOCIAL MIXER

Monday, 18 February 2013
19:00 to 21:00 - La Nouvelle Orleans Ballroom B

An informal student social mixer will be held on Monday evening following the ASLO Membership and Business Meeting. Senior scientists will be invited to attend and meet with students on an informal basis. Beverages and snacks will be available. All students 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 2013 Aquatic Sciences Meeting. Presentations will be judged on the basis of innovation/scientific insight, quality of experimental design/methods, and clarity/effectiveness of presentation. There is no need to apply; all ASLO student presentations will be judged and 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*.

CAREER CENTER

There will be a Career Center set up in Exhibit Hall E, 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 and to sign up for the Career Development Workshops and student social events.

SCIENTIFIC SPEED DATING: NETWORKING FOR THE 21ST CENTURY

Tuesday, 19 February 2013
12:00 to 13:30 (Lunch Time) - La Nouvelle Orleans Ballroom B

Panelists: Advanced scientists from a variety of aquatic science fields

It can be daunting to try to introduce yourself to someone at a large scientific meeting, but given the right opportunity, a quality exchange can have a lasting impression. Scientific speed dating is a twist on the popular singles speed dating phenomenon. The goal here is to foster an interactive environment between small groups of advanced scientists and graduate students in hopes of creating some short, high impact exchanges. It's amazing what can be accomplished in five minutes! Join us for this workshop to start building new connections.

ASLO STUDENT WORKSHOPS

Thursday, 21 February 2013
12:00 to 13:30 (Lunch Time) - Rooms 343 and 345

Student Career Development Workshops will be held over lunch on Tuesday and Thursday during the meeting. These are informal workshops 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. A limited number of lunches will be provided.

EARLY CAREER EVENTS

"Early Career" scientists are non-student ASLO members who have received their highest degree within the last 10 years. Come join us!

EARLY CAREER MEET AND MIX

Monday, 18 February 2013
19:00-21:00 - Exhibit Hall E Prefunction Area (1st Floor)

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: STRATEGIES FOR FUNDING YOUR AQUATIC RESEARCH

Wednesday, 20 February 2013
12:00-13:30 – La Nouvelle Orleans Ballroom B (3rd Floor)

The ASLO Early Career committee will convene a panel of scientists representing diverse funding organizations that support aquatic research - ranging from the National Science Foundation to private philanthropic foundations and including some leading aquatic scientists. The panel will share their perspectives on matching funding sources with individuals' research ideas, writing proposals, and engaging with funders. Scientists at all career stages are invited to attend and interact with the panel, to find out essentials about grant writing and more about funding aquatic research, for themselves, their students and their institutions. While this workshop is being 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.

ASLO 2013 MULTICULTURAL PROGRAM

Since 1990 the ASLO Multicultural Program has brought 770 diverse undergraduate and graduate students to the annual ASLO meetings. The year the program will support 85 students. The program features a 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. This year's program will feature a special Sunday field trip that includes kayaking, bicycling and a visit to the New Orleans Botanical Gardens. Dr. Deidre Gibson of Hampton University, and Co-chair of the New Orleans meetings, will deliver

the keynote address at the opening dinner on Saturday night. There will be a special student symposium on Wednesday that is open to all ASLO participants – we encourage you to attend. The ASLOMP students will be involved all the regular meeting activities. Please take the opportunity to introduce yourself when you see then at the meetings. For further information, contact Dr. Ben Cuker (benjamin.cuker@hamptonu.edu).

ASLO MULTICULTURAL PROGRAM TRAINING SESSION

Sunday, 17 February 2013
15:00 to 17:00 - Room 335-336

Since its inception in 1990, the ASLO Multicultural Program has bought over 750 undergraduate and graduate students to participate in the annual ASLO meetings and attendant activities. 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 15:00 on Sunday, 17 February.

EMERGING ISSUES WORKSHOP

Beginning with the summer meeting in 2010, the ASLO board of directors initiated funding for Emerging Issues Seminars that will further encourage dialog among scientists who wish to develop emerging, cutting-edge, controversial issues and/or topics that integrate knowledge across communities. In accordance with this, ASLO is sponsoring a two-day workshop following the meeting that is connected to a special session that will take place during the 2013 Aquatic Sciences Meeting in New Orleans. Organizers will submit a report with a summary of the outcome to the *L&O Bulletin* along with a table of contents of the written products stemming from the seminar.

ASLO 2013 EMERGING ISSUES WORKSHOP: LINKING OPTICAL AND CHEMICAL PROPERTIES OF DISSOLVED ORGANIC MATTER IN NATURAL WATERS

Saturday and Sunday, 23 and 24 February 2013
08:00 to 17:00 - Belle Chasse Room, Hilton Hotel, 3rd Floor

This is an open workshop immediately following the 2013 Aquatic Sciences Meeting. The workshop will be held in the Belle Chase Room at the Hilton Riverside Hotel.

A substantial increase in the number of studies using the optical properties (absorbance and fluorescence) of dissolved organic matter (DOM) as a proxy for its chemical properties has occurred during the last decade. This is due in part to improved instrumentation and algorithms for interpreting the spectral data. Chemical characterization of DOM involves intensive laboratory work and often large sample volumes, whereas optical characterization is attractive to many scientists as it is relatively simple and inexpensive and these techniques can also be measured in-situ and via remote sensing. Linking the optical and chemical properties of dissolved organic matter is now a topic that requires consolidation and a combined effort if the aquatic science community is to continue to gain from these techniques, which are becoming routine analyses in the aquatic sciences. The Aquatic Sciences Meeting has several sessions related to this topic. However, the workshop will address two specific urgent needs for utilization and proliferation of these techniques by the aquatic sciences community:

1. Link organic compounds (e.g. lignin) and classes of compounds (e.g. humic substances) present in natural waters that give rise to the spectral properties; and
2. Link optical properties to sources and the wider biogeochemical properties of aquatic systems (i.e. the role that DOM will play in the aquatic ecosystem).

The workshop will begin with plenary speakers on Saturday morning and continue Saturday afternoon and Sunday morning with open discussions focused on several key sub topics related to these two over-arching needs. Confirmed plenary speakers who will provide overview talks for this workshop are: George Aiken, Ron Benner, Neil Blough, Paula Coble, and Antonio Maninno. The workshop will end early Sunday afternoon. A complete agenda will be announced prior to the meeting.

CONFERENCE EVENTS

STUDENT VOLUNTEER TRAINING

Sunday, 17 February 2013
15:00 to 16:00 - Meet at Registration Area outside Exhibit Hall E Pre-function Area

This is a mandatory training session for student volunteers. Please contact Sue Rulla at suer@sgmeet.com

SUNDAY OPENING PLENARY SESSION

Sunday, 17 February 2013
16:00 - 18:00 - La Nouvelle Orleans Ballroom C

The opening session will begin at 16:00 on Sunday, 17 February. You will not want to miss this. Following a brief welcome and opening remarks by ASLO President John Downing, the session will include a presentation by Richard Campanella, a geographer and senior professor of practice, Tulane School of Architecture, Tulane University. His presentation, "New Orleans: A Historical Geography, 1700s to 2000s," will be illustrated to explain the formation of the Mississippi Delta, the settlement and early development of New Orleans all the way through the circumstances that led to the Katrina debacle. The A.C. Redfield Lifetime Achievement Award also will be presented during the opening session on Sunday. The Mixer Reception will kick off with a traditional New Orleans Mardi Gras Indian Show.

MARDI GRAS INDIAN SHOW AND OPENING MIXER AND RECEPTION

Sunday, 17 February 2013
18:00 - 20:00 - La Nouvelle Orleans Ballroom B

Enjoy this time of entertainment and get caught up with friends and colleagues! The Mardi Gras Indian Show consists of seven performers including a Big Chief Mardi Gras Indian, a Brass Band, and a Second Line. (The "main line" or "first line" is the main section of the parade, or the members of the actual club with the parading permit as well as the brass band. Those who follow the band just to enjoy the music are called the "second line." The second line's style of traditional dance, in which participants walk and sometimes twirl a parasol or handkerchief in the air, is called "second lining.") This will be a unique welcome to New Orleans and to the 2013 Aquatic Sciences Meeting.

PLENARY SESSIONS AND AWARD ACCEPTANCE PRESENTATIONS

Monday, 18 February 2013, through Friday, 22 February 2013
08:00 to 09:30 - La Nouvelle Orleans Ballroom C

Plenary Sessions will be held each morning of the meeting and will include brief opening announcements and remarks by committee member, plenary presentations, and award acceptance presentations. Plenary presentations and awardee information is listed in this program.

ANNUAL ASLO BUSINESS AND MEMBERSHIP MEETING

Monday, 18 February 2013

17:45 to 19:00 - La Nouvelle Orleans Ballroom C
Annual Business and Membership Meeting of ASLO including Hutchinson Award Presentation. We encourage everyone to attend-- especially new members and student members. You do not need to be a member of ASLO in order to attend.

POSTER SESSIONS AND RECEPTIONS

Tuesday, 19 February 2013 and Thursday, 21 February 2013
18:00 to 19:30 - Exhibit Hall E

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 and Thursday evenings. Posters numbered 1 through 245 will be presented on Tuesday. Posters numbered 246 through 479 will be presented on Thursday. Light reception foods will be served.

ART EXHIBIT: "PAST, CURRENT, FUTURE - GULF OF MEXICO"

Monday, 18 February 2013, through Thursday, 21 February 2013
09:30 to 17:30 – Room E1

Artist exhibition featuring original works in the form of painting, photography, sculpture, ceramics and fibers mixed media by Louisiana students ages 6-18 and the Gulf Coast community. All works will relate to the Gulf of Mexico as an inspiration. During the week, meeting scientists will vote on their favorite student art pieces. Winners will be announced on Thursday at 17:00 in Room E2 of the Convention Center. The top three student artwork pieces chosen by the scientists will be presented with awards.

TEACHER EXPO

Thursday, 21 February 2013
16:00 to 19:00 – Room E2

Scientists want to learn how to communicate their research into information useful to teachers. Teachers want experiences working with scientists to learn about current ideas in aquatic sciences.

During the expo, scientists will present four 15-minute introductory talks for teachers on topics such as ocean acidification, chemical pollutants and phytoplankton; scientist "mentors" will be on hand to answer your questions, discuss current water issues and show you relevant scientific posters; aquatic scientists and educators will provide hands-on activities and resources for your classroom.

16:00-17:00	4 Mini-Lectures on Freshwater and Marine Science topics (snacks provided)
17:00	Student Art Competition Winners will be announced
17:00-17:30	Mentors meet with teachers and explore the poster hall
17:30-19:00	Teachers can visit Resource Roundtables where scientists and education groups share hands-on activities and other resources with teachers
19:00	Reception and Tour of R/V *Pelican* (Tentative)

Teachers receive FREE admission to the Expo, but need to register in order to get a badge for the day. Teachers who have not registered online must register at the registration desk outside Exhibit Hall E.

WORKSHOPS, TOWN HALLS, AND AUXILIARY MEETINGS

SCOR WORKING GROUP

Saturday, 16 February 2013
08:00 to 17:30 - Room 340

Members of an ICSU Scientific Committee on Oceanic Research (SCOR) WG 139: Organic ligands- A key control on trace metal biogeochemistry in the ocean will meet for the second time on Saturday, February 16, 2013. Organic ligands, molecules that form stable complexes with metals, have been shown to play an integral role in the bioavailability and cycling of bio-essential trace metals in the marine environment. This working group aims to combine the expertise of trace metal biogeochemists, organic geochemists and biogeochemical modelers toward advancing our understanding of metal-binding ligands in the oceans. Overarching goals for this working group over the next three years are: 1) Promote improvements in quality, accessibility, and development of analytical methodologies for characterizing metal-binding ligands in seawater; 2) Characterize which components of the dissolved organic matter pool make a significant contribution to biogeochemistry of trace metals in the oceans; and 3) Identify the role of metal-binding ligands in microbial ecology and marine biogeochemical cycles and successfully incorporate this into biogeochemical models. While the February 2013 meeting is restricted to full and associate members of SCOR WG 139, participation in working group activities, including intercalibration efforts, is open to the broader scientific community. Anyone interested in the activities of this working group is encouraged to join our e-mail list (contact kristen.buck@bios.edu) and follow our progress on the SCOR website (www.scor-int.org/Working_Groups/wg139.htm). In addition, the co-chairs of SCOR WG 139 are also chairing a special session at the ASLO Aquatic Sciences Meeting in New Orleans, SS08: Biogeochemistry of metal-binding organic ligands in the ocean, scheduled for Tuesday, February 19 with a poster session Thursday, February 21. For more information, please contact co-chairs Kristen Buck (kristen.buck@bios.edu), Maeve Lohan (maeve.lohan@plymouth.ac.uk), or Sylvia Sander (sylvias@chemistry.otago.ac.nz).

C-MORE CAREER NETWORKING WORKSHOP

Sunday, 17 February 2013
08:30 to 15:30 - Room 342

C-MORE is sponsoring a group of students and post-docs to hold a one-day career/networking workshop just before the New Orleans meeting.

SCINTILLATION: A WORKSHOP TO MAKE YOUR SCIENCE COMMUNICATION SCINTILLATE THROUGH "CRITICAL STORYTELLING"

Sunday, 17 February 2013
09:00 to 16:00 - Room 345

Organized by: Jonathan H. Sharp (University of Delaware) and Adrienne Sponberg (ASLO)

If you would like to participate in this workshop, please contact Jon Sharp (jsharp@udel.edu).

The Challenge: To communicate your science effectively. Whether communicating with fellow researchers, local policymakers, or the lay public, 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 science issues important to society, 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 and even our science peers will tune us out if the presentation is not interesting. And in today's fast-paced, information-glutted world, even "interesting" isn't enough; it must be scintillating! It is a matter of critical storytelling.

The Premise: 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.

This is an all-day workshop to help you improve communication of your science is scheduled for Sunday before the formal opening of the 2013 Aquatic Sciences Meeting, featuring a trio of communication specialists. The specialists are Randy Olson (actor and independent filmmaker), with assistance from Hollywood veterans Dorie Barton (actress and script consultant for screenwriters) and Brian Palermo (actor and improv acting instructor). The three served as the panel for the S-Factor 2 film analysis at the 2012 Ocean Sciences meeting in Salt Lake City and will do so again for S-Factor 3 in New Orleans. Participation in the Scintillation workshop will be limited and prior registration required, but without a fee. Much of the day will consist of rotating split-off small group hands-on activities with the specialists where you will learn how to: 1. capture audience interest at the start of the presentation, 2. "act" throughout the presentation so that the audience remains excited, and, 3. create structure for each presentation so that it tells an engaging, relatable story. The full group will re-assemble for the latter part of the workshop to put together the parts they learned from each of the subgroup activities.

It is our hope that improved communication skills will assist the aquatic science community in reaching out to the lay public explaining the results of our research. The skills needed to "wow" a lay audience should also assist scientists in presenting information to peers, especially in presenting results to broad audiences, outside one's specialty area. In planning plenary talks for meetings, a question that we often hear is: "while he/she is clearly an expert in this subject, does he/she give an exciting and interesting talk?" The workshop registration is open to anyone interested, and 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.

GEARS: A WORKSHOP FOR BROADENING THE IMPACTS OF YOUR RESEARCH

Sunday, 17 February 2013
8:30 to 16:00 - Room 343

This all-day workshop addresses skills that include deconstructing your science, understanding how people learn, building effective knowledge for a variety of audiences, and broadening the reach of your science. Attendees will think creatively about how to integrate their research and education activities so that their research can be communicated to a broader audience. Education and outreach experts from three COSEE Centers include: Ari Daniel Shapiro, Annette DeCharon, and Bob Chen. Pre-register and qualify for $150 to defray the cost of one-night lodging by contacting Bob Chen (bob.chen@umb.edu).

PREPARING WORKFORCE AND TRANSFER STUDENTS IN TWO-YEAR COLLEGES FOR GEOSCIENCE CAREERS

Sunday, 17 February 2013
13:00 to 17:30 - Room 344

This workshop will cover best practices for preparing workforce and transfer students in two-year colleges (2YC) for ocean science careers. Participants will explore successful 2YC college transfer and workforce programs and practices, effective student research and internship programs, and geoscience career resources for 2YC students and faculty. Discussion will include strategies for effectively incorporating career information and professional skills into introductory oceanography courses.

HOW TO INTERVIEW AND NEGOTIATE FOR AN ACADEMIC POSITION

Monday, 18 February 2013
12:00 to 13:30 (Lunch Time) - Room 346 - 347

Jim Yoder, WHOI, has worked at three different academic/research institutions and served on seven search committees (chaired three) and has participated on promotion and tenure committees at two different institutions. He has led this discussion with graduate students and postdocs previously on 3 separate occasions and will comment on the questions and topics below. Lunch provided by COSEE OCEAN to the first 25 attendees.

- What happens throughout a typical interview process?
- What are key strategies to consider for your interviews?
- How do you prepare for an on-site interview?
- What questions can you expect? When and to whom should you answer?
- What questions are allowed/not allowed to be asked? How do you deal with inappropriate questions?
- What are some of the "hidden agendas" of search committee members?
- What do you need to ask of the institution when offered a job?
- Other Advice

S-FACTOR 3 (FILM ANALYSIS WORKSHOP) - PART I

Monday, 19 February 2013
12:00 to 13:30 (Lunch Time) - Room 345

Following our previous successes (2010, 2011, and 2012 winter meetings), at the 2013 meeting in New Orleans (February 17-22), we will conduct the S-Factor Video Workshop once again. Randy Olson, the marine biologist–turned filmmaker, will bring his Hollywood "S Team" for expert critiques. Randy has written and directed films about the oceans (his Shifting Baselines shorts), evolutionary biology ("Flock of Dodos") and climate change ("Sizzle"), authored the book Don't Be Such a Scientist, and for 2013 has a new historical documentary about a part of World War II featuring the voices of Richard Dreyfuss, Martin Sheen, and Brian Dennehy. As he did for the 2012 Ocean Sciences Meeting, he will bring two Hollywood veterans: Dorie Barton, script analyst and actress (e.g, Meet the Fockers, Down with Love) and Brian Palermo, improv instructor and actor (e.g., The Social Network, Disney's Girl VS. Monster) to join him on the S Factor Panel and other workshops in New Orleans.

We Want Your Short Videos! As with previous S Factor Workshops, the target is to explain aquatic science for lay public consumption. We invite anyone interested to submit a short video (not to exceed 5 minutes in YouTube format). All submitted videos will be posted and discussed on-line prior to the meeting. A selection of submitted ones will be given critiques at the meeting. Similar to the OSM2012 response, we hope to get submissions from a broad array of graduate students, early career scientists, more established scientists, professional filmmakers, and high school teachers. S-Factor 3 is scheduled in two parts, at the mid-day lunch break on Monday and on Tuesday evening. S-Factor 3 is partially supported by a grant from the Ocean Sciences Division of the US National Science Foundation. For more information or to submit a video, contact jsharp@udel.edu.

SNAP IT UP: ADVICE FROM HOLLYWOOD FOR SHORT PRESENTATIONS

Tuesday, 19 February 2013
12:00 to 13:30 (Lunch Time) - Room 345

Jonathan H. Sharp (University of Delaware) and Adrienne Sponberg (ASLO) as co-chairs.

You have only 15 minutes to present your data -- it's a challenge. But in the world of Hollywood, where they know how to tell entire stories in 5 seconds (literally) that amount of time is an eternity. Randy Olson is a former scientist who knew the science talk format well before moving to Hollywood and becoming a filmmaker. In this workshop he brings with him two voices directly from this rapid communication world of Hollywood: actress/script consultant Dorie Barton, and actor/improv instructor Brian Palermo. They have been working as a team (The S Team!) for over a year, with this being their fifth workshop. They will be attending science sessions on Monday and will share tips and tricks over lunch on Tuesday that will help you be more effective in your 15-minutes of fame.

L&O E-LECTURES TOWN HALL: AN EFFECTIVE APPROACH FOR ADDRESSING BROADER IMPACTS

Tuesday, 19 February 2013
12:00 to 13:30 (Lunch Time) - Room 344

Please join us for a Limnology & Oceanography e-Lectures Town Hall: "L&O e-Lectures: An Effective Approach for Addressing Broader Impacts." Several funding agencies now require proposals to not only provide justification for the intellectual merit of their work, but must also include a plan for activities demonstrating the broader impacts on society. For many, the task is arduous and elusive, with outcomes difficult to assess. L&O e-Lectures, a new publication from ASLO, offers a fresh and effective alternative for addressing societal benefit requirements by providing a high impact venue for publication in lecture format. The lectures can be used at the post-secondary level, or for the public at large. Over the past year, the L&O e-Lectures website has received over 40,000 hits and this number is growing exponentially. If, for example, just 1% of these hits were to result in e-Lecture downloads by post-secondary instructors, this would amount to approximately 400 instructors using these e-Lectures to teach their courses. As university class sizes range anywhere from 20 to 150 students, this translates to reaching 8000 to 60,000 students. The net outcome of publishing in L&O e-Lectures is win-win: a researcher submits their findings for publication in L&O, L&O Methods, L&O e-Books or L&O Fluids in the Environment, and can also submit a companion publication in L&O e-Lectures.

This Town Hall will introduce one of ASLO's newest peer-reviewed publications, L&O e-Lectures, and will provide a forum to discuss publishing opportunities. Hosted by Jennifer Cherrier, Florida A&M University and Editor-in-Chief L&O e-Lectures. For more information about L&O e-Lectures visit www.aslo.org/lectures (http://www.aslo.org/lectures) Contact Jennifer Cherrier: lolectures-editor@aslo.org or Jason Emmett: lolectures-manager@aslo.org

NSF OCEAN SCIENCE TOWN HALL MEETING

Tuesday, 19 February 2013
12:00 to 13:30 (Lunch Time) - Room 343

NSF program officers and staff will report on new and upcoming solicitations, describe proposed changes to the ships scheduling process, and answer questions from participants.

GETTING PEOPLE TO HANG ON (ALMOST) EVERY WORD: TELLING STORIES ABOUT YOUR SCIENCE

Tuesday, 19 February 2013
12:00 to 13:30 (Lunch Time) - Room 346 – 347

This workshop will be led by Ari Daniel Shapiro. We are made up of stories. They are the strongest currency of communication and memory. In this workshop, you will learn how to take your science – and the way you usually present data and research – and tell stories about it. Humorous stories that make people smile, meaningful stories that last, and engaging stories that make your listeners interested in the science. You will hear some examples, and get to try it yourself. Lunch provided by COSEE OCEAN to the first 25 attendees.

S-FACTOR 3 (FILM ANALYSIS WORKSHOP) - PART II

Tuesday, 19 February 2013
19:30 to 21:00 - Room 345

A continuation of the S-Factor 3 (Film Analysis Workshop) Organized by: Jonathan H. Sharp (University of Delaware) and Adrienne Sponberg (ASLO)

Following the success of the S-Factor 2 at the 2012 Ocean Sciences Meeting (see the website: http://www.sfactorpanels.org/sf2.html for information about the last workshop), we propose another film analysis workshop in New Orleans. The workshop will be led by scientist-turned-filmmaker, Randy Olson, who has been assisting ASLO with

film analysis workshops since 2010. Selected submitted videos will be critiqued by a team consisting of Olson (actor and independent filmmaker) and Hollywood veterans Dorie Barton (actress and story line consultant for screenwriters) and Brian Palermo (actor and improv acting instructor). The three served as the panel for the S-Factor 2 workshop at the 2012 Ocean Sciences meeting and are now becoming a team, including special workshops for organizations like the Natural Resources Defense Council and the Center for Disease Control. Similar to the previous workshops, we will invite anyone interested to submit a short video (not to exceed 5 minutes in You-Tube format). All submitted videos will be posted and discussed on-line prior to the meeting. A selection of submitted ones will be given critiques at the meeting. Similar to the OSM2012 response, we hope to get submissions from a broad array of graduate students, early career scientists, more established scientists, professional filmmakers, high school teachers. We want to schedule this workshop in two-parts, at the mid-day break and in the evening on Tuesday. Financial support for this workshop has been received from the Ocean Sciences Division of the US National Science Foundation.

FRONTIERS OF ECOSYSTEM SCIENCE WORKSHOP

Tuesday, 19 February 2013
19:30 to 21:30 - Room 346 - 347

Ecosystem science has a long history as a core program at the National Science Foundation (NSF), and although topics of research have fluctuated over the years as in any program, it retains a clear identity and continues to attract exciting proposals. As science is becoming more interdisciplinary, particularly the science of global environmental change, ecosystem scientists often find themselves in positions of intellectual and organizational leadership because of their experience working across disciplines. Now is an appropriate time to energize and bring together the discipline in pursuit of a research agenda for the future. The NSF funded a series of workshops (PeterGroffman and Kathleen Weathers, Cary Institute of Ecosystem Studies, are PIs) to accomplish this. The workshops and discussion groups will be held at multiple scientific-society meetings over the next two years, culminating in a Frontiers of Ecosystem Science Symposium. Relevant target societies in addition to ASLO include AGU, ASM, ERF, ESA, SFS (formerly NABS), ISME, IALE, AAG and SSSA. For this workshop, our organizing committee (Groffman, Weathers, Emily Bernhardt – Duke, Trina McMahon - University of Wisconsin, Joshua Schimel - UC Santa Barbara) will make an overview presentation to serve as a jumping off point for the session, which will focus on exciting developments in ecosystem ecology and its interfaces with otherdisciplines. Results from the discussion will serve as input for our final symposium that will involve approximately 50 participants and will produce a "white paper" that would serve as an evaluation and direction for the science that could be used at NSF and elsewhere.

This workshop will focus on exciting developments in ecosystem ecology and its interfaces with other disciplines as part of a National Science Foundation funded, multi-scientific society effort to address frontiers in ecosystem science and produce a "white paper" that will serve as an evaluation and direction for the discipline. Organized by Nancy B. Grimm, Ph.D., Professor, School of Life Sciences, Senior Sustainability Scientist, Global Institute of Sustainability, Arizona State University, Tempe, AZ USA 85287

SCIENCE JOURNALISM: OUT OF GULF COAST WATERS AND ONTO THE NEWS WIRES

Wednesday, 20 February 2013
12:00 to 13:30 (Lunch Time) - Room 344

Organizer: Cheryl Lyn Dybas, National Science Foundation, cdybas@nsf.gov

Oil in New Gulf Slick Matches that of 2010 Spill. Through Gulf Waters: Pointing Sea Turtles Back to Sea. After Spill, Gulf Oil Drilling Rebounds. These headlines introduced recent marine science news stories. Did these articles attract readers? If so, what's the secret to their success? Nancy Rabalais, Executive Director of the Louisiana Universities Marine Consortium (LUMCON), will offer opening thoughts on communicating about the ocean sciences. Participants in this workshop will learn how to present science in an interesting way while retaining factual accuracy — the key to good science communication and science journalism.

Science journalism aims to transmute scientific concepts and results from jargon-based language often understandable only by scientists, to news relevant to the lives of general readers (listeners/viewers).

The workshop explores science writing for a non-scientific audience. Participants will review examples of good science writing from newspapers like the New York Times and Washington Post, and news magazines like Science News and New Scientist; "dissect" the structure of science news and feature articles; discuss how popular coverage of science has changed in recent years; and learn the basics of science journalism. Participants will have the opportunity to write a general audience science article about research presented at the conference, and individual feedback will be offered to those interested.

INFORMAL OCEAN SCIENCE EDUCATION: AN INTRODUCTION

Wednesday, 20 February 2013
12:00-13:30 - Room 346-347

Workshop Leader: Jerry R. Schubel, PhD; President of the Aquarium of the Pacific

- This workshop will explore the following:
- The nature of informal science education, how it differs fundamentally from formal science education and occupies a separate and distinct domain of the educational landscape.
- Why academic and governmental scientists might want to expand their programs to include informal science education and how the driving forces behind the motivation could, and perhaps should, dictate how the modes by which they pursue informal science education.
- The value of partnerships with informal science institutions and the power of energizing networks.

Lunch provided by COSEE OCEAN to the first 25 attendees.

TOWN HALL: INFORMAL OCEAN SCIENCE EDUCATION: TRENDS AND OPPORTUNITIES

Wednesday, 20 February 2013
18:00 to 19:30 - Room 343

Town Hall Leaders: Jerry R. Schubel, PhD; President of the Aquarium of the Pacific and John Fraser, PhD, President and CEO for the New Knowledge Organization

Learning happens everywhere, not only in classrooms. As climate changes, sea level rises, and coastal areas get developed, all people need to increase

their awareness and understanding of the ocean to make appropriate decisions in their everyday lives. This Town Hall will present a review of the recent trends in informal ocean science education and offer a discussion of opportunities for future investigation, implementation, and scaling up of effective practices in informal science education regarding the ocean. A blue ribbon panel has written a forthcoming report that will form the basis of this discussion.

TOWN HALL - MARINE MICROBIAL EUKARYOTE TRANSCRIPTOME PROJECT

Wednesday, 20 February 2013
18:00 to 19:30 - Room 345

This is a town hall meeting focusing on microeukaryote sequencing and bioinformatics and will feature presentations and discussions focusing on bioinformatics methods to analyze microbial eukaryote transcriptomes. Highlights include presentations from the National Center for Genome Resources about their sequencing methods and their informatics analysis of data generated by the Marine Microbial Eukaryote Transcriptome Sequencing Project. This is a collaborative project supported by the Gordon and Betty Moore Foundation to sequence the transcriptomes of approximately 750 samples from hundreds of diverse organisms. The town hall will also feature short presentations from students and researchers who are developing bioinformatics methods for transcriptome analysis. In addition, the J. Craig Venter Institute will present their PhyloMetarep tool, a comparative transcriptomics analysis and visualization environment. Organizers: Jon Kaye, Gordon and Betty Moore Foundation; Bethany Jenkins, University of Rhode Island; P. Dreux Chappell, University of Rhode Island; and Sonya Dyhrman, Columbia University.

SENSENET SHOWCASE

Wednesday, 20 February 2013
18:00 to 20:00 - Room 342

Young researchers from the SENSEnet project which has focused on in situ sensors for the marine environment will give short sharp presentations on their latest work. There will be an opportunity to discuss their work further over drinks and nibbles.

BE INCLUSIVE I: SHARE YOUR RESEARCH EFFECTIVELY

Wednesday, 20 February 2013
18:00 to 21:00 - Room 344

As individuals, we can strive to communicate in inclusive ways. As members of academic systems, we can foster practices that support diversity. This workshop will help you effectively share your research and pathway to science. The Institute for Broadening Participation's "Be Inclusive II" workshop offers strategies to connect with diverse audiences while addressing barriers to participation. Attending both is recommended but not required. Food will be provided to the first 50 participants.

BE INCLUSIVE II: ADDRESS BARRIERS TO PARTICIPATION

Thursday, 21 February 2013
12:00 to 13:30 (Lunch Time) - Room 344

As individuals and members of academic systems, we can strive to communicate in inclusive ways and to foster practices that support diversity. This workshop will offer ways to connect with diverse audiences while addressing barriers to participation. The Center for Ocean Sciences Education Excellence's "Be Inclusive I" workshop will help you effectively share your research and pathway to science. Attending both is recommended but not required. Food will be provided to the first 50 participants.

TEACHING LARGE CLASSES

Thursday, 21 February 2013
12:00 to 13:30 (Lunch Time) - Room 346-347

This workshop will be led by Bob Chen, University of Massachusetts, Boston. Introductory environmental, ocean, and aquatic science courses provide an excellent opportunity to prepare majors and non-majors for thinking about some of the largest issues facing society such as climate change and energy needs. Large courses can also serve to attract students into the field. This workshop will provide some strategies to overcome some of the challenges of teaching large courses while making your teaching engaging, relevant, and effective.Lunch provided by COSEE OCEAN to the first 25 attendees.

SENSENET PROJECT MEETING

Thursday, 21 February 2013
19:30 to 21:30 - Room 342

SENSEnet final project meeting

FIELD TRIPS

FLOATING PEAT MARSHES OF JEAN LAFITTE NATIONAL PARK

Sunday, 17 February 2013
08:00 to 17:00 - Off-site

The Barataria Preserve of Jean Lafitte National Historical Park and Preserve is a 20,000 acre expanse of subtropical peat marsh and swamp forest, located just 15 miles south of New Orleans. The Preserve is situated in the upper, low-salinity reaches of an interdistributary basin of the Mississippi River Delta. The floating peat marshes have an atypical hydrology with subsurface water exchange and limited inundation. The substrate consists of root-derived organic matter, and is fully buoyant, moving vertically in response to water level fluctuations. Scrub-shrub thickets colonize and persist on some of these floating marsh habitats. Cypress swamp borders the emergent marshes along the low flanks of relict distributary ridges of the Mississippi River. Bottomland hardwoods dominate the infrequently flooded ridge-tops and spoil banks. Signs of declining forest health and encroachment to marsh due to regional subsidence and relative sea level rise are visible. The tour will include a boat ride through Preserve waterways, an optional short walk on a floating marsh and wax-myrtle thicket with extensive Sphagnum spp. ground cover, and a walk on a boardwalk trail chronicling the transition from marsh to bottomland hardwood forest in space. We may see alligators, nutria and possibly poisonous snakes, so come with cameras! We will see plenty of mosquitoes. Note: Bring calf boots, rain gear, mosquito repellant. Tour includes lunch.

Participants should meet just prior to 08:00 outside the Convention Center in front of Hall E. Busses will pick up and drop off from the bus lane on Convention Center Boulevard in front of Hall E.

TURTLE COVE ENVIRONMENTAL RESEARCH STATION, LAKE MAUREPAS

Sunday, 17 February 2013
08:00 to 17:00 - Off-site

Attendees will be taken by bus from the Convention Center to the Turtle Cove (https://www.selu.edu/acad_research/programs/turtle_cove/directions/index.html) Classroom on Galva Canal (approximate 45-minute drive) for an introductory presentation on environmental issues in the Lake Pontchartrain Basin. Attendees will be ferried to Turtle Cove Environmental Research Station for a tour of the facilities and a self-guided boardwalk tour into the Manchac marsh. The next bus stop will be at Middendorf's Restaurant located on Pass Manchac. (Lunch cost is not included; attendees will be responsible for purchasing their own lunch). After lunch attendees will be taken on a tour of an ongoing wetland restoration project in the Joyce Wildlife Management Area north of Pass Manchac. The field trip will conclude with a tour of Big Branch Marsh National Wildlife Refuge .

Participants should meet just prior to 08:00 outside the Convention Center in front of Hall E. Busses will pick up and drop off from the bus lane on Convention Center Boulevard in front of Hall E.

ASLO MEMBERSHIP

Membership in ASLO is strongly encouraged. We welcome the non-ASLO members in attendance, and we hope you will join the society while you are at the conference. If you are an ASLO member already, you may renew your membership at the registration desk.

REGISTRATION INFORMATION

The full registration fee includes admission to all sessions, exhibits, town hall meetings and workshops (unless otherwise specified), Sunday opening reception, poster session receptions, coffee breaks, and the program book (if you requested a copy prior to the meeting). Optional events such as the field trips and the Wednesday evening reception at the Aquarium of the Americas are not included.

GUEST/SPOUSE FEE: $75.00 USD ON SITE AT THE MEETING

The spouse and guest fees cover only the conference social events such as the Sunday welcome reception, coffee services, and the poster receptions. Optional events such as the field trips and the Wednesday evening reception at the Aquarium of the Americas are not included.

ADDITIONAL PARTICIPANT AND ATTENDEE INFORMATION

RECEIPTS AND LETTERS OF PARTICIPATION

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/neworleans2013/userlogon.asp.

Your username is your email address, and your password is your registration ID number which is printed on your conference name badge.

Likewise, letters of participation only will be provided to those who are registered for the meeting. If you need a letter of participation, please go to https://www.sgmeet.com/aslo/neworleans2013/userlogon.asp

CHILD CARE INFORMATION

While you are attending the 2013 ASLO Aquatic Sciences Meeting, your children can enjoy their own camp organized by ACCENT on Children's Arrangements, Inc., a national company specializing in children's activities. Daycare service will be available during the meeting in Room 337 at the convention center from 07:30 to 18:30 (7:30 am to 6:30 pm), Monday, 18 February, through Friday, 22 February. This is a complete morning to early evening entertainment program packed with activities for children ages six months to 12 years. Children will participate in age-appropriate activities, including arts and crafts projects and active games in a safe, nurturing, and educational environment. The high ratio of caregiver to child (1:2 for children six to 12 months; 1:3 for children 13 months to two years; 1:5 for children three to five years; and 1:8 for children six to 12 years) ensures that campers receive lots of personal attention.

Program costs include morning and afternoon snacks and juice, entertainment, and craft materials. Lunch is not included. However, a lunch can be purchased when registering, or parents can send or bring a lunch to their child.

Arrangements for child care need to be made on an individual basis through ACCENT on Arrangements, Inc. by completing the registration form online at http://www.accentregister.com/events/ch_events.asp?eId=6365

The deadline for advance child care registration is 8 February 2013. After this date, rates are subject to increase, so please register early. ASLO assumes no responsibility or liability for services rendered.

BUSINESS SERVICES

Located in Lobby F of the Ernest N. Morial Convention Center, **The UPS Store** is both a self-service and full-service operation, depending on the customer's needs. A wide range of office supplies and services including shipping, high volume copying, and faxing are available.

For more information regarding their services, please contact:

The UPS Store
Phone: (504)670-8941
Fax: (504)670-8887
Email: store6216@theupsstore.com

FedEx Office Center is located just across the street from the convention center. For more information about the services they provide, please contact them directly:

FedEx Office Print & Ship Center
901 Convention Center Blvd, Suite 100
New Orleans, LA 70130
Phone: (504) 585-5750
Fax: (504) 585-5742
E-mail: usa2153@fedex.com

INSTRUCTIONS FOR POSTER PRESENTERS

Posters will be placed on large poster boards. There will be two posters per side so posters must be no larger than 45.0 inches high by 45.5 inches wide. Because two posters will be mounted side by side, it is very important that your poster not exceed these dimensions. Posters will adhere to the boards using push pins that will be provided.

Poster presenters are asked to adhere to the designated set-up and teardown instructions and times.

All posters will be assigned a number, and these numbers are available online and will be included in the conference program. Poster presenters have been notified of their poster session's time and day. If you will be giving a poster presentation, you will be expected to be available to present your poster during your designated poster session.

Posters numbered 1 through 245 will be presented on Tuesday. Posters numbered 246 through 479 will be presented on Thursday.

POSTER SET UP

Poster presenters must be available to put up their posters on Monday, 18 February, 2013, from 12:00 to 17:00 in Exhibit Hall E.

POSTER TEARDOWN

Posters may be taken down on Thursday, 21 February, 2013, from 19:30 to 20:30, immediately following the conclusion of the poster session that evening. If you are not able to dismantle your poster at this time, you may do so on Friday morning from 8:00 to 10:00. Please be aware that if you are not able to remove your poster by 10:00 on Friday, the convention decorator will discard any posters that remain on the boards.

INSTRUCTIONS FOR ORAL PRESENTERS

Talks will be scheduled in 15-minute time slots. We strongly encourage a presentation of no more than 12 minutes to allow three minutes for discussion and to entertain questions from those in the audience. The time limit will be strictly enforced to facilitate movement between sessions.

No recording is allowed in any of the session rooms during the meeting.

PREPARING YOUR ELECTRONIC PRESENTATION

The audio visual company for the 2013 ASLO Aquatic Sciences Meeting is PSAV Audio Visual. Please contact PSAV if you have questions about preparing your presentation for the meeting and/or submitting your presentation electronically prior to the meeting:

Email: CMSsupport@psav.com

Phone: 214-210-8006

ADVANCE SUBMISSION

Speakers will receive an email with login credentials and instructions to submit online. Please make sure to upload all media files required for your presentation. Any necessary video or audio files not included in your online upload folder along with your PowerPoint, will cause your presentation to fail in the meeting room. Please see the list of preferred media formats in the "Additional Information" section below. Speakers who submit in advance will have a faster check in at the Presentation Room.

Although online submission may not be required, it is strongly encouraged.

The following presentation file types are acceptable for ONLINE submission:

- Microsoft Office PowerPoint (.ppt), (.pptx)
- Adobe Acrobat (.pdf)

MICROSOFT POWERPOINT TIPS

PowerPoint embeds image files directly into the file when you save them, while video files are not embedded. Only a link is made to the video file. Copy the video clips you want to insert into the same folder as the PowerPoint file. This will eliminate the problem of PowerPoint losing the link to the file. Be certain to bring the video files and the PowerPoint files to the meeting.

Please try to keep the video files size to less than 20MB if possible. Use short video segments when needed

List of Preferred Media (Video/Audio) Formats: (.wmv) (.mpg) (.avi) (.swf) (.wav) (.mov)

Compatible Codecs:

- Microsoft - RLE, Video1, Windows Media Series 8 and 9
- Divx 3/4/5
- Intel Indeo Video <= v.5.11
- TechSmith Screen Capture Codec
- Huffyuv Lossless Codec
- Asus Video Codec, On2VP3, ATI VCR and YV12 Codecs
- Cinepak, MJPEG

Fonts: Arial and Helvetica are recommended for clarity and compatibility. Confirm a font size of AT LEAST 24 points for body text and 36 – 40 points for headings. Light colored text on a dark background is advised. Avoid using red or green. Confirm that the maximum number of lines in text slides is no more than 6 or 7.

Images: The size of the screen will be 1024 x 768 pixels, meaning that any image with more pixels in the X or Y coordinate that is more than that will not be displayed. The image will be altered by PowerPoint to fit. Large images (i.e. 2000 x 1500 pixels) which are created with digital cameras and scanners will make the resulting PowerPoint file very large. This may cause the presentation to load slowly. This can be avoided by inserting images with the following properties:

- Format = JPEG (.jpg)
- Recommended Size = 800x600 pixels
- Compression Setting = 8 (High quality)

Use the "Insert" feature of PowerPoint to add images to your presentations. Do not copy/paste them into the slide or click and drag.

APPLE MACINTOSH USERS

Apple Macintosh users can also upload PowerPoint presentations to the website. Speakers creating presentations using Apple Keynote (.key) will need to bring their files directly to the Presentation Room to have them loaded to the network. PSAV will have a Macintosh computer in each breakout room.

BRING A BACKUP

Be sure to bring a backup copy of your presentation with you to the meeting. If you plan to upload files on-site, bring two copies. USB/Flash drives are preferred.

DURING YOUR PRESENTATION

Each meeting room will be staffed with a PSAV technician who will assist with starting each presentation. Once the presentation is launched, the speaker will control the program from the podium using a computer mouse or the up/down/right/left keys on a keyboard.

COMPUTER EQUIPMENT

The Presentation Room and all meeting rooms will be equipped with both a Windows 7 based PCs with Microsoft PowerPoint 2007 and an Apple Macintosh with Keynote '09. Verification of proper performance in the Presentation Room is essential, particularly if video and animation is included in the presentation. Please note that Internet access will not be available during your presentation.

LAPTOPS

Personal laptops cannot be used in the meeting rooms. You must upload your files in the Presentation Room at all times regardless of arrival time. PSAV support staff will be available to transfer from your laptop if needed. Please make sure you bring laptop video port adapters and power cables with you. Always bring a backup of the presentation on flash drive/memory stick or disc to the Presentation Room.

RENTAL OF ADDITIONAL AUDIO-VISUAL EQUIPMENT

Rental of a VCR, monitor, slide projector, audio systems, provision of extra power outlets, extra tables, stands, etc. can be handled for an additional cost. Costs for additional equipment will be billed to the presenting author. Please contact the conference management office for other presentation requests.

PRESENTATION ROOM

Room 339

Sunday..... 13:00 to 21:00
Monday..... 07:00 to 19:00
Tuesday..... 07:00 to 19:00
Wednesday..... 07:00 to 19:00
Thursday..... 07:00 to 19:00
Friday..... 07:00 to 15:30

All speakers must check in at the Presentation Room preferably the day before your session to preview your presentation. If you are checking in on the day of your session, please come by at least 4 hours prior to the start of your session. PSAV technicians will assist with the upload of your files and provide the opportunity to preview and/or edit the presentation as necessary. If you are unavoidably delayed, you must still go directly to the Presentation Room.

Do not bring a laptop or other media device to the session room.

When reviewing your presentation in the Presentation Room, make sure all fonts, images, and animations appear as expected and that all audio or video clips are working properly. The computers in the meeting rooms are the same as the computers in the Presentation Room, therefore:

IF THE PRESENTATION DOES NOT PLAY PROPERLY IN THE PRESENTATION ROOM, IT WILL NOT PLAY PROPERLY IN THE MEETING ROOM.

SECURITY

Speakers are required to provide identification in order to submit their presentation as well as to access it in the Presentation Room. Recording devices such as cameras are not permitted in the Presentation Room. All presentation files are deleted at the end of the conference, unless permission has been granted to the conference association to retain the presentation files.

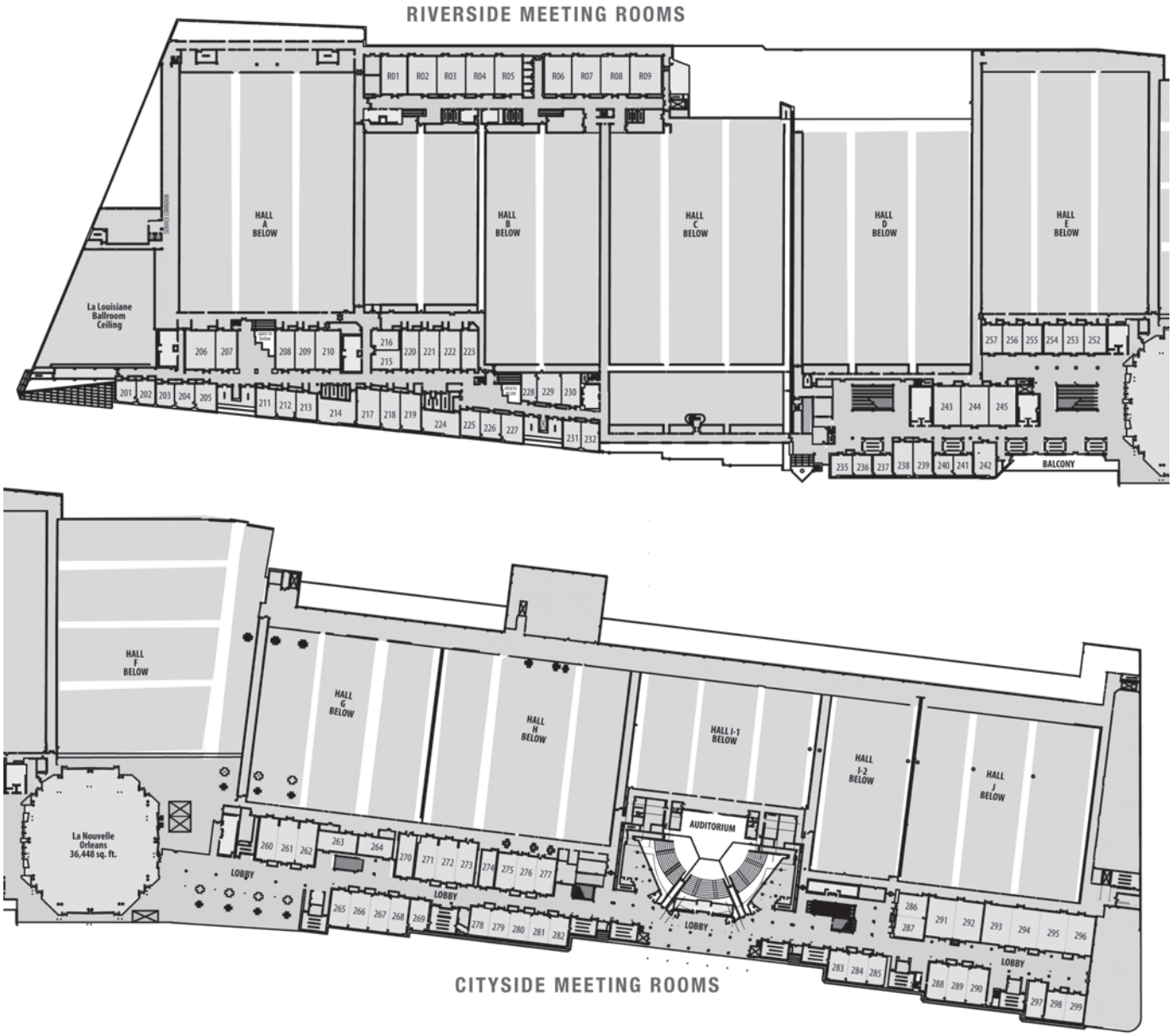
SPEAKER READY ROOM

A practice room will be open for ASLO 2013 presenters in Room 340 during the following times:

Sunday, 17 February 2013.....13:00 to 21:00
Monday, 18 February 2013 through
Thursday, 21 February 2013.....07:00 to 19:00
Friday, 22 February 2013.....07:00 to 15:30

ERNEST N. MORIAL CONVENTION CENTER - FIRST FLOOR

ERNEST N. MORIAL CONVENTION CENTER - SECOND FLOOR



ERNEST N. MORIAL CONVENTION CENTER - THIRD FLOOR

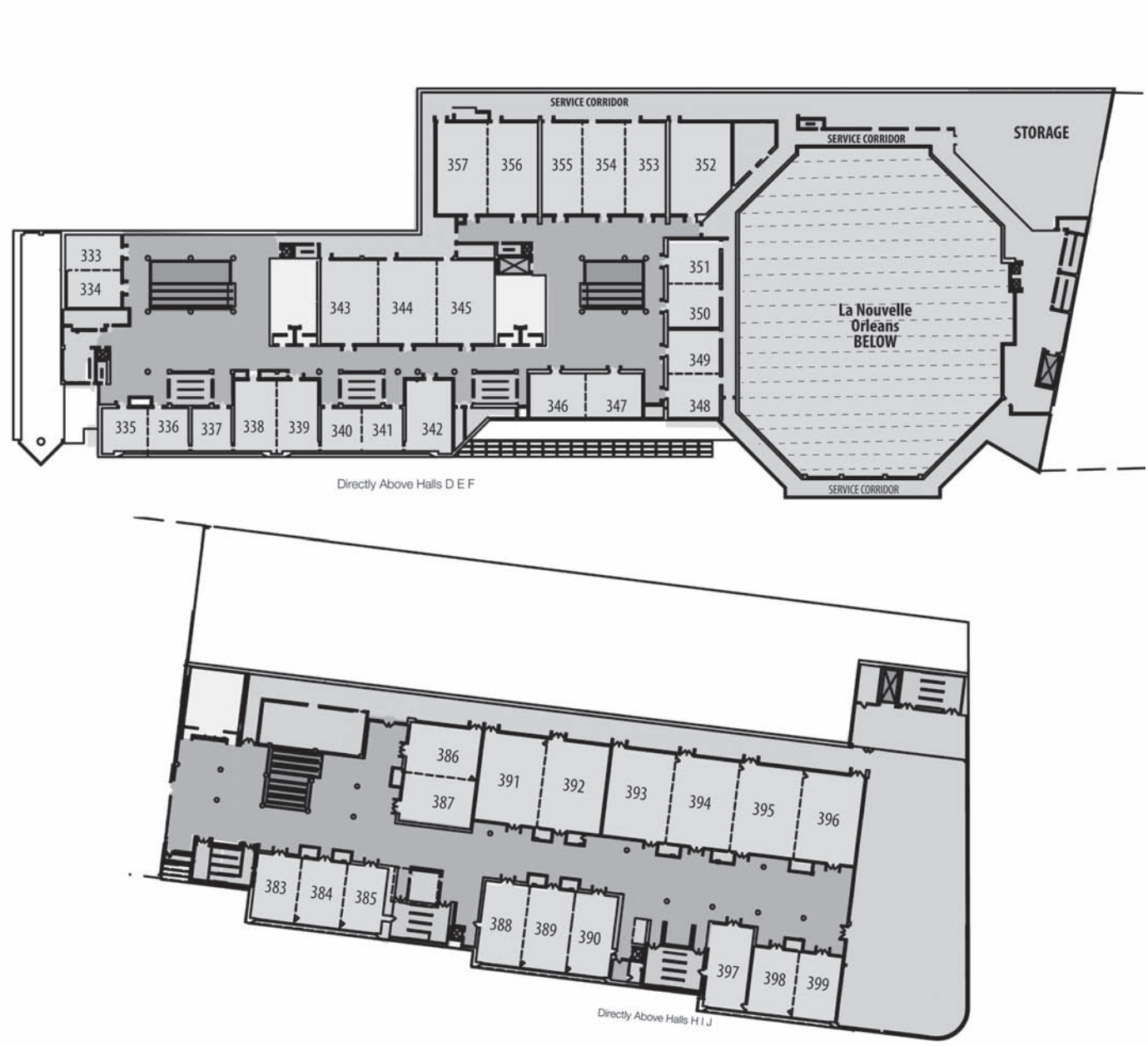
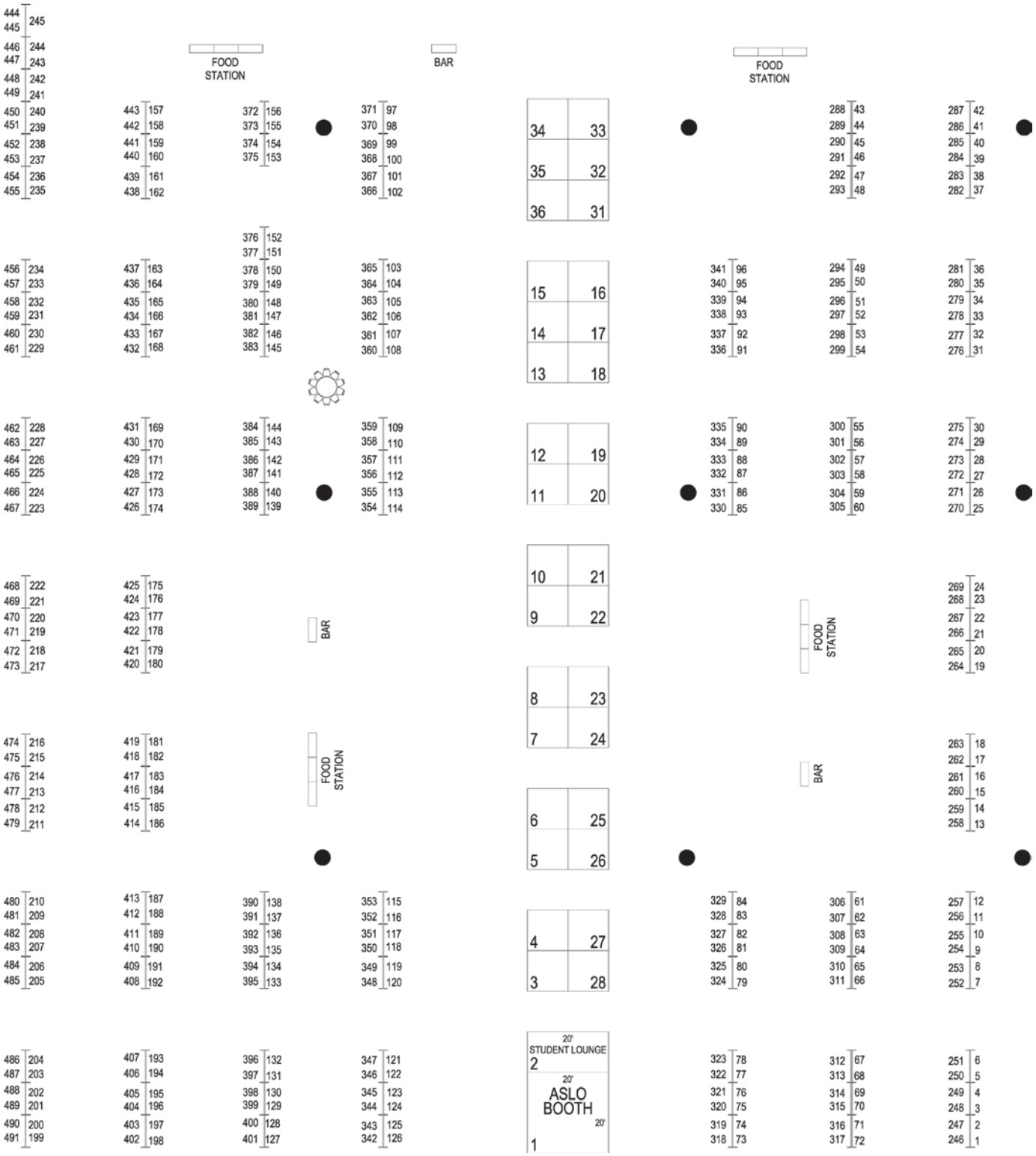


EXHIBIT HALL E - POSTER AND EXHIBITOR NUMBERS



MAP OF CONFERENCE HOTELS

FRENCH QUARTER & DOWNTOWN PARKING MAP

ASLO 2013 AQUATIC SCIENCES MEETING SCHEDULE

Events are at the Ernest N. Morial Convention Center unless noted otherwise.

SATURDAY, 16 FEBRUARY 2013

08:00 – 17:00 ASLO Board Meeting – *Hilton Hotel*

08:00 – 17:30 SCOR Working Group – *Room 340*

SUNDAY, 17 FEBRUARY 2013

08:00 – 17:00 ASLO Board Meeting – *Hilton Hotel*

08:00 – 17:00 Field Trip: Floating Peat Marshes of Jean Lafitte National Park – *Off-site*

08:00 – 17:00 Field Trip: Turtle Cove Environmental Research Station, Lake Maurepas – *Off-site*

08:30 – 15:30 C-MORE Career Networking Workshop – *Room 342*

09:00 – 16:00 SCINTILLATION: A Workshop to Make Your Science Communication Scintillate through Critical Storytelling – *Room 345*

08:30 – 16:00 GEARS: A Workshop for Broadening the Impacts of Your Research – *Room 343*

13:00 – 20:00 Registration – *Exhibit Hall E Prefunction Area*

13:00 – 21:00 Presentation Room Open – *Room 339*

13:00 – 21:00 Speaker Ready Room Open – *Room 340*

13:00 – 17:30 Preparing Workforce & Transfer Students in 2-Year Colleges for Geoscience Careers – *Room 344*

15:00 – 16:00 Student Volunteer Training – *Meet at Registration Desk*

15:00 – 17:00 ASLO Multicultural Program Training Session – *Room 335-336*

16:00 – 18:00 Opening Session and Award Presentation – *La Nouvelle Orleans Ballroom C*

Welcome and Opening Remarks by John Downing, ASLO President

Presentation: Richard Campanella

Redfield Award Acceptance Presentation: Bruce Peterson

18:00 – 20:00 Mixer Reception and Mardi Gras Indian Show – *La Nouvelle Orleans Ballroom B*

MONDAY, 18 FEBRUARY 2013

07:00 – 18:00 Registration – *Exhibit Hall E Prefunction Area*

07:00 – 19:00 Speaker Ready Room Open – *Room 340*

07:00 – 19:00 Presentation Room Open – *Room 339*

07:30 – 18:30 Child Care Room Open – *Room 337*

08:00 – 09:30 Plenary Session and Award Presentations – *La Nouvelle Orleans Ballroom C*

Plenary Presentation: Karen Kidd

Ruth Patrick Award Acceptance Presentation: Asit Mazumder

Yentsch-Schindler Early Career Award Acceptance Presentation: Emily Bernhardt

09:30 – 10:00 Coffee Break – *Exhibit Hall E*

09:30 – 17:30 Exhibits Open – *Exhibit Hall E*

09:30 – 17:30 Art Exhibit – *Room E1*

10:00 – 12:00 Concurrent Sessions – *Various Rooms*

12:00 – 17:00 Poster Set-up – *Exhibit Hall E*

12:00 – 13:30 Lunch (on your own)

12:00 – 13:30 Lunchtime Plenary Session – *La Nouvelle Orleans Ballroom C*
Presentation: Don Davis and Carl Brasseaux

12:00 – 13:30 How to Interview and Negotiate for an Academic Position – *Room 346-347*

12:00 – 13:30 S-Factor 3 (Film Analysis Workshop) - Part I – *Room 345*

13:30 – 15:30 Concurrent Sessions – *Various Rooms*

15:30 – 16:00 Coffee Break – *Exhibit Hall E*

16:00 – 17:30 Concurrent Sessions – *Various Rooms*

17:45 – 19:00 ASLO Business and Membership Meeting – *La Nouvelle Orleans Ballroom C*

Hutchinson Award Acceptance Presentation: Curtis Suttle

Open to all attendees; you do not have to be an ASLO member to attend.

19:00 – 21:00 Early Career Mixer – *Exhibit Hall E Prefunction Area*

19:00 – 21:00 Student Mixer – *La Nouvelle Orleans Ballroom B*

TUESDAY, 19 FEBRUARY 2013

07:00 – 18:00 Registration – *Exhibit Hall E Prefunction Area*

07:00 – 19:00 Speaker Ready Room Open – *Room 340*

07:00 – 19:00 Presentation Room Open – *Room 339*

07:30 – 18:30 Child Care Room Open – *Room 337*

08:00 – 09:30 Plenary Session and Award Presentations – *La Nouvelle Orleans Ballroom C*

Plenary Presentation: Andrew Weaver and Nancy Baron

Citation for Scientific Excellence Acceptance Presentation: Presented Posthumously to Scott Nixon

09:30 – 19:30 Exhibits Open – *Exhibit Hall E*

09:30 – 19:30 Art Exhibit – *Room E1*

09:30 – 10:00 Coffee Break – *Exhibit Hall E*

10:00 – 12:00 Concurrent Sessions – *Various Rooms*

12:00 – 13:30 Lunch (on your own)

12:00 – 13:30 ASLO Student Scientific Speed-Dating Workshop – *La Nouvelle Orleans Ballroom B*

12:00 – 13:30 NSF Ocean Science Town Hall Meeting – *Room 343*

12:00 – 13:30 L&O e-Lectures Town Hall: An Effective Approach for Addressing Broader Impacts – *Room 344*

12:00 – 13:30 SNAP IT UP: Advice from Hollywood for Short Presentations – *Room 345*

12:00 – 13:30 Getting People to Hang On (Almost) Every Word: Telling stories about your science – *Room 346-347*

13:30 – 14:00 ASM Tick – Talk Session SS83: Climate Change Science and Communication – *La Nouvelle Orleans Ballroom C*

14:00 – 15:30 Concurrent Sessions – *Various Rooms*

15:30 – 16:00 Coffee Break – *Exhibit Hall E*

16:00 – 18:00 Concurrent Sessions – *Various Rooms*

18:00 – 19:30 Poster Session and Reception – *Exhibit Hall E*

19:30 – 21:00 S-Factor 3 (Film Analysis Workshop) - Part II – *Room 345*

19:30 – 21:30 Frontiers of Ecosystem Science Workshop – *Room 346-347*

WEDNESDAY, 20 FEBRUARY 2013

07:00 – 18:00 Registration – *Exhibit Hall E Prefunction Area*

07:00 – 19:00 Speaker Ready Room Open – *Room 340*

07:00 – 19:00 Presentation Room Open – *Room 339*

07:30 – 18:30 Child Care Room Open – *Room 337*

08:00 – 09:30 Plenary Session and Award Presentations – *La Nouvelle Orleans Ballroom C*

Plenary Presentation: Susan Singer

Lindeman Award Acceptance Presentation: Jillian Petersen accepting via video taped presentation

Martin Award Acceptance Presentation: Val Smith

09:30 – 18:00 Exhibits Open – *Exhibit Hall E*

09:30 – 18:00 Art Exhibit – *Room E1*

09:30 – 10:00 Coffee Break – *Exhibit Hall E*

10:00 – 12:00 Concurrent Sessions – *Various Rooms*

12:00 – 13:30 Lunch (on your own)

12:00 – 13:30 Lunchtime Plenary Session – *La Nouvelle Orleans Ballroom C*
Presentation: Shirley Laska, "Catastrophe in the Making: The Engineering of Katrina"

12:00 – 13:30 Early Career Workshop – *La Nouvelle Orleans Ballroom B*

12:00 – 13:30 Science Journalism Workshop – Out of Gulf Coast Waters and Onto the News Wires – *Room 344*

12:00 – 13:30 Informal Ocean Science Education: An Introduction – *Room 346-347*

13:30 – 15:30 Concurrent Sessions – *Various Rooms*

15:30 – 16:00 Coffee Break – *Exhibit Hall E*

16:00 – 18:00 Concurrent Sessions – *Various Rooms*

18:00 – 19:30 Town Hall: Informal Ocean Science Education: Trends and Opportunities – *Room 343*

18:00 – 19:30 Town Hall: Marine Microbial Eukaryote Transcriptome Project – *Room 345*

18:00 – 20:00 SENSEnet Showcase – *Room 342*

18:00 – 21:00 Be Inclusive I: Share Your Research Effectively – *Room 344*

18:00 – 21:00 Reception at Audubon Aquarium of the Americas (Optional Ticketed Event) – *Off-site*

THURSDAY, 21 FEBRUARY 2013

07:00 – 18:00 Registration – *Exhibit Hall E Prefunction Area*

07:00 – 19:00 Speaker Ready Room Open – *Room 340*

07:00 – 19:00 Presentation Room Open – *Room 339*

07:30 – 18:30 Child Care Room Open – *Room 337*

08:00 – 09:30 Plenary Session and Award Presentations – *La Nouvelle Orleans Ballroom C*

Plenary Presentation: James Syvitski

Margalef Award Acceptance Presentation: Warwick Vincent

ASLO 2013 Volunteer Recognition

09:30 – 19:30 Exhibits Open – *Exhibit Hall E*

09:30 – 19:30 Art Exhibit – *Room E1*

09:30 – 10:00 Coffee Break – *Exhibit Hall E*

10:00 – 12:00 Concurrent Sessions – *Various Rooms*

12:00 – 13:30 Lunch (on your own)

12:00 – 13:30 ASLO Student Workshops – *Rooms 343 and 345*

12:00 – 13:30 Be Inclusive II: Address Barriers to Participation – *Room 344*

12:00 – 13:30 Teaching Large Classes – *Room 346-347*

13:30 – 14:00 ASM Tick – Talk Session SS84: Geo-Engineering of Aquatic Systems – *La Nouvelle Orleans Ballroom C*

14:00 – 15:30 Concurrent Sessions – *Various Rooms*

15:30 – 16:00 Coffee Break – *Exhibit Hall E*

16:00 – 18:00 Concurrent Sessions – *Various Rooms*

16:00 – 19:00 Teacher EXPO – *Room E2 and Exhibit Hall*

17:00 – 19:00 Teaching Resource Roundtables – *Room E2*

18:00 – 19:30 Poster Session and Reception – *Exhibit Hall E*

19:30 – 20:30 Poster Teardown – *Exhibit Hall E*

19:30 – 21:30 SENSEnet Project Meeting – *Room 342*

FRIDAY, 22 FEBRUARY 2013

07:00 – 16:00 Registration – *Exhibit Hall E Prefunction Area*

07:00 – 15:30 Speaker Ready Room Open – *Room 340*

07:00 – 15:30 Presentation Room Open – *Room 339*

07:30 – 18:30 Child Care Room Open – *Room 337*

08:00 – 10:00 Poster Teardown – *Exhibit Hall E*

08:00 – 09:30 Plenary Session – *La Nouvelle Orleans Ballroom C*

Plenary Presentation: Klement Tockner

Plenary Presentation: Mark Davis

09:30 – 10:00 Coffee Break – *La Nouvelle Orleans Ballroom C Foyer Area*

10:00 – 12:00 Concurrent Sessions – *Various Rooms*

12:00 – 13:30 Lunch (on your own)

13:30 – 15:30 Concurrent Sessions – *Various Rooms*

15:30 – 16:00 Coffee Break – *La Nouvelle Orleans Ballroom C Foyer Area*

16:00 – 17:30 Concurrent Session – *Room 348-349*

SATURDAY, 23 FEBRUARY 2013

08:00 – 17:00 Emerging Issues Workshop: Linking Optical and Chemical Properties of Dissolved Organic Matter in Natural Waters – *Hilton Hotel*

SUNDAY, 24 FEBRUARY 2013

08:00 – 17:00 Emerging Issues Workshop (continued) – *Hilton Hotel*

MONDAY AT A GLANCE

Room	Room 333-334	Room 343	Room 344	Room 345	Room 346-347	Room 352
08:00-09:30	Karen Kidd, University of New Brunswick, "Is the Birth Control Pill an Effective Form of Contraception for Wild Fish?" Ruth Patrick Award Acceptance Presentation - Asit Mazumder Yentsch - Schindler Early Career Award Acceptance Presentation - Emily Bernhardt					
09:30-10:00	Morning Break					
10:00-12:00	GS07: Multiple Stressor Problems in Aquatic Systems	SS36:Presence and impacts of emerging contaminants in aquatic systems	SS26:Coccolithophores: biogeochemical impacts and response to a changing ocean	SS45:Employing Riverine Organic Matter as an Integrated Signal of Catchment Processes, Climate and Land-Use Change	SS14: Natural and anthropogenic driven responses of microbial communities in the ocean	SS21: Optical signatures of the global carbon cycle: Characterization of the sources, sinks and chemistry of CDOM and FDOM
12:00-13:30	Lunch and Workshops including: Special Lunchtime Plenary Presentation by Don Davis and Carl Brasseaux: "People and Solutions: Cultural Hind-Casts Must Precede Restoration Forecasts" (La Nouvelle Orleans Ballroom C)					
13:30-15:30	GS07: Multiple Stressor Problems in Aquatic Systems	SS36:Presence and impacts of emerging contaminants in aquatic systems	SS49:Microbial mediated retention/ transformation of organic and inorganic materials in freshwater and marine ecosystems	SS45:Employing Riverine Organic Matter as an Integrated Signal of Catchment Processes, Climate and Land-Use Change	SS14: Natural and anthropogenic driven responses of microbial communities in the ocean	SS21: Optical signatures of the global carbon cycle: Characterization of the sources, sinks and chemistry of CDOM and FDOM
15:30-16:00	Afternoon Break					
16:00-17:30		SS36:Presence and impacts of emerging contaminants in aquatic system	SS49:Microbial mediated retention/ transformation of organic and inorganic materials in freshwater and marine ecosystems	SS45:Employing Riverine Organic Matter as an Integrated Signal of Catchment Processes, Climate and Land-Use Change	SS17: The USGS Delta Research and Global Observation Network (DRAGON)	GS08A: Plankton Ecology - Phytoplankton
17:30-19:00	ASLO Membership Meeting and Award Presentation Hutchinson Award Acceptance Presentation - Curtis Suttle					
19:00-21:00	ASLO Early Career Mixer (Prefunction Area/ Lobby E - Level 1)					

Room 353	Room 354	Room 355	Room 356	Room 357	Room 348-349	Room 350-351	Room
La Nouvelle Orleans Ballroom C							08:00-09:30
Morning Break							09:30-10:00
SS58: Ocean provinces, food web structure and particle flux	SS12: Cooperation - the key to success: Symbioses in aquatic systems	SS29: Opportunities and Challenges of Teaching Introductory Oceanography to Undergraduates	SS50: Zooplankton responses to environmental stressors	SS23: Dissolved organic matter dynamics: towards a molecular-level understanding	SS31: Biology and Biogeochemistry of Sea Ice Communities	SS74: Tackling Harmful Algal Blooms: Synergy between Research, Management & Education	10:00-12:00
Please see the program for a complete list of workshops, meetings, and lunchtime activities							12:00-13:30
SS58: Ocean provinces, food web structure and particle flux	SS12: Cooperation - the key to success: Symbioses in aquatic systems	SS29: Opportunities and Challenges of Teaching Introductory Oceanography to Undergraduates	SS50: Zooplankton responses to environmental stressors	SS23: Dissolved organic matter dynamics: towards a molecular-level understanding	SS22: Vanishing glaciers: Consequences for aquatic ecosystems	SS74: Tackling Harmful Algal Blooms: Synergy between Research, Management & Education	13:30-15:30
Afternoon Break							15:30-16:00
SS69: Coastal and Marine Ecological Classification Standard (CMECS)	SS06: New Insights into Microbial Ecology of Hypersaline Habitats		SS27: Surface and Subsurface Fluxes Across the Land-Ocean Interface of Large Rivers	SS23: Dissolved organic matter dynamics: towards a molecular-level understanding	SS22: Vanishing glaciers: Consequences for aquatic ecosystems	SS01: Ecosystem-based Marine Spatial Planning for Better Management of Our Oceans	16:00-17:30
La Nouvelle Orleans Ballroom C (The membership meeting and award presentation is open to all attendees; you do not have to be an ASLO member to attend.)							17:30-19:00
Student Mixer (La Nouvelle Orleans Ballroom B)							19:00-21:00

TUESDAY AT A GLANCE

Room	Room 333-334	Room 343	Room 344	Room 345	Room 346-347	Room 352
08:00-09:30	Plenary Presentation: Andrew Weaver and Nancy Baron "The Risks and Rewards of Communicating Your Science" Citation for Scientific Excellence Acceptance Presentation-Presented Posthumously to Scott Nixon					
09:30-10:00	Morning Break					
10:00-12:00		GS08 A:Plankton Ecology-Phytoplankton	SS50: Zooplankton responses to environmental stressors	SS54: Carbon Fluxes at the Land-Ocean Interface: Research and Education	SS75: Role and significance of chemosynthesis in the ocean	SS48: Geochemical consequences of advection in aquatic sediments
12:00-13:30	Lunch and Workshops including: L&O e-Lectures Town Hall: An Effective Approach for Addressing Broader Impacts (Room 344) Scientific Speed-Dating Student Workshop (La Nouvelle Orleans Ballroom B)					
13:30-14:00	ASM Tick Talk Session 83: Climate Change Science and Communication					
14:00-15:30		GS08 A:Plankton Ecology-Phytoplankton	SS50: Zooplankton responses to environmental stressors	SS54: Carbon Fluxes at the Land-Ocean Interface: Research and Education	SS27: Surface and Subsurface Fluxes Across the Land-Ocean Interface of Large Rivers	
15:30-16:00	Afternoon Break					
16:00-18:00		SS17: The USGS Delta Research and Global Observation Network (DRAGON)	SS50: Zooplankton responses to environmental stressors	SS54: Carbon Fluxes at the Land-Ocean Interface: Research and Education	SS01: Ecosystem-based Marine Spatial Planning for Better Management of Our Oceans	SS30: Biological and biogeochemical responses to human impacts at the sediment-water interface
18:00-19:30	Poster Session and Reception					
19:30-21:00	Town Halls and Evening Meetings					

Room 353	Room 354	Room 355	Room 356	Room 357	Room 348-349	Room 350-351	Room
La Nouvelle Orleans Ballroom C							08:00-09:30
Morning Break							09:30-10:00
SS58: Ocean provinces, food web structure and particle flux	SS49: Microbial mediated retention/ transformation of organic and inorganic materials in freshwater and marine ecosystems	SS02: Catapults, Ferries, and Bridges: Getting Aquatic Science Results to Policy and Management	SS81: Getting a grip on microbial change: the freshwater Earth Microbiome Project	SS35: Climate extremes – Is the future of ecosystems predictable and manageable?	SS08: Biogeochemistry of metal-binding organic ligands in the ocean	SS18: Oxygen Minimum Zones and Climate Change: Impacts on Higher Trophic Levels	10:00-12:00
Please see the program for a complete list of workshops, meetings, and lunchtime activities							12:00-13:30
La Nouvelle Orleans Ballroom C							13:30-14:00
SS20: Let it Snow! Aquatic Exopolymers, Suspended Particles, & Organic Aggregates	SS49: Microbial mediated retention/ transformation of organic and inorganic materials in freshwater and marine ecosystems	SS02: Catapults, Ferries, and Bridges: Getting Aquatic Science Results to Policy and Management	SS64: Quasi-Lagrangian Approaches in Pelagic Ecology	SS35: Climate extremes – Is the future of ecosystems predictable and manageable?	SS08: Biogeochemistry of metal-binding organic ligands in the ocean	SS18: Oxygen Minimum Zones and Climate Change: Impacts on Higher Trophic Levels	14:00-15:30
Afternoon Break							15:30-16:00
SS20: Let it Snow! Aquatic Exopolymers, Suspended Particles, and Organic Aggregates	SS73: Impact of submesoscale processes on upper ocean ecology, biogeochemistry and contaminant dispersal	SS21: Optical signatures of the global carbon cycle: Characterization of the sources, sinks and chemistry of CDOM and FDOM	SS64: Quasi-Lagrangian Approaches in Pelagic Ecology	SS82: Progress in understanding nutrient budgets in marginal basins and coastal systems	SS08: Biogeochemistry of metal-binding organic ligands in the ocean	SS62: CO2-Induced Environmental Change and the Occurrence and Severity of Harmful Algal Blooms	16:00-18:00
Exhibit Hall							18:00-19:30
See program for a complete list of town halls and evening meetings.							19:30-21:00

WEDNESDAY AT A GLANCE

Room	Room 333-334	Room 343	Room 344	Room 345	Room 346-347	Room 352
08:00-09:30	Dr. Susan R. Singer, "Promising Practices in Undergraduate Science and Engineering Education: Why Don't We Implement Them?" John Martin Award Acceptance Presentation - Val Smith Lindeman Award Acceptance Presentation - Jillian Petersen					
09:30-10:00	Morning Break					
10:00-12:00	GS08 B: Plankton Ecology - Zoology	SS40: Perspectives on restoration in the Gulf of Mexico	SS05: Advances in Coastal Hypoxia Modeling: From Physics to Fish	SS56: Carbon fluxes in aquatic ecosystems at catchment, regional and continental scales	SS53: Sensor Networks in Aquatic Systems: Research and Education	SS30: Biological and biogeochemical responses to human impacts at the sediment-water interface
12:00-13:30	Lunch and Workshops including: Special Lunchtime Plenary Presentation by Shirley Laska, "Catastrophe in the Making: The Engineering of Katrina" (La Nouvelle Orleans Ballroom C) ASLO Early Career Workshop (La Nouvelle Orleans Ballroom B)					
13:30-15:30	GS08 B: Plankton Ecology - Zoology	SS40: Perspectives on restoration in the Gulf of Mexico	SS05: Advances in Coastal Hypoxia Modeling: From Physics to Fish	SS56: Carbon fluxes in aquatic ecosystems at catchment, regional and continental scales	SS53: Sensor Networks in Aquatic Systems: Research and Education	SS30: Biological and biogeochemical responses to human impacts at the sediment-water interface
15:30-16:00	Afternoon Break					
16:00-18:00	GS08 B: Plankton Ecology - Zoology	GS06: Restoration Ecology in Aquatic System	SS05: Advances in Coastal Hypoxia Modeling: From Physics to Fish	SS56: Carbon fluxes in aquatic ecosystems at catchment, regional and continental scales	SS53: Sensor Networks in Aquatic Systems: Research and Education	SS30: Biological and biogeochemical responses to human impacts at the sediment-water interface
18:00-21:00	Optional Evening Event: Reception at Audubon Aquarium of the Americas plus Workshops and Evening Meetings					

Room 353	Room 354	Room 355	Room 356	Room 357	Room 348-349	Room 350-351	Room
La Nouvelle Orleans Ballroom C							08:00-09:30
Morning Break							09:30-10:00
SS76: Microbial Interactions: From Species Survival to Biogeochemical Cycles	SS04: ASLO Student Symposium	SS57: Trace Elements and Isotopes in the Ocean and Atmosphere: the International GEOTRACES Program	SS44: Factors promoting the expansion of harmful algal blooms in marine and freshwater ecosystems	SS82: Progress in understanding nutrient budgets in marginal basins and coastal systems subject to eutrophication and climate warming	SS43:Long Island Sound, America's Urban Estuary: Science, Policy, and Public Outreach	SS33: Microbial nitrogen cycling in marine pelagic waters	10:00-12:00
Please see the program for a complete list of workshops, meetings, and lunchtime activities.							12:00-13:30
SS76: Microbial Interactions: From Species Survival to Biogeochemical Cycles	SS04: ASLO Student Symposium	SS57: Trace Elements and Isotopes in the Ocean and Atmosphere: the International GEOTRACES Program	SS44: Factors promoting the expansion of harmful algal blooms in marine and freshwater ecosystems	SS78: Assessing Vulnerability of U.S. Lakes and Reservoirs to Climate Change	SS43:Long Island Sound, America's Urban Estuary: Science, Policy, and Public Outreach	SS33: Microbial nitrogen cycling in marine pelagic waters	13:30-15:30
Afternoon Break							15:30-16:00
SS39:Science and Policy Framework for Future Development of the Oil and Gas Resources of the USA Outer Continental Shelf (OCS)	SS04: ASLO Student Symposium	SS57: Trace Elements and Isotopes in the Ocean and Atmosphere: the International GEOTRACES Program	SS44: Factors promoting the expansion of harmful algal blooms in marine and freshwater ecosystems	SS78: Assessing Vulnerability of U.S. Lakes and Reservoirs to Climate Change	SS61: Ecosystem engineering as coastal protection – lessons from theory and practice	SS33: Microbial nitrogen cycling in marine pelagic waters	16:00-18:00
Please see the program for a complete list of workshops and evening meetings.							18:00-21:00

THURSDAY AT A GLANCE

Room	Room 333-334	Room 343	Room 344	Room 345	Room 346-347	Room 352
08:00-09:30	Plenary Presentation: Dr. James Syvitski, "Geo-engineering of Lowland Floodplains and Deltas" Margalef Award Acceptance Presentation - Warwick Vincent ASLO 2013 Volunteer Recognition					
09:30-10:00	Morning Break					
10:00-12:00		SS71: Watersheds of the Caribbean: Global Change, Science, Policy and Security	SS67: Role of the metalimnion and other internal transition zones in lakes	SS56: Carbon fluxes in aquatic ecosystems at catchment, regional and continental scales	SS53: Sensor Networks in Aquatic Systems: Research and Education	SS30: Biological and biogeochemical responses to human impacts at the sediment-water interface
12:00-13:30	Lunch and Workshops including: Student Workshops (Rooms 343 and 345)					
13:30-14:00	ASM Tick Talk Session 84: Geo-Engineering of Aquatic Systems					
14:00-15:30		SS65: The role of Arabia's Seas in projecting marine ecosystem resilience and adaptation to global climate change	SS67: Role of the metalimnion and other internal transition zones in lakes	SS56: Carbon fluxes in aquatic ecosystems at catchment, regional and continental scales	SS28: Sensor Networks in Aquatic Systems: Research and Education	SS34: Biogeo-chemistry of resuspended sediments in aquatic and coastal marine environments
15:30-16:00	Afternoon Break					
16:00-18:00	TEACHER EXPO Room E2 (16:00 to 19:00)	SS65: The role of Arabia's Seas in projecting marine ecosystem resilience and adaptation to global climate change	SS63: Long-term perspectives on lake research and management		SS28: Sensor Networks in Aquatic Systems: Research and Education	SS34: Biogeochemistry of resuspended sediments in aquatic and coastal marine environments
18:00-19:30		Poster Session and Reception				
19:30-21:00	Workshops and Evening Meetings					

Room 353	Room 354	Room 355	Room 356	Room 357	Room 348-349	Room 350-351	Room
La Nouvelle Orleans Ballroom C							08:00-09:30
Morning Break							09:30-10:00
SS16: Opportunities in the study of ocean particle flux	GS08 B: Plankton Ecology - Zoology	SS77: Transmission of terrestrial signals to the coastal ocean by (large) rivers	SS44: Factors promoting the expansion of harmful algal blooms in marine and freshwater ecosystems	SS13: Integrative approaches to ecological risk assessment of nonindigenous aquatic species	SS46: Groundwater and coastal ecology: Microbial alterations and ecological consequences of groundwater discharge	SS33: Microbial nitrogen cycling in marine pelagic waters	10:00-12:00
Please see the program for a complete list of workshops, meetings, and lunchtime activities							12:00-13:30
La Nouvelle Orleans Ballroom C							13:30-14:00
SS16: Opportunities in the study of ocean particle flux	GS05: Food Web Interactions and Trophic Linkages	SS79: Phytoplankton interactions in aquatic ecosystems	SS42: Comparative Analysis of Marine Ecosystem Organization (CAMEO)	SS13: Integrative approaches to ecological risk assessment of nonindigenous aquatic species	SS46: Groundwater and coastal ecology: Microbial alterations and ecological consequences of groundwater discharge		14:00-15:30
Afternoon Break							15:30-16:00
SS16: Opportunities in the study of ocean particle flux	GS05: Food Web Interactions and Trophic Linkages	SS79: Phytoplankton interactions in aquatic ecosystems	SS42: Comparative Analysis of Marine Ecosystem Organization (CAMEO)	SS13: Integrative approaches to ecological risk assessment of nonindigenous aquatic species	SS51: Iron, carbon cycling, and ecosystem dynamics in the Southern Ocean	SS10: Shedding Light On The 'Black Box' of Dissolved Organic Nitrogen	16:00-18:00
Exhibit Hall							18:00-19:30
See program for a complete list of workshops and evening meetings.							19:30-21:00

FRIDAY AT A GLANCE

Room	Room 333-334	Room 343	Room 344	Room 345	Room 346-347	Room 352
08:00-09:30	Klement Tockner, "Domesticated rivers: rethinking science and management " Mark Davis, "Square Pegs, Round Holes: The Disconnect Between New Water Realities & Current Water Management"					
09:30-10:00	Morning Break					
10:00-12:00		SS51: Iron, carbon cycling, and ecosystem dynamics in the Southern Ocean	SS63: Long-term perspectives on lake research and management	SS24: Monitoring and forecasting of surface current-affected phenomena in coastal regions	SS28: Sensor Networks in Aquatic Systems: Research and Education	SS80: Illuminating the biogeochemical roles of microbe
12:00-13:30	Lunch					
13:30-15:30		SS51: Iron, carbon cycling, and ecosystem dynamics in the Southern Ocean	SS63: Long-term perspectives on lake research and management	SS24: Monitoring and forecasting of surface current-affected phenomena in coastal regions	SS28: Sensor Networks in Aquatic Systems: Research and Education	SS80: Illuminating the biogeochemical roles of microbe
15:30-16:00	Afternoon Break					
16:00-17:30						

Room 353	Room 354	Room 355	Room 356	Room 357	Room 348-349	Room 350-351	Room
La Nouvelle Orleans Ballroom C							08:00-09:30
Morning Break							09:30-10:00
SS25: Evolution of coastal change in the Northern Gulf of Mexico	GS05: Food Web Interactions and Trophic Linkages	GS09: Community Ecology	SS72: Studies of zooplankton and other particles using optical instruments	SS79: Phytoplankton interactions in aquatic ecosystems	SS85: Extreme Aquatic Ecosystems and Their Astrobiological Relevance – A Session in Honor of Robert Wharton Jr.	SS52: Populations and activity of ammonia-oxidizing and denitrifying organisms in coastal waters	10:00-12:00
Lunch							12:00-13:30
SS25: Evolution of coastal change in the Northern Gulf of Mexico	GS05: Food Web Interactions and Trophic Linkages	GS09: Community Ecology	SS72: Studies of zooplankton and other particles using optical instruments	SS79: Phytoplankton interactions in aquatic ecosystems	SS85: Extreme Aquatic Ecosystems and Their Astrobiological Relevance – A Session in Honor of Robert Wharton Jr.	SS52: Populations and activity of ammonia-oxidizing and denitrifying organisms in coastal waters	13:30-15:30
Afternoon Break							15:30-16:00
					SS85: Extreme Aquatic Ecosystems and Their Astrobiological Relevance – A Session in Honor of Robert Wharton Jr.		16:00-17:30

MONDAY

MONDAY, 18 FEBRUARY - ORALS

GS07 MULTIPLE STRESSOR PROBLEMS IN AQUATIC SYSTEMS

Chair(s): Rebecca North, rebeccalnorth@gmail.com
Jeff Hudson, jeff.hudson@usask.ca

Location: Room 333-334

10:00 Hudson, J.; Sereda, J.; Vandergucht, D.; North, R.; Wheater, H.; Davies, J.: AN INTRODUCTION TO THE LAKE DIEFENBAKER STUDY

10:15 Vandergucht, D. M.; Johansson, J.; Hunter, K.; Yip, H.; Head, K.; Prestie, C. C.; Abirhire, O.; Sereda, J. M.; Hudson, J. J.: INITIAL CHARACTERIZATION OF A LARGE PRAIRIE RESERVOIR DURING THE ICE-FREE SEASON

10:30 Yip, H.; Guo, X.; Johansson, J.; Hunter, K.; Prestie, C.; Vandergucht, D.; Hudson, J.: REMOTE SENSING USING LANDSAT IMAGERY TO PREDICT CHLOROPHYLL A AND SECCHI DEPTH AT LAKE DIEFENBAKER, SASKATCHEWAN, CANADA

10:45 Johansson, J.; Hunter, K.; Head, K.; Yip, H.; Sereda, J.; Vandergucht, D.; Hudson, J.: A MASS BALANCE APPROACH TO CHARACTERIZING PHOSPHORUS AND NITROGEN DYNAMICS IN A COMPLEX PRAIRIE RESERVOIR.

11:00 Hunter, K.; Johansson, J.; Sereda, J.; Vandergucht, D.; Hudson, J.: DETERMINATION OF THE TYPE AND DEGREE OF NUTRIENT DEFICIENCY IN A LARGE RESERVOIR POTENTIALLY IMPACTED BY ANTHROPOGENIC ACTIVITIES

11:15 Abirhire, O.; Hunter, K.; Johansson, J.; Vandergucht, D.; Yip, H.; Head, K.; Prestie, C.; Hudson, J.: INFLUENCE OF AGRICULTURE, URBAN, AND AQUACULTURE LAND USE ON PHYTOPLANKTON COMMUNITY COMPOSITION IN LAKE DIEFENBAKER (SK, CANADA)

11:30 North, R. L.; Khan, N. H.; Ahsan, M.; Prestie, C.; Korber, D. R.; Lawrence, J. R.; Hudson, J.: BACTERIAL ABUNDANCES AND WATER QUALITY OBJECTIVES IN A LARGE PRAIRIE RESERVOIR: LAKE DIEFENBAKER (SK, CANADA)

11:45 Prestie, C. C.; Sereda, J.; Hudson, J.; Johansson, J.; Hunter, K.; Yip, H.; Head, K.; Vandergucht, D.; Perry, T.: CARBON SOURCES SUPPORTING FISH GROWTH IN A LARGE SASKATCHEWAN RESERVOIR

13:30 Head, K.; Sereda, J.; Pollock, M.; Hudson, J.: RESPONSE OF NATIVE FISH HABITAT TO REGIONAL CLIMATE CHANGE IN THE SOUTH SASKATCHEWAN RIVER

13:45 Deyle, E. R.; Fogarty, M. J.; Hsieh, C. H.; Kaufman, L.; MacCall, A. D.; Perretti, C. T.; Rosenberg, A.; Ye, H.; Sugihara, G.: UNDERSTANDING THE EFFECT OF FISHING ON OTHER POPULATIONS

14:00 Glaser, S. M.; Hendrix, C. S.: COMPLEX FEEDBACKS BETWEEN FISHERIES, FOOD SECURITY, AND CIVIL CONFLICT

14:30 Davison, I. R.; Tellez, E.; Woodke, R. L.; Bidner, R. J.; Wyatt, K. H.: REGULATION AND FATE OF DISSOLVED ORGANIC CARBON RELEASE BY THE GREEN ALGA *CLADOPHORA GLOMERATA*

14:45 Herbert, E. R.; Johnson, L. T.; Craft, C. B.: THE RESPONSE OF WATER COLUMN AND BENTHIC BIOFILM METABOLISM TO CARBON, NITROGEN, AND PHOSPHORUS ENRICHMENT ACROSS AN ESTUARINE SALINITY GRADIENT (GEORGIA, USA)

15:00 Marton, J. M.; Roberts, B. J.: PATTERNS OF PHOSPHORUS SORPTION IN LOUISIANA TIDAL BRACKISH AND SALT MARSHES IMPACTED BY THE DEEPWATER HORIZON OIL SPILL

15:15 Hasan, M. M.; Kaneko, G.; Ushio, H.; Watabe, S.; Ochiai, Y.: WIDESPREAD EXPRESSION OF MYOGLOBIN IN MUSCLE AND NON-MUSCLE TISSUES OF HYPOXIA-INTOLERANT SPECIES, RAINBOW TROUT

GS08A PLANKTON ECOLOGY - PHYTOPLANKTON

Chair(s): Donald Redalje, Donald.Redalje@USM.edu
Daniel Roelke, droelke@tamu.edu
Ed Laws, edlaws@lsu.edu
Chris Filstrup, Filstrup@iastate.edu
Nasseer Idrisi, nidrisi@uvi.edu

Location: Room 352

16:00 Clayton, S. A.; Dutkiewicz, S.; Jahn, O.; Follows, M. J.: OCEAN EDDIES AND DISPERSAL MAINTAIN PHYTOPLANKTON DIVERSITY

16:15 Bachman, B. E.; Lomas, M. W.; Goldman, E. A.; Lachenmyer, E.; Richardson, T. L.: PICOPHYTOPLANKTON BIOMASS AND PRIMARY PRODUCTIVITY IN EDDIES OF THE SARGASSO SEA

16:30 Lachenmyer, E. M.; Lomas, M. W.; Richardson, T. L.: DISSOLVED ORGANIC NUTRIENTS AND BACTERIAL PRODUCTIVITY IN EDDIES OF THE SARGASSO SEA

17:00 Fujiki, T.; Matsumoto, K.; Mino, Y.; Sasaoka, K.; Wakita, M.; Kawakami, H.; Honda, M.; Saino, T.: SEASONAL VARIATIONS OF PHYTOPLANKTON COMPOSITION AND PHOTOSYNTHETIC PHYSIOLOGY IN THE WESTERN SUBARCTIC GYRE OF THE NORTH PACIFIC

SS01 ECOSYSTEM-BASED MARINE SPATIAL PLANNING FOR BETTER MANAGEMENT OF OUR OCEANS

Chair(s): Tundi Agardy, tundiagardy@earthlink.net
Steven Degraer, S.Degraer@MUMM.ac.be
Angel Borja, aborja@azti.es

Location: Room 350-351

16:00 Ferran, K. G.: UTILIZING GIS & REMOTE SENSING FOR ENVIRONMENTAL ASSESSMENT AND ANALYSIS TO IMPROVE THE SPATIAL DECISION SUPPORT SYSTEM FOR COASTAL&MARINE RESOURCE MANAGEMENT

16:15 Melendez-Diaz, J.; Quiñones-Vilches, N.; Rodriguez, A.; Gervais, G.; Roberson, L.: HABITAT AND BIODIVERSITY MAPPING FOR THE DETERMINATION OF ALGAL BIOMASS MARICULTURE SITES IN COASTAL AREAS OF PUERTO RICO

16:30 Palamara, L.; Manderson, J.; Kohut, J.; DiDomenico, G.; Curchitser, E.; Kang, D.; Oliver, M. J.; Dobson, C.; Snow, A.: PUTTING THE DYNAMICS OF THE OCEAN INTO MARINE SPATIAL PLANNING: TEMPORAL VARIATION IN BUTTERFISH HABITAT

16:45 Wing, S. R.; Jack, L. C.: A SAFETY NETWORK AGAINST POPULATION COLLAPSE: MATURE SUBPOPULATIONS IN REFUGES DISTRIBUTED ACROSS A LANDSCAPE.

17:00 O'Connell, C. A.; Baumann, H.: ANALYSIS OF STAKEHOLDER OPINIONS AND ECOSYSTEM VALUATIONS REGARDING MARINE SPATIAL PLANNING IN LONG ISLAND SOUND

(T) represents Tutorial presentations

SS06 NEW INSIGHTS INTO MICROBIAL ECOLOGY OF HYPERSALINE HABITATS

Chair(s): Virginia Edgcomb, vedgcomb@whoi.edu
Joan Bernhard, jbernhard@whoi.edu

Location: Room 354

16:00 Oremland, R. S.: A RANDOM BIOGEOCHEMICAL WALK INTO THREE SODA LAKES OF THE WESTERN USA: WITH AN INTRODUCTION TO A FEW OF THEIR MICROBIAL DENIZENS[T]

16:30 Wu, Q.; Wang, J.: DO PATTERNS OF BACTERIAL TAXON RICHNESS ALONG SALINITY GRADIENTS DIFFER FROM THOSE OBSERVED FOR MACROORGANISMS

16:45 Bernhard, J. M.; Edgcomb, V. P.; Morrison, C.; Orsi, W.; Beaudoin, D. J.: HALOCLINE SEDIMENTS OF DEEP HYPERSALINE ANOXIC BASINS APPEAR TO SUPPORT PROTIST POPULATIONS

17:00 Edgcomb, V. P.; Bernhard, J. M.; Visscher, P. T.; Summons, R. E.: EUKARYOTIC COMMUNITIES OF DIFFERENT MICROBIALITES IN HYPERSALINE HAMELIN POOL, SHARK BAY, AUSTRALIA

17:15 Joye, S. B.; Habicht, K.; Hinrichs, K. U.; MacDonald, I. R.; MacGregor, B.; Teske, A. P.: SPATIAL VARIABILITY IN THE BIOGEOCHEMISTRY AND MICROBIAL ACTIVITY AND DIVERSITY IN GULF OF MEXICO SEAFLOOR BRINES

SS12 COOPERATION - THE KEY TO SUCCESS: SYMBIOSES IN AQUATIC SYSTEMS

Chair(s): Hans-Peter Grossart, hgrossart@igb-berlin.de
Kam W. Tang, kamtang@vims.edu
Claudia Dziallas, cdziallas@bio.ku.dk

Location: Room 354

10:00 Amin, S. A.; Hmelo, L. R.; Tol, H. V.; Parker, M. S.; Parsek, M.; Armbrust, E. V.: WHOLE CELL TRANSCRIPTOMICS REVEAL MULTIPLE COMPLEX INTERACTIONS BETWEEN A TOXIGENIC DIATOM AND A MUTUALISTIC BACTERIUM

10:15 Jauzein, C.; Evans, A.; Erdner, D. L.: THE IMPACT OF ASSOCIATED BACTERIA ON MORPHOLOGY AND PHYSIOLOGY OF THE DINOFLAGELLATE ALEXANDRIUM TAMARENSE

10:30 Klueter, A.; Crandall, J. B.; Archer, F. I.; Coffroth, M. A.; Teece, M. A.: M ETABOLIC FINGERPRINTS OF FOUR DIFFERENT TYPES OF SYMBIODINIUM SPP

10:45 Nissimov, J. I.; Kimmance, S. A.; Napier, J. A.; Allen, M. J.: PROTEIN FOLD DIFFERENCES IN THE COCCOLITHOVIRUS-ENCODED SERINE PALMITOYLTRANSFERASE AND ITS POSSIBLE IMPLICATIONS FOR THE DEMISE OF EMILIANIA HUXLEYI

11:00 Baker, L. J.; Kemp, P. F.; Alvarez-Valdez , G.: RESPONSE OF DIATOM-ATTACHED AND FREE-LIVING BACTERIA TO CHANGES IN GROWTH STATE OF THE HOST CELLS, IN A DIATOM-BACTERIA-VIRUS MODEL SYSTEM

11:15 Graff, J. R.; Menden-Deuer, S.; Forschner, S.; Long, R. A.; Rowley, D. C.: PARTICLE COLONIZATION BY VIBRIO CHOLERAE IS REGULATED BY BEHAVIORAL MODIFICATION IN RESPONSE TO CHEMICAL CUES FROM BACTERIA AND PHYTOPLANKTON EXUDATES

11:30 Bingham, B. L.; Dimond, J. L.; Muller-Parker, G.; Francis, L.: REPRODUCTIVE STRATEGY IS DETERMINED BY SYMBIONT PRESENCE AND IDENTITY IN A TEMPERATE SEA ANEMONE

11:45 Dziallas, C.; Riemann, L.: NITROGEN-FIXING BACTERIA IN MARINE CILIATES

13:30 Skovgaard, A.: ZOOPLANKTON EPIBIONTS: DO THEY MATTER?

13:45 Dong, Y.; Tang, K. W.; Yang, P. G.: DIETARY EFFECTS ON ABUNDANCE AND CARBON UTILIZATION ABILITY OF DMSP-CONSUMING BACTERIA ASSOCIATED WITH THE COPEPOD *ACARTIA TONSA* DANA

14:00 Bickel, S. L.; Tang, K. W.; Grossart, H. P.: TEMPORAL CHANGES OF GENETIC AND FUNCTIONAL DIVERSITY OF ZOOPLANKTON-ASSOCIATED BACTERIAL COMMUNITIES

14:15 Fiore, C. L.; Lesser, M. P.: NITROGE BIOGEOCHEMISTRY IN THE GIANT BARREL SPONGE, *XESTOSPONGIA MUTA* ACROSS THE CARIBBEAN

14:30 Crandall, J. B.; Teece, M. A.; Coffroth, M. A.: METABOLIC AND SYMBIONT DIFFERENCES BETWEEN A REEF-BUILDING CORAL AND A WEEDY CORAL IN THE FLORIDA KEYS REEF TRACT

14:45 Paul, J. H.; Young, E. C.; McDaniel, L. D.; daniels, C. A.; Voolstra, c.; RITCHIE, K. B.: NOVEL EFFECTS OF GENE TRANSFER AGENTS IN THE REEF ENVIRONMENT

15:00 Jani, A. J.; Briggs, C. J.: SHIFTS IN AMPHIBIAN SYMBIOTIC BACTERIAL COMMUNITIES ARE LINKED TO EPIZOOTIC SPREAD OF THE AQUATIC FUNGAL PATHOGEN BATRACHOCHYTRIUM DENDROBATIDIS

15:15 Corno, G.; Salka, I.; Grossart, H. P.: PREDATION MODIFIES BACTERIAL SPATIAL DISTRIBUTION RAISING PRODUCTIVITY IN AQUATIC BACTERIAL COMMUNITIES ADAPTED TO REFRACTORY SUBSTRATES

SS14 NATURAL AND ANTHROPOGENIC DRIVEN RESPONSES OF MICROBIAL COMMUNITIES IN THE OCEAN: EFFECTS ON THE BIOLOGICAL AND MICROBIAL CARBON PUMPS

Chair(s): Louis Legendre, legendre@obs-vlfr.fr
M. Robin Anderson, m.robin.anderson@dfo-mpo.gc.ca
Richard B. Rivkin, rrivkin@mun.ca

Location: Room 346-347

10:00 Azam, F.; Jiao, N.: MICROBIAL SEQUESTRATION AND MOBILIZATION OF CARBON IN THE OCEAN—THE MICROBIAL CARBON PUMP[T]

10:30 Owen, K. R.; Creach, V.; Malin, G.: CALCULATING THE CARBON CONTENT OF A DROP IN THE OCEAN: ALTERNATIVES TO CHLOROPHYLL A IN ESTIMATIONS OF PHYTOPLANKTON BIOMASS

10:45 Viviani, D. A.; Church, M. J.; Böttjer, D.: VARIABILITY IN DISSOLVED PRIMARY PRODUCTION AND MICROBIAL GROWTH IN THE NORTH PACIFIC SUBTROPICAL GYRE

11:00 Benner, R.: TRACING BACTERIAL C AND N IN THE MICROBIAL CARBON PUMP*

11:15 Mousing, E. A.; Ellegaard, M.; Richardson, K.: TEMPERATURE INFLUENCES ON PHYTOPLANKTON COMMUNITY SIZE STRUCTURE

11:30 Williams, C. A.; Mahaffey, C.; Sharples, J.: PHYTOPLANKTON COMMUNITY RESPONSE TO AN EPISODIC WIND EVENT

(*) represents Invited presentations

11:45 Legendre, L.; Guidi, L.; Uitz, J.: POTENTIAL EFFECTS OF OCEAN WARMING ON THE BIOLOGICAL AND MICROBIAL CARBON PUMPS

13:30 Turner, J. T.; Petitpas, C. M.: A QUARTER-CENTURY OF BACTERIOPLANKTON, TEMPERATURE AND CHLOROPHYLL IN BUZZARDS BAY, MASSACHUSETTS, USA (1987-2012)*

13:45 Endres, S.; Flerus, R.; Galgani, L.; Roa, J.; Engel, A.: ORGANIC MATTER TURNOVER BY PELAGIC MICROORGANISMS UNDER THE IMPACT OF OCEAN ACIDIFICATION

14:00 Davis, M. E.; Smayda, T. J.; Borkman, D. G.: LONG-TERM BLOOM PATTERNS OF THE DIATOM THALASSIOSIRA NORDENSKIOELDII CLEVE IN NARRAGANSETT BAY

14:15 Van Oostende, N.; Dunne, J. P.; Fawcett, S. E.; Ward, B. B.: PHYTOPLANKTON SUCCESSION AND ACCLIMATION EXPLAINS NITRATE UPTAKE FOLLOWING AN UPWELLING EVENT

14:30 Hennon, G. M.; Armbrust, E. V.: ACCLIMATED PHYSIOLOGY AND GENE EXPRESSION OF THE DIATOM *THALASSIOSIRA PSEUDONANA* UNDER ELEVATED CO_2

14:45 Hartmann, M.; Gomez-Pereira, P.; Grob, M. C.; Osrtowski, M.; Tarran, G. A.; Martin, A. P.; Scanlan, D. J.; Zubkov, M. V.: UNEQUIVOCAL DOMINATION OF CO_2FIXATION BY *PROCHLOROCOCCUS* IN SURFACE WATERS OF THE LOW LATITUDE ATLANTIC OCEAN

15:00 Andersson, A.: INTERPLAY BETWEEN BOTTOM-UP AND TOP-DOWN FACTORS REGULATING BACTERIAL GROWTH RATE ALONG A NUTRITIONAL GRADIENT.

15:15 Rivkin, R. B.: MICROBES AND OCEAN BIOGEOCHEMICAL PROCESSES

SS17 PREDICTING DRIVERS AND MANAGEMENT PRACTICES IN LARGE RIVERS AND DELTAS: THE USGS DELTA RESEARCH AND GLOBAL OBSERVATION NETWORK (DRAGON)

Chair(s): Matthew E. Andersen, mandersen@usgs.gov
D. Phil Turnipseed, pturnip@usgs.gov

Location: Room 346-347

16:00 Turnipseed, D. P.: PREDICTING DRIVERS AND MANAGEMENT PRACTICES IN LARGE RIVERS AND DELTAS: THE USGS DELTA RESEARCH AND GLOBAL OBSERVATION NETWORK (DRAGON)*

16:15 Wilson, S. A.; Thatcher, C. A.: GEOSPATIAL TOOLS AND DATA DEVELOPED TO SUPPORT THE USGS'S FORECAST MEKONG EFFORT*

16:30 Andersen, M. E.; Patricio, H. C.; Hewitt, D. A.; Ainsley, S. M.; Beeman, J. W.: DEVELOPING A PILOT FISH DATABASE AND PROGRAM FOR THE MEKONG RIVER BASIN TO ASSIST IN PLANNING SUSTAINABLE FOOD SECURITY*

16:45 Densmore, B. K.; Dietsch, B. J.; Wilson, R. C.: HYDROGRAPHIC SURVEY IN THE LOWER MEKONG, TONLE SAP, AND BASSAC RIVERS NEAR PHNOM PENH, CAMBODIA*

17:00 Doyle, T. W.; Bhattarai, D.; Feng, S.: A GRAPHIC VISUALIZATION TOOL OF THE MEKONG RIVER TO INFORM PLANNERS AND DESIGNERS OF ECOSYSTEM DEVELOPMENT, PROTECTION, AND RESTORATION*

17:15 Middleton, B. A.: DEVELOPING WETLAND RESTORATION AND PROTECTION PARTNERSHIPS IN THE RIVER DELTAS OF CHINA*

SS21 OPTICAL SIGNATURES OF THE GLOBAL CARBON CYCLE: CHARACTERIZATION OF THE SOURCES, SINKS AND CHEMISTRY OF CDOM AND FDOM

Chair(s): Aron Stubbins, aron.stubbins@skio.usg.edu
Natasha McDonald, natasha.mcdonald@bios.edu

Location: Room 352

10:00 Nelson, N. B.; Siegel, D. A.: CDOM IN THE OCEAN: A GLOBAL PERSPECTIVE[T]

10:30 Helms, J. R.; Stubbins, A.; Mopper, K.: PHOTOCHEMICAL BLEACHING OF DEEP-SEA DISSOLVED ORGANIC MATTER*

10:45 Yamashita, Y.; Nosaka, Y.; Suzuki, K.; Ogawa, H.; Takahashi, K.; Saito, H.: QUANTITATIVE AND QUALITATIVE CHARACTERISTICS OF CHROMOPHORIC DISSOLVED ORGANIC MATTER IN THE WESTERN NORTH PACIFIC

11:00 Jaffe, R.; Cawley, K.; Yamashita, Y.: DETERMINING OPTICAL PROPERTIES TO QUANTIFY CDOM AND FDOM CONTRIBUTIONS FROM FRINGE MANGROVES IN A SUB-TROPICAL ESTUARY.

11:15 Barron, R. K.; Siegel, D. A.; Gillocheau, N.: UV-ABSORBING SUBSTANCES LINKED TO PHYTOPLANKTON COMMUNITY DYNAMICS IN A COASTAL OCEAN

11:30 Powers, L. C.; Miller, W. L.: ESTIMATING THE MAGNITUDE OF DIRECT PHOTOCHEMICAL CARBON OXIDATION IN THE NORTHERN GULF OF MEXICO USING OCEAN COLOR

11:45 Mannino, A.; Hyde, K.; Novak, M. G.; Hooker, S. B.: DEVELOPMENT AND ANALYSIS OF OCEAN COLOR SATELLITE DOM PRODUCTS FOR STUDIES IN COASTAL OCEAN DYNAMICS

13:30 Osburn, C. L.; Paerl, H. W.; Handsel, L. T.: FLUORESCENCE TRACKING OF PARTICULATE AND DISSOLVED ORGANIC MATTER QUALITY IN A RIVER-DOMINATED ESTUARY

13:45 Hulatt, C. J.; Kaartokallio, H. K.; Stedmon, C. A.; Sonninen, E.; Oinonen, M.; Thomas, D. N.: RADIOCARBON AGE, LABILITY AND OPTICAL FINGERPRINTS OF RIVERINE DISSOLVED ORGANIC MATTER EXPORTED FROM A NORTHERN PEAT-DOMINATED CATCHMENT.

14:00 Dainard, P. G.; Gueguen, C.: DISTRIBUTION OF PARAFAC MODELLED CDOM COMPONENTS IN THE NORTH PACIFIC AND WESTERN ARCTIC OCEANS

14:15 Salyuk, P. A.; Krikun, K. A.; Golik, I. A.: DISSOLVED ORGANIC MATTER FLUORESCENCE SPECTRA IN THE FAR EASTERN SEAS OF RUSSIA

SS22 VANISHING GLACIERS: CONSEQUENCES FOR AQUATIC ECOSYSTEMS

Chair(s): Ruben Sommaruga, ruben.sommaruga@uibk.ac.at
Tom Battin, tom.battin@univie.ac.at
Eran Hood, ewhood@uas.alaska.edu

Location: Room 348-349

13:30 Jacobsen, D.: DO FRESHWATER ECOSYSTEMS BENEFIT FROM GLACIAL RUNOFF?[T]

14:00 Scott, D. T.; Hood, E.; Vermilyea, A.; Schroth, A.: SEASONAL NUTRIENT AND IRON FLUXES FROM A GLACIER ALONG THE GULF OF ALASKA: INSIGHT INTO MATERIAL EXPORT INTO COASTAL ESTUARIES

[T] represents Tutorial presentations

14:15 Vermilyea, A. W.; Hood, E. W.; Scott, D.; Stubbins, A.; Spencer, R.; Raymond, P.; Fellman, J.; Schroth, A.: ALASKAN GLACIER DICHOTOMY: MELT SEASON DYNAMICS OF NUTRIENTS AND MERCURY

14:30 Schroth, A. W.; Hood, E.; Vermilyea, A.; Fellman, J. B.; Scott, D.: TIME-SERIES INSIGHTS TO TRACE METAL DYNAMICS IN ALASKAN CATCHMENTS WITH VARYING DEGREES OF GLACIATION

14:45 Hood, E. W.; Hock, R. M.; Scott, D. T.; Schroth, A. W.; Zhang, J.: FUTURE CHANGES IN WATER AND NUTRIENT FLUXES FROM GLACIER WATERSHEDS IN ALASKA

15:00 Koziol, K. A.; Moggridge, H. L.; Hodson, A. J.: THE ORGANIC CARBON BUDGET OF A GLACIAL SYSTEM: TEMPORARY OVERDRAFT OR A MASSIVE DEFICIT?

15:15 Battin, T. J.; Wilhelm, L.; Singer, G. A.; Fasching , C.; Besemer, K.: VANISHING GLACIERS: CONSEQUENCES FOR AQUATIC ECOSYSTEMS

16:00 Sommaruga, R.; Kandolf, G.: BACK TO THE ORIGIN: TURBID GLACIER-FED LAKES LACK HETEROTROPHIC NANOFLAGELLATES

16:15 Slemmons, K. E.; Saros, J. E.: IMPLICATIONS OF NITROGEN-RICH GLACIAL MELTWATER FOR PHYTOPLANKTON DIVERSITY AND PRODUCTIVITY

16:30 Tartarotti, B.; Saul, N.; Sommaruga, R.; Steinberg, C. E.: UV STRESS-INDUCED DNA DAMAGE IN COPEPODS FROM CLEAR AND TURBID ALPINE LAKES

16:45 Kammerlander, B.; Sommaruga, R.; Sonntag, B.: CONSEQUENCES OF A RETREATING GLACIER FOR CILIATES IN TWO REMOTE ALPINE LAKES OF CONTRASTING TRANSPARENCY

17:00 Warner, K. A.; Saros, J. E.; Simon, K. S.: NITROGEN SUBSIDIES IN GLACIAL MELTWATER: IMPLICATIONS FOR HIGH ELEVATION AQUATIC CHAINS

17:15 Gluchowska, M.; Weslawski , J. M.; Lydersen, C.; Steen, H.; Hop, H.; Falk Petersen, S.; Zajaczkowski, M.; Walczowski, W.; Stempniewicz, L.: CAN WE REPLACE GLACIER BAYS WITH RIVER MOUNTS IN ARCTIC ECOSYSTEM?

SS23 DISSOLVED ORGANIC MATTER DYNAMICS: TOWARDS A MOLECULAR-LEVEL UNDERSTANDING

Chair(s): Aron Stubbins, aron.stubbins@skio.usg.edu
Thorsten Dittmar, tdittmar@mpi-bremen.de
Jutta Niggemann, jniggema@mpi-bremen.de

Location: Room 357

10:00 Kellerman, A. M.; Dittmar, T.; Kothawala, D. N.; Tranvik, L. J.: CHEMODIVERSITY OF DISSOLVED ORGANIC MATTER: PATTERNS AND REGULATION ACROSS 125 BOREAL LAKES

10:15 Kothawala, D. N.; Stedmon, C. A.; Köhler, S. J.; Müller, R. A.; Weyhenmeyer, G. A.; Tranvik, L. J.: DECONSTRUCTING THE STRUCTURE OF DISSOLVED ORGANIC MATTER IN BOREAL LAKES USING FLUORESCENCE SPECTROSCOPY

10:30 Goldberg, S. J.; Ball, G.; Allen, B.; Schladow, G.; Simpson, A.; Masoom, H.; Soong, R.; Aluwihare, L. I.: SEASONAL VARIATION IN THE SOURCE AND COMPOSITION OF SOLID PHASE EXTRACTED DOM FROM LAKE TAHOE AND SHORTER RESIDENCE TIME LAKES IN THE SIERRA NEVADA, CA

10:45 Echevarría Román, Y. A.; Pullin, M. J.; Cooray, A. T.; Jackson, K. J.: DISSOLVED ORGANIC MATTER (DOM) DYNAMICS IN THREE PRIMARY STREAMS IN A MONTANE GRASSLAND OF NORTHERN NEW MEXICO

11:00 Kaplan, L. A.; Sleighter, R. L.; Cory, R. M.; Hatcher, P. G.: COUPLED GEOCHEMICAL AND BIOLOGICAL CHARACTERIZATION OF DISSOLVED ORGANIC MATTER FROM A HEADWATER STREAM

11:15 Hatcher, P. G.; Abdulla, H. A.; Sleighter, R. L.: TWO DIMENSIONAL CORRELATIONS ANALYSIS OF FOURIER TRANSFORM ION CYCLOTRON RESONANCE MASS SPECTRA OF DISSOLVED ORGANIC MATTER

11:30 Chen, H.; Abdulla, H. A.; Sun, L.; Mopper, K.; Hatcher, P.: PHOTOCHEMICAL FLOCCULATION OF ORGANIC MATTER IN IRON RICH WATERS STUDIED BY ESI FTICR MASS SPECTROMETRY

11:45 Miller, W. L.; Powers, L. C.: PRELIMINARY WORK ON THE PHOTOCHEMICAL REACTIVITY OF DEEP OCEAN REFRACTORY CARBON: "PHOTOCHEMISTRY IN THE DORC"

13:30 Shen, Y.; Fichot, C. G.; Benner, R.: NET DISSOLVED ORGANIC CARBON ACCUMULATION IN A RIVER-INFLUENCED OCEAN MARGIN

13:45 Steen, A. D.; Webber, A. T.; Vazin, J. P.; Gainer, P. J.; Wilhelm, S. W.: LEUCYL AMINOPEPTIDASE IS NOT ENOUGH: CONTROLS ON THE ACTIVITIES OF DIVERSE PEPTIDASES IN FRESHWATER AND SEAWATER

14:00 Pollard, P. C.: INSTANTANEOUS MEASURES OF BACTERIAL RESPIRATION RATE QUANTIFY THE SUPER LABILE DISSOLVED ORGANIC CARBON IN FRESHWATER

14:15 Daley, M. C.; Moisander, P.; Urban-Rich, J.: DOC RELEASED BY THE HYDROMEDUSA NEMOPSIS BACHEI AND ITS AFFECTS ON BACTERIA

14:30 Johnson, W. M.; Howard-Åkerfeldt, I.; Longnecker, K.; Kido Soule, M.; Kujawinski, E.: THE IMPACT OF CARBON SUBSTRATE ON THE METABOLIC PROFILE OF THE HETEROTROPHIC BACTERIUM *RUEGERIA POMEROYI*

14:45 Osterholz, H.; Dittmar, T.; Müllenmeister, S.; Kramer, C.; Simon, M.; Niggemann, J.: FAST TRANSFORMATION OF FRESHLY PRODUCED COMPOUNDS INTO REFRACTORY DISSOLVED ORGANIC MATTER

15:00 Niggemann, J.; Gerdts, G.; Dittmar, T.: DIVERSITY OF DISSOLVED ORGANIC MATTER AS A DIRECT CONSEQUENCE OF MICROBIAL DIVERSITY?

15:15 Jaekel, U.; Dittmar, T.; Girguis, P. R.; Expedition 336 Scientists: TRANSFORMATIONS OF ORGANIC MATTER UNDER DISTINCT SEDIMENTARY REDOX HORIZONS AT NORTH POND

16:00 Cao, X.; Aiken, G. R.; Mao, J.; Schmidt-Rohr, K.: EVIDENCE FOR PRESERVATION OF A MAJOR COMPONENT IN DISSOLVED ORGANIC MATTER FROM RIVER TO COASTAL MARINE WATERS

16:15 Walker, B. D.; Abdulla, H. A.; Hatcher, P. G.; McCarthy, M. D.; Druffel, E.: MOLECULAR AND ISOTOPIC VARIABILITY OF DISSOLVED ORGANIC MATTER WITHIN A UNIQUE COASTAL UPWELLING SYSTEM: A COMBINED 114C AND H-NMR AND APPROACH

16:30 Koch, B. P.; Lechtenfeld, O. J.; Flerus, R.; McCallister, S. L.; Schmitt-Kopplin, P.; Kaiser, K.; Benner, R.; Kattner, G.: A MOLECULAR PERSPECTIVE ON THE AGEING OF MARINE DISSOLVED ORGANIC MATTER

(*) represents Invited presentations

16:45 Follett, C. L.; Repeta, D. J.; Rothman, D. H.; Xu, L.: HIDDEN CYCLE OF DISSOLVED ORGANIC CARBON IN THE OCEAN

17:00 Longnecker, K.; Kujawinski, E. B.: ASSEMBLING COMPLEX ORGANIC MOLECULES IN THE DEEP SEA

17:15 Dittmar, T.; Blasius, B.; Feenders, C.; Steinbrink, C.; Stumm, M.; Christoffers, J.; Simon, M.; Stubbins, A.; Niggemann, J.: THE NEUTRAL REACTIVITY THEORY: A MECHANISTIC EXPLANATION FOR THE STABILITY OF DOM IN THE DEEP OCEAN

SS26 COCCOLITHOPHORES: BIOGEOCHEMICAL IMPACTS AND RESPONSE TO A CHANGING OCEAN

Chair(s): William M. Balch, bbalch@bigelow.org
Nicholas R. Bates, nick.bates@bios.edu
Phoebe J. Lam, pjlam@whoi.edu
Benjamin S. Twining, btwining@bigelow.org

Location: Room 344

10:00 Balch, W. M.; Twining, B. S.; Drapeau, D. T.; Bowler, B. C.; Lubelczyk, L. C.; Bates, N. R.; Lam, P. J.; Smith, H. E.; Poulton, A. J.: THE GREAT CALCITE BELT: A CIRCUM-GLOBAL COCCOLITHOPHORE FEATURE IN THE SOUTHERN OCEAN

10:15 Bates, N. R.; Garley, R.; Balch, W. M.; Twining, B. S.; Lam, P. J.: FEEDBACKS BETWEEN AIR-SEA CO2 FLUXES AND COCCOLITHOPHORES

10:30 Rosengard, S. Z.; Lam, P. J.; Auro, M. E.; Pike, S. M.; Balch, W. M.: ORGANIC CARBON EXPORT ACROSS THE GREAT CALCITE BELT: INVESTIGATING BALLAST IN CALCITE-RICH SURFACE WATERS OF THE SOUTHERN OCEAN

10:45 Poulton, A. J.; Stinchcombe, M. C.; Holland, R.; Zubkov, M. V.; Bakker, D. C.; Lee, G. A.; Suggett, D. J.; Richier, S.; Young, J. R.: COCCOLITHOPHORE CALCIFICATION IN NORTH-WEST EUROPEAN SHELF WATERS

11:00 Iglesias-Rodriguez, M. D.; Jones, B. M.; Lebrato, M.; Blanco-Ameijeiras, S.: STRAIN VARIABILITY AND MOLECULAR INSIGHTS ON ACCLIMATION TO ELEVATED CO2 THROUGH PROTEOMICS

11:15 Lefebvre, S. C.; Valas, R.; Allen, A. E.; Dupont, c. L.; Carpenter, E. J.; Stillman, J. H.: TANSCRIPTOME ANALYSIS OF EMILIANIA HUXLEYI REVEALS DIFFERENTIAL RESPONSES TO LIGHT, PCO2 AND NITROGEN SOURCE

11:30 von Dassow, P.; Mella-Flores, D.; Herrera, Y.; Bendif, E.; Torres, R.: COCCOLITHOPHORES IN NATURALLY HIGH PCO2 ENVIRONMENTS

11:45 Fulton, J. M.; Fredricks, H. F.; Kendricks, B. J.; DiTullio, G. R.; Vardi, A.; Bidle, K. D.; Van Mooy, B.: LIPIDOME OF THE *EMILIANIA HUXLEYI*-COCCOLITHOVIRUS SYSTEM IN A CHANGING OCEAN

SS27 SURFACE AND SUBSURFACE FLUXES ACROSS THE LAND-OCEAN INTERFACE OF LARGE RIVERS

Chair(s): Mead A. Allison, mallison@mail.utexas.edu
Karen H. Johannesson , kjohanne@tulane.edu
Alexander S. Kolker, akolker@lumcon.edu

Location: Room 356

16:00 Lohrenz, S. E.; Cai, W. J.; Tian, H.; He, R.; Xue, Z.; Fennel, K.; Hopkinson, C. S.; Howden, S. D.: CHARACTERIZING CLIMATE AND HUMAN INFLUENCES ON LAND-OCEAN FLUXES IN A LARGE RIVER SYSTEM USING COUPLED TERRESTRIAL-COASTAL OCEAN MODELS*

16:15 Mitra, S.; Wozniak, A. S.; Miller, R.; Hatcher, P.; Druffel, E. R.: MARINE-TO-LAND ATMOSPHERIC TRANSPORT OF ORGANIC MATTER IN COASTAL AREAS

16:30 Kolker, A. S.; Cable, J. E.; Johannesson, K. H.; Allison, M. A.: SUBSURFACE HYDROLOGICAL AND GEOCHEMICAL FLUXES IN THE MISSISSIPPI RIVER DELTA

16:45 Furukawa, Y.; Reed, A. H.; Zhang, G.: BIOGEOCHEMICAL CONTROL ON THE PARTICLE FLUX AND TRANSPORT DYNAMICS IN RIVER-DOMINATED COASTAL REGIONS

17:00 Gardner, C. B.; Lyons, W. B.; Carey, A. E.: ROCK-DERIVED MICRONUTRIENT FLUXES AND WEATHERING IN HIGH-STANDING OCEAN ISLANDS AND SMALL MOUNTAINOUS RIVERS

17:15 Scott, J. T.; Grantz, E. M.; Haggard, B. E.; Jarvie, H. P.; Sharpley, A. N.: PHOSPHORUS RETENTION BY SMALL RESERVOIRS IS DISPROPORTIONATELY GREATER THAN THEIR DISTRIBUTION IN THE LANDSCAPE

SS29 OPPORTUNITIES AND CHALLENGES OF TEACHING INTRODUCTORY OCEANOGRAPHY TO UNDERGRADUATES

Chair(s): Allison Beauregard, beauregа@nwfsc.edu
Jan Hodder, jhodder@uoregon.edu

Location: Room 355

10:00 Frashure, K. M.: SUSTAINABLE OCEAN HABITS INFUSED WITH THE PEDAGOGICAL "LEARNING COMMUNITES" MODEL ENHANCES STUDENT SUCCESS RATES AT BUNKER HILL COMMUNITY COLLEGE

10:15 Conrad, S. H.: OPPORTUNITIES AND CHALLENGES OF TEACHING INTRODUCTORY PHYSICAL OCEANOGRAPHY TO UNDERGRADUATES AT A COMMUNITY COLLEGE IN THE HUDSON RIVER WATERSHED

10:30 Olney, J. L.; Caldwell, M.: THE CHALLENGES OF DEVELOPING AN INTRODUCTORY OCEANOGRAPHY COURSE FOR A DIVERSE 2-YEAR-COLLEGE COMMUNITY.

10:45 Rodriguez, A. M.: HOW TO DEVELOP AN ONLINE INTERACTIVE OCEANOGRAPHY LABORATORY

11:00 Trujillo, A. P.: BEST PRACTICES FOR TEACHING ONLINE: TIPS, STRATEGIES, AND TECHNIQUES FOR SUCCESSFUL ONLINE INSTRUCTION OF INTRODUCTORY OCEANOGRAPHY

11:15 Ramirez, A.: MULTIPLE ASSESSMENT STRATEGIES AND STUDENT SUCCESS IN AN ONLINE OCEANOGRAPHY COURSE

11:30 Brey, J. A.; Geer, I. W.; Moran, J. M.; Mills, E. W.; Nugnes, K. A.; Moses, M. N.: AMS EDUCATION PROGRAM: TEACHING INTRODUCTORY OCEANOGRAPHY TO UNDERGRADUATES SINCE 2005

11:45 True, M. B.: ADAPTION OF A PUBLISHER'S COURSE PACKAGE FOR THE TEACHING OF INTRODUCTORY OCEANOGRAPHY TO UNDERGRADUATES IN A COMMUNITY COLLEGE ENVIRONMENT

13:30 Norton Henry, E. N.; Cheruvelil, K. S.: STUDENT UNDERSTANDING OF STATISTICAL RESULTS DEPICTED BY FIGURES AND TEXT

13:45 Waggett, R. J.; Huber, D. R.; Jones, L. B.: MATH BITES: AN INTEGRATED APPROACH TO TEACHING SCIENCE AND MATHEMATICS

[T] represents Tutorial presentations

14:15 Jester, R. J.; Milbrandt, E. C.: SCIENTISTS FOR A DAY: ENGAGING COMMUNITY COLLEGE STUDENTS IN FIELD RESEARCH AND ECOSYSTEM RESORATION PROMOTES SCIENCE LITERACY

14:30 Beauregard, A. Y.; Schwartz, M. C.: USING GIS WITH REAL-TIME WATER QUALITY ASSESSMENT TO GUIDE SCIENTIFIC INQUIRY AND LEARNING IN AN INTRODUCTORY OCEANOGRAPHY COURSE

14:45 Kveven, A. L.: UTILIZING HIGH IMPACT EDUCATIONAL PRACTICES IN COMMUNITY COLLEGE INTRODUCTORY OCEANOGRAPHY COURSES

15:00 Montoya-Ospina, R.; Maldonado-Rivera, P.; Gomez-Garzón, D.; Fuentes-Claudio, L.; Infante-Mendez, G.; Harris, L.; Cornwell, J.; Pierson, J.; Moser, F.: CONNECTING UNDERGRADUATE SCIENCE DISCIPLINES THROUGH MARINE SCIENCE RESEARCH AT BIOLUMINESCENT BAYS IN PUERTO RICO, A PILOT REU

15:15 Fitzpatrick, J.: ISOLATED ISLAND HOTSPOTS, CORAL REEFS, AND HUMPBACK WHALES PROVIDE AN EXCELENT FIELD LABORATORY FOR EXPLORING OCEANOGRAPHY

SS31 BIOLOGY AND BIOGEOCHEMISTRY OF SEA ICE COMMUNITIES

Chair(s): Susanne Neuer, susanne.neuer@asu.edu
Andrew Juhl, andyjuhl@ldeo.columbia.edu

Location: Room 348-349

10:00 Assmy, P.; Sundfjord, A.; Hop, H.; Ehn, J. E.; Kristiansen, S.; Tatarek, A.; Bluhm, K.; Daase, M.; Wiktor, J.; Granskog, M. A.: MASS AND WIDESPREAD OCCURRENCE OF FLOATING ICE-ALGAL AGGREGATES BELOW MELTING ARCTIC SEA ICE*

10:15 Juhl, A. R.; Aumack, C.; Neuer, S.; Krembs, C.: EXPORT OF SEA ICE ALGAE AND RETENTION OF ORGANIC MATTER BY FIRST YEAR ARCTIC SEA ICE

10:30 Aumack, C. F.; Juhl, A. R.; Neuer, S.: LINKING SEA ICE ORGANIC MATTER TO THE UNDERLYING MARINE ENVIRONMENT: PARTICLE SINKING VELOCITY UPON EXPORT

10:45 Lavrentyev, P.; Franze, G.; Conley, R.; Putland, J.; Solovyev, K.; Svensen, C.; Young, K.; Tarasenko, A.; Vesman, A.: MICROZOOPLANKTON ROLE IN THE WARMING ARCTIC: A CROSS-SYSTEM COMPARISON

11:00 Noble, A. E.; Saito, M. A.; Moran, D. M.: DISSOLVED AND PARTICULATE TRACE METAL MICRONUTRIENTS UNDER THE MCMURDO SOUND SEASONAL SEA ICE

11:15 Kinsey, J. D.; Tyssebotn, I. M.; Kieber, D. J.; Kiene, R. P.: EFFECTS OF IRRADIANCE ON *PHAEOCYSTIS ANTARCTICA* ORGANOSULFUR AND ACRYLATE PRODUCTION

11:30 Rellinger, A. N.; Kiene, R. P.; Kieber, D. J.: THE EFFECTS OF PROLONGED DARKNESS ON DMSP AND OTHER BIOGEOCHEMICALLY- RELEVANT CONSTITUENTS IN*PHAEOCYSTIS ANTARCTICA*

11:45 McKay, R. M.; Beall, B. F.; Twiss, M. R.; Morris, P.; Bullerjahn, G. S.: MICROBIAL CHANGE AS RELATED TO ICE COVER IN THE LAURENTIAN GREAT LAKES

SS36 PRESENCE AND IMPACTS OF EMERGING CONTAMINANTS IN AQUATIC SYSTEMS

Chair(s): Karen Kidd, kiddk@unb.ca;
Rebecca Klaper, rklaper@uwm.edu

Location: Room 343

10:00 Klaper, R. D.: PREDICTING THE IMPACTS OF EMERGING CONTAMINANTS IN FRESHWATER SYSTEMS BASED ON REALISTIC ENVIRONMENTAL EXPOSURES: DOSE AND MECHANISM OF ACTION MAKE THE POISON[T]

10:30 Brooks, B. W.; Du, B.; Connors, K. A.; Scott, W. C.; Kristofco, L. A.: PERSPECTIVES ON BIOACCUMULATION OF PHARMACEUTICALS IN INLAND AND COASTAL SYSTEMS*

10:45 Anger, C. T.; Sueper, C.; Blumentritt, D.; McNeill, K.; Engstrom, D. R.; Arnold, W. A.: QUANTIFICATION OF TRICLOSAN, CHLORINATED TRICLOSAN DERIVATIVES, AND THEIR DIOXIN PHOTOPRODUCTS IN SEDIMENT CORES*

11:00 Cheever, B. M.; Frost, P. C.; Higgins, S. N.; Xenopoulos, M. A.: EFFECTS OF SILVER NANOPARTICLE EXPOSURE ON LENTIC ECOSYSTEM FUNCTION

11:15 Bidigare, R. R.; Christensen, S. J.: DETECTION AND QUANTIFICATION OF THE CYANOTOXIN BMAA IN AQUATIC INVERTEBRATES

11:30 Goto, D.; Hamel, M.; Hammen, J.; Rugg, M.; Pegg, M. A.; Forbes, V. E.: PREDICTING LONG-TERM EXPOSURE EFFECTS OF ENDOCRINE DISRUPTORS ON STURGEON RECRUITMENT IN A STRESSED RIVERINE SYSTEM

11:45 Perez, X. G.; Diaz, L.; Miller, M.; Roberson, L.: PRESENCE AND DISTRIBUTION OF EMERGING CONTAMINANTS IN THE SAN JUAN BAY ESTUARY, PUERTO RICO.

13:30 Bogard, M. B.; Vogt, R. J.; Donald, D. B.; Bunting, L.; Leavitt, P. R.: DIFFERENTIAL EFFECTS OF UREA ON ALGAL COMMUNITY COMPOSITION ALONG A GRADIENT OF FERTILIZATION IN EUTROPHIC LAKES

13:45 Ozhan, K.; Miles, S. M.; Bargu, S.: LOUISIANA SWEET CRUDE OIL IMPACT ON THE GULF OF MEXICO PHYTOPLANKTON

14:00 Gong, L.; Ojima, M.; Moss, A. G.: MESOCOSM-BASED ANALYSIS OF OIL AND DISPERSANT-INDUCED MICROPARTICULATES.

14:15 Anaya, J. M.; Chen, C. S.; Zhang, S.; Spurgin, J.; Chuang, C. Y.; Xu, C.; Miao, A. J.; Quigg, A.; Santschi, P. H.; Chin, W. C.: EFFECTS OF ENGINEERED NANOPARTICLES ON THE ASSEMBLY OF EXOPOLYMERIC SUBSTANCES FROM PHYTOPLANKTON

14:30 Bush, C. H.; Ishaque, A. I.: DETERMINATION OF CECS IN WATER SAMPLES AND VITELLOGENIN CONTENT IN MALE *STRIPED KILLIFISH* AND *MUMMICHOG FISH*TISSUE FROM THE MCBS.

14:45 Griffith, D. R.; Kido Soule, M. C.; Matsufuji, H.; Eglinton, T. I.; Kujawinski, E. B.; Gschwend, P. M.: FREE, CONJUGATED, AND HALOGENATED ESTROGENS IN TREATED WASTEWATER EFFLUENT

15:00 Roberson, L. M.; Rivera, P.; Diaz, L.: IMPACT OF EMERGING CONTAMINANTS ON MARINE MACROALGAE

15:15 Du, B.; Connors, K. A.; Scott, W. C.; Kristofco, L. A.; Breed, C.; Byars, B. W.; Chambliss, C. K.; Brooks, B. W.: BIOACCUMULATION OF PHARMACEUTICALS AND OTHER CONTAMINANTS OF EMERGING CONCERN IN AQUATIC ORGANISMS IN ESTUARY AREA ALONG GULF OF MEXICO

(*) represents Invited presentations

16:00 Blakelock, G. C.; Xenopoulos, M. A.; Cheever, B. M.; Frost, P. C.: EFFECTS OF CHRONIC AND LONG-TERM EXPOSURE OF SILVER NANOPARTICLES ON NATURAL LAKE BACTERIOPLANKTON

16:15 Vincent, J. L.; Frost, P. C.; Cheever, B. M.; Xenopoulos, M. A.: RESPONSES OF NATURAL PHYTOPLANKTON AND ZOOPLANKTON TO CHRONIC EXPOSURE OF SILVER NANOPARTICLES

16:30 Pizarro, H. N.; di Fiori, E.; Cataldo, D.; Ramirez, M.; Rodriguez, P.; do Santos Afonso, M.: EFFECT OF THE INTERACTION OF TWO STRESSORS, GLYPHOSATE AND THE INVASIVE MUSSEL *LIMNOPERNA FORTUNEI*, ON FRESHWATER MICROBIAL COMMUNITIES

16:45 Elfadul, R. A.; May, E. B.; Chen , N.; Ishaque, A. B.: DETERMINATION OF CONTAMINANTS OF EMERGING CONCERN (CECS) IN MARYLAND COASTAL BAYS

17:00 Gonzalez, A. J.; Arkoosh , M.; Dietrich, J.; Krupkin, A.: EFFECTS ASSOCIATED WITH EXPOSURE TO POLYBROMINATED DIPHENYL ETHERS (PBEDS) IN JUVENILE CHINOOK SALMON.

17:15 Kidd, K. A.; Jobling, S.: THE ONGOING ISSUE OF ENDOCRINE DISRUPTING CHEMICALS: RECENT TRENDS IN WILDLIFE HEALTH AND EXPOSURES

SS45 EMPLOYING RIVERINE ORGANIC MATTER AS AN INTEGRATED SIGNAL OF CATCHMENT PROCESSES, CLIMATE AND LAND-USE CHANGE

Chair(s): Erin Ellis, ellise@evergreen.edu
Robert Spencer, rspencer@whrc.org
Peter Hernes, pjhernes@ucdavis.edu

Location: Room 345

10:00 Aiken, G. R.; Butman, D.; Hanley, K.; Spencer, R. G.: DISSOLVED ORGANIC MATTER AS AN INDICATOR OF WATERSHED PROCESSES *

10:15 Hosen, J. D.; McDonough, O. T.; Febria, C. M.; Williams, M. R.; Palmer, M. A.: ANTHROPOGENIC LAND COVER LINKED TO SHIFTS IN STREAM DISSOLVED ORGANIC MATTER COMPOSITION

10:30 Cawley, K. M.; Campbell, J.; Zwilling, M.; Jaffe, R.: EVALUATION OF WATERSHED FOREST MANAGEMENT AND VEGETATION COVER ON DISSOLVED ORGANIC MATTER CHARACTERISTICS IN STREAMS FROM NORTHEASTERN FORESTS

10:45 Xenopoulos, M. A.; Porter-Goff, E.; Spooner, D. E.; Williams, C. J.; Wilson, H. F.: THE PREVALENCE OF NONLINEARITY AND DETECTION OF ECOLOGICAL THRESHOLDS FOR DISSOLVED ORGANIC MATTER, NUTRIENTS AND ECOSYSTEM FUNCTIONS ACROSS LAND USE GRADIENTS

11:00 Fellman, J.; Hood, E.; Stubbins, A.; Spencer, R.; Raymond, P.: VARIABLE GLACIAL COVERAGE INFLUENCES DISSOLVED ORGANIC MATTER BIOGEOCHEMISTRY IN COASTAL WATERSHEDS OF SOUTHEAST ALASKA

11:15 Roehm, C. L.: DOM CHARACTERSITICS ALONG A STREAM NETWORK OF A WATERSHED IN NORTHERN SWEDEN

11:30 Louchouarn, P.; Amon, R.; Peirce, K.; Myers-Pigg, A. N.; Prokushkin, A.: MOLECULAR EVIDENCE OF LABILE PYROGENIC DOC IN MAJOR ARCTIC RIVERS: IMPLICATIONS FOR WILDFIRE-STREAM METABOLIC LINKAGES

11:45 Sleighter, R. L.; Abdulla, H. A.; Stubbins, A.; Spencer, R. G.; Holmes, R. M.; McClelland, J. M.; Hatcher, P. G.: MULTIVARIATE STATISTICS ASSIST IN THE CHARACTERIZATION OF DISSOLVED ORGANIC MATTER IN ARCTIC RIVERS ANALYZED BY ADVANCED ANALYTICAL TECHNIQUES

13:30 Galy, V.; Peucker-Ehrenbrink, B.; Eglinton, T.: EROSIONAL CONTROL OF THE GLOBAL TRANSFER OF TERRESTRIAL ORGANIC CARBON TO THE OCEAN*

13:45 Tucker, A. N.; McCallister, S. L.: GLOBAL SYNTHESIS OF THE RADIOCARBON AGE OF PARTICULATE AND DISSOLVED ORGANIC CARBON EXPORTED FROM AQUATIC SYSTEMS

14:00 Voss, B. M.; Eglinton, T. I.; Peucker-Ehrenbrink, B.; Galy, V.: TRACING RIVERINE ORGANIC MATTER WITH INORGANIC RADIOISOTOPES

14:15 Ellis, E. E.; Ingalls, A. E.; Richey, J. E.; Keil, R. G.; Santos, G. M.; Druffel, E. R.: TEMPORAL VARIABILITY IN THE AGE OF CARBON EXPORTED BY THE MEKONG RIVER, CAMBODIA: A COMPARISON BETWEEN LIGNIN PHENOLS AND BULK ORGANIC MATTER

14:30 Vonk, J. E.; Spencer, R. G.; Mann, P. J.; Peterse, F.; Feng, X.; Holmes, R. M.; Eglinton, T. I.: MOLECULAR INSIGHTS INTO SEASONAL PATTERNS OF PARTICULATE ORGANIC MATTER RELEASE IN THREE MAJOR ARCTIC RIVERS

14:45 Rosenheim, B. E.; Williams, E. K.; Roberts, B. J.; Allison, M. A.: HIGH DISCHARGE AND PARTICULATE ORGANIC CARBON TRANSPORT ON THE MISSISSIPPI-ATCHAFALAYA SYSTEM

15:00 Mann, P. J.; Vonk, J. E.; McIntyre, C.; Wacker, L.; Eglinton, T. I.; Holmes, R. M.; Spencer, R. G.: SUSCEPTIBILITY OF ANCIENT ORGANIC CARBON TO RAPID TURNOVER IN ARCTIC STREAMS AND RIVERS

15:15 Panneer Selvam, B.; Laudon, H.; Berggren, M.: WINTER CONDITIONS ALTER THE CHARACTER AND REACTIVITY OF DISSOLVED ORGANIC CARBON AT THE SOIL-STREAM INTERFACE.

16:00 Hartnett, H. E.: INVESTIGATING CARBON TRANSPORT AND TRANSFORMATION IN THE COLORADO RIVER THROUGH FIELD-BASED TEACHING

16:15 Raleigh, M. L.; Bowman, M. M.; Smith, Z. P.; Coe, J. D.; Hartnett, H. E.: MICROBIAL BIOAVAILABILITY OF DISSOLVED ORGANIC CARBON IN THE COLORADO RIVER

16:30 Kendrick, M. R.; Huryn, A. D.: HIGH EARLY AND LATE SEASON METABOLISM IN AN ARCTIC RIVER

16:45 Berggren, M.; del Giorgio, P. A.: THE METABOLIC FOOTPRINT OF RIVERINE DISSOLVED ORGANIC CARBON FROM DIFFERENT TERRESTRIAL SOURCES

17:00 Asmala, E.; Autio, R.; Kaartokallio, H.; Pitkänen, L. M.; Stedmon, C. A.; Thomas, D. N.: RIVERINE DISSOLVED ORGANIC MATTER IN THREE BOREAL ESTUARIES ENTERING THE BALTIC SEA

17:15 Dunton, K. H.; McClelland, J. W.; Crump, B. C.; Connelly, T. L.; Kellogg, C.; Linn, S. E.; Khosh, M. S.: THE ROLE OF TERRESTRIAL INPUTS OF ORGANIC MATTER IN ARCTIC LAGOONS: COMPARATIVE STUDIES FROM OPEN-WATER AND ICE-COVERED PERIODS

(T) represents Tutorial presentations

SS49 MICROBIAL MEDIATED RETENTION/TRANSFORMATION OF ORGANIC AND INORGANIC MATERIALS IN FRESHWATER AND MARINE ECOSYSTEMS

Chair(s): Jennifer J Mosher, jmosher@stroudcenter.org
Richard Devereux, Devereux.Richard@epamail.epa.gov
Anthony V Palumbo, palumboav@ornl.gov

Location: Room 344

13:30 Kirchman, D. L.; Campbell, B. A.; Cottrell, M. T.; Dittmar, T.; Niggemann, J.: A "MOLECULAR" VIEW OF BACTERIAL COMMUNITIES AND DISSOLVED ORGANIC MATERIAL IN THE DELAWARE ESTUARY[T]

14:00 Lennon, J. T.; Muscarella, M. E.; Jones, S. E.: BACTERIA AND BROWNING: IMPLICATIONS OF TERRESTRIAL CARBON SUBSIDIES FOR AQUATIC ECOSYSTEMS *

14:15 Findlay, R. H.: LINKAGES AMONG AQUATIC MICROORGANISMS AND DISSOLVED ORGANIC MATTER IN LOW-ORDER STREAMS AND RIVERS.*

14:30 Mosher, J. J.; Kan, J.; Kaplan, L. A.: A META-ECOSYSTEM APPROACH TO INVESTIGATING BACTERIAL COMMUNITY AND DISSOLVED ORGANIC MATTER INTERACTIONS IN THREE DISTANT WATERSHEDS

14:45 Lee, D. Y.; Doherty, M.; Owens, M. S.; Crump, B. C.; Cornwell, J. C.: MICROBIAL COMMUNITIES AND METABOLIC CARBON CYCLES REFLECT REDOX CONDITIONS IN THE SEASONALLY ANOXIC CHESAPEAKE BAY

15:00 Kaartokallio, H.; Asmala, E.; Autio, R.; Thomas, D. N.: VARIABILITY IN BACTERIAL PRODUCTION, ABUNDANCE AND CELL PROPERTIES IN THREE BOREAL BALTIC SEA ESTUARIES

15:15 King, E. L.; Sornborger, A.; Meile, C.: PREDICTING BACTERIAL METABOLIC FUNCTIONING UNDER VARYING ENVIRONMENTAL FORCING

16:00 Corman, J. R.; Moody, E.; Nevarez, N.; Elser, J. J.: NUTRIENT LIMITATION OF PRIMARY PRODUCERS IN TRAVERTINE STREAMS IN SOUTHEASTERN ARIZONA

16:30 Risse-Buhl, U.; Schlief, J.; Mutz, M.: CRUCIAL ROLE OF PHAGOTROPHIC PROTISTS DURING MICROBIAL MEDIATED LEAF LITTER PROCESSING UNDER CRITICAL OXYGEN CONCENTRATIONS

16:45 Appling, A. P.; Heffernan, J. B.: NUTRIENT RETENTION BY PLASTIC ORGANISMS IN DYNAMIC ECOSYSTEMS

17:00 Cotner, J. B.; Godwin, C. M.: ARSENIC AND OLD LACE: JUST HOW MUCH PHOSPHORUS DOES A BACTERIUM NEED?

17:15 Scott, E. E.; Evans-White, M. A.; Scott, J. T.: PHOSPHORUS CONCENTRATION AND LIGHT AVAILABILITY DIFFERENTIALLY AFFECT MICROBIAL-MEDIATED LEAF LITTER CONDITIONING.

SS50 ZOOPLANKTON RESPONSES TO ENVIRONMENTAL STRESSORS: FROM INDIVIDUAL RESPONSES TO LARGER SCALE IMPLICATIONS

Chair(s): Amy E. Maas, amaas@whoi.edu
David T. Elliott, delliott@umces.edu

Location: Room 356

10:00 Condon, R. H.; Duarte, C. M.; Pitt, K. A.; Lucas, C. H.; Arthur, J. M.; Decker, M. B.; Hollyhead, C.; Martin, M. S.; NCEAS Global Jelly Group: GLOBAL JELLYFISH BLOOMS: ASSESSING CURRENT PARADIGM, AND NATURAL AND ANTHROPOGENIC DRIVERS OF LONG-TERM JELLYFISH POPULATIONS FROM THE 19TH CENTURY TO PRESENT[T]

10:30 Hopcroft, R. R.; Doubleday, A. J.; Ulrich, S.: THE GULF OF ALASKA'S SALP BLOOM OF 2011: IGNORANCE OR HARBINGER OF CHANGE?

10:45 Green, S. R.; Gibson, D.; Elliott, D.: FEEDING RATES OF PHOROZOOIDS OF THE DOLIOLID, *DOLIOLETTA GEGENBAURI*

11:00 McNamara, M. E.; Lonsdale, D. J.; Cerrato, R. M.: THE ROLE OF EUTROPHICATION IN STRUCTURING PLANKTONIC COMMUNITY STRUCTURE IN THE PRESENCE OF THE CTENOPHORE *MNEMIOPSIS LEIDYI* (AGASSIZ 1865)

11:15 Nejstgaard, J. C.; Arora, V.; Birsa, L. M.; Jakobsen, H. H.: VIDEO ASSESSMENT OF MICROZOOPLANKTON SWIMMING IN RESPONSE TO PREDATORS

11:30 Robinson, H. E.; Koehl, M. A.: FLOW MICROHABITATS OVER BENTHIC SUSPENSION FEEDERS INFLUENCE PREDATOR-PREY INTERACTIONS

11:45 Liu, H.; Fogarty, M. J.; Hare, J.; Hsieh, C. H.; Glaser, S. M.; Sugihara, G.: MECHANISTIC UNDERSTANDING OF DYNAMICS AND COHERENCE FROM MARINE ZOOPLANKTON TO FISHES IN A CHANGING ENVIRONMENT

13:30 Elliott, D. T.; Pierson, J. J.; Roman, M. R.: INFLUENCE OF HYPOXIA ON LIFE HISTORY TRAITS OF THE WIDESPREAD COASTAL COPEPOD *ACARTIA TONSA*.

13:45 Keister, J. E.; Tuttle, L. B.; McLaskey, A.; Raatikainen, L.; Winans, A. K.: ZOOPLANKTON SPECIES DIVERSITY COMPLICATES MEASUREMENT AND UNDERSTANDING THE EFFECTS OF DECREASING OXYGEN AND PH ON ECOSYSTEMS

14:00 Maas, A. E.; Lawson, G. L.: THE SYNERGISTIC EFFECT OF LOW OXYGEN AND HIGH CO2 ON THE PHYSIOLOGY OF THECOSOME PTEROPODS IN THE ATLANTIC AND PACIFIC

14:15 Grear, J. S.; Borsay Horowitz, D.: EFFECTS OF COASTAL ACIDIFICATION ON THE LIFE CYCLE AND FITNESS OF THE MYSID SHRIMP *AMERICAMYSIS BAHIA*

14:30 Gravinese, P. M.; Tankersley, R. A.: EFFECTS OF OCEAN ACIDIFICATION ON EMBRYONIC DEVELOPMENT AND LARVAL MORPHOLOGY IN THE FLORIDA STONE CRAB

14:45 Murray, C. S.; Gobler, C.; Baumann, H.: SURVIVAL AND GROWTH AT ELEVATED CO2 CONDITIONS IN ATLANTIC SILVERSIDE EGGS AND LARVAE: EVIDENCE FOR SEASONAL VARIABILITY

15:15 Seuront, L.; Stanley, H. E.: BEHAVIORALLY-MEDIATED IMPACT OF CLIMATE CHANGE: A CASE FROM THE DOWNSIDE

SS58 OCEAN PROVINCES, FOOD WEB STRUCTURE AND PARTICLE FLUX

Chair(s): Uta Passow, passow@lifesci.ucsb.edu
Adrian Burd, adrianb@uga.edu
Deborah Steinberg, debbies@vims.edu

Location: Room 353

10:00 Wassmann, P.; Svensen, C.; Koski, M.; Reigstad, M.; Wexels Riser, C.: UPPER WATER COLUMN VERTICAL FLUX RETENTION AND REGULATION BY ZOOPLANKTON[T]

10:30 Koski, M.: ZOOPLANKTON COMMUNITY STRUCTURE AND FLUX ATTENUATION – PHYSIOLOGY AND BEHAVIOR CAN INDUCE MANY-FOLD VARIABILITY IN CONSUMPTION OF SINKING PARTICLES

10:45 Pakhomov, E. A.; Podeswa, Y.; Hunt, B. P.: ACTIVE CARBON TRANSPORT AND FEEDING ECOLOGY OF PELAGIC DECAPODS IN THE NORTH PACIFIC SUBTROPICAL GYRE

(*) represents Invited presentations

MONDAY

11:00 Stock, C. A.; Dunne, J. P.; John, J.: GLOBAL-SCALE CARBON AND ENERGY FLOWS THROUGH THE PLANKTONIC FOOD WEB: AN ANALYSIS WITH A COUPLED PHYSICAL-BIOLOGICAL MODEL

11:15 Davison, P. C.; Checkley, D. M.; Koslow, J. A.; Barlow, J.: SPATIAL VARIABILITY IN THE PRIMARY PRODUCTION REQUIRED AND CARBON FLUX MEDIATED BY MESOPELAGIC FISHES IN THE NORTHEAST PACIFIC OCEAN

11:30 Wilson, S. E.; Neuer, S.; Condon, R. H.; Shelton, N. L.: EFFECT OF SEASONAL AND SPATIAL VARIABILITY IN THE DIETS AND FECAL PELLET PRODUCTION OF MESOZOOPLANKTON ON PARTICLE FLUX

11:45 Steinberg, D. K.; Gleiber, M. R.; Conroy, B. J.; Berelson, W. M.: CONTRIBUTION OF ZOOPLANKTON FECAL PELLETS TO CARBON FLUX IN THE AMAZON RIVER PLUME AND WESTERN TROPICAL NORTH ATLANTIC OCEAN

13:30 Buesseler, K. O.: WHY EZ-RATIOS MAKE IT EASIER TO UNDERSTAND PARTICLE FLUX ATTENUATION IN THE OCEAN [T]

14:00 Stewart, G. M.; Choi, H. Y.; Lomas, M. W.; Moran, S. B.: CONNECTING PLANKTON COMMUNITY STRUCTURE WITH POC EXPORT USING PO-210/PB-210 TRACERS ALONG LINE P, SUBARCTIC PACIFIC

14:15 Guidi, L.; Uitz, J.; Stemmann, L.; Legendre, L.: USING GLOBAL THORIUM, SEDIMENT TRAP, AND OPTICAL DATA TO REGIONALIZE OCEAN CARBON REMINERALIZATION AND SEQUESTRATION

14:30 Iversen, M. H.; Nowald, N.; Klawonn, I.; Ploug, H.; Jackson, G. A.; Fischer, G.: IMPORTANCE OF MICROBES, ZOOPLANKTON, AND BALLASTING ON CARBON FLUX ATTENUATION

14:45 Olli, K.; Reigstad, M.; Wassmann, P. F.: DECONVOLUTING THE VERTICAL FLUX ATTENUATION IN THE TWILIGHT ZONE

15:00 Jackson, G. A.: COMPARING PREDICTIONS FROM COAGULATION MODELS WITH OBSERVATIONS OF PARTICLE SIZE DISTRIBUTIONS MADE WITH OPTICAL INSTRUMENTS.

15:15 Close, H. G.; Hurley, S. J.; Wilkes, E.; Pearson, A.: LIPID AND ISOTOPIC SIGNATURES OF A PLANKTON COMMUNITY GRADIENT IN THE NORTHEAST PACIFIC OCEAN

SS69 COASTAL AND MARINE ECOLOGICAL CLASSIFICATION STANDARD (CMECS): A COMMON LANGUAGE FOR SCIENCE AND MANAGEMENT

Chair(s): Emily Shumchenia, emily@gso.uri.edu
Rebecca J. Allee, becky.allee@noaa.gov

Location: Room 353

16:00 Allee, R. J.; Finkbeiner, M.: THE COASTAL AND MARINE ECOLOGICAL CLASSIFICATION STANDARD (CMECS): AN OVERVIEW OF THE NEW FEDERAL STANDARD[T]

16:30 Finkbeiner, M. A.; Robinson, C.: APPLYING CMECS TO EXISTING GEOSPATIAL DATASETS: CASE STUDIES WITH SCHEME

16:45 Allee, R. J.; Kurtz, J.; Finkbeiner, M.; Gould, R. W.; Ko, D. S.; Goodin, K.: APPLICATION OF THE COASTAL AND MARINE ECOLOGICAL CLASSIFICATION STANDARD USING SATELLITE-DERIVED DATA FOR PELAGIC HABITATS IN THE NORTHERN GULF OF MEXICO

17:00 LaFrance, M.; King, J.: DEVELOPING BENTHIC HABITAT MAPS TO ASSIST OFFSHORE WIND FARM SITING IN RHODE ISLAND, USA

17:15 Shumchenia, E. J.; Cicchetti, G.: COMPARISONS OF HISTORICAL VS. RECENT BENTHIC BIOTOPE EXTENT AND BENTHIC HABITAT QUALITY

SS74 TACKLING HARMFUL ALGAL BLOOMS: SYNERGY BETWEEN RESEARCH, MANAGEMENT & EDUCATION

Chair(s): Vincent Lovko, vlovko@mote.org
Alina Corcoran, alina.corcoran@myfwc.com

Location: Room 350-351

10:00 Jochens, A. E.; Kirkpatrick, B.; Wolfe, S. H.: WHAT IS IT? WHERE IS IT? WHERE IS IT GOING? WORKING TOGETHER TO BUILD A HARMFUL ALGAL BLOOM INTEGRATED OBSERVING SYSTEM FOR THE GULF OF MEXICO*

10:15 Corcoran, A. A.; Flewelling, L. J.; Henschen, K.; Wolny, J.; Kirkpatrick, G. J.; Lovko, V. J.; Kirkpatrick, B. A.; Hu, C.; Lenes, J. M.; Weisburg, R. H.: A FLORIDA RED TIDE BLOOM COLLABORATIVE RESPONSE – OVERVIEW

10:30 Kudela, R. M.; Caron, D. A.; Carter, M. L.; Cochlan, W. p.; Dale, G.; Howard, M. D.; Langlois, G.; McAfee, S.; Stumpf, R.; Gulland, F.: DEVELOPMENT OF THE CALIFORNIA HARMFUL ALGAL BLOOM MONITORING AND ALERT PROGRAM (CALHABMAP)

10:45 Caron, D. A.; Jones, B. H.; Robertson, G.; Mengel, M.; Kudela, R.; Howard, M.; Ryan, J.; Scholin, C.; Terrill, E.; Holt, B.: HAB MONITORING DURING A MAJOR EFFLUENT DIVERSION EVENT IN COASTAL SOUTHERN CALIFORNIA: THE ROLE OF SCIENCE AND PARTNERSHIPS IN MONITORING AND DECISION MAKING

11:00 Greenfield, D. I.; Coyne, K. J.; Doll, C. R.; Main, C.; Bianco, C.: COMPARISON OF SANDWICH HYBRIDIZATION ASSAY AND QUANTITATIVE PCR FOR HAB RESEARCH AND MANAGEMENT USING THE RAPHIDOPHYTE HETEROSIGMA AKASHIWO

11:15 Accorsi, E. K.; Palacios, S. L.; Kudela, R. M.: DIFFERENTIATION OF THE CYANOBACTERIAL HARMFUL ALGAL BLOOM SPECIES APHANIZOMENON AND MICROCYSTIS REFLECTANCE SPECTRA: AN EARLY WARNING TOOL?

11:30 Lundgren, V. M.; Roelke, D. L.; Grover, J. P.; Brooks, B. W.; Prosser, K. N.; Scott, W. C.; Laws, C. A.; Umphres, G. D.: MITIGATION OF *PRYMNESIUM PARVUM* BLOOMS: AT THE INTERFACE OF ECOLOGY, HYDROLOGY AND STAKEHOLDER INTERESTS

11:45 Kirkpatrick, B. A.; Fleming, L. E.; Kohler, K.; Currier, R. D.: KARENIA BREVIS AEROSOLS: FROM MONITORING PEOPLE TO REAL TIME BEACH REPORTING TO MINIMIZE HUMAN HEALTH IMPACTS*

13:30 Neill, B.; Kirkpatrick, B.: NGOS: CONTRIBUTING TO HARMFUL ALGAL BLOOM RESEARCH AND EDUCATION

13:45 Boyer, G. L.; Kishbaugh, S.; Perkins, M.; Mueller, N.: THE NEW YORK STATE CITIZEN-BASED MONITORING PROGRAM FOR CYANOBACTERIA TOXINS

14:00 Seubert, E. L.; Chilton, L.; Gellene, A. G.; Stauffer, B. A.; Jones, A.; Seegers, B.; Thomas, J.; Terrill, E.; Caron, D. A.: CONSTRUCTION OF A COMMUNITY BASED HARMFUL ALGAL BLOOM MONITORING PROGRAM: BRIDGING UNIVERSITY RESEARCH WITH INFORMAL SCIENCE CENTERS

[T] represents Tutorial presentations

14:15 Smith, E. A.; Blanchard, P.; Bargu, S.: EDUCATION AND OUTREACH CONCERNING HARMFUL ALGAL BLOOMS IN ESTUARIES OF SOUTH LOUISIANA

14:30 Kennison, R.; Chilton, L.: WHAT ARE HARMFUL ALGAL BLOOMS AND WHAT CAN WE DO ABOUT THEM? HOW SCIENTISTS, EDUCATORS AND THE PUBLIC CAME TOGETHER TO ANSWER THESE QUESTIONS

TUESDAY, FEBRUARY 19 - ORALS

GS08A PLANKTON ECOLOGY - PHYTOPLANKTON

Chair(s): Donald Redalje, Donald.Redalje@USM.edu
Daniel Roelke, droelke@tamu.edu
Ed Laws, edlaws@lsu.edu
Chris Filstrup, Filstrup@iastate.edu
Nasseer Idrisi, nidrisi@uvi.edu

Location: Room 343

10:00 Filstrup, C. T.; Wagner, T.; Soranno, P. A.; Stanley, E. H.; Stow, C. A.; Webster, K. E.; Downing, J. A.: REGIONAL VARIABILITY IN NON-LINEAR CHLOROPHYLL RESPONSE TO TOTAL PHOSPHORUS ENRICHMENT IN LAKES

10:15 Fredrick, N. D.; Berges, J. A.; Twining, B. S.; Nuñez-Milland, D.; Hellweger, F. L.: EXPLORING MECHANISMS OF P CONTENT HETEROGENEITY IN CULTURED PHYTOPLANKTON USING AGENT-BASED MODELING

10:30 Laws, E. A.; Pei, S.; Bienfang, P.: PHOSPHATE-LIMITED GROWTH OF THE MARINE DIATOM THALASSIOSIRA WEISSFLOGII: EVIDENCE OF NON-MONOD GROWTH KINETICS

10:45 Windecker, L. A.; Brzezinski, M. A.; Wear, E. K.; Carlson, C. A.; Jones, J. L.: PATTERNS OF TRANSPARENT EXOPOLYMER RELEASE BY MARINE DIATOMS UNDER SILICATE AND NITRATE STRESS

11:00 Chen, G.; Rynearson, T.: GENETIC VARIATION IN THE MARINE PLANKTONIC DIATOM *THALASSIOSIRA GRAVIDA*

11:15 Ryan-Keogh, T. J.; Macey, A. I.; Nielsdottir, M. C.; Lucas, M. I.; Steigenberger, S. S.; Stinchcombe, M. C.; Achterberg, E. P.; Bibby, T. S.; Moore, C. M.: SPATIAL AND TEMPORAL DEVELOPMENT OF PHYTOPLANKTON IRON STRESS IN RELATION TO BLOOM DYNAMICS IN THE HIGH LATITUDE NORTH ATLANTIC

11:30 Marquez, I. A.; Krause, J. W.; Brzezinski, M. A.; Medrano, M. R.; Baines, S. B.: *SYNECHOCOCCUS:* A MAJOR PLAYER IN THE OCEAN SILICON CYCLE?

11:45 Hunter-Cevera, K. R.; Sosik, H. M.; Neubert, M. G.; Solow, A. R.; Olson, R. J.; Shalapyonok, A.: *SYNECHOCOCCUS* POPULATION GROWTH RATES FROM A MATRIX POPULATION MODEL: VALIDATION AND FIELD STUDIES

14:00 Redalje, D. G.; Stone, M.; Chen, X.: QUANTUM YIELD FOR TWO SPECIES OF MARINE PHYTOPLANKTON GROWN IN SEMICONTINUOUS CULTURE UNDER FLUCTUATING AND STATIC IRRADIANCE CONDITIONS

14:15 Boeing, W. J.; Bartley, M.; Lammers, P.; Van Voorhies, W.: ECOLOGICAL DYNAMICS AND INVASION RATES OF ALGAE PRODUCTION SYSTEMS UNDER VARYING ENVIRONMENTAL CONDITIONS

14:30 Xu, Y.; Boeing, W. J.: MODELLING MAXIMUM LIPID PRODUCTIVITY OF MICROALGAE: REVIEW AND NEXT STEP

14:45 Roelke, D. L.; Spatharis, S.: PHYTOPLANKTON OVERYIELDING IN FLUCTUATING ENVIRONMENTS AND THE PARADOX OF COMPLEMENTARITY

15:00 Niesen, M.; Harris, L. A.: PHYTOPLANKTON COMMUNITY COMPOSITION IN THE POTOMAC RIVER ESTUARY

15:15 Mayor, E.; Kennedy, V.; Pierson, J.; Chigbu, P.: POPULATION BIOLOGY OF MYSIDS IN THE MARYLAND COASTAL BAYS

SS01 ECOSYSTEM-BASED MARINE SPATIAL PLANNING FOR BETTER MANAGEMENT OF OUR OCEANS

Chair(s): Tundi Agardy, tundiagardy@earthlink.net
Steven Degraer, S.Degraer@MUMM.ac.be
Angel Borja, aborja@azti.es

Location: Room 346-347

16:00 Borja, A.; Galparsoro, I.; Pascual, M.; Aranda, M.; Menchaca, I.; Uyarra, M. C.: MARINE SPATIAL PLANNING IN THE BASQUE COUNTRY (BAY OF BISCAY): A WAY FOR A FUTURE ECOSYSTEM-BASED MANAGEMENT

16:15 Shumchenia, E. J.; Grilli, A. R.: CHARACTERIZATION OF ECOLOGICALLY RELEVANT MARINE LANDSCAPES TO INFORM MARINE SPATIAL PLANNING

16:30 Kyriazi, Z.; Maes, F.; Vanaverbeke, J.; Vincx, M.: GAME THEORETICAL MODELLING OF OFFSHORE RENEWABLE ENERGY AND NATURE CONSERVATION INTERACTIONS IN THE CONTEXT OF MARINE SPATIAL PLANNING

16:45 Degraer, S.; Beare, D.; Cronin, K.; Essid, M.; Jones, P. J.; Katsanevakis, S.; Qiu, W.; Rabaut, M.; Stamford, T.; Stelzenmüller, V.; Sutton, G.; ter Hofstede, R.; Vanaverbeke, J.; van Dalfsen, J.; Vassilopoulou, V.; Vincx, M.; van Hoof, L.: MESMA: AN INTEGRATED TOOL TO MONITOR AND EVALUATE SPATIALLY MANAGED AREAS

17:00 Stelzenmüller, V.; Probst, W. N.; Schulze, T.; Pastoors, M.; Maes, F.; Sorensen, T. K.; Hommes, S.: TOWARDS AN ECOSYSTEM-BASED MSP IN THE SOUTHERN NORTH SEA: CURRENT STATE, GAPS AND SCIENCE NEEDS

17:15 Hall, C. M.: MARINE SPATIAL PLANNING FOR RENEWABLE ENERGY DEVELOPMENT ACTIVITIES ON THE U.S. OUTER CONTINENTAL SHELF

SS02 CATAPULTS, FERRIES, AND BRIDGES: GETTING AQUATIC SCIENCE RESULTS TO POLICY AND MANAGEMENT

Chair(s): Elizabeth Turner, elizabeth.turner@noaa.gov
Dwight Trueblood, dwight.trueblood@noaa.gov
Kalle Matso, kmatso@wildcats.unh.edu
Felix Martinez, felix.martinez@noaa.gov

Location: Room 355

10:00 Meyer, R. M.; McAfee, S. T.; Parris, A.; Whiteman, E.; Simpson, C.: WHAT DOES IT MEAN TO UNDERSTAND THE SCIENCE NEEDS OF DECISION MAKERS?

10:30 Brady, D. C.; Fitzpatrick, J.; DePinto, J.; Di Toro, D. M.; Kemp, W. M.; Scavia, D.: THE FEASABILITY OF TRANSITIONING COASTAL ECOSYSTEM MANAGEMENT MODELS FROM DEVELOPMENT TO OPERATIONAL STATUS

10:45 Mesner, N. O.; Walker, A.; Kinder, T.: STREAM SIDE SCIENCE: WATERSHED EDUCATION THAT MAKES A DIFFERENCE

11:00 Martinez, F. A.; Chadderton, W. L.; Wittman, M. E.; Newcomb, T.; Lodge, D. M.: BRIDGING SCIENCE, SOCIAL SCIENCE, AND MANAGEMENT OF AQUATIC INVASIVE SPECIES IN THE LAURENTIAN GREAT LAKES

(T) represents Tutorial presentations

11:15 McKenzie, C. H.; Deibel, D.; Lowen, J. B.; Ma, K. C.; Pilgrim, B.: CANADIAN CASE STUDIES IN AQUATIC INVASIVE SPECIES MITIGATION

11:30 Stow, C. A.; Kashian, D. R.; DePinto, J. V.; Peacor, S. D.; Hook, T. O.: SCIENCE TO MANAGEMENT: EXPERIENCES IN THE GREAT LAKES

11:45 Leon Soon, S.; Lemus, J.; Thomas, F.: COMMUNITY-DRIVEN SCIENTIFIC RESEARCH FACILITATES THE DEVELOPMENT OF EFFECTIVE MANAGEMENT STRATEGIES

14:00 Gardner, M. W.; Rogers, T. M.: BRINGING WETLANDS TO MARKET: CREATING PRACTICAL SCIENCE COMMUNICATIONS WITH THE END-USER IN MIND

14:15 Palmer, S. M.; Madden, K. M.; Buskey, E. J.; Peterson, T. R.; Ward, G. H.: BALANCING FRESHWATER INFLOWS IN A CHANGING ENVIRONMENT: COLLABORATING FOR WATER CONSERVATION ON THE TEXAS COAST

14:30 Hagy, J. D.; Greene, R. M.: SUPPORTING A NUTRIENT CRITERIA PROMULGATION IN FLORIDA

14:45 Lucena-Moya, P.; Dyer, F.; Harrison, E. T.; Jarrod, K.; Tschierschke, A.; ElSawah, S.: LOOKING FOR THRESHOLDS: THE RESPONSE OF MACROINVERTEBRATE ASSEMBLAGES TO PREDICTOR VARIABLES IN THE UPPER MURRUMBIDGEE RIVER CATCHMENT (AUSTRALIA)

15:00 Wang, F.; Reuter, H.: AN AGENT-BASED MODEL ON THE EFFECTS OF DIVE TOURISM ON KOH TAO, THAILAND: USING COMPUTER SIMULATION AS A SUSTAINABLE TOURISM MANAGEMENT TOOL

15:15 Castendyk, D.: FROM OPEN PITS TO LAKE DISTRICTS: DESIGNING THE REHABILITATION OF CANADA'S OIL SANDS MINES

SS08 BIOGEOCHEMISTRY OF METAL-BINDING ORGANIC LIGANDS IN THE OCEAN: SOURCES, COMPOSITION AND IMPACTS ON TRACE METAL CYCLING

Chair(s): Maeve C. Lohan, maeve.lohan@plymouth.ac.uk
Sylvia G. Sander, sylvias@chemistry.otago.ac.nz
Kristen N. Buck, kristen.buck@bios.edu

Location: Room 348-349

10:00 Sander, S. G.; Lohan, M.; Buck, K. N.: BIOGEOCHEMISTRY OF METAL-BINDING ORGANIC LIGANDS IN THE OCEAN: SOURCES, COMPOSITION AND IMPACTS ON TRACE METAL CYCLING[T]

10:30 Buck, K. N.: THE ORGANIC COMPLEXATION OF DISSOLVED IRON ACROSS THE NORTH ATLANTIC BASIN: RESULTS FROM THE U.S. GEOTRACES NORTH ATLANTIC SECTION CRUISES

10:45 Bundy, R. M.; Biller, D. V.; Barbeau, K. A.; Buck, K. N.: SOURCES OF IRON-BINDING LIGANDS IN CENTRAL CALIFORNIA AND SAN FRANCISCO BAY

11:00 Waska, H.; Beck, M.; Brumsack, H.; Koschinsky, A.; Ruiz Chancho, M. J.; Seidel, M.; Simon, H.; Dittmar, T.: DISSOLVED IRON AND COPPER SPECIATION IN A SUBTERRANEAN ESTUARY IN THE GERMAN WADDEN SEA: THE INFLUENCE OF DISSOLVED ORGANIC MATTER (DOM)

11:15 Sulzberger, B.: ROLES OF ORGANIC LIGANDS IN THE LIGHT-INDUCED REDOX CYCLING OF IRON

11:30 Abdulla, H. A.; Chen, H.; Sun, L.; Helms, J.; Mopper, K.; Hatcher, P. G.: PHOTOCHEMICALLY INDUCED IRON AND ORGANIC MATTER FLOCCULATION

11:45 Porcal, P.; Frejlachova, K.; Savrdova, T.; Kopacek, J.: PHOTOCHEMICAL REDUCTION OF PHOSPHORUS MOBILITY IN SURFACE WATERS

14:00 Boiteau, R.; Fitzsimmons, J. N.; Repeta, D. J.; Boyle, E. A.; Coe, A.; Chisholm, S.: HPLC-ICP-MS CHARACTERIZATION OF ORGANIC LIGANDS FROM CYANOBACTERIA LABORATORY CULTURES AND NATURAL SEAWATER

14:15 Farst, C. M.; Stenson, A.; Buck, K. N.; Landing, W. M.: ISOLATION AND CHARACTERIZATION OF MARINE SIDEROPHORES BY ELECTROSPRAY IONIZATION MASS SPECTROMETRY AND CLE-ACSV

14:30 Baars, O.; Perlman, D. H.; Morel, F. M.: METALLOPHORES IN NATURAL SAMPLES AND SPENT MEDIA ANALYSED BY HIGH RESOLUTION LC-MS/MS

14:45 Hogle, S. L.; Barbeau, K. A.; Roe, K. L.: HETEROTROPHIC BACTERIOPLANKTON UTILIZE HEME-BASED MOLECULES FOR GROWTH: A CASE STUDY IN THE BIOLOGICAL CONTROLS ON A MODEL IRON-BINDING LIGAND

15:00 Hassler, C. S.; Norman, L.; Angles, E.; Robinson, C.; Doblin, M.; Bowie, A.; Mancuso Nichols, C.: IMPACT OF BACTERIAL, PHYTOPLANKTONIC AND NATURAL EXOPOLYMERIC SUBSTANCES ON IRON BIOGEOCHEMISTRY

15:15 Norman, L.; Hassler, C. S.: OCEANIC IRON ENRICHMENT FROM ATMOSPHERIC DUST: FROM CHEMISTRY TO BIOAVAILABILITY

16:00 Wozniak, A. S.; Shelley, R. U.; Gurganus, S. C.; Sleighter, R. L.; Abdulla, H. A.; Willoughby, A. S.; Landing, W. M.; Hatcher, P. G.: EXPLORING THE RELATIONSHIPS BETWEEN ORGANIC MATTER MOLECULAR CHARACTERISTICS AND TRACE METAL SOLUBILITIES OF COMBUSTION- AND DUST-INFLUENCED MARINE AEROSOLS

16:15 Gurganus, S. C.; Wozniak, A. S.; Shelley, R. U.; Willoughby, A. S.; Sleighter, R. L.; Abdulla, H. A.; Landing, W. M.; Hatcher, P. G.: TRACE METAL AND ORGANIC MATTER CHARACTERISTICS OF AEROSOLS FROM MARINE AIR MASSES

16:30 Kleint, C.; Koschinsky, A.; Powell, Z.: GEO-BIO INTERACTIONS IN SHALLOW WATER HYDROTHERMAL VENTS AND THEIR IMPACT ON TRACE METALS

16:45 Carrasco, G. G.; Fitzsimmons, J. N.; Donat, J. R.; Boyle, E. A.: ASSESSING ZINC AND CADMIUM LIGANDS FROM HYDROTHERMAL PLUMES AND RIVERINE MATTER : POINT SOURCES OR GLOBAL TRENDSETTERS?

17:00 Schijf, J.; Christenson, E. A.; Potter, K. J.: DIFFERENT BINDING MODES OF CU AND PB VS. NI, ZN, AND CD WITH THE TRIHYDROXAMATE SIDEROPHORE DESFERRIOXAMINE B AT SEAWATER IONIC STRENGTH

17:15 Ye, Y.; Tagliabue, A.; Voelker, C.: CYCLING OF ORGANIC FE-BINDING LIGANDS IN 3D BIOGEOCHEMICAL MODEL

17:30 Cabaniss, S. E.: MOLECULAR-LEVEL MODELING OF TRACE METAL BINDING BY NATURAL ORGANIC MATTER

17:45 Sherman, E. M.; Moore, K.: A QUANTITATIVE ASSESSMENT OF MARINE IRON SIMULATION

(*) represents Invited presentations

SS17 PREDICTING DRIVERS AND MANAGEMENT PRACTICES IN LARGE RIVERS AND DELTAS: THE USGS DELTA RESEARCH AND GLOBAL OBSERVATION NETWORK (DRAGON)

Chair(s): Matthew E. Andersen, mandersen@usgs.gov
D. Phil Turnipseed, pturnip@usgs.gov

Location: Room 343

16:00 Gaweesh, A. M.; Meselhe , E. A.; Allison, M. A.; McCorquodale, J. A.; Sadid, K. M.; Pereira, J. F.; Georgiou, I. Y.; Vosburg, B. M.: NUMERICAL MODELING OF PULSED SEDIMENT DIVERSIONS; EFFECT ON STABILITY OF LATERAL SAND BARS IN THE LOWER MISSISSIPPI RIVER*

16:15 Sadid, K. M.; Meselhe , E. A.; Allison, M. A.; McCorquodale, J. A.; Gaweesh, A. M.; Pereira, J. F.; Georgiou, I. Y.; Vosburg, B. M.: HYDRODYNAMIC AND SEDIMENT TRANSPORT MODELING OF BONNET CARRE SPILLWAY DURING THE 2011 MISSISSIPPI RIVER FLOOD*

16:30 Moura, J. S.; Victoria, R. L.; Oliveira, E. C.; Ometto, J. H.; Martinelli, L. A.; Mitsuya, M.: HYDROLOGICAL AND BIOGEOCHEMICAL PROCESS IN AN AMAZON BASIN FLOODPLAIN – CURUAI VRRZEA, BRAZIL*

16:45 Pusch, M. T.; Irvine, K.; Solimini, A.: ECOLOGICAL ASSESSMENT OF HYDROMORPHOLOGICAL ALTERATIONS TO THE SHORES OF EUROPEAN LAKES*

17:00 Chen, Y. W.; Liu, X.; Wu, Z. S.; Xu, C. P.: CYANOBACTERIA DISTRIBUTION RELATED TO WATER LEVEL CHANGE IN THE BIGGEST FRESHWATER LAKE, LAKE POYANG CHINA*

17:15 Henderson, N. D.; Hannigan, R. E.; Christian, A. D.: SEASONAL LAND USE/COVER AFFECTS ON MICROBIAL COMMUNITIES IN THE NEPONSET RIVER WATERSHED*

17:30 Costea, G.; Pusch, M.: INVERTEBRATE DIVERSITY IN A CLAY-DOMINATED RIVER CORRIDOR (PRUT RIVER, ROMANIA)*

SS18 OXYGEN MINIMUM ZONES AND CLIMATE CHANGE: IMPACTS ON HIGHER TROPHIC LEVELS

Chair(s): Brad Seibel, seibel@uri.edu
Karen Wishner, kwishner@gso.uri.edu
Lisa Levin, llevin@ucsd.edu

Location: Room 350-351

10:00 Seibel, B. A.: CRITICAL OXYGEN LEVELS IN MARINE ANIMALS

10:15 Robison, B. H.; Reisenbichler, K. R.; Sherlock, R. E.; Walz, K. R.: EXPANDING OXYGEN MINIMUM ZONES: PHYSIOLOGICAL AND ECOLOGICAL CONSEQUENCES FOR MESOPELAGIC ANIMALS

10:30 Netburn, A. N.; Koslow, J. A.: THE ROLE OF THE OXYGEN MINIMUM ZONE IN CONFINING DEEP SCATTERING LAYERS IN THE SOUTHERN CALIFORNIA BIGHT

10:45 Friedman, J. R.; Drazen, J. C.; Condon, N. E.: GILL SURFACE AREA AND METABOLIC ENZYME ACTIVITIES OF DEMERSAL FISHES ASSOCIATED WITH THE OXYGEN MINIMUM ZONE OFF CALIFORNIA, U.S.A.

11:00 Barry, J. P.; Buck, K. R.; Taylor, J. R.; Herlien, R.; Lovera, C.; Whaling, P. J.; Kuhnz, L.: THE EFFECTS OF HYPOXIA AND HYPERCAPNIA ON METABOLISM IN BATFISH (*DIBRANCHUS SPONGIOSA*) FROM THE OXYGEN MINIMUM ZONE OF THE GULF OF CALIFORNIA

11:15 Pierson, J. J.; Elliott, D.; Roman, M. R.; Stoecker, D.; Decker, M. B.; Houde, E.; Liu, K.; Barba, A.: LIFE AND DEATH IN THE DEAD ZONE: BALANCING PREDATORS, PREY, AND HYPOXIA FOR COPEPODS IN CHESAPEAKE BAY

11:30 Roman, M.; Elliott, D.; Pierson, J.: ONLY THE GOOD DIE YOUNG: BOTTOM WATER HYPOXIA AS A MORTALITY SOURCE FOR COPEPOD EGGS AND NAUPLII IN CHESAPEAKE BAY

11:45 Liu, W.; Decker, M. B.; Pierson, J. J.: EFFECTS OF HYPOXIA ON GELATINOUS ZOOPLANKTON PREDATION OF COPEPODS IN CHESAPEAKE BAY

14:00 Gomes, H. R.; Goes, J. I.; Matondkar, S. P.; Basu, S.; Parab, S. G.; Buskey, E. J.; Thoppil, P.: ECOSYSTEM DISRUPTION IN THE ARABIAN SEA LINKED TO THE SPREAD OF HYPOXIA

14:15 Williams, R. L.; McKinney, R.; Wakeham, S.; Wishner, K. F.: OXYGEN MINIMUM ZONE ZOOPLANKTON: VERTICAL TRENDS OF CARBON AND NITROGEN STABLE ISOTOPES

14:30 Chu, S. N.; Wang, Z. A.; Hoering, K. H.: OCEAN ACIDIFICATION IN THE NORTHEAST PACIFIC OXYGEN MINIMUM ZONE

14:45 Gobler, C. J.; Wallace, R. B.; Depasquale, E.; Griffith, A.; Baumann, H.: DYNAMICS AND CONSEQUENCES OF ACIDIFICATION AND HYPOXIA IN COASTAL ECOSYSTEMS

15:00 Rahman, M. S.; Thomas, P.: MOLECULAR RESPONSES OF ATLANTIC CROAKER EXPOSED TO HYPOXIA IN THE NORTHERN GULF OF MEXICO: COMPARISON WITH LABORATORY FINDINGS

15:15 Wishner, K. F.; Levin, L.: OXYGEN MINIMUM ZONES AND COASTAL HYPOXIA: PRESENT AND POTENTIAL FUTURE EFFECTS ON BENTHIC AND PELAGIC COMMUNITIES

SS20 LET IT SNOW! AQUATIC EXOPOLYMERS, SUSPENDED PARTICLES, AND ORGANIC AGGREGATES

Chair(s): Karen Shapiro , kshapiro@ucdavis.edu
Fred C. Dobbs, fdobbs@odu.edu

Location: Room 353

14:00 Silver, M.: A HISTORICAL RAMBLE THROUGH THE FIELD OF MARINE PLANKTONIC AGGREGATES[T]

14:30 Shapiro, K.; Silver, M.; Mazzillo, F.; Largier, J.; Conrad, P.; Mazet, J.: FROM CATS TO SEA OTTERS: THE ROLE OF MARINE SNOW IN TRANSMISSION OF A LETHAL ZOONOTIC PATHOGEN IN THE NEARSHORE

14:45 Ward, J. E.; Doyle, J. J.; Ortiz, V. L.; Mason, R. P.: THE DARK SIDE OF MARINE SNOW: INCORPORATION, EFFECTS, AND TROPHIC UPTAKE OF ANTHROPOGENIC MATERIALS

15:00 Kramer, A. M.; Dobbs, F. C.; Ward, J. E.; Pierce, M.; Drake, J. M.: UNDERSTANDING THE CONTRIBUTION OF MARINE AGGREGATE-ASSOCIATED BACTERIA TO PATHOGEN LOAD IN OYSTERS USING AN AGENT-BASED MODEL

15:15 Dobbs, F. C.; Lyons, M. M.: EVIDENCE FOR COMPLEX LIFESTYLES AMONG AQUATIC BACTERIA: TEMPORAL VARIATION IN MICROHABITAT EFFECT DRIVEN BY CHANGES IN THE FREE-LIVING MICROBIAL COMMUNITIES

[T] represents Tutorial presentations

16:00 Passow, U.: MARINE SNOW AND AGGREGATES: WHAT IS ALL THE EXCITEMENT ABOUT?*

16:15 Ziervogel, K.; Passow, U.; Sweet, J.; Arnosti , C.: MARINE SNOW AND ASSOCIATED MICROBIAL PROCESSES AS DRIVERS FOR OIL TRANSFORMATION IN SURFACE GULF OF MEXICO WATERS

16:30 Asper, V. L.; Dike, C.; Diercks, A. R.; Passow, U.: IN SITU MEASUREMENTS OF MARINE SNOW SINKING SPEEDS NEAR THE MACONDO WELL IN THE GULF OF MEXICO

16:45 Edwards, B. R.; May, A. L.; Ossolinski, J. E.; Fredricks, H. F.; Campagna, S. R.; Van Mooy, B. A.: THE POTENTIAL IMPACTS OF ALLELOPATHY BETWEEN DIATOMS AND PARTICLE ATTACHED BACTERIA ON EXPORT EFFICIENCY.

17:00 Fong, A. A.; Bidigare, R. R.; Kemp, P. F.: COMPARISON OF AGGREGATE-ASSOCIATED BACTERIAL DIVERSITY IN EPISODIC PHYTOPLANKTON BLOOMS IN THE NORTH PACIFIC OCEAN

17:15 Dammrich, T.; van Beusekom, J. E.; Engel, A.: AGGREGATE FORMATION AND SINKING VELOCITIES OF NATURAL PHYTOPLANKTON ASSEMBLAGES DURING SPRING BLOOM IN A TEMPERATE SHALLOW TIDAL BASIN

17:30 Fettweis, M.; Lee, B. J.; Baeye, M.; Van den Eynde, D.; Chen, P.; Yu, J. C.: BIOLOGICAL EFFECTS ON FLOCCULATION AND DEPOSITION OF FINE-GRAINED SEDIMENTS IN A COASTAL TURBIDITY MAXIMUM

17:45 Azam, F.; Malfatti, F.: AGGREGATION CONTINUUM: A CONTEXT FOR BACTERIAL STRUCTURING OF PELAGIC MARINE ECOSYSTEMS*

SS21 OPTICAL SIGNATURES OF THE GLOBAL CARBON CYCLE: CHARACTERIZATION OF THE SOURCES, SINKS AND CHEMISTRY OF CDOM AND FDOM

Chair(s): Aron Stubbins, aron.stubbins@skio.usg.edu
Natasha McDonald, natasha.mcdonald@bios.edu

Location: Room 355

16:00 Spencer, R. G.; Aiken, G. R.; Mann, P. J.; Holmes, R. M.; Niggemann, J.; Dittmar, T.; Hernes, P. J.; Stubbins, A.: THE UTILITY OF CDOM FOR IMPROVING LAND TO OCEAN TERRIGENOUS DISSOLVED ORGANIC CARBON FLUXES*

16:15 Cardille, J. A.; Leguet, J. B.; del Giorgio, P.: SATELLITE IMAGERY AND LEGACY DATA SETS OF LAKE COLOR: A MODEL FOR BOREAL LAKES USING THE NEW LANDSAT PLATFORM

16:30 Lapierre, J. F.; del Giorgio, P. A.: LARGE-SCALE PATTERNS IN FLUORESCENT DOM IN BOREAL LAKES AND LINKS TO LANDSCAPE PROPERTIES

16:45 Gonsior, M.; Hertkorn, N.; Schmitt-Kopplin, P.; Cooper, W. J.: SARGASSUM – A MAJOR SOURCE OF CDOM IN THE GULF OF MEXICO AND THE SARGASSO SEA

17:00 Andrew, A. A.; Del Vecchio, R.; Blough, N. V.: LINKING THE OPTICAL PROPERTIES TO THE CHEMICAL STRUCTURE OF CDOM AND HUMIC SUBSTANCES

17:15 Willoughby, A. S.; Wozniak, A. S.; Abdulla, H. A.; Hatcher, P. G.: CHEMICAL CHARACTERIZATION OF CHROMOPHORIC ORGANIC MATTER IN AMBIENT AEROSOLS USING UV-VIS, NMR, AND ESI-FTICR-MS

17:30 Stubbins, A.; del Giorgio, P.; Berggren, M.; Lapierre, J. F.; Dittmar, T.: WHAT'S IN AN EEM? MOLECULAR SIGNATURES ASSOCIATED WITH DISSOLVED ORGANIC FLUOROPHORES

17:45 Stedmon, C. A.; Christensen, J. H.; Kritzberg, E. S.; Nielsen, N. J.; Reader, H.: COUPLING THE UV-VISIBLE SPECTROSCOPIC PROPERTIES OF DISSOLVED ORGANIC MATTER TO ITS CHEMICAL CHARACTERISTICS: EVIDENCE ACROSS CONTRASTING ENVIRONMENTS.

SS27 SURFACE AND SUBSURFACE FLUXES ACROSS THE LAND-OCEAN INTERFACE OF LARGE RIVERS

Chair(s): Mead A. Allison, mallison@mail.utexas.edu
Karen H. Johannesson , kjohanne@tulane.edu
Alexander S. Kolker, akolker@lumcon.edu

Location: Room 346-347

14:00 Palinkas, C. M.: TRANSFER OF TERRESTRIAL SEDIMENT TO THE AQUATIC ENVIRONMENT: LESSONS LEARNED FROM A SMALL COASTAL PLAIN RIVER AND POTENTIAL APPLICATION TO LARGER SYSTEMS

14:15 Allison, M. A.; Meselhe, E. A.; Vosburg, B. M.: IMPACT OF DELTA PLAIN PROCESSES ON MISSISSIPPI-ATCHAFALAYA SEDIMENT DISCHARGE TO THE GULF OF MEXICO DURING THE GREAT FLOOD OF 2011

14:30 Roy, E. D.; White, J. R.; Smith, E. A.; Bargu, S.; Li, C.: ESTUARINE ECOSYSTEM RESPONSE TO THREE LARGE-SCALE MISSISSIPPI RIVER FLOOD DIVERSION EVENTS

14:45 Joung, D.; Shiller, A. M.: DISSOLVED TRACE ELEMENTS IN LOUISIANA SHELF WATERS

15:00 Scaroni, A. E.; Nyman, J. A.; DeLaune, R. D.; Lindau, C. W.: HABITAT CHANGE IN THE ATCHAFALAYA RIVER BASIN ALTERS NUTRIENT INPUTS TO THE GULF OF MEXICO

15:15 Shi, J. Z.; Li, X.; Hu, G. D.; Xu, H. D.; Shi, H. Y.: MIXING, STRATIFICATION AND TIDAL STRAINING WITHIN THE NORTH PASSAGE OF THE PARTIALLY-MIXED CHANGJIANG RIVER ESTUARY, EAST CHINA SEA

SS30 BIOLOGICAL AND BIOGEOCHEMICAL RESPONSES TO HUMAN IMPACTS AT THE SEDIMENT-WATER INTERFACE

Chair(s): Katja Fennel, katja.fennel@dal.ca
Wally Fulweiler, rwf@bu.edu
Roxane Maranger, r.maranger@umontreal.ca
John Lehrter, lehrter.john@epa.gov

Location: Room 352

16:00 Cornwell, J. C.; Owens, M. S.; Kellogg, M. L.; Gao, Y.; Stoecker, D. K.: ANTHROPOGENIC INFLUENCES ON NUTRIENT AND GAS EXCHANGE AT THE SEDIMENT-WATER INTERFACE[T]

16:45 Oliver, J. L.: DOES SCIENCE SUPPORT ENVIRONMENTAL POLICY OR DOES ENVIRONMENTAL POLICY SUPPORT SCIENCE? SCALING FROM MEASUREMENT TO MANAGEMENT OF THE ENVIRONMENT (AND BACK)*

17:00 Gardner, W. S.; Lin, X.; McCarthy, M. J.; Cartwright, G.; Fall, K.; Liu, Z.; Briggs, K.; Friedrichs, C.: HOW IMPORTANT ARE RESUSPENDED PARTICLES TO NITROGEN DYNAMICS IN THE NORTHERN GULF OF MEXICO?

TUESDAY

(*) represents Invited presentations

17:15 Park, K.; Ha, H.: BOTTOM BOUNDARY LAYER SEDIMENT DYNAMICS USING HIGH-RESOLUTION DATA IN A SHALLOW, MICRO-TIDAL NORTHERN GULF OF MEXICO ESTUARY

17:30 Malmaeus, J. M.; Karlsson, M. O.: MOBILE PHOSPHORUS CONTENT IN SOFT SEDIMENTS IN TWO SUB-SYSTEMS OF THE BALTIC SEA WITH DIFFERENT REDOX CONDITIONS

17:45 Darrow, E. S.; Carmichael, R. H.; Calci, K. R.; Burkhardt, W.: SEDIMENTARY ORGANIC MATTER SOURCE SHIFTS DUE TO LAND USE CHANGE IN A NORTHERN GULF OF MEXICO ESTUARINE SYSTEM

SS35 CLIMATE EXTREMES - IS THE FUTURE OF ECOSYSTEMS PREDICTABLE AND MANAGEABLE?

Chair(s): Karin Junker, karin.junker@io-warnemuende.de
Carola Wagner, carola.wagner@io-warnemuende.de

Location: Room 357

10:00 Junker, K.; Dippner, J. W.: POTENTIAL PREDICTABILITY OF THE SOUTHERN BALTIC SEA PHYTOPLANKTON

10:15 Neuheimer, A. B.; MacKenzie, B. R.: EXPLAINING VARIATION IN LIFE HISTORY TIMING ACROSS A SPECIES RANGE: EFFECTS OF CLIMATE ON SPAWNING TIME IN AN EXPLOITED MARINE FISH

10:30 Lindsay, E. K.; Johnson, A. K.: INFLUENCE OF ENVIRONMENTAL VARIABLES ON MONKFISH (*LOPHIUS AMERICANUS*) CATCH AND SPAWNING DISTRIBUTION IN THE MID-ATLANTIC BIGHT (U.S.)

10:45 Gurbisz, C.; Kemp, W. M.: IMPACTS OF EXTREME WEATHER ON A LARGE SUBMERSED PLANT BED IN CHESAPEAKE BAY: ANALYSIS OF TIME SERIES DATA

11:00 McEwen, D. C.; Butler, M. G.: FOUR DECADES OF TEMPERATURE CHANGE IN AN ARCTIC TUNDRA POND AT BARROW, AK

11:15 Guizien, K.; Belharet,, M.; Moritz, C.; Guarini, J. M.: METAPOPULATION MODELLING BASED ON LARVAL DISPERSAL SIMULATIONS TO STUDY BENTHIC SPECIES RESILIENCE TO EXTREME CLIMATIC AND ANTHROPOGENIC STRESSES

11:30 Neal, B. P.; Treibitz, A.; Khen, A.; Lin, T. H.; Kreigman , D.; Mitchell, B. G.; Beijbom, B.; Kline, D. I.: LONG-TERM RESPONSE, RECOVERY, AND ADAPTATION OF CARIBBEAN CORALS FOLLOWING THE SEVERE HEAT BLEACHING IN 2005

11:45 Martinez, E.; Menze, M. A.; Torres, J. J.: MITOCHONDRIAL ENERGETICS OF BENTHIC AND PELAGIC ANTARCTIC TELEOSTS

14:00 Haig, H. A.; Vogt, R. J.; WISSEL B.; Leavitt , P. R.: WATER ISOTOPES LINK ECOSYSTEM FUNCTIONING TO HYDROLOGICAL VARIABILTY IN A LAKE CHAIN IN SASKATCHEWAN, CANADA

14:15 Strock, K. E.; Saros, J. E.; Nelson, S. J.; Birkel, S. D.: THE EFFECTS OF EXTREME CLIMATE EVENTS ON LAKEWATER CHEMISTRY: IMPLICATIONS FOR DISSOLVED ORGANIC CARBON TRENDS IN THE NORTHEAST U.S.

14:30 Crosswell, J. R.; Wetz, M. S.; Hales, B.; Paerl, H. W.: GLOBALLY-SIGNIFICANT CO2 EMISSIONS FROM COASTAL WATERS INDUCED BY HURRICANE IRENE (2011)

14:45 Mercier-Blais, S.; Beisner, B. E.; Prairie, Y. T.: EFFECTS OF AN ARTIFICIALLY DEEPENED THERMOCLINE ON THE TRANSFORMATION OF CARBON IN A LAKE: THE TIMEX (THERMOCLINE INDUCED MIXING EXPERIMENT) PROJECT

15:00 Ikenweiwe, N. B.; Valborg, B.; Hensen, S.; Quarty, G.; Ian, R.: APPLICATION OF REMOTE SENSING TO THE STUDY OF GULF OF GUINEA ECOSYSTEM PRODUCTIVITY

15:15 Grimm, N. B.; Hale, R. L.; Turnbull, L.; Earl, S.; Childers, D. L.: MODULATION OF STORM-DRIVEN WATER AND NUTRIENT LOADS BY INFRASTRUCTURE IN AN ARID URBAN ECOSYSTEM

SS48 GEOCHEMICAL CONSEQUENCES OF ADVECTION IN AQUATIC SEDIMENTS

Chair(s): Joerg Lewandowski, lewe@igb-berlin.de
Gunnar Nuetzmann, nuetzmann@igb-berlin.de
Christof Meile, cmeile@uga.edu
Andreas Brand, andreas.brand@eawag.ch

Location: Room 352

10:00 Charette, M. A.: THE WAQUOIT BAY SUBTERRANEAN ESTUARY: AN IDEAL NATURAL LABORATORY FOR STUDYING BIOGEOCHEMICAL PROCESSES OPERATING IN GROUNDWATER IMPACTED PERMEABLE SEDIMENTS*

10:15 Huettel, M.; Chipman, L.; Berg, P.: CONTROLS OF OXYGEN FLUX IN PERMEABLE COASTAL SEDIMENTS*

10:30 Berg, P.; Huettel, M.; Long, M. H.: EFFECTS OF ADVECTIVE FLOW IN PERMEABLE SEDIMENT MEASURED BY EDDY CORRELATION

10:45 Bryant, L. D.; Brand, A.; Mejer, K.; Wüest, A.; Engelhardt, C.; Kirillin , G.: ROCKING SEICHES AND SEDIMENT DANCERS: EFFECTS ON SEDIMENT OXYGEN UPTAKE AND POREWATER CHEMISTRY

11:00 Wuest, A.; Bryant, L. D.; Muller, B.: DEEP-WATER OXYGEN DEPLETION IN LAKES AND RESERVOIRS

11:15 Brand, A.; Lewandowski, J.; Hamann, E.; Nützmann, G.: CAN ADVECTION BE DISREGARDED IN MUDDY, BIOIRRIGATED SEDIMENTS? – A MODEL STUDY

11:30 Volkenborn, N.; Polerecky, L.; Chennu, A.; Meile, C.; Wethey, D. S.; Woodin, S. A.: BIOADVECTION IN MARINE SEDIMENTS: OXIC-ANOXIC OSCILLATIONS AT DEPTH AND FERTILIZATION OF MICROPHYTOBENTHOS AT THE SURFACE

11:45 Ziebis, W.; Madison, M. J.: DOES BIOTURBATION INCREASE THE FLUX OF NITROUS OXIDE FROM COASTAL SEDIMENTS?

SS49 MICROBIAL MEDIATED RETENTION/TRANSFORMATION OF ORGANIC AND INORGANIC MATERIALS IN FRESHWATER AND MARINE ECOSYSTEMS

Chair(s): Jennifer J Mosher, jmosher@stroudcenter.org
Richard Devereux, Devereux.Richard@epamail.epa.gov
Anthony V Palumbo, palumboav@ornl.gov

Location: Room 354

10:00 Baker, B. C.; Scott, J. T.: PHYTOPLANKTON STOICHIOMETRY, COMPOSITION, AND N2 FIXATION EFFICIENCY ALONG AN N:P SUPPLY RATIO GRADIENT

(T) represents Tutorial presentations

10:15 Scicluna, T. R.; Cook, P.; Grace, M.: BIOGEOCHEMICAL CYCLING OF PHOSPHORUS IN THE SEDIMENTS OF A LAGOONAL ESTUARY: IMPLICATIONS FOR EUTROPHICATION AND CYANOBACTERIAL BLOOMS.

10:30 Brin, L. D.; Giblin, A. E.; Rich, J. J.: DENITRIFICATION AND ANAMMOX HAVE SIMILAR TEMPERATURE OPTIMA AND SEASONALLY CONSISTENT THERMAL DEPENDENCES IN COASTAL RHODE ISLAND SEDIMENTS

10:45 Botrel, M.; Altabet, M. A.; Gregory-Eaves, I.; Maranger, R.: NITRIFICATION IN SHALLOW LAKES USING NATURAL STABLE ISOTOPES COMPOSITION OF NITRATE

11:00 Shelley, F. C.; Trimmer, M.; Grey, J.: SEASONAL METHANE OXIDATION AS A CHEMOSYNTHETC CARBON SOURCE IN RIVERS

11:15 Tait, Z. S.; Baylor, V. D.; Sipler, R. E.; Roberts, Q. N.; Stubbins, A.; Bronk, D. A.; Frischer, M. E.: WILL INCREASED TERRESTRIAL CARBON FLUX FROM MELTING PERMAFROST STIMULATE INCREASED BACTERIAL NITRATE UPTAKE IN THE ARCTIC OCEAN?

11:30 Holtgrieve, G. W.; Brett, M. T.; Taipale, S. J.; So, N.; Chheng, P.: THE IMPORTANCE OF BIOGENIC METHANE FOR FISHERIES PRODUCTION IN TONLE SAP LAKE, CAMBODIA

11:45 Tyssebotn, I. M.; Kinsey, J. D.; Kieber, D. J.; Kiene, R. P.; Rellinger, A. N.; Oswald, L.; Motard-Cote, J.: LATE SUMMER CONCENTRATIONS AND BIOLOGICAL TURNOVER RATES OF ACRYLATE AND DIMETHYLSULFOXIDE IN THE GULF OF MEXICO

14:00 Wilking, L. E.; Dillon, K. S.: ASSESSING HETEROTROPHIC BACTERIAL ACTIVITY IN ARTIFICIAL REEF BIOFILMS

14:15 Ogram, A. V.; Bae, H. S.; Huettel, M.; Chanton, J.: METHANOGENESIS, METHANOGENS, AND NUTRIENT IMPACTS IN THE FLORIDA EVERGLADES

14:30 Govenar, B.; Hall, J. V.; Schoolcraft, K. S.; Moseman-Valtierra, S. M.: EXAMINING THE ROLE OF RIBBED MUSSELS IN GREENHOUSE GAS FLUXES FROM COASTAL SALT MARSHES

14:45 Grossart, H. P.: MICROBIAL INTERACTIONS: KEY FOR ORGANIC MATTER AGGREGATION AND REMINERALIZATION IN AQUATIC SYSTEMS

15:00 Xing, P.; Wu, L. Q.; Zheng, J.: MICROBIAL COMMUNITIES INVOLVED IN ANAEROBIC DEGRADATION OF MICROCYSTIS BIOMASS

15:15 Devereux, R.; Beddick Jr., D. L.; Lehrter, J. C.; Jarvis, B.; Yates, D. F.; Mosher, J. J.; Brown, S. D.; Vishnivetskaya, T. A.; Palumbo, A. V.: REACTIVE IRON AND IRON-REDUCING BACTERIA IN LOUISIANA CONTINENTAL SHELF SEDIMENTS

SS50 ZOOPLANKTON RESPONSES TO ENVIRONMENTAL STRESSORS: FROM INDIVIDUAL RESPONSES TO LARGER SCALE IMPLICATIONS

Chair(s): Amy E. Maas, amaas@whoi.edu
David T. Elliott, delliott@umces.edu

Location: Room 344

10:00 Nielsen, T. G.; Riisgaard, K.; Swalethorp, R.; Kjellerup, S.; Rysgaard, S.: IMPORTANCE OF PROTOZOOPLANKTON IN A FUTURE WARMER ARCTIC

10:15 Ozersky, T.; Nakov, T.; Shchapov, K.; Wright, K.; Moore, M. V.: NEGATIVE EFFECTS OF ELEVATED TEMPERATURES ON AN ENDEMIC, KEYSTONE COPEPOD IN LAKE BAIKAL, RUSSIA.

10:30 Urban-Rich, J.; Major, C.; Daley, M.: CHANGES IN BIVALVE LARVAE ABUNDANCE BETWEEN A COLD AND WARM WINTER

10:45 Cournoyer, B. L.; Dam, H. G.: CAN THE COPEPOD ACARTIA HUDSONICA ADAPT TO CLIMATIC WARMING? WITHIN-POPULATION GENETIC VARIATION IN LIFE HISTORY TRAITS

11:00 St-Gelais, N. F.; Sastri, A. R.; del Giorgio, P. A.; Beisner, B. E.: CRUSTACEAN ZOOPLANKTON PRODUCTION AND COMMUNITY SIZE STRUCTURE IN BOREAL LAKES ALONG LATITUDINAL GRADIENTS.

11:15 Hirst, A. G.; Forster, J.; Atkinson, D.; Woodward, G.: CHANGING SIZE IN A WARMING WORLD

11:30 Bi, H.; Jo, Y.; Hare, J.: TRANSPORT AND MARINE ZOOPLANKTON SEASONAL DYNAMICS IN THE MID-ATLANTIC BIGHT

11:45 Finiguerra, M. B.; Dam, H. G.; Avery, D. E.; Burris, Z.: SEX-SPECIFIC ADULT STARVATION TOLERANCE IN THE MARINE COPEPOD ACARTIA TONSA

14:00 du Mais, R. M.; Ignoffo, T.; Slaughter, A.; Kimmerer, W.: REPRODUCTIVE SUCCESS OF THE COPEPOD PSEUDODIAPTOMUS FORBESI IN THE PRESENCE OF SUBLETHAL LEVELS OF THE TOXIC CYANOBACTERIA MICROCYSTIS AERUGINOSA

14:15 Kelly, P. T.; Creamer, K. P.; Coloso, J. J.; Jones, S. E.: ZOOPLANKTON FOOD QUALITY AMONG LAKES WITH VARYING TERRESTRIAL INPUTS: DO ESSENTIAL FATTY ACIDS OR PHOSPHOROUS LIMIT PRODUCTION?

14:30 Nobili, R.; Robinson, C.; Buitenhuis, E.; Castellani, C.: QUANTIFYING THE EFFECTS OF VARIABILITY IN PHYTOPLANKTON STOICHIOMETRY ON COPEPOD PHYSIOLOGY AND ECOLOGY

14:45 Elser, J. J.; Steger, L.; Kyle, M.; McCrackin, M. L.; Peace, A.: LIVING ON THE STOICHIOMETRIC KNIFE-EDGE: EFFECTS OF HIGH AND LOW FOOD C:P RATIO ON GROWTH, FEEDING, AND RESPIRATION IN MULTIPLE DAPHNIA SPECIES.

15:00 Baines, S. B.; Chen, X.; Twining, B. S.; Landry, M. L.: POTENTIAL FOR MINERAL LIMITATION OF ZOOPLANKTON FROM AN HNLC REGION (THE COSTA RICAN UPWELLING DOME)

15:15 Hébert, M.; Maranger, R.; Beisner, B.; Guénard, G.; Legendre , P.: RELATIVE IMPORTANCE OF FUNCTIONAL TRAITS AND ENVIRONMENTAL FACTORS IN CONTROLLING THE NUTRIENT RECYCLING POTENTIAL BY CRUSTACEAN ZOOPLANKTON

16:00 Hewson, I.; Li, W.; Ng, G.; LaBarre, B. A.; Greco, A.; Rudstam, L. G.; Watkins, J. M.; Hairston, N. G.: EUKARYOTIC CIRCULAR SSDNA VIRUSES IN FRESHWATER ZOOPLANKTON: METAGENOMIC IDENTIFICATION, SEASONAL IMPACTS, AND POTENTIAL ROLE IN HOST EPIDEMIOLOGY

16:15 Anas, M. U.; Scott, K. A.; Cooper, R. N.; Das, B.; Cumming, B. F.; Wissel, B.: EARLY ACIDIFICATION OF BOREAL SHIELD LAKES DOWN-WIND OF ATHABASCA OILSAND OPERATIONS: INFERENCES FROM CRUSTACEAN ZOOPLANKTON COMMUNITIES

16:30 Bailey, J. L.; Celis-Salgado, M. P.; Heneberry, J.; Yan, N. D.: USING ZOOPLANKTON COMMUNITY STRUCTURE AND DAPHNID BIOASSAYS TO COMPARE RECOVERING ACIDIFIED AND CONTAMINATED LAKES IN NORTHERN ONTARIO

(*) represents Invited presentations

16:45 Grenvald, J. C.; Nielsen, T. G.; Hjorth, M.; Berge, J.: IMPACT OF PYRENE AND TEMPERATURE ON EARLY DEVELOPMENT OF TWO CO-EXISTING ARCTIC COPEPODS

17:00 Almeda, R.; Wambaugh, Z.; Zucheng , W.; Bona, S.; Cammie , H.; Zhanfei , L.; Buskey, E.: EFFECTS OF CRUDE OIL EXPOSURE ON ZOOPLANKON SURVIVAL AND BIOACCUMULATION OF POLYCYCLIC AROMATIC HYDROCARBONS

17:15 Motschman, J. D.; Kunz, K. L.; Nihongi, A.; Chang, W.; Strickler, J. R.: INCEPTION: ENGINEERING MULTI-LAYER SPHERICAL MICROFLUIDIC OIL DROPLETS OF DIFFERENT COMPOSITIONS TO TEST OIL-ZOOPLANKTON INTERACTIONS

17:30 Herrera, I.; Torreblanca, L.; Yebra, L.; Hernández-León, S.: ZOOPLANKTON AARS ACTIVITY IN RELATION TO THE LUNAR CYCLE IN SUBTROPICAL WATERS

17:45 Jungbluth, M.; Lenz, P. H.; Goetze, E.: A NEW QPCR-BASED APPROACH TO STUDYING COPEPOD NAUPLII IN THE FIELD

SS54 CARBON FLUXES AT THE LAND-OCEAN INTERFACE: RESEARCH AND EDUCATION

Chair(s): Jennifer Cherrier, jennifercherrier@gmail.com
Bob Chen, bob.chen@umb.edu
Jaye Cable, jecable@email.unc.edu
Christof Meile, cmeile@uga.edu

Location: Room 345

10:00 Schalles, J. F.; Alberts, J. J.; Fichot, C. G.; Urban, L. W.: SOURCES AND DYNAMICS OF DISSOLVED ORGANIC CARBON OUTWELLING ON THE GEORGIA COAST INTO THE SOUTH ATLANTIC BIGHT: RESEARCH AND STUDENT TRAINING

10:15 McIntosh, H. A.; Pondell, C.; Tyler, E.; Canuel, E.: USING BIOMARKERS TO DETERMINE SOURCES AND COMPOSITION OF ESTUARINE ORGANIC MATTER: DELAWARE BAY TO THE CLASSROOM

10:30 Bianchi, T. S.; Allison, M. A.; Cai, W. J.: BIOGEOCHEMICAL DYNAMICS OF LARGE-RIVER INTERFACES: LINKAGES WITH GLOBAL CHANGE[T]

11:00 Stets, E. G.: CAN WE DETECT LONG-TERM TRENDS IN CARBON EXPORT FROM LARGE RIVER SYSTEMS?

11:15 Fichot, C. G.; Benner, R.: TRANSFORMATIONS AND FATES OF TERRIGENOUS DOM IN A RIVER-INFLUENCED OCEAN MARGIN

11:30 Hunt, C. W.; Wollheim, W. M.; Salisbury, J. S.; Stewart, R. J.; Hanley, K. W.; Aiken, G. R.: MODELING THE EXPORT OF DOC FROM LARGE WATERSHEDS AND ITS INFLUENCE ON THE OPTICAL PROPERTIES OF COASTAL WATERS

11:45 Jearld, Jr., A.; Liles, G.; Gutierrez, B.: ACROSS DISCIPLINARY BOUNDARIES: DIVERSIFYING A FAMOUS SCIENCE COMMUNITY ONE COHORT AT A TIME

14:00 Emery, H. E.; Fulweiler, R. W.: ANTHROPOGENIC IMPACTS ON SALT MARSH GREENHOUSE GAS EMISSIONS

14:15 Cramer, C. B.; Fulweiler, R. W.: VIDEO FLUXES: AN INTERPRETATION FOR EDUCATION AND OUTREACH

14:30 Pidgeon, E. J.: BLUE CARBON: A TRANSFORMATIONAL TOOL FOR COASTAL CONSERVATION?[T]

15:00 Chen, R. F.; Cable, J. E.; Cherrier, J.; Meile, C.; Gardner, G. B.; Wang, X. C.; Esch, M.; Gray, E.; Lyons, G.; Peri, F.: OUTWELLING OF DISSOLVED ORGANIC CARBON FROM SALT MARSHES

16:15 Cable, J. E.; Gardner, G. B.; Chen, R. F.: RESPONSE OF CDOM IN SALT MARSH GROUNDWATER TO WIND AND TIDALLY DRIVEN INUNDATION PATTERNS

16:30 Seminara, D. N.; Schalles, J. F.; Strange, T. P.; Esch, M.: THE VEGETATION STRUCTURE OF NORTHERN GULF OF MEXICO SALT MARSHES REVEALED BY POLYGON-TRAINED CLASSIFICATIONS OF HIGH RESOLUTION IMAGERY

16:45 Cherrier, J.; Kelley, B.; Abazinge, M.; Tunnell, W.; Schalles, J.; Jagoe, C.; Callender, R.: PROMOTING A BALANCE BETWEEN SOCIETAL DEMANDS AND COASTAL ECOSYSTEM SUSTAINABILITY: A MODEL FOR TRAINING THE NEXT GENERATION OF OCEAN SCIENTISTS

17:00 Nordström, M. C.; Levin, L. A.: SUCCESSION IN STABLE ISOTOPE SPACE: FOOD-WEB HETEROGENEITY AND RECOVERY IN RESTORED SALT MARSHES

17:15 Song, H. Z.: CHANGE IN SEA LEVEL AND ITS IMPACTS ON MARSHES

17:30 Harris, L. A.; Bryan, J.: THE ROLE OF AUTECOLOGY IN TIDAL WETLAND MODELS

17:45 Jung, Y.; Burd, A. B.: MODELING THE PRODUCTION OF SALT MARSH GRASSES WITH THE SENSITIVITY ANALYSIS AND EXAMING THE BALACED GROWTH MODEL

SS58 OCEAN PROVINCES, FOOD WEB STRUCTURE AND PARTICLE FLUX

Chair(s): Uta Passow, passow@lifesci.ucsb.edu
Adrian Burd, adrianb@uga.edu
Deborah Steinberg, debbies@vims.edu

Location: Room 353

10:00 Neuer, S.; DeMartini, F.; Wilson, S. E.; Shelton, N.; Bachman, B.; Condon, R. H.; Richardson, T. L.; Lomas, M. W.: OASIS IN THE DESERT? ENHANCED PRODUCTION, GRAZING AND CARBON EXPORT ASSOCIATED WITH CORE AND EDGE OF AN ANTICYCLONIC EDDY IN THE SARGASSO SEA

10:15 Siegel, D. A.; Boyd, P.; Buesseler, K. O.; Doney, S. C.; Sailley, S.: A MECHANISTIC ASSESSMENT OF GLOBAL CARBON EXPORT FROM SATELLITE OBSERVATION

10:30 Smith, H. E.; Poulton, A. J.; Sanders, R.; Lampitt, R. S.; Balch, W. M.; Lam, P. J.: WHAT CONTROLS PARTICLE SINKING SPEED IN THE OPEN OCEAN?

10:45 Pinckney, J.; Benitez-Nelson, C. R.; Thunell, R.; Muller-Karger, F.; Lorenzoni, L.; Troccoli, L.; Varela, R.: CLIMATE-DRIVEN CHANGES IN PHYTOPLANKTON DIVERSITY AND COMMUNITY COMPOSITION IN THE CARIACO BASIN (1995-2011)

11:00 De La Rocha, C. L.; Gallinari, M.; Moriceau, B.; Iversen, M. H.; Evertsen, A. J.; Giering, S.; LeGoff, M.; Masson, A.; Lampitt, R.: HIGHEST SINKING FLUXES IN AN OUTDOOR MESOCOSM EXPERIMENT ASSOCIATED WITH DIATOM-BASED FOOD WEBS

11:15 McTigue, N. D.; Bucolo, P.; Liu, Z.; Dunton, K. H.: SEDIMENTARY CHLOROPIGMENT CONCENTRATIONS IN THE CHUKCHI SEA, ALASKA: A MICROBIAL LINK TO BENTHIC FOOD WEBS

11:30 Uchimiya, M.; Fukuda, H.; Nishino, S.; Kikuchi, T.; Ogawa, H.; Nagata, T.: LOW PRODUCTION AND SLOW TURNOVER OF HETEROTROPHIC MICROBES IN THE DEEP WATER OF THE CANADA BASIN, WESTERN ARCTIC

[T] represents Tutorial presentations

11:45 Rohal, M.; Thistle, D.: VARIABILITY OF DEEP-SEA MEIOFAUNAL MAJOR TAXA ON THE CONTINENTAL RISE OFF THE WEST COAST OF THE UNITED STATES

SS62 CO2-INDUCED ENVIRONMENTAL CHANGE AND THE OCCURRENCE AND SEVERITY OF HARMFUL ALGAL BLOOMS

Chair(s): Charles Trick, cyano@uwo.ca
Mark Wells, mlwells@maine.edu

Location: Room 350-351

16:00 Morales-Williams, A. M.; Wanamaker, Jr., A. D.; Downing, J. A.: STABLE ISOTOPIC EVIDENCE OF PHYTOPLANKTON BICARBONATE UPTAKE DURING PERIODS OF CARBON DIOXIDE UNDERSATURATION IN EUTROPHIC LAKES

16:15 Shi, X. L.; Kong, F. X.: IMPACTS OF ELEVATED CO2 LEVEL ON PHYTOPLANKTON COMMUNITY AND WATER ECOSYSTEMS IN LAKE TAIHU, CHINA

16:30 Wannicke, N.; Nausch, M.; Nausch, G.; Frindte, K.; Fabian, J.; Grossart, H. P.; Voss, M.: INTERACTING IMPACT OF OCEAN ACIDIFICATION AND EUTROPHICATION ON CYANOBACTERIAL BLOOMS

16:45 Errera, R. M.; Yvon-Lewis, S.; Campbell, L.: RESPONSE OF THE HARMFUL ALGA *KARENIA BREVIS* TO PRE-INDUSTRIAL, CURRENT, AND FUTURE PCO_2 AND SEA SURFACE TEMPERATURES

17:00 Yuan, J.: MULTIPLE NON-LINEAR REGRESSION OF CARBON DIOXIDE PARAMETERS ON TEMPERATURE AND SALINITY IN THE SURFACE OCEANS

17:15 Brown, A. T.; Gerwick, W.: EFFECT OF MODIFIED PH ENVIRONMENTS ON MOOREA PRODUCENS GROWTH AND PRODUCTION OF ADAPTIVE SECONDARY METABOLITES

17:30 Feifel, K. M.; Lessard, E. J.; Fletcher, S. J.: DEVELOPING A LONG TERM RECORD OF HISTORICAL *ALEXANDRIUM* BLOOMS USING SEDIMENT CORES

17:45 Ambrecht, L. H.; Roughan, M.; Rossi, V.; Schaeffer, A.; Davies, P. L.; Waite, A. M.; Armand, L. K.: PHYTOPLANKTON COMPOSITION UNDER CONTRASTING OCEANOGRAPHIC CONDITIONS IN A BIOLOGICAL HOTSPOT (EASTERN AUSTRALIA)

SS64 QUASI-LAGRANGIAN APPROACHES IN PELAGIC ECOLOGY

Chair(s): Mark D. Ohman, mohman@ucsd.edu
Michael R. Landry, mlandry@ucsd.edu

Location: Room 356

14:00 Landry, M. R.; Selph, K. E.; Stukel, M. R.; Gutiérrez, A.; Taylor, A. G.; Wokuluk, J. J.; Baines, S. B.: SPATIALLY HETEROGENEOUS DYNAMICS OF PICOPHYTOPLANKTON IN LAGRANGIAN-STUDIED WATER PARCELS IN THE COSTA RICA DOME

14:15 D'Asaro, E. A.; Perry, M. J.; Lee, C. M.: THE 2008 NORTH ATLANTIC BLOOM EXPERIMENT- LESSONS FROM A 3 MONTH, OPEN OCEAN AUTONOMOUS QUASI-LAGRANGIAN PROGRAM

14:30 Archer, S. D.; Kimmance, S. A.; Stephens, J. A.; Yang, M.; Torres, R.; Nightingale, P. D.: CYCLING OF DIMETHYL SULPHIDE (DMS) IN THREE CONTRASTING UNPERTURBED SF6-LAGRANGIAN WATER BODIES.

14:45 Genin, A.; Koseff, J. R.; Monismith, S. G.; Steinbuck, J. V.; Vaknin, R.; Holzman, R.: LAGRANGIAN MEASUREMENTS OF PHYTOPLANKTON GRAZING: PITFALLS AND SOLUTIONS FOR PRECISE TRACKING OF "WATER PARCELS"

15:00 Ohman, M. D.; Chekalyuk, A.: SPRAY GLIDER, MOVING VESSEL PROFILER, AND ADVANCED LASER FLUOROMETER SITUATE LAGRANGIAN EXPERIMENTS IN THE CCE-LTER SITE

15:15 de Verneil, A.; Franks, P. J.; Rudnick, D. L.; Ohman, M. D.; Landry, M. R.: PHYSICAL CONTEXT IN THE CALIFORNIA CURRENT ECOSYSTEM: FORCING DURING THE E-FRONT STUDY

16:00 Krause, J. W.; Brzezinski, M. A.; Stukel, M. R.; Landry, M. R.; Ohman, M. D.: BIOGENIC SILICA CYCLING ACROSS FRONTAL GRADIENTS IN THE CALIFORNIA CURRENT ECOSYSTEM

16:15 Brzezinski, M. A.; Krause, J. W.; Barbeau, K. A.; Bundy, R. M.; Stukel, M. R.; Landry, M. R.; Ohman, M. D.: VARIABLE INFLUENCE OF IRON ON SILICEOUS BIOMASS AND PRODUCTION IN A FRONTAL ZONE WITHIN THE CALIFORNIA CURRENT

16:30 Harvey, J. B.; Ryan, J. P.; Zhang, Y.: AUTONOMOUS DETECTION, LAGRANGIAN TRACKING, AND SAMPLING OF COASTAL UPWELLING FRONTS FOR TARGETED STUDIES OF PLANKTON ECOLOGY

16:45 Norton, E. L.; Andrews, K. R.; Powell, B. S.; Goetze, E.: WHAT MECHANISMS UNDERLIE DISPERSAL BARRIERS FOR MARINE PLANKTON?

17:00 Kimmerer, W. J.; Gross, E. S.; MacWilliams, M. L.: VERTICAL MOVEMENTS OF ESTUARINE ZOOPLANKTON CAUSE RETENTION AS DEMONSTRATED BY A PARTICLE-TRACKING MODEL

17:15 Kavanaugh, M. T.; Hales, B. R.; Letelier, R. M.; Doney, S.; Davis, C. O.; Spitz, Y. H.; White, A. E.; Church, M. J.; Saraceno, M.: DYNAMIC SEASCAPES: AN OBJECTIVE AND HIERARCHICAL FRAMEWORK FOR UNDERSTANDING PELAGIC SPATIOTEMPORAL VARIABILITY

SS73 IMPACT OF SUBMESOSCALE PROCESSES ON UPPER OCEAN ECOLOGY, BIOGEOCHEMISTRY AND CONTAMINANT DISPERSAL

Chair(s): Margaret L. Estapa, mestapa@whoi.edu
David A. Siegel, davey@eri.ucsb.edu
Ken O. Buesseler, kbuesseler@whoi.edu

Location: Room 354

16:00 Fields, E.; Siegel, D. A.; Nelson, N. B.; Estapa, M. L.; Lomas, M. W.; Sudre, J.; Garcon, V.: IMPACT OF SUBMESOSCALE PROCESSES ON UPPER OCEAN ECOLOGY, BIOGEOCHEMISTRY AND CONTAMINANT DISPERSAL

16:15 Buesseler, K. O.; Estapa, M. L.; Siegel, D. A.; Nelson, N.; Lomas, M.; Stanley, R.: HIGH-RESOLUTION VARIABILITY IN PARTICLE PROPERTIES AND EXPORT ASSOCIATED WITH SUBMESOSCALE FRONTS

16:30 Liang, J. H.; Deutsch, C. A.; McWilliams, J. C.; Frenzel, H.; Uchiyama, Y.: THE MODULATION OF PLANKTON ECOSYSTEM IN THE CALIFORNIA CURRENT SYSTEM BY SUBMESOSCALE PROCESSES

16:45 Matrai, P. A.; Steele, M.; Swift, D.; Riser, S.; Johnson, K.: AUTONOMOUS OBSERVATIONS OF ARCTIC PHYTOPLANKTON ACTIVITY: AN ANNUAL CYCLE IN ICE-COVERED WATERS

(*) represents Invited presentations

17:00 Olson, E. M.; McGillicuddy, D. J.; Davis, C. S.; Dyhrman, S. T.; Waterbury, J. B.: PHYSICAL AGGREGATION OF BUOYANT *TRICHODESMIUM* SPP. COLONIES THROUGH EDDY/WIND INTERACTION: OBSERVATIONS AND MODELING

17:15 Carlson, C. A.; Nelson, C.; Ewart, C.; Halewood, E. R.: SUBMESOCALE COMMUNITY DIFFERENTIATION AND POPULATION ENRICHMENT OF SARGASSO SEA BACTERIOPLANKTON IN A MODE-WATER EDDY

17:30 Gyory, J.; Nemeth, R. S.; Kadison, E.; Cherubin, L. M.; Paris, C. B.: FINE-SCALE BIO-PHYSICAL OCEANOGRAPHIC PATTERNS AT A YELLOWFIN GROUPER SPAWNING AGGREGATION SITE

17:45 Cuhel, R. L.; Aguilar, C.: BATHYMETRY-INDUCED HYDROGRAPHIC ANOMALIES PRODUCE DISTINCT BIOTIC DOMAINS UPSTREAM, ON, AND OVER A 9-KM SEAMOUNT-LIKE REEF STRUCTURE

SS75 ROLE AND SIGNIFICANCE OF CHEMOSYNTHESIS IN THE OCEAN

Chair(s): Stefan Sievert, ssievert@whoi.edu
Karen G. Lloyd, klloyd@utk.edu

Location: Room 346-347

10:00 Stewart, F. J.: CHEMOSYNTHESIS IN THE GLOBAL OCEAN: EMERGING PERSPECTIVES FROM MARINE OXYGEN MINIMUM ZONES[T]

10:30 Orcutt, B. N.; Sylvan, J. B.; Rogers, D. R.; Delaney, J.; Edwards, K. J.; Girguis, P.: PRIMARY PRODUCTION IN YOUNG AND OXIC OCEANIC CRUST

10:45 Davis, R. E.; Kießlich, K.; Tebo, B. M.: COMMUNITY COMPOSITION AND CARBON FIXATION MECHANISMS IN IRON-CYCLING MICROBIAL MATS FROM HYDROTHERMAL VENTS AT LOIHI SEAMOUNT, HAWAII

11:00 Sievert, S. M.; Stepanauskas, R.; Woyke, T.; Zhang, Y.; Musat, N.: SINGLE-CELL VIEW OF EPSILONPROTEOBACTERIA AT DEEP-SEA HYDROTHERMAL VENTS

11:15 Le Bris, N.; Contreira Pereira, L.; Yucel, M.; Mullineaux, S.; Sievert, M.: ABIOTIC CONTROLS ON CHEMOAUTOTROPHIC PRIMARY PRODUCERS AT DEEP-SEA HYDROTHERMAL VENT INFERRED FROM IN SITU PHYSICO-CHEMICAL MONITORING

11:30 Heinzelmann, S. M.; Villanueva, L.; Sinninghe Damsté, J. S.; Schouten, S.; van der Meer, M. T.: COMPOUND SPECIFIC HYDROGEN ISOTOPES AS A CULTURE INDEPENDENT METHOD TO IDENTIFY CORE METABOLISMS OF MICROORGANISMS IN SITU

11:45 Marzocchi, U.; Revsbech, N. P.; Nielsen, L. P.; Risgaard-Petersen, N.: DISTANT ELECTRIC COUPLING BETWEEN NITRATE REDUCTION AND SULFIDE OXIDATION IN MARINE SEDIMENT

SS81 GETTING A GRIP ON MICROBIAL CHANGE: THE FRESHWATER EARTH MICROBIOME PROJECT

Chair(s): Stefan Bertilsson, stebe@ebc.uu.se
Hans-Peter Grossart, hgrossart@igb-berlin.de
Katherine McMahon, tmcmahon@engr.wisc.edu

Location: Room 356

10:00 Newton, R. J.; Bootsma, M. J.; Morrison, H. G.; Sogin, M. L.; McLellan, S. L.: THE MICROBIAL FOOTPRINT OF A CITY: VIEWS FROM LAKE MICHIGAN

10:15 Székely, A. J.; Langenheder, S.: THE EFFECT OF DROUGHT-REWETTING CYCLES ON BACTERIAL METACOMMUNITIES

10:30 Brown, T. R.; Scott, K. M.: FRESHWATER BENTHIC ALGAL RESPONSE TO ELEVATED CARBON DIOXIDE

10:45 Muscarella, M. E.; Jones, S. E.; Lennon, J. T.: LIFE IN BROWN WATERS: AQUATIC BACTERIAL RESPONSES TO INCREASED TERRESTRIAL CARBON LOADING

11:00 Mutschler, J. P.; Read, E. K.; McMahon, K. D.: BACTERIAL COMMUNITY DYNAMICS IN AN OLIGOTROPHIC LAKE BEFORE AND AFTER MANIPULATION OF THE LIGHT REGIME

11:15 Jones, S. E.; Newton, R. J.; Cadkin, T. A.; McMahon, K. D.: SPATIAL AND TEMPORAL SCALES OF AQUATIC BACTERIAL BETADIVERSITY

11:30 Button, D. K.; Robertson, B. R.; Gustafson, E.; Zaho, X.: TEMPERATURE AFFECTS ON BACTERIA IN HARDING LAKE AK: THEORY, IN SITU AND LABORATORY DATA, AND A MECHANISM-BASED COMPUTER MODEL

11:45 Simmons, L. J.; Sandgren, C. D.; Berges, J. A.: ESTIMATING PHYTOPLANKTON TAXONOMIC COMPOSITION USING PIGMENT-BASED METHODS: ILLUSTRATING LIMITATIONS USING LAKE MICHIGAN DATASETS

SS82 PROGRESS IN UNDERSTANDING NUTRIENT BUDGETS IN MARGINAL BASINS AND COASTAL SYSTEMS SUBJECT TO EUTROPHICATION AND CLIMATE WARMING

Chair(s): Volker Bruchert, volker.bruchert@geo.su.se
Barbara Deutsch, barbara.deutsch@itm.su.se

Location: Room 357

16:00 Murrell, M. C.; Lehrter, J. C.; Hagy, J. D.; Pauer, J.; Feist, T. F.: A CARBON BUDGET FOR THE LOUISIANA CONTINENTAL SHELF: ROLE OF WATER COLUMN PRIMARY PRODUCTION AND RESPIRATION

16:15 Bernard, R. J.; Mortazavi, B.: SEDIMENT NITROGEN CYCLING ACROSS A SALINITY GRADIENT IN MOBILE BAY ALABAMA

16:30 Glibert, P. M.; Wilkerson, F.; Dugdale, R.; Parker, A. E.: FOOD WEB AND BIOGEOCHEMICAL EFFECTS OF EUTROPHICATION AND CHANGES IN NITROGEN FORM AND STOICHIOMETRY IN SAN FRANCISCO BAY DELTA

16:45 Sackmann, B. S.; Khangaonkar, T.; Long, W.; Mohamedali, T.; Roberts, M.: BIOGEOCHEMISTRY OF GREATER PUGET SOUND AND THE SALISH SEA – WHAT DOES THE FUTURE HOLD: INSIGHTS FROM A COUPLED HYDRODYNAMIC AND WATER QUALITY MODEL

17:00 Krembs, C.; Bos, J.; Albertson, S.; Sackmann, B.; Keyzers, M.; Friedenberg, L.; Ruffner, J.; Maloy, C.: INCREASING NUTRIENTS, A REPOSITIONING OF ALGAL BIOMASS AND LARGE NOCTILUCA BLOOMS IN PUGET SOUND. IS EUTROPHICATION FUELING THE MICROBIAL FOOD WEB?

17:15 Dugdale, R.; Wilkerson, F.; Parker, A. E.: PROCESSING OF ANTHROPOGENIC NUTRIENTS WITHIN ESTUARIES AFFECTS NUTRIENT EXPORT TO ADJACENT COASTAL WATERS: A MODELING APPROACH

17:30 Kelly, V. J.; Stets, E. G.: EVALUATING LONG-TERM NITRATE CONCENTRATIONS IN THE POTOMAC RIVER

17:45 Wilkerson, F.; Glibert, P.; Parker, A. E.; Dugdale, R.; Blaser, S.; Pimenta, A.; Buck, C.: NUTRIENT RATIOS: UNDERSTANDING THE IMPORTANCE OF NITROGEN REDOX STATE AND N:P STOICHIOMETRY IN ESTUARIES SUBJECT TO CULTURAL EUTROPHICATION

[T] represents Tutorial presentations

TUESDAY, 19 FEBRUARY - POSTERS

GS07 MULTIPLE STRESSOR PROBLEMS IN AQUATIC SYSTEMS

Chair(s): Rebecca North, rebeccalnorth@gmail.com
Jeff Hudson, jeff.hudson@usask.ca

Location: Exhibit Hall E

1 Moore, A.; DiBacco, C.: EFFECTS OF TEMPERATURE AND SALINITY ON THE DEVELOPMENT OF NATIVE VERSUS TUNICATE-INVADED COMMUNITIES

2 Stadmark, J.; Conley, D. J.: MANAGING MULTIPLE STRESSORS IN THE BALTIC SEA

GS08A PLANKTON ECOLOGY - PHYTOPLANKTON

Chair(s): Donald Redalje, Donald.Redalje@USM.edu
Daniel Roelke, droelke@tamu.edu
Ed Laws, edlaws@lsu.edu
Chris Filstrup, Filstrup@iastate.edu
Nasseer Idrisi, nidrisi@uvi.edu

Location: Exhibit Hall E

3 Vaillancourt, R. D.; Marra, J. F.; Lance, V. P.; Hargreaves, B.: NITROGEN AVAILABILITY AND LIGHT INTENSITY CONTROL PHOTOSYNTHETIC MAXIMUM QUANTUM YIELD IN THE STRATIFIED OCEAN

4 Tirado-Alonso, A. E.; Perez, Z.; Laboy, L.; Fuente-Claudio, L.; Harris, L.: PRIMARY PRODUCTIVITY AT BIOLUMINESCENT LAGOONS IN PUERTO RICO.

5 Carrera Montalvo, A.; Nieves, M.; Vélez, S.; Sastre, M.: SHORT-TERM CHANGES IN PLANKTONIC COMMUNITY COMPOSITION IN LAGUNA GRANDE, PUERTO RICO, AT THE ONSET OF THE RAINY SEASON

6 Kjellerup, S.; Lindeque, P.; Nielsen, T. G.: LIVE DISCRIMINATION OF *CALANUS GLACIALIS* AND *C. FINMARCHICUS FEMALES* – CAN WE SEPARATE SIBLING SPECIES?

7 Heard, A. M.; Sickman, J. O.: CORRELATING ATMOSPHERIC NITROGEN DEPOSITION WITH NITROGEN AFFECTED LAKES AND NUTRIENT LIMITATION IN THE SIERRA NEVADA, CALIFORNIA

8 Roncalli, V.; Lenz, P. H.; Christie, A. E.: IDENTIFICATION AND DEVELOPMENTAL PROFILING OF THE INSECT DIAPAUSE-ASSOCIATED PROTEIN COUCH POTATO (CPO) IN THE COPEPOD *CALANUS FINMARCHICUS*

9 El-Tourky, S.; Hitchcock, G. L.: SPATIAL AND TEMPORAL PATTERNS IN MESOZOOPLANKTON DISTRIBUTIONS IN THE FLORIDA STRAITS

10 Whittaker, K. A.; Rynearson, T. A.: DISTANT COUSINS? BASIN-SCALE GENETIC CONNECTIVITY AMONG POPULATIONS OF THE MARINE DIATOM *THALASSIOSIRA ROTULA*

11 Walters, T. L.; Frazier, L. M.; Paffenhöfer, G. A.; Frischer, M. E.: MOLECULAR PROFILING OF ZOOPLANKTON GUT CONTENT USING PNA-PCR AND DENATURING HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (PNA-PCR-DHPLC)

12 Fields, D. M.; Twining, B. S.; Browman, H. I.: COPEPODS INTESTINES: 10^21 MICROBIOREACTORS OF GLOBAL OCEAN PROCESSES

13 Questel, J. M.; Hopcroft, R. R.; Blanco-Bercial, L.; Bucklin, A.: DISTRIBUTION OF *PSEUDOCALANUS* SPP. IN THE PACIFIC-ARCTIC AS REVEALED BY MOLECULAR MARKERS

14 Cooper, J. T.; Geoff , S.; Wawrik, B.: TRANSCRIPTOMIC ANALYSIS OF *SCRIPPSIELLA TROCHOIDEA* UNDER NITROGEN AND PHOSPHORUS LIMITING CONDITIONS

15 Vandenhecke, M. J.; Bastedo, J.; Huot, Y.; Campbell, D.: STRATEGIES OF PHOTOACCLIMATION OF MARINE PHYTOPLANKTON : « SIGMA-TYPE » OR « N-TYPE » ?

16 Kordbacheh, A.; Walsh, E. J.: DO DIFFERENT POPULATIONS OF THE COSMOPOLITAN SPECIES EUCHLANIS DILATATA INTERBREED?

18 Bayha, K. M.; Hernandez, F. H.; Graham, W. M.: INSIGHTS INTO SPECIES-SPECIFIC ICHTHYOPLANKTON DISTRIBUTION IN THE GULF OF MEXICO COASTAL ZONE EMPLOYING MOLECULAR SPECIES DIAGNOSTIC TOOLS

19 Perry, E.; Craig, C.; Alves, C.; Miller-Sims, V.; Kimmerer, W.; Cohen, C. S.: STRIKING RANGE OF GENETIC VARIABILITY IN INTRODUCED SPECIES OF COPEPODS IN THE SAN FRANCISCO ESTUARY

20 Wallace, J. R.; Jenkins, B. D.; Chappell, P. D.: PROFILING NUTRIENT LIMITATION IN THALASSIOSIROID DIATOMS VIA GLOBAL GENE EXPRESSION ANALYSIS

SS01 ECOSYSTEM-BASED MARINE SPATIAL PLANNING FOR BETTER MANAGEMENT OF OUR OCEANS

Chair(s): Tundi Agardy, tundiagardy@earthlink.net
Steven Degraer, S.Degraer@MUMM.ac.be
Angel Borja, aborja@azti.es

Location: Exhibit Hall E

21 Scott, K. R.; Diez, C. E.: MARINE TURTLES NEST IN DYNAMIC ENVIRONMENTS IMPACTED IN THE NATURAL RESERVES OF MONA AND CULEBRA ISLANDS, PUERTO RICO

22 Taylor, C. M.; Jones, B. T.; Grey, E. K.: CONNECTIVITY OF BLUE CRAB POPULATIONS IN THE NORTHERN GULF OF MEXICO USING GRAPH THEORY AND LAGRANGIAN PARTICLE-TRACKING

23 Tobosa, L. R.; Waltz, G. T.; Wendt, D. E.; Walker, J.; Starr, R. M.: A COMPARISON OF ROCKFISH SPECIES DIVERSITY INSIDE AND OUTSIDE MPAS ALONG A LATITUDINAL GRADIENT ON THE CENTRAL CALIFORNIA COAST

24 Tewes, E. E.; Stevens, B. G.: MARYLAND OFFSHORE WIND ENERGY SITING: INVESTIGATING EPIBENTHIC COMMUNITIES USING UNDERWATER VIDEO TECHNIQUES

25 Vassilopoulou, V.; Mavrommati, G.; Panayotidis, P.; Kokkali, A.; Anagnostou, C.: HOW EFFECTIVE ARE MARINE SPATIAL PLANS? FRAMING KEY ISSUES USING STAKEHOLDERS' OPINION

26 Warziniack, T.: MEASURING MARKET AND NONMARKET VALUES OF ECOSYSTEM IMPACTS: PRESENTING A GENERAL EQUILIBRIUM MODEL OF ECOSYSTEM SERVICES

27 Lumb, L. M.; Gibeaut, J. C.: IDENTIFYING CRITICAL HABITAT NEEDS OF THE ARANSAS-WOOD BUFFALO POPULATION OF THE ENDANGERED WHOOPING CRANE,*GRUS AMERICANA*

(*) represents Invited presentations

TUESDAY

SS02 CATAPULTS, FERRIES, AND BRIDGES: GETTING AQUATIC SCIENCE RESULTS TO POLICY AND MANAGEMENT

Chair(s): Elizabeth Turner, elizabeth.turner@noaa.gov
Dwight Trueblood, dwight.trueblood@noaa.gov
Kalle Matso, kmatso@wildcats.unh.edu
Felix Martinez, felix.martinez@noaa.gov

Location: Exhibit Hall E

28 Buchalski, C.; Palmer, S.; Buskey, E.; Madden, K.; Peterson, T. R.; Ragland, C.: BRIDGE ACROSS THE MISSION: USING A MEDIATED MODELING APPROACH FOR MESS MANAGEMENT AND MOVING FORWARD

29 Smith, L. K.; Barber, M.; Duguay, L.; Whitley, L.: USING THE OCEAN LITERACY PRINCIPLES TO CONNECT INLAND AUDIENCES TO THE GLOBAL OCEAN

30 Venn, C.; Hallen, C. P.: A MODEL FOR INCORPORATING EMBEDDED RESEARCH AND SERVICE LEARNING INTO AN UNDERGRADUATE COURSE IN AQUEOUS GEOCHEMISTRY

SS04 ASLO STUDENT SYMPOSIUM

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

Location: Exhibit Hall E

31 Lopez, L. M.; Pangle, K. L.; Malinich, T. D.: SPATIAL PATTERNS IN THE ABUNDANCE OF THE SPINY WATER FLEA *(BYTHOTREPHES LONGIMANUS)* IN NORTHERN LAKE MICHIGAN

32 Mostovaya, A.; Kritzberg, E.: DIFFERENCES IN $_{p}$H TOLERANCE IN BACTERIAL COMMUNITIES FROM ENVIRONMENTS OF DIFFERING ALKALINITY, SALINITY AND $_{p}$H

33 Cira, E.; Wetz, M.; Kimmel, D.; Paerl, H.: BOTTOM-UP AND TOP-DOWN CONTROLS UPON ESTUARINE PHYTOPLANKTON GROWTH AND COMMUNITY COMPOSITION

34 Dean, H. A.; Smith, S. L.; Ozbay, G.: A STABLE ISOTOPIC AND FATTY ACID FOODWEB COMPARISON OF ATLANTIC MENHADEN (*BREVOORTIA TYRANNUS*) AND GULF MENHADEN (*BREVOORTIA PATRONUS*)

35 Laureano-Rosario, A. E.; Olson, M. B.: PHYTOPLANKTON RESPONSES TO ELEVATED CO_2

36 Conlon, L.; Cherubin, L.; Idrisi, N.: MODELING PASSIVE TRACER DISPERSAL IN THE UPPER OCEAN UNDER DIFFERENT HEAT FLUX REGIMES

37 Carmon, B. N.; Benaka, L.; Patrick, W.; Lambert, D.: DEVELOPMENT OF A LIFE HISTORY DATABASE FOR NOAA FISHERIES

38 Martinez, S.; Perez, B.; Ortiz, E.: SPATIAL DISTRIBUTION OF SHALLOW WATER CRABS (CRUSTACEA: DECAPODA) IN PUERTO RICO

39 Wright, C. L.; Borde, A. B.; Diefenderfer, H. L.: GIS ANALYSIS OF HISTORICAL LAND COVER CHANGES IN THE LOWER COLUMBIA RIVER ESTUARY

40 Gaynus, C. J.; Rubio, G.: HUMAN INTERACTIONS WITH COASTS AND OCEANS

41 Parekh, A. D.; Graham, E. R.; Sanders, R. W.: TEMPORAL EFFECTS ON CARBONIC ANHYDRASE ACTIVITY AND PRIMARY PRODUCTION IN ZOOXANTHELLAE

42 Kenny, C. M.; Roumillat, W. A.; de Buron, I.: RED VENT IN THE AMERICAN EEL: DOES THE PARASITE ANGUILLICOLOIDES CRASSUS HAVE A ROLE?

43 Caskey, S.; Wohl, E.; Dwire, K.; Merritt, D.; Schnackenberg, L.: DOWNSTREAM EFFECTS OF DIVERSION DAMS ON RIPARIAN VEGETATION IN THE ROUTT NATIONAL FOREST, COLORADO

44 Cottingham, G. A.; Denson, M. R.; Brenkert, K.: FLUORESCEIN DYE AS A TOOL IN HEALTH ASSESSMENT

45 Sainmont, J.; Andersen, K. H.; Visser, A. W.: OPTIMAL FORAGING AND DIEL VERTICAL MIGRATION IN A LIFE HISTORY MODEL

46 Giltz, S. M.; Grey, E. K.; Taylor, C. M.: PELAGIC DISPERSAL OF THE NORTHERN GULF OF MEXICO BLUE CRAB

47 Ward, E.; Morrill, C.; Wagner, A.; Otto-Bliesner, B.; Rosenbloom, N.: HOW DID ONE LAKE DRAMATICALLY CHANGE THE EARTH'S CLIMATE 8,200 YEARS AGO? UNDERSTANDING THE 8.2KYR EVENT USING THE COMMUNITY CLIMATE SYSTEM MODEL VERSION 3

48 George, M. C.; Halfman, J. D.; Cornwell, J. C.: A PRELIMINARY INVESTIGATION OF BACTERIAL RESPIRATION IN THE FINGER LAKES OF CENTRAL NEW YORK, USA.

49 Appikonda, S. H.; Jangly, G. P.; Singh, G.; Buddhadev, K.; Patel, D.; Santiago-Vazquez, L. Z.: HOW STRESS AFFECTS THE TRANSCRIPTOME AND THE MICROBIOME OF THE OCTOCORAL PLEXAURA HOMOMALLA

50 Jangly, G. P.; Appikonda, S. H.; Tinwala, Z.; Sagare, M.; Hastak, P.; Santiago-Vazquez, L. Z.: STRESS AND BACTERIAL INVOLVEMENT IN THE PRODUCTION OF PROSTAGLANDINS BY THE OCTOCORAL PLEXAURA HOMOMALLA

51 Zinke, L. A.; St. Peter, R. C.; Reese, B. K.; Mills, H. J.; IODP Expedition 336 Scientists: A QUANTITATIVE RNA APPROACH TO MARINE DEEP SUBSURFACE MICROBIAL COMMUNITY CHARACTERIZATION

52 Garza, J. J.; Ignacio, D. P.; McCarthy, A.; Read, B. A.: CHARACTERIZING THE STRUCTURE AND FUNCTION OF CARBONIC ANHYDRASE ISOZYMES IN E. HUXLEYI

53 Villarosa Garcia, M.: MODELING THE EFFECT OF COCCOLITH SHAPE ON COCCOLITHOPHORE SINKING RATES, LIGHT ACQUISITION AND PLATE DISSOLUTION

54 Chen, H.; Stubbins, A.; Mopper, K.; Perdue, E. M.; Green, N. W.; Hatcher, P.: MOLECULAR CHARACTERIZATION OF DOM BY ULTRAHIGH RESOLUTION MASS SPECTROMETRY FROM VARIOUS OCEANIC WATER MASSES ISOLATED BY REVERSE OSMOSIS-ELECTRODIALYSIS

55 Sarno, A. F.; Zhang, X.; Young, G.; Hadaegh, A.; Gonzalez, K.; Wang, X.; Moberly, J.; Read, B. A.: CHARACTERIZING THE SELENOPROTEOME OF THE MARINE COCOLITHOPHORE EMILIANIA HUXLEYI

SS06 NEW INSIGHTS INTO MICROBIAL ECOLOGY OF HYPERSALINE HABITATS

Chair(s): Virginia Edgcomb, vedgcomb@whoi.edu
Joan Bernhard, jbernhard@whoi.edu

Location: Exhibit Hall E

56 Nevarez, N.; Corman, J.; Lee, Z.; Souza, V.; Elser, J. J.: NUTRIENT ENRICHMENT RESPONSE OF MICROBIAL PHOTOTROPHS AND HETEROTROPHS IN A DESERT POND IN CUATRO CINNEGAS, MEXICO

[T] represents Tutorial presentations

57 Nicholson, B. E.; Kelley, C. A.; Detweiler, A. M.; Bebout, B. M.; Mauney, M. T.; Tazaz, A. M.; Chanton, J. P.; Davila, A. F.: STABLE CARBON ISOTOPES AND RATES OF METHANE PRODUCED IN THE HYPERSALINE ENVIRONMENTS OF THE ATACAMA DESERT, CHILE AND BAJA CALIFORNIA SUR, MEXICO

58 Aiello, I.; Lazar, C. S.; Goldhammer, T.; Schröder, J.; Elvert, M.; Heuer, V.; Teske, A. P.; Hinrichs, K.: UNTANGLING MICROBIAL AND GEOCHEMICAL VERTICAL DISTRIBUTION IN THE URANIA BASIN AND MUD VOLCANO, EASTERN MEDITERRANEAN SEA

SS10 SHEDDING LIGHT ON THE 'BLACK BOX' OF DISSOLVED ORGANIC NITROGEN: INSIGHTS INTO THE SOURCES, SINKS, CYCLING, AND COMPOSITION OF AQUATIC DON

Chair(s): Katye E. Altieri, kaltieri@princeton.edu
Rachel E. Sipler, sipler@vims.edu

Location: Exhibit Hall E

59 Altieri, K. E.; Hastings, M. G.; Peters, A.; Sigman, D. M.: SOURCES AND VARIABILITY OF ORGANIC NITROGEN IN MARINE RAINWATER INVESTIGATED USING ULTRA-HIGH RESOLUTION FT-ICR-MS, CLUSTER ANALYSIS, AND N ISOTOPES

SS11 RESEARCH EXPERIENCES OF UNDERGRADUATES IN AQUATIC SCIENCES

Chair(s): Russell Cuhel, rcuhel@uwm.edu
Carmen Aguilar, aguilar@uwm.edu

Location: Exhibit Hall E

60 Benolkin, A.; Dinnel, P.: OUTPLANTING SUCCESS AND WEANING DIET OF PINTO ABALONE

61 Bienlien, L. M.; Carnegie, R.: MOLECULAR ANALYSIS OF *PERKINSUS MARINUS*INFECTION ACQUISITION IN *CRASSOSTREA VIRGINICA*

62 Jensen, A.; Chesney, E.: DEVELOPMENT OF FISH TRAPS FOR THE CAPTURE OF AGE 0 JUVENILE SNAPPERS: TESTING DESIGN PERFORMANCE AND CAPTURE EFFICIENCY

63 Knauss, C.; Hiller, K.; Kearns, P.; Feinman, S.; Bowen, J.: CHARACTERIZING MICROBIAL DENITRIFICATION AND BIOGEOCHEMICAL PROCESSES UP-GRADIENT, WITHIN, AND DOWN-GRADIENT FROM A BRACKISH NITREX PERMEABLE REACTIVE BARRIER

64 Lemanski, B. C.; Penczykowski, R. M.; Sieg, R. D.; Duffy, M. A.: POOR FOOD QUALITY INCREASES DISEASE IN ZOOPLANKTON: AN EXPERIMENTAL AND MECHANISTIC DETERMINATION

65 McLean, E.; Hernandez, F.: JUVENILE FISH FEEDING DYNAMICS WITHIN PELAGIC *SARGASSUM* HABITATS

66 Mendez, A. J.; Würsig, B.; Orbach, D.: DOLPHIN MATING BEHAVIORS: DUSKY DOLPHIN (*LAGENORHYCHUS OBSCURUS*) AND BOTTLENOSE DOLPHIN (*TURSIOPS TRUNCATUS*) COMPARISONS

67 Schoville, J.; Lovko, V.; Kirkpatrick, G.: POTENTIAL BIOCONTROL OF *KARENIA BREVIS* BLOOMS VIA *AMOEBOPHYRA* SP.

68 Stillman, K.; Schultz, T.: A TRANSCRIPTOMIC APPROACH TO CIRCATIDAL RHYTHMS

69 Thompson, K. A.; Curran, M. C.: EFFECT OF PARASITIC TREMATODES*MICROPHALLUS TURGIDUS* ON PREDATION OF GRASS SHRIMP *PALAEMONETES PUGIO*BY MUMMICHOGS *FUNDULUS HETEROCLITUS*

70 Brannon, E. Q.; Kroeger, K.; Ganju, N.; Pohlman, J.; Green, A.: INVESTIGATING TIME VARIATIONS IN DOC CONCENTRATIONS FOR SALT MARSH CARBON BUDGETS: TESTING CONTINUOUS CDOM MEASUREMENTS AS A PROXY FOR DOC

71 Cherry, M. L.; Guo, L.: VARIATIONS IN THE CONCENTRATION AND COMPOSITION OF DISSOLVED ORGANIC MATTER IN LAKE MICHIGAN

72 Gagne-Maynard, W.; York, J.; Ullman, W.: DETERMINATION OF NUTRIENT SOURCES AND SINKS WITHIN THE MURDERKILL ESTUARY USING IN-SITU CHEMICAL ANALYSIS AND NITRATE ISOTOPE FRACTIONATION

73 O'Dell, M. J.; Villareal, T.: PHYSIOLOGICAL EFFECTS OF CRUDE OIL ON DIATOM-DIAZOTROPH ASSOCIATIONS

74 Poehls, A.; Fields, D.; Balch, B.; Shema, S.: EFFECTS OF OCEAN ACIDIFICATION ON GROWTH RATE AND BIOMASS OF THE COCCOLITHOPHORE *PLEUROCHRYSIS*

75 Warren, J. K.; McDonald, N.: BERMUDA BIO-OPTICS PROJECT: QUANTIFYING CHROMOPHORIC DISSOLVED ORGANIC MATTER AND LIGNIN PHENOLS IN THE OPEN OCEAN

76 Rosa, J.; Pennington, P. L.: EVALUATION OF RECENT MODIFICATIONS TO THE MODULAR ESTUARINE MESOCOSM

77 Gogan, N.; Abbott, D.; Breger, D.: WERE THE DENSITY OFFSETS IN HUDSON RIVER SEDIMENT CORES CAUSED BY TSUNAMI, STORM SURGE, OR RIVER FLOOD?

78 Green, B.; Palinkas, C.: SEDIMENTATION IN THE LOWER POTOMAC RIVER AND ITS INFLUENCE ON NITROGEN BURIAL

79 Danielson, R.; Batchelder, H.; Spitz, Y.: HOW WELL DO THE ECOLOGICAL VARIABLES OF A BIOPHYSICAL MODEL OF THE OREGON SHELF AGREE WITH OBSERVATIONAL DATA?

80 Grimes, D.; Talley, L.: CHARACTERIZING STRATIFICATION IN THE ARABIAN SEA

81 Vogel, K. S.; Grothues, T.: AUTOMATIC FISH DETECTION BY AREA DISTRIBUTION AND SYMMETRY IN SIDE SCAN SONAR IMAGES

82 Schaal, S. M.; Xie, Y.; Yankey, F.; Zeidler, T.; Aguilar, C.; Cuhel, R.; Lauko, I.; Pinter, G.: CONSEQUENCES OF DREISSENA BUGENSIS INVASION AND CORRELATION BETWEEN LIGHT ATTENUATION AND TRANSMISSION IN LAKE MICHIGAN

83 Akintoye, R.; Wiggin, J.: THE USE OF MODELING TO PREDICT WATER QUALITY REALTED BEACH CLOSURES BASED ON ENVIRONMENTAL CONDITIONS

84 Bitterwolf, S. A.; Pineda, J.; Starczak, V.: ABUNDANCE AND VERTICAL DISTRIBUTION OF SQUALUS ACANTHIAS, SPINY DOGFISH, AT STELLWAGEN BANK: DAILY AND INTERANNUAL PATTERNS FROM 2008 TO 2012

85 Chamberlin, D. W.; Eckert, G. L.; Tamone, S. L.: THE DYNAMICS OF A HARMFUL ALGAL BLOOM AND PARALYTIC SHELLFISH TOXINS IN JUNEAU, ALASKA

(*) represents Invited presentations

86 DeLand, S. E.; Yang, S.: MESOGRAZER ABUNDANCE AND EPIPHYTIC BIOMASS AND THEIR EFFECTS ON EELGRASS GROWTH RATES

87 Gesier, H.; de Sieyes, N.; Boehm, A.; Santoro, A.: DISTRIBUTION OF AMMONIA-OXIDIZING ARCHAEA AND BACTERIA ALONG PHYSIOCHEMICAL GRADIENTS AT SUBTERRANEAN ESTUARIES IN CALIFORNIA AND MARYLAND

88 Kelly, L.; Sneed, J.; Engene, N.; Meickle, T.; Demet, K. L.; Paul, V.: UNDERSTANDING THE ECOLOGY AND PHYLOGENY OF BLOOM FORMING CYANOBACTERIA IN THE INDIAN RIVER LAGOON, FLORIDA

89 Mendez, C.; Liu, K. L.; Pierson, J. J.: EFFECTS OF HYPOXIA ON COPEPOD PREDATION BY THE CTENOPHORE, MNEMIOPSIS LEIDYI, IN CHEDAPEAKE BAY

90 Morse, M. L.; Shurin, J.; Noto, A.: INFLUENCE OF TIDAL ELEVATION ON MACROINVERTEBRATE DISTRIBUTION IN SALT MARSHES OF SOUTHERN CALIFORNIA

91 Pérez-Pérez, N. M.; Wolfer, H.; Johnson , A. K.: EFFECTS OF HYPOXIA ON THE IMMUNE SYSTEM OF ATLANTIC CROAKER (*MICROPOGONIAS UNDULATUS*) IN THE CHESAPEAKE BAY, USA

92 Schultz, D. T.; Deheyn, D. D.: FERROUS IRON'S ROLE IN THE BIOLUMINESCENCE OF *CHAETOPTERUS VARIOPEDATUS*

93 Sokoly, D. L.; DeWitt, T. H.: IS NUTRIENT UPTAKE BY PACIFIC NW SALT MARSHES N- OR P- LIMITED?

94 White, J. E.; Arnott, S. A.: AGING AMERICAN EELS (ANGUILLA ROSTRATA) USING MARGINAL INCREMENT ANALYSIS

95 Cappio, L.; Carver Dionne, L.; Cummings, E. G.; George, M.; Guay, K.; Gunn, P. J.; Koehlein, K.; Stewart, M.; Abbott, A. N.; Curtin, T. M.: HISTORIC CHANGES IN MERCURY FLUXES TO THREE NEW YORK FINGER LAKES (USA)

96 DePass, C. C.; Lam, P. J.; Auro, M. E.: CONTRASTING BIOGENIC SILICA CONCENTRATIONS IN THE NORTH AND SOUTH ATLANTIC

97 Downer, M. M.; Pal, S.; Benitez-Nelson, C.; Bennett, M.: PHOSPHORUS DISTRIBUTIONS IN THE CHUKCHI SEA

98 Gates, C.; Kustka , A. B.: THE POTENTIAL ROLES OF TRICHODESMIUM FERRITIN IN FE STORAGE AND BUFFERING INTRACELLULAR FE DURING DIEL NITROGENASE CYCLING

99 Marti, A. M.; Marton, J. M.; Roberts, B. J.: EFFECTS OF VARYING SALINITY ON GREENHOUSE GAS PRODUCTION FROM OILED AND UNOILED LOUISIANA SALT MARSH SOILS

100 Tapscott, C.; Williams, W.: EVALUATING THE NUTRIENT AND MAJOR ANION COMPOSITION OF SUBURBAN AND FORESTED CATCHMENT STREAMS IN THE COASTAL PLAIN OF CHESAPEAKE BAY

101 Walker, M.; Jeremiason, J.: DETERMINATION OF METHYLMERCURY-DISSOLVED ORGANIC MATTER BINDING CONSTANTS BY COMPETITIVE LIGAND EXCHANGE-SOLID PHASE EXTRACTION

102 Economy, L. M.; Colbert, S. L.: SUBMARINE GROUNDWATER DISCHARGE AND CARBON DIOXIDE DYNAMICS AT KIHOLO BAY, HI

103 Gunn, P. J.; Curtin, T. M.; Finkelstein, D. B.: CALIBRATING STABLE ISOTOPIC PALEOCLIMATE INDICATORS THROUGH A HIGH-RESOLUTION INVESTIGATION OF MODERN SEDIMENTATION IN SENECA LAKE, NEW YORK, USA

104 DiFalco, S.; Gurbisz, C.; Kemp, M.: EFFECTS OF EXTREME WEATHER ON A LARGE SUBMERSED PLANT BED IN CHESAPEAKE BAY: FIELD OBSERVATIONS

SS12 COOPERATION - THE KEY TO SUCCESS: SYMBIOSES IN AQUATIC SYSTEMS

Chair(s): Hans-Peter Grossart, hgrossart@igb-berlin.de
Kam W. Tang, kamtang@vims.edu
Claudia Dziallas, cdziallas@bio.ku.dk

Location: Exhibit Hall E

105 Tang, K. W.; Bickel, S. L.; Grossart, H. P.: CILIATE EPIBIONTS ASSOCIATED WITH CRUSTACEAN ZOOPLANKTON IN GERMAN LAKES: DISTRIBUTION, MOTILITY, AND BACTERIVORY

106 Zavala Lopez , A.; Hogue, C.: THE EFFECT OF TEMPERATURE ON THE SURVIVAL AND INFECTIVITY OF THREE COMMON TREMATODE SPECIES INFECTING THE CALIFORNIA HORN SNAIL.

107 Shoemaker, K. M.; Moisander, P. H.: MICROBIAL DIVERSITY IN ASSOCIATION WITH ZOOPLANKTON IN THE NORTH ATLANTIC SUB -TROPICAL GYRE

SS14 NATURAL AND ANTHROPOGENIC DRIVEN RESPONSES OF MICROBIAL COMMUNITIES IN THE OCEAN: EFFECTS ON THE BIOLOGICAL AND MICROBIAL CARBON PUMPS

Chair(s): Louis Legendre, legendre@obs-vlfr.fr
M. Robin Anderson, m.robin.anderson@dfo-mpo.gc.ca
Richard B. Rivkin, rrivkin@mun.ca

Location: Exhibit Hall E

108 Akinwole, P. O.; Kaplan, L. A.; Kan, J.; Findlay, R. H.: SPATIAL SCALING OF MICROBIAL COMMUNITY STRUCTURE IN TWO FLUVIAL NETWORKS

109 Ogawa, H.; Uchimiya, M.; Fukuda, H.: DECOMPOSITION CHARACTERISTICS OF DISSOLVED ORGANIC MATTER IN SURFACE WATERS OF THE WESTERN NORTH PACIFIC

110 Staryk, C. J.; Mulholland, M. R.; Bernhardt, P.: SEASONAL VARIABILITY OF NET COMMUNITY METABOLISM ON THE EASTERN NORTH AMERICAN CONTINENTAL SHELF (MID-ATLANTIC BIGHT, GEORGES BANK, AND GULF OF MAINE)

SS17 PREDICTING DRIVERS AND MANAGEMENT PRACTICES IN LARGE RIVERS AND DELTAS: THE USGS DELTA RESEARCH AND GLOBAL OBSERVATION NETWORK (DRAGON)

Chair(s): Matthew E. Andersen, mandersen@usgs.gov
D. Phil Turnipseed, pturnip@usgs.gov

Location: Exhibit Hall E

111 Remple, K. L.; Smythe, W. F.; Baptista, A.: GEOSCIENCE EDUCATION IN SOUTHEAST ALASKA: COMBINING WESTERN SCIENCE WITH TRADITIONAL ECOLOGICAL KNOWLEDGE PROMOTES INTEREST IN STEM FIELDS

(T) represents Tutorial presentations

SS21 OPTICAL SIGNATURES OF THE GLOBAL CARBON CYCLE: CHARACTERIZATION OF THE SOURCES, SINKS AND CHEMISTRY OF CDOM AND FDOM

Chair(s): Aron Stubbins, aron.stubbins@skio.usg.edu
Natasha McDonald, natasha.mcdonald@bios.edu

Location: Exhibit Hall E

112 Huang, Q.; Xiao, Y.; Cai, M.; Wang, F.; Lu, Z.: SPATIAL VARIABILITY IN COMPOSITION AND SOURCES OF SEDIMENTARY DISSOLVED ORGANIC MATTER IN ARCTIC KONGSFJORDEN

113 Nezlin, N. P.; Gully , J. R.; Mengel, M. J.; Robertson, G. L.; Steele, A.; Weisberg, S. B.: CDOM AS A TRACER OF EFFLUENT PLUMES FOR WATER QUALITY COMPLIANCE ASSESSMENT AROUND SUBMERGED OCEAN OUTFALLS

114 Smith, Z. P.; Bowman, M. M.; Raleigh, M.; Coe, J. D.; Hartnett, H. E.: DISTRIBUTION AND FLUORESCENCE CHARACTERIZATION OF DISSOLVED ORGANIC CARBON IN THE COLORADO RIVER

115 Ya, C.; Anderson, W.; Jaffe, R.: APPLICATION OF STABLE CARBON ISOTOPES AND OPTICAL PROPERTIES IN THE ASSESSMENT OF DISSOLVED ORGANIC MATTER SOURCES IN A SUBTROPICAL ESTUARY

116 Brym, A. J.; Ziervogel, K.; Paerl, H. W.; Montgomery , M. T.; Osburn, C. L.: CHARACTERIZATION OF PARTICULATE ORGANIC MATTER IN THREE ESTUARIES USING PARALLEL FACTOR ANALYSIS (PARAFAC)

117 Bowman, M. M.; Raleigh, L. M.; Smith, Z. P.; Coe, J. D.; Hartnett, H. E.: PHOTOREACTIVITY OF DISSOLVED ORGANIC CARBON IN THE COLORADO RIVER

118 Cao, F.; William, W. L.: A NEW ALGORITHM TO RETRIEVE COLORED DISSOLVED ORGANIC MATTER (CDOM) ABSORBANCE SPECTRA IN THE UV FROM OCEAN COLOR

119 Wood, C. L.; Frey, K. E.; Mann, J. P.; Spencer, R. G.: PHOTOREACTIVITY OF CHROMOPHORIC DISSOLVED ORGANIC MATTER ASSOCIATED WITH SEA ICE MELT IN THE CHUKCHI AND BEAUFORT SEAS

120 D'Sa, E. J.; Goes, J. I.; Naik, P.; Mouw, C. B.; Gomes, H. R.: SUMMER CDOM CHARACTERISTICS IN THE SOUTHEASTERN BERING SEA USING EXCITATION-EMISSION MATRIX FLUORESCENCE AND PARAFAC ANALYSIS

SS23 DISSOLVED ORGANIC MATTER DYNAMICS: TOWARDS A MOLECULAR-LEVEL UNDERSTANDING

Chair(s): Aron Stubbins, aron.stubbins@skio.usg.edu
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Jutta Niggemann, jniggema@mpi-bremen.de

Location: Exhibit Hall E

121 Sun, L.; Spencer, R. G.; Dyda, R. Y.; Hernes, P. J.; Mopper, K.: A SIMPLIFIED CUO OXIDATION METHOD FOR CHARACTERIZATION OF LIGNIN PHENOLICS IN ENVIRONMENTAL SAMPLES

122 Mesfioui, R.; Hatcher, P. G.: CHEMICAL CHARACTERIZATION OF ANTHROPOGENIC DISSOLVED ORGANIC NITROGEN IN THE YORK RIVER DETERMINED FROM FOURIER TRANSFORM ION CYCLOTRON MASS SPECTROMETRY

123 Witt, M.: COMPARISON OF LASER DESORPTION/ IONIZATION AND ELECTROSPRAY IONIZATION OF NATURAL ORGANIC MATTER

124 Xu, C.; Chen, H.; Sugiyama, Y.; Zhang, S.; LI, H.; Ho, Y.; Kaplan, D. I.; Schwehr, K. A.; Hatcher, P. G.; Santschi, P. H.: MOLECULAR LEVEL INVESTIGATION OF THE NATURAL ORGANIC MATTER AS RADIOIODINE SINK AND SOURCE IN THE WETLAND AREA OF THE SAVANNAH RIVER SITE BY FT-ICR-MS

125 Becker, J. W.; DeLong, E. F.; Repeta, D. J.; Rappé, M. S.; Grote, J.; Berube, P. M.; Chisholm, S. W.: RESPONSE OF CULTURED HETEROTROPHIC BACTERIOPLANKTON STRAINS TO PHYTOPLANKTON-DERIVED DISSOLVED ORGANIC MATTER ADDITIONS

126 Ball, G. I.; Goldberg, S. J.; Simpson, S. J.; Masoom, H.; Soong, R.; Aluwihare, L. I.: CHEMICAL HETEROGENEITY OF CUO-OXIDIZED LACUSTRINE AND RIVERINE DOM PROBED BY COMPREHENSIVE GCGGC TIME-OF-FLIGHT MASS SPECTROMETRY (GCGGC-TOF-MS)

127 Arakawa, N. K.; Aluwihare, L. I.: COMPREHENSIVE REDUCTION OF OXYGEN-CONTAINING FUNCTIONAL GROUPS TO IDENTIFY RDOM STRUCTURE

128 Nyarko, A. A.; Chen, N.; Duan, S.: CHARACTERIZATION OF DISSOLVED ORGANIC MATTER IN MARYLAND COASTAL BAY USING FLUORESCENCE SPECTROSCOPY

SS26 COCCOLITHOPHORES: BIOGEOCHEMICAL IMPACTS AND RESPONSE TO A CHANGING OCEAN

Chair(s): William M. Balch, bbalch@bigelow.org
Nicholas R. Bates, nick.bates@bios.edu
Phoebe J. Lam, pjlam@whoi.edu
Benjamin S. Twining, btwining@bigelow.org

Location: Exhibit Hall E

129 Twining, B. S.; Ruacho, A.; Honisch, B.; Rauschenberg, S.: TRENDS IN METAL LIMITATION OF PHYTOPLANKTON AND COCCOLITHOPHORES ALONG THE "GREAT CALCITE BELT" IN THE SOUTHERN OCEAN

130 Koeve, W.; Oschlies, A.: DETECTING CACO3 DISSOLUTION IN THE INTERIOR OF THE OCEAN

131 Nielsdóttir, M. C.; Honisch, B. L.; Rauschenberg, S.; Vogt, S.; Twining, B. S.: DISSOLVED IRON REQUIREMENTS AND ELEMENTAL QUOTAS OF *EMILIANIA HUXLEYI* STRAINS ISOLATED FROM COASTAL AND OCEANIC ENVIRONMENTS

132 Fredricks, H. F.; Fulton, J. M.; Dyhrman, S. T.; Van Mooy, B. A.: THE FLEXIBLE LIPIDOME OF EMILIANIA HUXLEYI; THE CAPACITY TO COPE WITH MULTIPLE NUTRIENT STRESSES

133 Martinez, E. A.; Robert, M.; Bernard, A.; Bishop, J. K.: IN-SITU OBSERVATIONS OF PARTICULATE INORGANIC CARBON IN THE SUBARCTIC NORTH PACIFIC

TUESDAY

(*) represents Invited presentations

SS27 SURFACE AND SUBSURFACE FLUXES ACROSS THE LAND-OCEAN INTERFACE OF LARGE RIVERS

Chair(s): Mead A. Allison, mallison@mail.utexas.edu
Karen H. Johannesson , kjohanne@tulane.edu
Alexander S. Kolker, akolker@lumcon.edu

Location: Exhibit Hall E

134 Reed, M.; Brock, L.; Keppler, C.; Kacenas, S.; Hogan, S.; Greenfield, D.: THE INFLUENCE OF NITROGEN AND PHOSPHORUS ON SEASONAL PHYTOPLANKTON BIOMASS AND COMMUNITY COMPOSITION IN FOUR COASTAL SOUTH CAROLINA SYSTEMS

135 Ramatchandirane, C. G.; Kolker, A. S.; Argow, B. A.; Donnelly, J. P.; Fagherazzi, S.; Giosan, L.; Priestas, A. M.: CHENIER PLAIN REACTIVATION IN SOUTHWEST LOUISIANA LEADS TO RECENT MARSH DEVELOPMENT VIA FLUVIAL AND COASTAL PROCESSES

136 Beddick, Jr., D. L.; Devereux, R.; Jarvis, B.; Lehrter, J. C.; Yates, D. F.: MISSISSIPPI AND ATCHAFALAYA RIVER INFLUENCE ON SEDIMENT POREWATER CHEMISTRY

137 Jarvis, B. M.; Lehrter, J. C.; Devereux, R.; Beddick, D. L.; Yates, D. F.: SOURCES AND DISTRIBUTION OF ORGANIC MATTER IN SEDIMENTS OF THE LOUISIANA CONTINENTAL SHELF

138 Ameen, A.; Kolker, A. S.; Taylor, C. M.: ECOGEOMORPHOLOGY OF DEVELOPING WETLANDS NEAR A MISSISSIPPI RIVER SEDIMENT DIVERSION

139 Rich, M. W.; Roberts, B. J.: WATER COLUMN RESPIRATION AND NUTRIENT UPTAKE LINKAGES ALONG THE CONTINUUM FROM THE LOWER ATCHAFALAYA RIVER TO THE NORTHERN GULF OF MEXICO

140 Chambers, C. R.; Kolker, A. S.; Roberts, B. J.: SEDIMENT DYNAMICS AND BIOGEOCHEMICAL CYCLING IN A DEVELOPING DELTAIC SYSTEM: UNDERSTANDING LAND BUILDING AND HABITAT QUALITY IN A RIVER DIVERSION.

141 Montes-Hugo, M. A.; Mohammadpour, G.: REMOTE SENSING OF SPM IN THE ST LAWRENCE ESTUARY: BUDGET UNCERTAINTIES DUE TO OPTICALLY-SHALLOW WATERS

SS29 OPPORTUNITIES AND CHALLENGES OF TEACHING INTRODUCTORY OCEANOGRAPHY TO UNDERGRADUATES

Chair(s): Allison Beauregard, beaurega@nwfsc.edu
Jan Hodder, jhodder@uoregon.edu

Location: Exhibit Hall E

142 Burns, K. P.; Gibson, D. M.: STUDENTS, EDUCATORS, RESEARCHERS AND THE COMMUNITY UNITE!

143 Wenzel, D. B.: DEVELOPING FIELD STUDIES IN OCEANOGRAPHY TO ENGAGE THE GEN-ED COMMUNITY COLLEGE STUDENT

144 Jones, M. H.; St. John, K. E.; Leckie, R. M.; Krissek, L.: ENHANCING SCIENTIFIC AND OCEAN LITERACY IN UNDERGRADUATE OCEANOGRAPHY COURSES: USING SCIENTIFIC OCEAN DRILLING DATA TO CONVEY "HOW WE KNOW" WHAT WE KNOW

145 Cetrulo, B. B.; Capers, J. W.; Tyler III, W. A.; Cook, S. B.: MOVING FROM BREADTH TO DEPTH: PEDAGOGICAL STRATEGIES THAT ENHANCE STUDENT LEARNING IN UNDERGRADUATE OCEANOGRAPHY COURSES.

146 Heal, K. R.: EMBRACING SOCIAL MEDIA TO TEACH INTRODUCTORY OCEANOGRAPHY

147 Jaeger, S. A.: ASSESSING OCEAN LITERACY IN 2-YEAR COLLEGES: PROVIDING A BASELINE IN AN INTRODUCTORY COURSE

148 Cheung, I. S.: A FIRST YEAR EXPERIENTIAL EDUCATION: WEEKEND EXPERIENTIAL COURSES IN MARINE SCIENCE

149 Kveven, A. L.: THE OCEAN RESEARCH COLLEGE ACADEMY (ORCA): COMBINING OCEAN SCIENCE WITH FIELD RESEARCH AS THE INTERDISCIPLINARY CORNERSTONE FOR A STEM EARLY COLLEGE.

150 Gordon, E. S.: IMPLEMENTATION OF "THE MATH YOU NEED, WHEN YOU NEED IT" TO SUPPORT STUDENT LEARNING IN INTRODUCTORY OCEANOGRAPHY

151 Greenaway, A. M.: A SCHOOL RIVER WATCH WATER QUALITY PROGRAM

SS30 BIOLOGICAL AND BIOGEOCHEMICAL RESPONSES TO HUMAN IMPACTS AT THE SEDIMENT-WATER INTERFACE

Chair(s): Katja Fennel, katja.fennel@dal.ca
Wally Fulweiler, rwf@bu.edu
Roxane Maranger, r.maranger@umontreal.ca
John Lehrter, lehrter.john@epa.gov

Location: Exhibit Hall E

152 Meléndez, M.; Corredor, J. E.; Nesterenko , P.; Morell, J. M.: DIRECT CHROMATOGRAPHIC SEPARATION OF CALCIUM AND MAGNESIUM IN SEDIMENT POREWATERS

153 Estrella-Riollano, A. I.; Santos-Flores, C. J.: ECOLOGY OF THE ASIAN CLAM, CORBICULA FLUMINEA (MLLLER), AND ITS IMPACT ON THE BENTHIC INVERTEBRATES IN GUAJATACA AND LA PLATA RESERVOIRS, PUERTO RICO

154 Gordon, O. S.; Menvielle, E.; Limburg, K.: FISH AS BIOGEOCHEMICAL REFLECTIONS OF WATER QUALITY AND LAND-USE IN THE ONONDAGA CREEK WATERSHED

155 Och, L. M.; Müller, B.; Schmid, M.: FORMATION AND BURIAL OF FE/MN ACCUMULATIONS IN LAKE BAIKAL SEDIMENTS: A MODELLING APPROACH

156 Rao, A. M.; Malkin, S.; Meysman, F. J.: THE IMPACT OF MACROFAUNA ON CALCIUM CARBONATE CYCLING IN COASTAL SEDIMENTS

157 Ortiz-González, I. C.; Estrella-Riollano, A. I.; Santos-Flores, C. J.: CHARACTERIZATION OF BENTHIC GASTROPODS IN TWO SUBTROPICAL MAN-MADE RESERVOIRS (GUAJATACA AND LA PLATA) IN PUERTO RICO

158 Washburn, T.; Rhodes, A.; Montagna, P.: DEEP SEA POLYCHAETES AND CRUSTACEANS AND THE DEEPWATER HORIZON BLOWOUT

159 Duval, T. P.; Ormshaw, H.: FERTILIZER LEGACY EFFECTS ON WETLAND RESTORATION: INCREASED PHOSPHORUS EXPORT DUE TO VERTICAL MOVEMENT OF THE SEDIMENT-WATER INTERFACE

(T) represents Tutorial presentations

SS31 BIOLOGY AND BIOGEOCHEMISTRY OF SEA ICE COMMUNITIES

Chair(s): Susanne Neuer, susanne.neuer@asu.edu
Andrew Juhl, andyjuhl@ldeo.columbia.edu

Location: Exhibit Hall E

160 Kinzler, K. P.; Held, B.; McHugh, C.; Aumack, C.; Juhl, A.; Neuer, S.: SIMULATED ALGAL BLOOMS IN MELT WATER OF LAND FAST ARCTIC SEA ICE

161 Smith, J. P.; Lee, P.; DiTullio, G.; Byrum, C.; Janech, M. G.: EFFECTS OF IRRADIANCE LEVELS ON THE EXPRESSION OF ICE-BINDING PROTEINS IN THE SEA-ICE DIATOM, *FRAGILARIOPSIS CYLINDRUS*

162 Franze, G.; Lavrentyev, P.; Conley, R.; Putland, J.; Young, K.; Williams, W.; Nelson, J.: MICROZOOPLANKTON DISTRIBUTION AND TROPHIC INTERACTIONS WITH BACTERIA, PHYTOPLANKTON, AND PLANKTONIC COPEPODS IN THE BEAUFORT GYRE

SS35 CLIMATE EXTREMES - IS THE FUTURE OF ECOSYSTEMS PREDICTABLE AND MANAGEABLE?

Chair(s): Karin Junker, karin.junker@io-warnemuende.de
Carola Wagner, carola.wagner@io-warnemuende.de

Location: Exhibit Hall E

163 Ewell, C.: MECHANISMS BEHIND COLORATION IN NUDIBRANCHS

164 Miller, B.; Heinze, A. W.: THERMOTAXIS OF MIXOTROPHIC PROTIST IN THE GENUS DINOBRYON AS DETERMINED BY AN INDOOR MESOCOSM

165 Gearhart, T. A.; Stockwell, J. D.; Kraft, J.; Iannucci, F. M.: AN EVALUATION OF FATTY ACID PROPAGATION THROUGH MULTIPLE TROPHIC LEVELS AND ITS APPLICATION TO QUANTIFYING ECOSYSTEM CHANGE IN LAKE CHAMPLAIN

166 Spanbauer, T. L.; Hefley, T. J.; Stone, J. R.; Fritz, S. C.: USING PALEOECOLOGICAL DATA TO TEST MODELS AND INDICATORS OF EXTINCTION

167 Woodin, S. A.; Wethey, D. S.; Volkenborn, N.; Berke, S. K.: CLIMATE CHANGE, PDO: PATTERNS OF CHANGE IN THE ARENICOLID POLYCHAETE *ABARENICOLA PACIFICA*

SS36 PRESENCE AND IMPACTS OF EMERGING CONTAMINANTS IN AQUATIC SYSTEMS

Chair(s): Karen Kidd, kiddk@unb.ca;
Rebecca Klaper, rklaper@uwm.edu

Location: Exhibit Hall E

168 Noell, K. M.; Pitula , J. S.: CHARACTERIZATION OF ENZYMATIC ACTIVITY OF AN ACONITASE ORTHOLOGUE PERKINSUS MARINUS

169 Knee, K. L.; Encalada, A. C.: LAND USE AND WATER QUALITY IN A RURAL CLOUD FOREST REGION (INTAG, ECUADOR)

170 Lewis, M. A.: ANTHROPOGENIC CHEMICALS AS DRIVERS OF CHANGE FOR COASTAL ECOSYSTEMS: WETLANDS AND MANGROVE AND SEAGRASS HABITATS

171 Poulin, C.; Bruyant, F.; Laprise, M. H.; Cockshutt, A. M.; Marie-Rose Vandenhecke, J.; Huot, Y.: THE IMPACT OF LIGHT POLLUTION ON THE PHOTOPHYSIOLOGY OF *MICROCYSTIS AERUGINOSA*

172 Bera, G.; Shiller, A. M.; Shim, M.; Yeager, K. M.: ANTHROPOGENIC STABLE CESIUM IN WATER AND SEDIMENT OF A SHALLOW ESTUARY (ST LOUIS BAY, MS)

173 Luning Prak, D. J.; O'Sullivan, D. W.: PHOTOLYSIS OF DINITROBENZYL ALCOHOLS AND OTHER NITROAROMATIC COMPOUNDS IN SEAWATER, ESTUARY WATER, AND PURE WATER

174 Bussan, D. D.; Payne, J. T.; Millar, J. J.; Jackson, C. R.; Cizdziel, J. V.; Ochs, C. A.: METALS AND CHLOROPHYLL CONCENTRATIONS IN SIX MAJOR RIVERS OF THE MISSISSIPPI RIVER BASIN

175 Martin, C. W.; Valentine, J. F.; Dindo, J. D.; Scyphers, S. B.; Kauffman, T. C.: INVESTIGATION OF POLYCYCLIC AROMATIC HYDROCARBON ACCUMULATION IN COASTAL ALABAMA WATERFOWL AFTER THE DEEPWATER HORIZON OIL SPILL

176 Major, C. R.; Urban-Rich, J. L.: INGESTION OF NANOPARTICLES INHIBITS GROWTH RATE IN BIVALVE LARVAE

177 Kim, Y.; Powell, E. N.; Wade, T. L.; Brooks, J. M.: THE STATUS AND LONG-TERM TRENDS OF ORGANIC CONTAMINANTS IN OYSTERS FROM MISSISSIPPI GULF COAST

SS45 EMPLOYING RIVERINE ORGANIC MATTER AS AN INTEGRATED SIGNAL OF CATCHMENT PROCESSES, CLIMATE AND LAND-USE CHANGE

Chair(s): Erin Ellis, ellise@evergreen.edu
Robert Spencer, rspencer@whrc.org
Peter Hernes, pjhernes@ucdavis.edu

Location: Exhibit Hall E

178 Handsel, L. T.; Paerl, H. W.; Osburn, C. L.: TRACKING AND IDENTIFYING POTENTIAL SOURCES OF ORGANIC NITROGEN USING FLUORESCENCE AND STATISTICAL MODELING IN AN EASTERN NORTH CAROLINA RIVER BASIN

179 Wolf, M.; Graeber, D.; Gelbrecht, J.; Zwirnmann, E.; Pusch, M.: DOES AGRICULTURE AFFECT DOM LOADS IN SMALL HEADWATER STREAMS

180 Drake, T. W.; Spencer, R. G.; Wickland, K. P.; Striegl, R. G.; McKnight, D. M.; Holmes, R. M.: BIODEGRADABILITY AND TURNOVER OF PERMAFROST-DERIVED DISSOLVED ORGANIC CARBON

181 Deutsch, B.; Ruppenthal, M.; Humborg, C.; Alling, V.; Moerth, C. M.: STABLE HYDROGEN ISOTOPE RATIOS OF HMW-DOM: A NEW APPROACH TO TRACE TERRESTRIAL DISSOLVED ORGANIC MATTER IN MARINE ECOSYSTEMS

182 Dempsey, C. M.; Morris, D. P.; Pazzaglia, F. J.; Osburn, C. L.; Raymond, P. A.; Peters, S. C.: STUDYING THE AGE AND BIOLABILITY OF ORGANIC CARBON IN STREAMS AND SOILS WITHIN THREE HEADWATER CATHMENTS

183 Hemingway, J. D.; Galy, V. V.: ORGANIC CARBON EXPORT FROM FOUR NEW ENGLAND RIVERS

184 Bianchi, T. S.; Garcia Tigreros, F. G.; Yvon-Lewis, S.; Shields, M. R.; Mills, H. J.; Butman, D.; Osburn, C.; Raymond, P.; Shank, G. C.; DiMarco, S. F.: TRANSFER OF TERRESTRIALLY-DERIVED ORGANIC MATTER DURING THE MISSISSIPPI RIVER FLOOD OF 2011

185 Ramos, J.; Harnett, H. E.: LINKING TERRESTRIAL LAND-COVER WITH AQUATIC BIOGEOCHEMICAL PROPERTIES IN THE COLORADO RIVER SYSTEM

TUESDAY

(*) represents Invited presentations

186 Twiss, M. R.; Sprague, H. M.; Loftus, S. E.; Marshall, N. F.; Skufca, J. D.: WATER QUALITY ASSESSMENT OF THE ST. LAWRENCE RIVER USING HIGH RESOLUTION SENSOR ARRAYS

187 Kraus, T.; Downing, B. D.; Saraceno, J. F.; Pellerin, B. A.; Sauer, M. J.; Beramaschi, B. A.: DEVELOPMENT OF IN-SITU FLUOROMETERS TO TRACK DIFFERENT POOLS OF DISSOLVED ORGANIC MATTER

188 Connelly, T.; McClelland, J. W.; Linn, S.; Khosh, M. S.; Dunton, K. H.: SEASONAL VARIATIONS IN PARTICULATE ORGANIC MATTER SOURCES AND COMPOSITION IN ARCTIC LAGOONS RELATED TO CHANGES IN THE PHYSICO-CHEMICAL ENVIRONMENT

189 Dubinenkov, I. V.; Flerus, R.; Lechtenfeld, O.; Schmitt-Kopplin, P.; Kattner, G.; Koch, B. P.: MOLECULAR CHARACTERIZATION OF DISSOLVED ORGANIC MATTER SOURCES IN THE ARCTIC LENA RIVER DELTA

190 Hernes, P. J.; Spencer, R. G.; Dyda, R. Y.; O'Geen, A. T.; Dahlgren, R. A.: COUPLING OF LITTER LEACHATE SOURCES OF DOM TO OAK WOODLAND CATCHMENT STREAM CHEMISTRY

SS48 GEOCHEMICAL CONSEQUENCES OF ADVECTION IN AQUATIC SEDIMENTS

Chair(s): Joerg Lewandowski, lewe@igb-berlin.de
Gunnar Nuetzmann, nuetzmann@igb-berlin.de
Christof Meile, cmeile@uga.edu
Andreas Brand, andreas.brand@eawag.ch

Location: Exhibit Hall E

191 Dornhoffer, T. M.; Waldbusser, G. G.; Meile, C.: BURROWING AND IRRIGATION BEHAVIOR IN ARENICOLA: EFFECTS ON NITROGEN AND OXYGEN DYNAMICS

SS49 MICROBIAL MEDIATED RETENTION/TRANSFORMATION OF ORGANIC AND INORGANIC MATERIALS IN FRESHWATER AND MARINE ECOSYSTEMS

Chair(s): Jennifer J Mosher, jmosher@stroudcenter.org
Richard Devereux, Devereux.Richard@epamail.epa.gov
Anthony V Palumbo, palumboav@ornl.gov

Location: Exhibit Hall E

192 Montgomery, M. T.; Coffin, R. B.; Boyd, T. J.; Osburn, C. L.: DEGRADATION OF AROMATIC ORGANIC COMPOUNDS BY NATURAL BACTERIAL ASSEMBLAGES AT ESTUARINE FRONTAL BOUNDARIES.

193 Policicchio, H. M.; Schwartz, M.: ASSESSMENT OF WATER QUALITY AND CHEMISTRY WITHIN CARPENTERS CREEK, AN URBAN STREAM

194 Sato, M.; Sakuraba, R.; Hashihama, F.: DISTRIBUTIONS OF ALKALINE PHOSPHATASE AND DIPHOSPHATASE ACTIVITIES IN THE PACIFIC OCEAN, WITH AN EMPHASIS ON PHOSPHORUS CYCLING IN SUBTROPICAL GYRES

195 Kim, S.; Kim, B.; An, S.; Yoo, M.; Choi, J.; Lee, J.; Hyun, J.: IMPACTS OF ARTIFICIAL DYKE AND FRESHWATER DISCHARGE ON THE BIOGEOCHEMICAL AND ECOLOGICAL PROCESSES IN THE YOUNG-SAN ESTUARY, YELLOW SEA

196 Hyun, J.; Kim, S.; Mok, J.; Kim, B.; Thamdrup, B.: ORGANIC CARBON OXIDATION DOMINATED BY THE REDUCTION OF MN(IV) AND FE(III) IN THE SEDIMENTS OF THE ULLEUNG BASIN IN THE EAST SEA

197 Lampkin, A. L.; Millar, J. J.; Payne, J. T.; Ochs, C. A.; Jackson, C. R.: PARTICLE-ASSOCIATED AND SOLUBLE PHOSPHATASE ACTIVITY IN MAJOR RIVERS OF THE MISSISSIPPI RIVER BASIN

198 Thompson, S. K.; Cotner, J. B.: THE PRIMING EFFECT AS A MECHANISM OF TERRESTRIAL CARBON UTILIZATION IN NORTHERN MINNESOTA LAKES

199 Stegman, M. R.; Cottrell, M. T.; Kirchman, D. L.: SINGLE CELL ACTIVITY OF AEROBIC ANOXYGENIC PHOTOTROPHIC BACTERIA IN THE DELAWARE ESTUARY

200 Duff, J. H.; Sheibley, R. W.; Tesoriero, A. J.; Munn, M. D.: LOW TRANSIENT STORAGE INHIBITS N AND P RETENTION IN AGRICULTURAL STREAMS ACROSS THE USA

201 Cote, J. M.; Isom, C. E.; Boling, W. B.; Wawrik, B.; Callaghan, A. V.: ANALYSIS OF ANAEROBIC CHESAPEAKE BAY SEDIMENT MICROBIAL COMMUNITIES FOR THEIR ABILITY TO UTILIZE ALKANES VIA MOLECULAR ANALYSIS AND MICROCOSM STUDIES

202 Richardson, J. D.; Kieber, D. J.; Song, G.; Xie, H.; Cottrell, M. T.; Kirchman, D. L.: CYCLING OF CARBON MONOXIDE IN THE DELAWARE ESTUARY

203 Motard-Côté, J.; Kieber, D. J.; Rellinger, A.; Oswald, L.; Kiene, R. P.: MICROBIAL CYCLING OF DYMETHYLSULFONIOPROPIONATE AND DYMETHYLSULFIDE PRODUCTION ALONG A SALINITY GRADIENT IN THE NORTHERN GULF OF MEXICO

204 Abin, C. A.; Hollibaugh, J. T.: DISSIMILATORY SB(V) REDUCTION: A NOVEL MODE OF ANAEROBIC MICROBIAL RESPIRATION UBIQUITOUS IN THE ENVIRONMENT

SS50 ZOOPLANKTON RESPONSES TO ENVIRONMENTAL STRESSORS: FROM INDIVIDUAL RESPONSES TO LARGER SCALE IMPLICATIONS

Chair(s): Amy E. Maas, amaas@whoi.edu
David T. Elliott, delliott@umces.edu

Location: Exhibit Hall E

205 Hinson, K. I.; Walsh, E. J.: WATER QUALITY AND ITS IMPACT ON THE GENETIC STRUCTURE OF THE MODEL INVERTEBRATE *BRACHIONUS PLICATILIS*

206 Ng, G.; Nidzieko, N. J.: THE EFFECTS OF DIFFERENTIAL WATER MIXING ON THE ZOOPLANKTON COMMUNITY

207 Herrera, K. M.; Urban-Rich, J.: ZOOPLANKTON SURVIVAL IN SALINITY SHOCK EXPERIMENTS

208 Leach, T. H.; Williamson, C. E.; FIscher, J. M.: THE ZONES OF MAXIMUM DAYTIME AND NIGHTTIME DEPLETION: NOVEL INDICES FOR ASSESSING STRUTURAL AND DYNAMIC DRIVERS OF DIEL MIGRATION OF ZOOPLANKTON.

209 Cabrol, J.; Winkler, G.; Tremblay, R.: ECOPHYSIOLOGICAL FEATURES OF THE COPEPOD EURYTEMORA AFFINIS IN RESPONSE TO HABITAT CHANGE IN THE ST. LAWRENCE ESTUARY: AN EXPERIMENTAL APPROACH

(T) represents Tutorial presentations

210 Ignoffo, T. R.; Slaughter, A. M.; Kimmerer, W. J.: GROWTH AND DEVELOPMENT OF A COPEPOD IN AN ESTUARY WITH PERSISTENTLY LOW PRIMARY PRODUCTION.

211 Dutz , J.; Samchyshyna , L.; Sazhin , A. F.; Troedsson , C.; Bouquet , J. M.; Thompson , E. M.: EFFECTS OF OCEAN ACIDIFICATION AND TEMPERATURE ON MARINE ZOOPLANKTON: A MESOCOSM STUDY

212 Strake, S.; Harlinska, A.: POPULATION STRUCTURE AND REPRODUCTION OF THE COPEPOD ACARTIA BIFILOSA IN THE SOUTHERN PART OF THE BALTIC SEA, GULF OF RIGA

213 Dwyer, A.; Brutemark, A.; De Stasio, B.; Vehmaa, A.; Engström-Öst, J.: CONSEQUENCES OF FEEDING ON TOXIC CYANOBACTERIA FOR THE COPEPOD EURYTEMORA AFFINIS FROM THE GULF OF FINLAND

214 Santos, C. J.; Sanchez, B. I.; Martinez, G. A.: ZOOPLANKTON FROM SIX RESERVOIRS IN PUERTO RICO: DIVERSITY ALONG A SUBTROPICAL TROPHIC GRADIENT

215 Evans, E. D.; Chigbu, P.: ABUNDANCE AND DISTRIBUTION OF BAY ANCHOVY, ANCHOA MITCHILLI, EGGS AND LARVAE IN THE MARYLAND COASTAL BAYS

216 Loadman, N. L.; Huebner, J. D.; Wuerz, M.; Dandurand, K.; Wiegand, M. D.; Latimer, J.; Richardson, N.: EFFECTS OF UVR ON THE *DAPHNIA MAGNA-PASTEURIA RAMOSA* HOST-PARASITE SYSTEM

217 Gadbois, N. B.; Hirons, A.; Riegl, B.; Shenker, J.: USING CHAETOGNATH SPECIES AS INDICATORS OF WATER MASSES IN THE FLORIDA CURRENT, BROWARD COUNTY, FLORIDA, USA

218 Slaughter, A. M.; Kimmerer, W. J.: REPRODUCTION AND MORTALITY OF KEY COPEPODS IN LOW-SALINITY AND FRESHWATER HABITATS OF THE SAN FRANCISCO ESTUARY

219 MORALES-NÚÑEZ, A. G.; Evans, E.; Chigbu, P.: THE ABUNDANCE, BIOVOLUME, AND SIZE DISTRIBUTION OF MNEMIOPSIS LEIDYI IN THE MARYLAND COASTAL BAYS

220 Oghenekaro, E. U.; Chigbu, P.; Tang, K.; Pierson, J.: MESOZOOPLANKTON ABUNDANCE AND DISTRIBUTION IN RELATION TO ENVIRONMENTAL FACTORS IN THE MARYLAND COASTAL BAYS

SS54 CARBON FLUXES AT THE LAND-OCEAN INTERFACE: RESEARCH AND EDUCATION

Chair(s): Jennifer Cherrier, jennifercherrier@gmail.com
Bob Chen, bob.chen@umb.edu
Jaye Cable, jecable@email.unc.edu
Christof Meile, cmeile@uga.edu

Location: Exhibit Hall E

221 Esch, M.; Cable, J. E.; Peri, F.; Meile, C.: CONSTRAINING CREEK BANK SEEPAGE FLUXES: MODELING AND DIRECT MEASUREMENTS

222 Norwood, M. J.; Louchouarn, P.; Armitage, A. R.; White, N.; Highfield, W. E.; Brody, S.: FLUXES AND INVENTORIES OF BLUE CARBON IN TEXAS WETLANDS: MEASURING ECOLOGICAL SHIFTS FROM COASTAL SALT MARSH TO MANGROVE DOMINATED WETLANDS

223 Arriola, J. M.; Cable, J. E.: ESTIMATING CARBON BURIAL RATES WITHIN A PRISTINE TIDAL SALT MARSH IN THE BIG BEND REGION OF FLORIDA

224 Dunlap, T. M.; McCallister, S. L.: A MULTIPROXY APPROACH TO ASSESS THE MICROBIAL PROCESSING OF DISSOLVED ORGANIC MATTER OF THE YORK RIVER ESTUARY, VA: IMPLICATIONS FOR THE COASTAL OCEAN

225 Jones, E. B.; Wiggert, J. D.: CHARACTERIZATION OF CROSS-SHELF BIOPHYSICAL INTERACTION ACROSS THE MISSISSIPPI-ALABAMA SHELFBREAK USING REMOTE SENSING DATA

226 Frost, D.; McCallister, S. L.: POLLEN AS A TERRESTRIAL CARBON SUBSIDY TO RIVERINE AND COASTAL SYSTEMS

SS69 COASTAL AND MARINE ECOLOGICAL CLASSIFICATION STANDARD (CMECS): A COMMON LANGUAGE FOR SCIENCE AND MANAGEMENT

Chair(s): Emily Shumchenia, emily@gso.uri.edu
Rebecca J. Allee, becky.allee@noaa.gov

Location: Exhibit Hall E

227 Nelson, E. R.; Suryan, R. M.; Horton, C. H.; Gladics, A. J.: THE HUNGER GAMES: PROVISIONING RATES AND IMPLICATIONS FOR COMMON MURRE (URIA AALGE) CHICKS

228 Johnson, S.; Fox, D. A.; Weatherbee, B. M.: CONSERVATION PLANNING FOR SAND TIGERS (CARCHARIAS TAURUS) IN DELAWARE BAY

SS73 IMPACT OF SUBMESOSCALE PROCESSES ON UPPER OCEAN ECOLOGY, BIOGEOCHEMISTRY AND CONTAMINANT DISPERSAL

Chair(s): Margaret L. Estapa, mestapa@whoi.edu
David A. Siegel, davey@eri.ucsb.edu
Ken O. Buesseler, kbuesseler@whoi.edu

Location: Exhibit Hall E

229 Aghassi, E. N.; Siegel, D. A.; Nelson, N. B.; Stassinos, E. A.; Estapa, M.: TRACING OPTICAL METRICS THROUGH SUBMESOSCALE FEATURES IN THE NORTHERN ATLANTIC GYRE.

230 Heal, K. R.; Smith, S. R.; Church, M. J.: PHOTOSYNTHETIC PARAMETERS OVER HOURLY AND DAILY TIMESCALES SHED LIGHT ON POPULATION STABILITY AT STATION ALOHA

231 Smith, S. R.; Heal, K. R.; Church, M. J.: HIGH RESOLUTION SAMPLING REVEALS LIGHT-DRIVEN FLUCTUATIONS IN MICROBIAL POPULATION SIZE AND ACTIVITIES AT STATION ALOHA

SS74 TACKLING HARMFUL ALGAL BLOOMS: SYNERGY BETWEEN RESEARCH, MANAGEMENT & EDUCATION

Chair(s): Vincent Lovko, vlovko@mote.org
Alina Corcoran, alina.corcoran@myfwc.com

Location: Exhibit Hall E

232 Liu, P. P.; Chen, Y. W.; Ma, Y. B.: ECOLOGICAL RESTORATION IN INNER CITY LAKES- AN EXAMPLE FROM CHENGDU CHINA

233 Ji, J.; Liu, X.; Wu, Z. S.: 6-YEAR CYANOBACTERIA BLOOM DISTRIBUTION IN EUTROPHIC LAKE TAIHU, CHINA

234 Karlsson, O. M.; Malmaeus, J. M.; Baresel, C.: TOWARDS COST EFFICIENCY IN MITIGATING EUTROPHICATION OF THE BALTIC SEA

TUESDAY

(*) represents Invited presentations

235 Israel, N. M.; Patino, R.: RELATIONSHIPS BETWEEN SURFACE WATER QUALITY AND GOLDEN ALGAL BLOOMS IN THE PECOS RIVER BASIN, TEXAS AND NEW MEXICO, USA

236 Carstens, C.; Baresel, C.; Destouni, G.; Cvetkovic, V.: REDUCING HYPOXIA IN THE BALTIC SEA THROUGH THE WAVE-POWERED BALTIC AERATION PUMP (WEBAP)

237 Simoniello, C.; Kirkpatrick, B.; Slimak, N.; Jochens, A.: A FLORIDA RED TIDE BLOOM COLLABORATIVE RESPONSE

238 Sullivan, J.; Neill, B.: ENGAGING STUDENTS AND COMMUNITIES IN HAB RESEARCH AND MITIGATION THROUGH SCIENCE FAIR PROJECTS

239 Polikarpov, I.; Al-Yamani, F.: MICROALGAL AND PROTOZOAN COMMUNITIES IN HYPERSALINE ENVIRONMENT AT ARABIAN GULF SHORE, KUWAIT

240 Lenes, J. M.; Kirkpatrick, G. J.; Weisberg, R. H.; Walsh, J. J.; Hu, C.; Lembke, C.; Lovko, V. J.; Kirkpatrick, B. A.; Corcoran, A. A.: A FLORIDA RED TIDE BLOOM COLLABORATIVE RESPONSE – RESEARCH

SS75 ROLE AND SIGNIFICANCE OF CHEMOSYNTHESIS IN THE OCEAN

Chair(s): Stefan Sievert, ssievert@whoi.edu
Karen G. Lloyd, klloyd@utk.edu

Location: Exhibit Hall E

241 McParland, E. L.; Benitez-Nelson, C. R.; Lorenzoni, L.; Rollings, A.: UNDERSTANDING THE COMPOSITION OF PHOSPHORUS IN SUSPENDED PARTICLES OF THE CARIACO BASIN

242 Thomas, F.; Giblin, A. E.; Cardon, Z. G.; Sievert, S. M.: SULFUR-OXIDATION IN SALT MARSH SEDIMENTS IS INFLUENCED BY PLANT-MICROBE INTERACTIONS

243 Larson, B. I.; Meile, C. D.; Houghton, J. L.: HYDROTHERMAL VENT SUBSURFACE HABITATS AS INFERRED FROM REACTIVE TRANSPORT MODELING

244 Lloyd, K. G.; May, M.; Steen, A. D.: A META-ANALYSIS OF METHODS TO QUANTIFY MICROBES IN MARINE ENVIRONMENTS

SS81 GETTING A GRIP ON MICROBIAL CHANGE: THE FRESHWATER EARTH MICROBIOME PROJECT

Chair(s): Stefan Bertilsson, stebe@ebc.uu.se
Hans-Peter Grossart, hgrossart@igb-berlin.de
Katherine McMahon, tmcmahon@engr.wisc.edu

Location: Exhibit Hall E

245 Cottrell, M. T.; Fauteux, L.; del Giorgio, P. A.; Kirchman, D. L.: BACTERIAL COMMUNITY STRUCTURE IN QUEBEC LAKES AS REVEALED BY TAG PYROSEQUENCING OF SSU RNA GENES

WEDNESDAY, FEBRUARY 20 - ORALS

GS06 RESTORATION ECOLOGY IN AQUATIC SYSTEM

Chair(s): Sandra Clinton, sclinto1@uncc.edu

Location: Room 343

16:00 Ysebaert, T.; Borsje, B.; Walles, B.; de Mesel, I.; Dijkstra, J. T.; Cronin, K.; Holzhauer, H.; Herman, P. M.: TIDAL FLAT RESTORATION AND CONSERVATION IN ESTUARINE ENVIRONMENTS: LESSONS LEARNED BY BUILDING WITH NATURE

16:15 van Duren, L. A.; van Katwijk, M. M.; Heusinkveld, J.; Reise, K.; Fens, J.; van Bentum, F.: EELGRASS RESTORATION IN A DYNAMIC HABITAT – THE BALANCE BETWEEN ECOSYSTEM MANAGEMENT AND LARGE-SCALE GARDENING

16:30 Scharfbillig, A. A.; Reichart, G. J.; Middelburg, J. J.; Liu, Z. W.: ELUCIDATING THE CARBON AND NITROGEN FLOW IN LAKE TAIHU A SHALLOW CHINESE LAKE: STABLE ISOTOPE LABELING EXPERIMENT

16:45 Valdez, I. C.; Martell, E. M.; Lougheed, V. L.: DETERMINING THE EFFECTS OF LIVESTOCK GRAZING AND RECREATIONAL DEVELOPMENT ON NUTRIENT LIMITATION OF STREAM COMMUNITIES IN THE SACRAMENTO MOUNTAIN FOREST.

17:00 O'Brien, J. M.; Lessard, J. L.; Plew, D.; Graham, S. E.; McIntosh, A. R.: DO PLANTS MATTER? THE ROLE OF MACROPHYTES IN NUTRIENT RETENTION BY LOWLAND AGRICULTURAL STREAMS

17:15 Gonzalez, R.; Dunham, J.: RESPONSES OF JUVENILE COHO SALMON TO LARGE WOOD RESTORATION IN A COASTAL PACIFIC NORTHWEST STREAM

17:30 Franck, E. M.; Hackman, A.; Christian, A. D.: THE EFFECTS OF CRANBERRY BOG RESTORATION ON PHYSICAL HABITAT, AQUATIC INVERTEBRATE COMMUNITIES, AND ECOSYSTEM PROCESSES AT TIDMARSH FARMS, PLYMOUTH, MA

17:45 Clinton, S. M.; Osypian, M.; Jefferson, A.: EFFECTS OF URBAN STREAM RESTORATION ON TRANSIENT STORAGE AND ECOSYSTEM FUNCTION

GS08B PLANKTON ECOLOGY - ZOOPLANKTON

Chair(s): Gustav-Adolf Paffenhofer, gustav.paffenhofer@skio.usg.edu
Katherine Richardson, kari@science.ku.dk
Frederic Maps, frederic.maps@gmail.com
Elizaveta Ershova, eershova@alaska.edu
John Dolan, dolan@obs-vlfr.fr

Location: Room 333-334

10:00 Dolan, J. R.; Yang, E. J.; Lee, S.; Kim, S. Y.: TINTINNID CILIATES OF THE AMUNDSEN SEA (ANTARCTICA) PLANKTON: ASSEMBLAGES OF COASTAL POLYNYA AND OFFSHORE DEEP WATER SITES

10:15 Lie, A. A.; Kim, D. Y.; Schnetzer, A.; Caron, D. A.: SMALL-SCALE TEMPORAL AND SPATIAL VARIATIONS IN PROTISTAN COMMUNITY COMPOSITION AT THE USC MICROBIAL OBSERVATORY STATION OFF THE COAST OF SOUTHERN CALIFORNIA

11:00 Smith, S. L.; Annan, J. D.; Hargreaves, J. C.: AFFINITY: THE MEANINGFUL TRAIT-BASED ALTERNATIVE TO THE HALF-SATURATION 'CONSTANT'

11:15 Doubleday, A. J.; Hopcroft, R. R.: SEASONAL AND INTER-ANNUAL PATTERNS OF PTEROPOD AND LARVACEAN ESTIMATES IN THE COASTAL GULF OF ALASKA

11:30 Takahashi, K.; Ichikawa, T.; Fukugama, C.; Kakehi, S.; Okazaki, Y.; Yamane, M.; Furuya, K.: HIGH RESOLUTION VERTICAL AND HORIZONTAL PROFILES OF DOLIOLID BLOOM DETERMINED BY THE VISUAL PLANKTON RECORDER IN THE WESTERN NORTH PACIFIC

11:45 Lester, C.; Hoskins, A. R.; Mariita, R. M.; Britt, J.; Klinka, M.; Moss, A. G.: A NEWLY INVASIVE CYDIPPID CTENOPHORE IN MOBILE BAY AND MISSISSIPPI SOUND.

13:30 Sainmont, J.; Varpe, Ø.; Andersen, K. H.; Visser, A. W.: FEEDING SEASON DURATION AND THE RELATIVE SUCCESS OF CAPITAL AND INCOME SPAWNING COPEPODS

13:45 Hirai, J.; Ichikawa, T.; Hidaka, K.; Tsuda, A.: A METAGENETIC METHOD FOR MARINE PLANKTONIC COPEPODS USING 454 PYROSEQUENCING OF 28S RDNA GENE

14:00 Burris, Z. P.; Dam, H. G.: COPEPOD SEX-RATIOS MAY BE FEMALE-BIASED AT BIRTH

14:15 Sichlau, M. H.; Kiørboe, T.; Nielsen, E. E.: SEXUAL SELECTION IN A PELAGIC COPEPOD, *TEMORA LONGICORNIS*

14:30 Kjellerup, S.; Swalethorp, R.; Nielsen, T. G.: POPULATION DYNAMICS AND POPULATION DYNAMICS AND LIFE STRATEGY OF THE COPEPOD *METRIDIA LONGA* IN A GREENLANDIC FJORD

14:45 Rutzen, I.; Hopcroft, R. R.; Nelson, R. J.: ZOOPLANKTON IN AN ARCTIC UNDER CHANGE: COMMUNITIES OF THE CANADA BASIN

15:00 Fujioka, H.; Machida, R. J.; Tsuda, A.: EARLY LIFE CYCLE OF *NEOCALANUS* COPEPODS IN THE OYASHIO REGION, WESTERN NORTH PACIFIC

15:15 Andersen Borg, C. M.; Bruno, E.; Kiørboe, T.: THE KINEMATICS OF RELOCATION JUMPS IN COPEPOD NAUPLII

16:00 Powell, J. R.; Ohman, M. D.: CHANGES IN FINE-SCALE PATCHINESS OF MESOZOOPLANKTON ACROSS FRONTAL BOUNDARIES ASSESSED WITH GLIDER-MOUNTED ACOUSTIC DOPPLER PROFILERS

16:15 Ershova, E. A.; Hopcroft, R.; Kosobokova, K. N.: SPATIAL PATTERNS OF PSEUDOCALANUS SPECIES DISTRIBUTION AND EGG PRODUCTION IN THE PACIFIC ARCTIC

16:30 Kayfetz, K. R.; Slaughter, A. M.; Kimmerer, W. J.: INFLUENCE OF BIOTIC INTERACTIONS ON THE DISTRIBUTION OF THE COPEPOD *PSEUDODIAPTOMUS FORBESI* IN THE SAN FRANCISCO ESTUARY

16:45 Maps, F.; Record, N. R.; Pershing, A. J.: TRADE-OFF BETWEEN METABOLISM AND DEVELOPMENT EXPLAINS GLOBAL PATTERNS OF PELAGIC COPEPODS DORMANCY

17:00 Liu, H.; Zhu, F.; Chen, M.: EFFECT OF DIATOM SILICA CONTENT ON COPEPOD GRAZING, GROWTH AND REPRODUCTION

17:15 Idrisi, N.; Cherubin, L.; Conlon, L.; Davis, K.; Gyory, J.; Hitchcock, G.; Wright, V.: ROLE OF SUBSURFACE PLANKTON LAYERS IN THE BENTHIC-PELAGIC COUPLING OF ENERGY FLOW WITHIN A TROPICAL CORAL REEF ECOSYSTEM: A CONCEPTUAL MODEL

17:30 Beyer, J. E.; Remmel, E. J.; Zamor, R. M.; Easton, J. D.; Easton, A. C.; Glenn, K. L.; Hallidayschult, T. C.; Hambright, K. D.: EVIDENCE OF COMPETITION AND PREDATION AFFECTING DAPHNIA LUMHOLTZI ABUNDANCES AND MORPHOLOGY IN LAKE TEXOMA.

(*) represents Invited presentations

17:45 Clark, N. A.; Ditchfield, A. K.; Purdy, K. J.; Hart, M. C.; Hatton, A. D.: COPEPODS AND THEIR FECAL MATTER – MARINE METHANE SOURCES?

SS04 ASLO STUDENT SYMPOSIUM

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

Location: Room 354

10:00 Peschiera, M.; Taylor, W.; Beard, D.; Staudinger, M. D.; McCright, A. M.; Melendez, E.: CONNECTING RIVERS AND PEOPLE FOR ENHANCED WATER QUALITY AND FISHERIES SUSTAINABILITY IN PUERTO RICO *

10:15 Reyes, D. E.; Walsh, E. J.: LEVELS OF GENETIC DIFFERENTIATION IN A FRESHWATER MICROINVERTEBRATE OF THE CHIHUAHUAN DESERT

10:30 Pineda, R. R.; Spivak, A. C.: EUTROPHICATION IN ESTUARIES CAUSES CHANGES IN THE QUALITY AND QUANTITY OF FOOD AVAILABLE TO HERBIVOROUS INVERTEBRATES

10:45 Silver, A. C.: GROWTH TRENDS OF NORTHERN ROCK SOLE ALONG KODIAK ISLAND, ALASKA

11:00 Zimmerman, T.; Laurel, B.: DISPERSAL OF NEWLY SETTLED JUVENILE NORTHERN ROCK SOLE.

11:15 Padilla-Crespo, E.; Otero-Morales, E.; Massol-Deya, A.; Löffler, F. E.: DETECTION OF DEHALOGENATING-*CHLOROFLEXI* AND DISTRIBUTION OF A NEW BIOMARKER LINKED TO 1,2-DICHLOROPROPANE DECHLORINATION IN SUBSURFACE ENVIRONMENTS

11:30 Colon-Muller, A. N.; Vera-Mecicano, L. W.; Infante-Mendez, G. A.; Cornwell, J.: HOW DOES THE BENTHIC SYSTEM AFFECTS AMMONIFICATION AND DENITRIFICATION PROCESSES IN SEDIMENT'S OVERLYING WATER IN TWO BIOLUMINESCENT LAGOONS IN PUERTO RICO?

11:45 Lopez, G. T.; Apple, J.: INVESTIGATING CLIMATIC AND LOCAL FACTORS INFLUENCING WATER QUALITY IN THE SALISH SEA

13:30 Lopez, E. K.; Henkel, S. K.; Lindholm, J. B.: ASSOCIATIONS BETWEEN DEMERSAL FISHES AND STRUCTURE-FORMING INVERTEBRATES IN TEMPERATE WATERS ON THE CONTINENTAL SHELF OF THE PACIFIC NORTHWEST

13:45 López-Figueroa, N. B.; Cólon-Rivera, R. J.; West, J. B.; Feagin, R. A.: ISOTOPIC VARIATIONS OF THE DIFFERENT WATER SOURCES REACHING THE HUMACAO NATURAL RESERVE (HNR)

14:00 Christmas, A. F.; Sulkin, S.: EFFECTS OF OCEAN ACIDIFICATION ON DISPERSAL BEHAVIOR AND FEEDING RATES IN THE LARVAL STAGE OF THE DUNGENESS CRAB AND THE PACIFIC GREEN SHORE CRAB

14:15 Price, A. L.; Wheeler, J.; Anderson, E.; Mullineaux, L.: SWIMMING IN TURBULENCE: TRACKING HELICAL PATTERNS AND DIVE RESPONSES IN COMPETENT OYSTER LARVAE

14:30 Baca, S. T.; Gomez, D. M.; Walsh, E. J.: TOXICITY COMPARISON BETWEEN POPULATIONS OF THE FRESHWATER ROTIFER *PLATIONUS PATULUS* TO PHARMACEAUTICALS AND PERSONAL CARE PRODUCTS (PPCPS)

14:45 DeGree, A. A.: STUDYING THE EFFECTS OF ESTUARINE PROCESSING ON PHYSICAL AND OPTICAL PROPERTIES

15:00 Watkins, J. A.; Arnott, S.; Roumillat, B.; Williams , A.: HEALTH ASSESSMENT AND SEX RATIO OF THE AMERICAN EEL, ANGUILLA ROSTRATA, IN THE SOUTH CAROLINA TRIBUTARIES

15:15 Wolfer, H. M.; Johnson, A. K.: PHYSIOLOGICAL AND IMMUNE SYSTEM EFFECTS OF SUBLETHAL HYPOXIA ON ATLANTIC CROAKER, *MICROPOGONIAS UNDULATUS*, IN CHESAPEAKE BAY

16:00 Staton, B.; Mohan, J.; Walther, B.: SPATIOTEMPORAL PATTERNS IN THE COUPLING OF OTOLITH AND SOMATIC GROWTH IN ATLANTIC CROAKER

16:15 Mopper, K.; Abdulla, H.; Sun, L.; Stubbins, A.: DEVELOPMENT OF A HIGH-PRECISION TOC/DOC ANALYZER WITH A LOW NANOMOLAR (10^-9 M) DETECTION LIMIT

16:30 Breland, M. S.; Horodysky, A. Z.; Johnson, A. K.; Brill, R. W.; Bushnell, P. G.; Wolfer, H.: BEHAVIORAL THERMOREGULATION OF ATLANTIC CROAKER UNDER HYPOXIC AND NORMOXIC CONDITIONS

16:45 Moore, T. N.; Cuker, B. E.: SEDIMENT OXYGEN DEMAND AND ORTHOPHOSPHATE RELEASE IN THE HAMPTON RIVER TRIBUTARY OF THE CHESAPEAKE BAY

17:00 Panneer Selvam, B.; Natchimuthu, S.; Arunachalam, L.; Bastviken, D.: FRESHWATERS GREENHOUSE GAS EMISSION KEEP TERRESTRIAL CARBON SINK AT STAKE: THE CASE OF INDIA

17:15 Honisch, B. L.; Smith, T. B.; Brandt, M. E.: CHRONIC AND ACUTE IMPACTS OF LAND-BASED SOURCES OF POLLUTION ON CORAL HEALTH IN THE US VIRGIN ISLANDS

17:30 Downs, E. E.; Popp, B.; Holl, C. M.: NITROGEN ISOTOPE FRACTIONATION AND AMINO ACID TURNOVER RATES IN THE PACIFIC WHITE SHRIMP, *LITOPENAEUS VANNAMEI*

SS05 ADVANCES IN COASTAL HYPOXIA MODELING: FROM PHYSICS TO FISH

Chair(s): Robert Hetland, hetland@tamu.edu
Dubravko Justic, djusti1@lsu.edu

Location: Room 344

10:00 Allahdadi, M.; Li, C.: THE ROLE OF SUMMERTIME DIURNALL HEATING ON THE WATER COLUMN STRATIFICATION OVER THE LOUISIANA SHELF

10:15 Hetland, R. D.; Zhang, X. Q.: INTERANUAL VARIATIONS OF STRATIFICATION OVER THE TEXAS-LOUISIANA SHELF AND EFFECTS ON SEASONAL HYPOXIA

10:30 Justic, D.; Wang, L.: GULF HYPOXIA MODELING 1994-2012: PROGRESS, CHALLENGES AND PROSPECTS

10:45 Yu, L.; Fennel, K.; Laurent, A.; Hetland, R.; Murrell, M. C.; Lehrter, J. C.: PRIMARY PROCESSES CONTROLLING OXYGEN DYNAMICS ON THE TEXAS-LOUISIANA SHELF

11:00 Fennel, K.; Hu, J.; Laurent, A.; Marta-Almeida, M.; Hetland, R.: SENSITIVITY OF HYPOXIA PREDICTIONS FOR THE TEXAS-LOUISIANA SHELF TO SEDIMENT OXYGEN CONSUMPTION AND MODEL NESTING

11:15 Laurent, A.; Fennel, K.; Hetland, R.: EFFECTS OF PHOSPHORUS LIMITATION ON OXYGEN DYNAMICS IN THE MISSISSIPPI AND ATCHAFALAYA RIVER PLUMES

11:30 Obenour, D. R.; Michalak, A. M.; Rabalais, N. N.; Scavia, D.: NEW APPROACHES FOR EXPLORING TRENDS IN GULF HYPOXIA FORMATION

(T) represents Tutorial presentations

11:45 Siedlecki, S. A.; Banas, N.; Davis , K. A.; Giddings, S.; MacCready, P.; Connolly, T.; Hickey, B.: SEASONAL OXYGEN DECLINE IN AN UPWELLING REGIME – A CLOSER LOOK AT SPATIAL AND TEMPORAL OXYGEN VARIABILITY IN THE PACIFIC NORTHWEST

13:30 Wiggert, J. D.; Long, W.; Xu, J.; Hood, R. R.; Jones, E. B.; Lanerolle, L. W.; Brown, C. W.: APPLICATION OF A COUPLED PHYSICAL-BIOGEOCHEMICAL MODEL TO SIMULATE AND FORECAST THE ECOLOGICAL VARIABILITY OF CHESAPEAKE BAY

13:45 DePetro, P. A.; Melendez, W.; Anstead, A. M.; Feist, T. J.; Pauer, J. J.; Schaeffer, B. A.; Hagy, J. D.: DEVELOPMENT AND APPLICATION OF AN OBSERVATION-BASED LIGHT ATTENUATION EQUATION FOR A HIGH-RESOLUTION NORTHERN GULF OF MEXICO EUTROPHICATION MODEL

14:00 Feist, T. J.; Melendez, W.; Pauer, J. J.; DePetro, P. A.; Anstead, A. M.; Lehrter, J. C.; Kreis, Jr., R. G.: DEVELOPMENT, CALIBRATION, AND SENSITIVITY ANALYSES OF A HIGH-RESOLUTION DISSOLVED OXYGEN MASS BALANCE MODEL FOR THE NORTHERN GULF OF MEXICO

14:15 Pauer, J. J.; DePetro, P. A.; Anstead, A. M.; Lehrter, J. C.: LESSONS LEARNED FROM A ONE-DIMENSIONAL WATER QUALITY MODEL FOR THE GULF OF MEXICO

14:30 Ko, D. S.; Lehrter, J. C.; Murrell, M. C.; Greene, R. M.; Gould, R. W.; Penta, B.: A HIGH-RESOLUTION 3D HYPOXIA MODEL FOR THE LOUISIANA SHELF

14:45 Xia, M.; Jiang, L.; Niu, Q.; Schaeffer, B. A.: THE IMPACT OF WIND FORCING AND RIVER DISCHARGE TO A GULF ESTUARY HYPOXIA

15:00 Brush, M. J.: MODELING ESTUARINE HYPOXIA IN NARRAGANSETT BAY, R.I. WITH AN INTERMEDIATE-COMPLEXITY APPROACH

15:15 Hamidi, S. A.; Bravo, H. R.; Klump, J. V.; Waples, J. T.: EVIDENCE OF MULTIPLE PHYSICAL DRIVERS ON THE CIRCULATION AND THERMAL REGIME IN THE GREEN BAY OF LAKE MICHIGAN

16:00 Lake, S. J.; Brush, M. J.: MODELING THE FORMATION OF PERIODIC HYPOXIA IN A TRIBUTARY ESTUARY: THE YORK RIVER, VIRGINIA

16:15 Testa, J. M.; Li, Y.; Lee, Y.; Li, M.; Kemp, W. M.: EXPLORING PHYSICAL AND BIOLOGICAL CONTROLS ON CHESAPEAKE BAY HYPOXIA USING A COUPLED HYDRODYNAMIC-BIOGEOCHEMICAL MODEL

16:30 Vander Woude, A. J.; Mason, D. M.; Zhang, H.; Stow, C. A.; Adamack, A. T.; de Mutsert, K.; Pierson , J. J.; Roman, M. R.; Brandt, S. B.; Kolesar and C. Sellinger, S.: THE EFFECTS OF HYPOXIA ON THE FOOD WEB OF THE NORTHERN GULF OF MEXICO: AN ATLANTIS ECOSYSTEM MODELING APPROACH

16:45 Purcell, K. M.; Craig, J. K.; Nance, J. M.; Smith, M. D.: THE EFFECTS OF HYPOXIA ON THE SPATIAL AND TEMPORAL PATTERNS OF FISHING EFFORT IN THE NORTHWESTERN GULF OF MEXICO SHRIMP FISHERY

17:00 de Mutsert, K.; Steenbeek, J.; Walters, C. J.; Cowan, J. H.: USING ECOSPACE TO SIMULATE EFFECTS OF HYPOXIA ON LIVING MARINE RESOURCES IN THE NORTHERN GULF OF MEXICO

17:15 Rose, K. A.; Creekmore, S.; Neilan, R. M.; Craig, J. K.; Thomas, P.; Rahman, M. S.; Fennel, K.; Hetland, R.; DiMarco, S. F.: PREDICTING THE POPULATION-LEVEL EFFECTS OF HYPOXIA ON ATLANTIC CROAKER (MICROPOGONIAS UNDULATUS) IN THE NORTHERN GULF OF MEXICO

17:30 Grothues, T. M.; Thomas, P.; Dobarro, J. A.; Rahman, M. S.: BEHAVIORAL MEDIATION OF EXPOSURE DURATION TO HYPOXIA FOR IMMATURE ATLANTIC CROAKER IN THE WILD

17:45 Brady, D. C.; Targett, T. E.; Di Toro, D. M.; Kemp, W. M.: COUPLING THE SPATIAL AND TEMPORAL DYNAMICS OF HYPOXIA WITH JUVENILE ESTUARY DEPENDENT FISH BEHAVIOR

SS30 BIOLOGICAL AND BIOGEOCHEMICAL RESPONSES TO HUMAN IMPACTS AT THE SEDIMENT-WATER INTERFACE

Chair(s): Katja Fennel, katja.fennel@dal.ca
Wally Fulweiler, rwf@bu.edu
Roxane Maranger, r.maranger@umontreal.ca
John Lehrter, lehrter.john@epa.gov

Location: Room 352

10:00 Mickey, R. C.; Xu, K.; Libes, S.; Trapp, M.: A STUDY OF RESUSPENDED MATERIAL ALONG SEDIMENT-WATER INTERFACE ON THE TEXAS-LOUISIANA CONTINENTAL SHELF USING GUST EROSION MICROCOSM SYSTEM

10:15 McCarthy, M. J.; Carini, S. A.; Liu, Z.; Ostrom, N. E.; Gardner, W. S.: DO SEDIMENTS DRIVE HYPOXIA DEVELOPMENT IN THE NORTHERN GULF OF MEXICO HYPOXIC ZONE?

10:30 Mortazavi, B.; Bernard, R.; Riggs, A.; Kleinhuizen, A.; Logsdon, M.; Phipps, S.: THE TRANSFORMATIONS OF THE NITROGEN CYCLE IN A COASTAL LANDSCAPE: THE PRESENT AND THE FUTURE

10:45 Hardison, A. K.; Algar, C.; Giblin, A.; Rich, J. J.: ENVIRONMENTAL CONTROLS ON ANOXIC NITROGEN CYCLING PATHWAYS IN MARINE SEDIMENTS

11:00 Roberts, B. J.; Marton, J. M.; Bernhard, A. E.; Giblin, A. E.: LOUISIANA BRACKISH AND SALT MARSH NITRIFICATION POTENTIAL AND MICROBIAL DIVERSITY FOLLOWING THE DEEPWATER HORIZON OIL SPILL

11:15 Bernhardt, E. S.; Hassett, B. A.; Lutz, B. D.: TRANSPORTER OR TRANSFORMER - NITROGEN CYCLING ALONG AN URBAN TO FOREST TRANSITION

11:30 Fields, L.; Nixon, S. W.; Fulweiler, R. W.: RAPID RESPONSE OF BENTHIC-PELAGIC COUPLING TO CLIMATE DRIVEN ECOSYSTEM CHANGES IN A TEMPERATE ESTUARY

11:45 Rogener, M.; Heiss, E. M.; Ireland, T.; Murray, R. W.; Fulweiler, R. W.: SHORT AND LONG-TERM TEMPORAL VARIATIONS OF MANGANESE, IRON, AND N_2 FLUXES ACROSS THE SEDIMENT WATER INTERFACE IN A TEMPERATE ESTUARY

13:30 Spivak, A. C.: RECOVERING FROM LONG TERM EUTROPHICATION: WATER QUALITY ALTERS SEDIMENT BIOGEOCHEMISTRY IN MESOCOSM AND FIELD EXPERIMENTS

13:45 Foster, S. Q.; Fulweiler, R. W.: EFFECTS OF INCREASING EUTROPHICATION ON SEDIMENT N_2O AND N_2 FLUXES IN A SHALLOW, COASTAL ECOSYSTEM

14:00 Vieillard, A. M.; Fulweiler, R. W.: HIGH-RESOLUTION NITROUS OXIDE FLUXES FROM A TEMPERATE INTERTIDAL MUDFLAT

14:15 Mills, H. J.; Reese, B. K.; St. Peter, C.; Zinke, L.: MOLECULAR BIOGEOCHEMICAL CHARACTERIZATION OF THE LOUISIANA/TEXAS SHELF HYPOXIC ZONE NEPHELOID LAYER

WEDNESDAY

(*) represents Invited presentations

14:30 Henry, K. M.; Twilley, R. R.: A CONCEPTUAL MODEL OF BIOGEOCHEMICAL CYCLING DURING DELTA DEVELOPMENT IN THE ANTHROPOCENE

14:45 Lehrter, J.; Devereux, R.; Murrell, M.; Beddick, D.; Yates, D.; Jarvis, B.; Cicchetti, G.; Herchenroder, B.: SEDIMENT-WATER OXYGEN EXCHANGES AND FEEDBACKS WITH SEDIMENT OXIC, SUBOXIC, AND ANOXIC PROCESSES

15:00 Paraska, D.; Hipsey, M.; Salmon, S. U.: SEDIMENT DIAGENESIS: IMPROVING LINKS BETWEEN MEASUREMENT AND MODELLING

15:15 Harris, C. K.; Fennel, K.; Hetland, R. D.: EFFECTS OF RESUSPENSION ON SEDIMENT BED OXYGEN CONSUMPTION: A NUMERICAL MODELING STUDY

16:00 Shelton, A. J.; Richmond, R. H.: RESTORING WATERSHEDS, CORAL REEFS, AND FISHERIES THROUGH A COMMUNITY EFFORT IN GUAM, USA

16:15 Sturdivant, S. K.; Diaz, R. J.: ASSESSING THE AFFECTS OF SEDIMENT-ASSOCIATED HYDROCARBONS ON BIOTURBATION AND SEDIMENT PROPERTIES FOLLOWING THE BP OIL SPILL

16:30 Vanaverbeke, J.; Braeckman, U.; Vincx, M.: MACROFAUNAL FUNCTIONAL DIVERSITY AFFECTS COASTAL BENTHIC ECOSYSTEM FUNCTIONING: USING BIOTURBATION POTENTIAL IN PROTECTION MEASURES

16:45 Kim, T. W.; Lovera, C.; Buck, K.; Barry, J. P.: EFFECT OF LOW OXYGEN AND LOW PH ON THE INTERACTION BETWEEN MANILA CLAMS AND THEIR PREDATORY CRABS

17:00 Funkey, C. P.; Conley, D. J.; Reuss, N. S.; Jilbert, T.; Slomp, C. P.; Humborg, C.: TO BLOOM OR NOT TO BLOOM? INVESTIGATING CYANOBACTERIA ABUNDANCE IN THE BALTIC SEA DURING THE HOLOCENE ERA

17:15 Cardenas, M. B.; Gerecht, K. E.; Markowski, M. S.; Nowinski, J. D.; Sawyer, A. H.; Swanson, T. E.; Guswa, A. J.: HOW THE PULSE OF A RIVER AFFECTS ITS LIVER

17:30 Easton, E. E.; Thistle, D.; Spears, T.: DEEP-SEA HARPACTICOIDS: ARE CRYPTIC SPECIES A PROBLEM?

17:45 Smyth, A. R.; Geraldi, N. R.; Piehler, M. F.: LOCATION OF OYSTER REEF RESTORATION WITHIN AN ESTUARY AFFECTS SEDIMENT NITROGEN DYNAMICS

SS33 MICROBIAL NITROGEN CYCLING IN MARINE PELAGIC WATERS

Chair(s): Jonathan P. Zehr, zehrj@ucsc.edu
Julie LaRoche, julie.laroche@dal.ca
Lasse Riemann, lriemann@bio.ku.dk

Location: Room 350-351

10:00 LaRoche, J.: WHO'S WHO IN THE MICROBIAL WORLD OF NITROGEN CYCLING[T]

10:30 Luo, Y. W.; Doney, S. C.; Lima, I.: DATA-BASED TESTS OF ENVIRONMENTAL CONTROLS ON NITROGEN FIXATION RATES IN GLOBAL OCEAN

10:45 Weber, T. S.; Deutsch, C.: LOCAL VS. BASIN-SCALE REGULATION OF MARINE N2-FIXATION

11:00 Robidart, J. C.; Church, M. J.; Ryan, J. P.; Wilson, S. T.; Ascani, F.; Marin III, R.; Richards, K.; Karl, D. M.; Scholin, C. A.; Zehr, J. P.: APPLICATION OF HIGH RESOLUTION AUTONOMOUS TIME SERIES TO DETECT PATTERNS OF NITROGEN FIXING CYANOBACTERIA IN THE NORTH PACIFIC OCEAN

11:15 Hilton, J. A.; Satinsky, B. M.; Crump, B.; Doherty, M.; Foster, R. A.; Paul, J. H.; Tripp, H. J.; Villareal, T. V.; Zehr, J. P.; Moran, M. A.: FREE-LIVING AND SYMBIOTIC N_2-FIXING CYANOBACTERIA TRANSCRIPTION PROFILES IN THE AMAZON RIVER PLUME

11:30 Montoya, J. P.; Weber, S. C.; Loick-Wilde, N.; Goes, J. I.; Carpenter, E. J.; Coles, V. J.: NUTRIENTS, NITROGEN FIXATION, AND THE PLANKTONIC FOOD WEB IN THE AMAZON PLUME

11:45 Weber, S. C.; Carpenter, E. J.; Goes, J.; Coles, V. J.; Montoya, J. P.: SEASONAL AND SPATIAL VARIABILITY IN DIAZOTROPHY IN THE AMAZON RIVER PLUME

13:30 White, A.; Bombar, D.; Fong, A.; Karl, D. M.; Zehr, J. P.: DIAZOTROPHY IN THE SOUTH PACIFIC: RECONCILING RATES AND METRICS OF CELL ABUNDANCE

13:45 Waite, A. M.; Thompson, P. A.; Tilbrook, B.; Akl, J.; Raes, E. J.; Feng, M.; Rossi, V.; Roughan, M.; Wyatt, A. S.: FORMATION OF SHALLOW HIGH-NITRATE LOW-OXYGEN LAYERS IN THE EASTERN INDIAN OCEAN SUPPORTED BY SURFACE NITROGEN FIXATION

14:00 Raes, E. J.; Mcinnes, A. S.; Strutton, P. G.; Phillips, H. E.; Waite, A. M.: NITROGEN FIXATION IN THE EASTERN INDIAN OCEAN

14:15 McInnes, A. S.; Raes, E. J.; Shepard, A.; Waite, A. M.; Quigg, A.: CARBON AND NITROGEN FIXATION MEASURED VIA GENE EXPRESSION IN THE INDIAN OCEAN

14:30 Benavides, M.; Bronk, D. A.; Agawin, N. S.; Pérez-Hernández, M.; Hernández-Guerra, A.; Arístegui, J.: LONGITUDINAL VARIABILITY OF SIZE-FRACTIONATED N_2 FIXATION AND DON RELEASE ALONG 24.5 NN IN THE SUBTROPICAL NORTH ATLANTIC

14:45 Riou, V.; Fonseca Batista, D.; Roukaerts, A.; Prakya, S. R.; Loureiro, C. M.; Santos, M.; Elskens, M.; Martins, A.; Biegala, I.; Dehairs, F.: IMPACT OF CONTRASTING PHYSICO-CHEMICAL CONDITIONS AT THE NORTH-WESTERN AZORES FRONT ON N_2-,CO_2-FIXATION AND UCYN ABUNDANCE

15:00 Sargent, E. C.; Snow, J. T.; Pabortsava, K.; Villareal, T. A.; Moore, C. M.; Bibby, T. S.; Poulton, A. J.: RECONSIDERING THE FATE OF DIAZOTROPH-DERIVED NEW NITROGEN: THE PRESENCE OF *TRICHODESMIUM* IN SINKING MATERIAL

15:15 Rees, A. P.; Clark, D. R.; Turk-Kubo, K. A.; Zehr, J. P.; Al-Moosawi, L.: ACIDIFICATION OF THE MARINE NITROGEN CYCLE

16:00 Le Moal, M.; Collin, H.; Biegala, I. C.: INTRIGUING DIVERSITY AMONG DIAZOTROPHIC PICOPLANKTON ALONG A MEDITERRANEAN TRANSECT : A DOMINANCE OF RHIZOBIA

16:15 Voss, M.; Dalsgaard, T.; Fabian, J.; Wannicke, N.; Wasmund, N.; Montoya, J. P.: NITROGEN FIXATION DURING AN UNUSUAL SUMMER BALTIC SEA

16:30 Farnelid, H.; Bentzon-Tilia, M.; Andersson, A. F.; Bertilsson, S.; Jost, G.; Labrenz, M.; Jürgens, K.; Riemann, L.: ACTIVE NITROGEN FIXING HETEROTROPHIC BACTERIA AT AND BELOW THE OXIC-ANOXIC INTERFACE IN THE BALTIC SEA

16:45 Klawonn, I.; Bonaglia, S.; Edlund, A.; Brüchert, V.; Ploug, H.: ANAEROBIC PROCESSES IN CYANOBACTERIAL AGGREGATES IN AERATED SURFACE WATERS

17:00 Landolfi, A.; Dietze, H.; Koeve, W.; Oschlies, A.: IRON LIMITATION AND DOM PREVENT OCEANIC N LOSS

[T] represents Tutorial presentations

17:15 Treibergs, L. A.; Fawcett, S. E.; Lomas, M. W.; Sigman, D. M.: NITROGEN ISOTOPIC RESPONSE OF PROKARYOTIC AND EUKARYOTIC PHYTOPLANKTON TO NITRATE AVAILABILITY IN SARGASSO SEA SURFACE WATER

17:30 Fawcett, S. E.; Ward, B. B.; Lomas, M. W.; Sigman, D. M.: COUNTERINTUITIVE EFFECT OF FALL MIXED LAYER DEEPENING ON THE DOMINANT NITROGEN SOURCE TO EUKARYOTIC PHYTOPLANKTON IN THE SARGASSO SEA

17:45 Heiss, E. M.; Fulweiler, R. W.: PELAGIC NITRIFICATION IN VARYING ENVIRONMENTS: HOW RATES CHANGE ALONG AN ESTUARY-TO-SHELF GRADIENT

SS39 SCIENCE AND POLICY FRAMEWORK FOR FUTURE DEVELOPMENT OF THE OIL AND GAS RESOURCES OF THE USA OUTER CONTINENTAL SHELF (OCS)

Chair(s): Jennifer Culbertson, jennnifer.culbertson@boem.gov
Kelly Hammerle, kelly.hammerle@boem.gov

Location: Room 353

16:00 Froomer, N. L.: OIL AND GAS DEVELOPMENT ON THE OUTER CONTINENTAL SHELF: REGULATIONS, ENVIRONMENTAL PROTECTION AND SCIENCE

16:15 Reddy, C. M.; Haddad, R. I.: INTEGRATING ACADEMIA INTO OIL-SPILL PLANNING AND RESPONSE

16:30 Lewandowski, J.; Epperson, D.; Skrupky, K.: INTEGRATING SCIENCE, POLICY AND STAKEHOLDER INPUT TO MAKE BETTER DECISIONS ON MINIMIZING IMPACTS OF OFFSHORE ENERGY DEVELOPMENT ON MARINE PROTECTED SPECIES

16:45 Butterworth, M.; Kaller, A.; Sinclair, J.; Nannen, M.: INVASIVE SPECIES AND THE OFFSHORE OIL AND GAS INDUSTRY

17:00 Valentine, M. M.; Benfield, M.: CHARACTERIZATION OF EPIBENTHIC AND DEMERSAL MEGAFAUNA AT MISSISSIPPI CANYON 252 SHORTLY AFTER THE DEEPWATER HORIZON OIL SPILL

17:15 Culbertson, J. B.; Tripathi, P. B.; Butterworth, M. R.; Martinson, R. J.; Reddy, C. M.; Peacock, E. E.: REVIEWING THE VARIED RESPONSES OF COASTAL ECOSYSTEMS TO OIL SPILLS FOR EVALUATING POTENTIAL IMPACTS IN NEPA ANALYSES.

17:30 Sharuga, S. M.; Benfield, M. C.: A RADIAL ROV SURVEY DESIGN FOR INVESTIGATION OF BENTHIC MEGAFAUNA IN THE VICINITY OF THE DEEPWATER HORIZON MACONDO WELL.[T]

SS40 PERSPECTIVES ON RESTORATION: COASTAL HABITATS TO THE DEEP SEA

Chair(s): Erik E. Cordes, Ph.D., ecordes@temple.edu
Helen K. White, Ph.D., hwhite@haverford.edu
Amanda W.J. Demopoulos, Ph.D., ademopoulos@usgs.gov

Location: Room 343

10:00 Cowan, J. L.: RESTORING GULF OF MEXICO HABITATS AND RESOURCES: CHALLENGES AND OPPORTUNITIES[T]

10:30 Armitage, A. R.; Ho, C. K.; Madrid, E. N.; Bell, M. T.; Kinney, E.; Quigg, A.: DO CONSTRUCTION TECHNIQUES INFLUENCE ECOSYSTEM-LEVEL RESTORATION OF EMERGENT AND AQUATIC ASSEMBLAGES IN A BRACKISH WETLAND?

10:45 Sharma, S.; Goff, J.; Moody, R.; Byron, D.; Cebrian, J.; Heck, Jr, K.; Powers, S.: EFFICACY OF WAVE ATTENUATING STRUCTURES ON RESTORING SHORELINES, SAV & EMERGENT MARSH GRASSES: A COMPARATIVE STUDY OF TWO TYPES OF BREAKWATERS

11:00 Caffrey, J. M.; Hester, C. M.; Jarmul, S.; Smith, A. N.; Smith, H. M.: SEDIMENT BIOGEOCHEMISTRY IN RESTORED AND NATIVE SUBTROPICAL SEAGRASS BEDS

11:15 McDonald, A. M.; Christiaen, B.; Cebrian, J.: SUCCESSFUL RESTORATION OF SHOALGRASS (*HALODULE WRIGHTII*) TO AN ALABAMA COASTAL LAGOON

11:30 Sparks, E. L.; Cebrian, J.; Tobias, C. R.: NUTRIENT FILTRATION CAPABILITY OF SMALL-SCALE SALT MARSH RESTORATION DESIGNS

11:45 Middleton, B. A.; Roberts, B. J.: HYDROLOGIC REMEDIATION FOLLOWING THE DEEPWATER HORIZON INCIDENT IMPACTED ECOSYSTEM PROCESSES REGULATING ELEVATION IN COASTAL BALDCYPRESS SWAMPS

13:30 Sadovski, A. L.; King, S.; Montagna, P. A.; Turner, E. L.: MODELING AND VISUALIZATION OF THE MARSHES VEGETATION

13:45 McClenachan, G.; Turner, R. E.: EFFECTS OF OIL ON THE RATE AND TRAJECTORY OF LOUISIANA MARSH SHORELINE EROSION

14:00 Forsyth, M. K.; Harris, L. A.: INVESTIGATIONS OF THE EFFECTS OF OYSTER MORPHOLOGY ON FILTRATION RATE AND PARTICLE CAPTURE USING A HYBRID ECOSYSTEM INDIVIDUAL-BASED MODEL

14:30 Qu, F.; Rowe, G. T.: POLYCHAETE ANNELID (SEGMENTED WORMS) SPECIES COMPOSITION IN THE DEEP GULF OF MEXICO FOLLOWING THE DEEP WATER HORIZON (DWH) OIL SPILL

14:45 Ruiz-Ramos, D. V.; Baums, I. B.: POPULATION GENETIC ANALYSIS OF LEIOPATHES GLABERRIMA IN THE GULF OF MEXICO

15:00 Doughty, C. L.; Quattrini, A. M.; Cordes, E. E.: POPULATION DYNAMICS OF THE DEEP-SEA CORAL GENUS PARAMURICEA IN THE GULF OF MEXICO

15:15 White, H. K.; Reddy, C. M.: GEOCHEMICAL INSIGHTS INTO RESTORATION EFFORTS IN THE GULF OF MEXICO

SS43 LONG ISLAND SOUND, AMERICA'S URBAN ESTUARY: SCIENCE, POLICY, AND PUBLIC OUTREACH

Chair(s): James Ammerman, james.ammerman@stonybrook.edu
Christopher Gobler, christopher.gobler@stonybrook.edu
Cornelia Schlenk, cornelia.schlenk@stonybrook.edu

Location: Room 348-349

10:00 Ammerman, J. W.: LONG ISLAND SOUND: ORGIN, HISTORY, AND RESEARCH

10:15 Swanson, R. L.; Wilson, R. E.: LONG ISLAND SOUND'S PHYSICAL OCEANOGRAPHY: ANTICIPATING THE FUTURE BASED ON RECENT DATA AND INFORMATION

10:30 O'Donnell, J.: HYPOXIA IN LONG ISLAND SOUND-MEASUREMENTS AND MECHANISMS

10:45 Suter, E. A.; Lwiza, K. M.; Rose, J.; Gobler, C.; Taylor, G. T.: REGIME SHIFTS IN NUTRIENTS, PHYTOPLANKTON, AND HYDROGRAPHY OVER THE LAST FIFTEEN YEARS IN LONG ISLAND SOUND

11:00 Latimer, J. S.; Tedesco, M.; Swanson, R. L.; Stacey, P.; Yarish, C.; Garza, C.: SCIENCE IN SUPPORT OF MANAGEMENT, MANAGEMENT IN SUPPORT OF SCIENCE – THE LONG ISLAND SOUND EXPERIENCE[T]

WEDNESDAY

(*) represents Invited presentations

11:30 Seligson, N.; Johnson, C.: THE ROLE OF THE CITIZENS ADVISORY COMMITTEE IN THE LONG ISLAND SOUND STUDY*

11:45 Graham, L. J.; Burg, R.: GOING BEYOND TRADITIONAL EDUCATIONAL METHODS TO CHANGE ENVIRONMENTAL BEHAVIOR

13:30 O'Connell, C. A.; Collier, L. J.; Flood, R. D.: MEASURING THE EFFECTS OF AN INTERDISCIPLINARY INTRODUCTORY COURSE ON UNDERGRADUATE STUDENT ATTITUDES ABOUT LONG ISLAND SOUND

13:45 Graham, L. J.; Marrero, M.: PROMOTING WETLANDS STEWARDSHIP FROM THE BAYOU TO THE BIG APPLE

14:00 Durand, J. M.; Young, C. R.; Hanson, G. N.; Wong, T.: COMPARISON OF SEEPAGE PROPERTIES AT TWO LOCATIONS ALONG THE EAST SHORE OF PORT JEFFERSON HARBOR, NY

14:15 Young, C.; Rapaglia , J.; Rogers , D.; Grant , C.; Bokuniewicz , H.: DISTRIBUTION OF SUBMARINE GROUNDWATER DISCHARGE INTO PORT JEFFERSON HARBOR, LONG ISLAND SOUND, NY

14:30 Treible, L. M.; Lonsdale, D. J.; Gobler, C. J.: THE ROLE OF CTENOPHORES IN NUTRIENT REGENERATION IN LONG ISLAND SOUND

14:45 Rice, E. J.; Stewart, G. M.: SEASONALITY OF LONG-TERM WARMING IN LONG ISLAND SOUND AND ZOOPLANKTON COMMUNITY CHANGES

15:00 Yarish, C.; Kim, J. K.: SEAWEED AQUACULTURE: AN OPPORTUNITY FOR NUTRIENT BIOEXTRACTION IN LONG ISLAND SOUND AND ADJACENT URBANIZED ESTUARIES

15:15 Rackovan, J. L.; Grothues, T. M.; Able, K. W.: ASSOCIATION OF PELAGIC FISHES WITH PIERS IN THE LOWER HUDSON RIVER AS MEASURED WITH DUAL FREQUENCY IDENTIFICATION SONAR (DIDSON)

SS44 FACTORS PROMOTING THE EXPANSION OF HARMFUL ALGAL BLOOMS IN MARINE AND FRESHWATER ECOSYSTEMS

Chair(s): James Ammerman, James.Ammerman@stonybrook.edu
Christopher J. Gobler, christopher.gobler@stonybrook.edu

Location: Room 356

10:00 Wurch, L. L.; Gobler, C. J.; Walker, E.; Dyhrman, S. T.: TRANSCRIPTOME PROFILING IN NATURAL POPULATIONS OF *A. ANOPHAGEFFERENS* PROVIDE INSIGHT INTO NUTRITIONAL DRIVERS OF HARMFUL BROWN TIDES

10:15 Harke, M. J.; Gobler, C. J.: WHOLE TRANSCRIPTOME RESPONSE OF THE TOXIC, BLOOM FORMING CYANOBACTERIUM, *MICROCYSTIS AERUGINOSA*, TO NUTRIENT AVAILABILITY.

10:30 Coyne, K. J.; Bouchard, J. N.; Hennige, S. J.; Warner, M. E.: REGULATION OF GENE EXPRESSION BY LIGHT AND NITROGEN SOURCE IN *HETEROSIGMA AKASHIWO*

10:45 Eiler, A.; Drakare, S.; Pernthaler, J.; Peura, S.; Simek, K.; Znachor, P.; Lindström, E. S.: CAN NEXT GENERATION SEQUENCING BE USEFUL IN PHYTOPLANKTON MONITORING?

11:00 Parker, M. S.; Maumus, F.; Armbrust, E. V.: STRESS ACTIVATED TRANSPOSONS IN THE DOMOIC ACID PRODUCING DIATOM *PSEUDO-NITZSCHIA MULTISERIES*

11:15 Guannel, M. L.; Haring, D.; Twiner, M. J.; Wang, Z.; Noble, A.; Saito, M. A.; Rocap, G.: TOXIGENICITY AND COMMUNITY COMPOSITION OF THE DIATOM PSEUDO-NITZSCHIA IN THE SOUTH ATLANTIC OCEAN

11:30 Benitez-Nelson, C.; Anderson, C. R.; Thunell R.; Sekula-Wood, E.; Siegel, D.: INCREASING PSEUDO-NITZSCHIA ABUNDANCE AND DOMOIC ACID TOXICITY OF SINKING PARTICLES IN THE SANTA BARBARA BASIN ASSOCIATED WITH CHANGES IN SOURCE WATERS

11:45 Lubetkin, S. C.; Lessard, E. J.: HABITAT MODELING OF PSEUDO-NITZSCHIA DISTRIBUTION AND TOXICITY IN THE COASTAL WATERS OF THE NORTHWEST PACIFIC USING NON-PARAMETRIC MULTIPLICATIVE REGRESSION

13:30 Paerl, H. W.; Otten, T. G.; Xu, H.; Qin, B.; Zhu, G.; Wilhelm, S. W.; Scott, J. T.; Hall, N. S.: CONTROLLING HARMFUL CYANOBACTERIAL BLOOMS IN A MORE CROWDED, WARMER WORLD: RETHINKING NUTRIENT REDUCTION PARADIGMS AND STRATEGIES

13:45 Otten, T. G.; Paerl, H. W.: PRIMARY DRIVERS OF SUCCESSION AND TOXIGENICITY OF THE CYANOHAB *MICROCYSTIS SPP.*

14:00 White, J. D.; Sarnelle, O.: VARIATION IN ECOLOGICAL TRAITS OF MICROCYSTIS AERUGINOSA: IMPLICATIONS FOR POPULATION DYNAMICS

14:15 Swarbrick, V. J.; Vogt, R. J.; Quiñones-Rivera, Z. J.; Leavitt, P. R.: SEASONAL SUPPRESSION OF ALGAL GROWTH BY NITROGEN FERTILIZATION: LANDSCAPE EVIDENCE FROM 16 YEARS OF ENRICHMENT BIOASSAYS

14:30 Nojavan A., F.; Cassar, N.; Qian, S. S.; Reckhow, K. H.; Paerl, H. W.: A STUDY OF ANTHROPOGENIC DISTURBANCE OF THE NEW RIVER ESTUARY USING A BAYESIAN BELIEF NETWORK APPROACH

14:45 Stanfield, E. R.; Sreenivasan, A.; Los Huertos, M.: ENVIRONMENTAL FACTORS ASSOCIATED WITH TOXIC CYANOBACTERIA IN PINTO LAKE, A COASTAL LAKE IN THE MONTEREY BAY AREA

15:00 McLaughlin, J. T.; Creed, I. F.; Trick, C. G.: APPLICATION OF CYTOTOXICITY ASSAYS TO DETECT POTENTIALLY HARMFUL BIOACTIVE COMPOUNDS PRODUCED BY FRESHWATER CYANOBACTERIA AND CHRYSOPHYTES

15:15 Hudon, C.; Lévesque, D.; Cattaneo, A.; Gagnon, P.: FACTORS CONTROLLING THE PROLIFERATION OF THE BENTHIC CYANOBACTERIUM *LYNGBYA WOLLEI* IN THE ST. LAWRENCE RIVER (CANADA)

16:00 Munawar, M.; Fitzpatrick, M. A.: ALGAL BLOOM DYNAMICS: EXAMINING MICROBIAL AND PLANKTONIC FOOD WEB INTERACTIONS

16:15 Planas, D.; Pannard, A.; Paquet, S.: PHYSICAL FORCING OF HARMFUL ALGAE BLOOMS IN LAKES WITH LOW NUTRIENT LOADING

16:30 Wurtsbaugh, W. A.; Marcarelli, A. M.; Boyer, G. L.: HARMFUL ALGAL BLOOMS IN THE GREAT SALT LAKE (UTAH): SALINITY, NUTRIENT AND TOP-DOWN CONTROLS

16:45 Yokota, K.; Bingham-Hill, A. S.: LAWN FERTILIZER RUNOFFS AND THEIR EFFECTS ON URBAN POND PHYTOPLANKTON: COMPARISON OF CONVENTIONAL AND NEW FORMULAE

17:00 Lindim, C.; Becker, A.; Fischer, H.: ROLE OF INTERNAL VS. EXTERNAL LOADS IN THE MANAGEMENT OF A FLOWING LAKE: A MODELLING STUDY

17:15 Graham, J. L.; Ziegler, A. C.; Loving, B. L.; Loftin, K. A.: FATE AND TRANSPORT OF CYANOBACTERIA-RELATED TOXINS AND TASTE-AND-ODOR COMPOUNDS FROM UPSTREAM RESERVOIR RELEASES IN THE KANSAS RIVER, KANSAS

17:30 Cha, Y.: CONTROLS ON HARMFUL ALGAL BLOOMS IN A RESERVOIR IN THE EAST ASIAN MONSOON SYSTEM

17:45 Hambright, K. D.; Easton, J. D.; Zamor, R. M.; Easton, A. C.; Glenn, K. L.; Allison, B.; Remmel, E. J.; Beyer, J. E.: ENVIRONMENTAL REGULATION OF GROWTH AND TOXICITY OF PRYMNESIUM PARVUM: IDENTIFICATION OF POSSIBLE MANAGEMENT STRATEGIES

SS53 SENSOR NETWORKS IN AQUATIC SYSTEMS: RESEARCH AND EDUCATION

Chair(s): Joe Needoba, needobaj@ebs.ogi.edu
Brian Bergamaschi, bbergama@usgs.gov
Janice McDonnell, mcdonnel@marine.rutgers.edu
Bob Chen, bob.chen@umb.edu

Location: Room 346-347

10:00 Roehm, C. L.; Powell, H.: THE SENSOR NETWORK OF THE AQUATIC MEASUREMENT PROGRAM WITHIN NEON.

10:15 Newton, J. A.: NANOOS-IOOS OBSERVATION AND VISUALIZATION OF ESTUARINE OCEAN ACIDIFICATION: MAKING A DIFFERENCE

10:30 Baptista, A.; Needoba, J.; Roegner, C.; Welle, P.; Spitz, Y.; Llebot, C.; Li, B.; Evans, W.; Peterson, T.; Herfort, L.: SCIENCE IN THE ERA OF COLLABORATORIES: UNDERSTANDING AND PREDICTING UPWELLING-DRIVEN ESTUARINE HYPOXIA AND ACIDIFICATION

10:45 Chen, R. F.; Uzzo, S.; Cramer, C.; DiBona, P.; Faux, R.: SENSOR NETWORKS AND SOCIAL NETWORKS: EFFECTIVE STRATEGIES FOR EDUCATION AND OUTREACH

11:00 Johnson, K. S.; Jannasch, H.; Coletti, L.; Carlson, R.; Brown, G.; Nohava, T.; Martz, T.; Takeshita, Y.; Swift, D.; Riser, S.: TOWARDS A GLOBAL OCEAN PH OBSERVING SYSTEM: FIRST OBSERVATIONS WITH DEEP-SEA DURAFET PH SENSORS ON PROFILING FLOATS

11:15 Jochens, A. E.: HELPING EDUCATORS TEACH STUDENTS AND THE PUBLIC ABOUT THE OCEAN AND THE GULF OF MEXICO

11:30 Simoniello, C.; Kobara, S.; Walker, S.; Howard, M. K.; Jochens, A. E.; Nowlin, W.; Baumer-Pendergast, D.; Mullins-Perry, R.: MAKING SENSE OF OCEAN SENSING: TRANSLATING OCEAN SCIENCE INFORMATION FOR DIVERSE AUDIENCES

11:45 Kindelberger, S. A.; Doremus, D. R.; Libes, S. M.; Trapp, J. M.: NEW APPROACHES TO TERRESTRIAL-BASED OCEAN MONITORING PLATFORMS

13:30 Elrod, V. A.; Johnson, K. S.; Plant, J.; Massion, E.; Jannasch, H.; Coletti, L.; Sakamoto, C.: APPLICATION OF A VERSATILE IN SITU CHEMICAL ANALYZER BASED ON ARDUINO TECHNOLOGY: MONITORING PO4 CONCENTRATIONS IN A DYNAMIC COASTAL WATERSHED

13:45 Downing, B. D.; Pellerin, B. A.; Bergamaschi, B. A.; Kraus, T. E.; Saraceno, J. F.; Sauer, M. J.: IMPROVING DOC PROXY MEASUREMENTS THROUGH CORRECTION OF IN SITU DOM FLUORESCENCE FOR EFFECTS OF TURBIDITY AND INNER FILTERING.

14:00 Stauffer, B. A.; Schnetzer, A.; Gellene, A. G.; Seubert, E. L.; Sukhatme, G. S.; Caron, D. A.: COASTAL SENSOR NETWORKS ALLOW ELUCIDATION OF CAUSATIVE MECHANISMS UNDERLYING ALGAL BLOOM AND FISH KILL EVENTS

14:15 Milbrandt, E. C.; Bartleson, R. D.; Martignette, A. J.; Siwicke, J. J.; Thompson, M.: USING A MULT-NODE SENSOR NETWORK TO UNDERSTAND DIURNAL, TIDAL, AND SEASONAL DYNAMICS OF A SOUTHWEST FLORIDA BARRIER ISLAND ECOSYSTEM *

14:30 Adams, L. G.; Howick, T.: MONITORING THE CHATTAHOOCHEE RIVER USING THE BASIC OBSERVATION BUOY, A PARTNERSHIP BETWEEN A UNIVERSITY, NATURE CENTER, AND AP ENVIRONMENTAL SCIENCE STUDENTS

14:45 Matsumoto, G. I.; Johnson, K.; Adams, L.: SENSOR NETWORKS USED FOR BOTH RESEARCH AND EDUCATION - WHAT IS NEEDED TO MAKE RESEARCH SENSORS SUITABLE FOR THE CLASSROOM.*

15:00 Pullin, M. J.; Schwingle, R.; Echevarria Roman, Y.; Gabrielsen, P. J.: A MOBILE WATER ANALYSIS LABORATORY FOR THE STUDY OF STREAM NUTRIENT AND DOC DYNAMICS

15:15 Escoffier, N.; David, A.; Métivier, F.; Groleau, A.: INTEGRATING LARGE RIVER TROPHIC FUNCTIONING FROM REAL TIME SENSORS NETWORK MEASUREMENTS

16:00 Andresen, C. G.; Lougheed, V. L.: INTEGRATION OF NEAR-SURFACE REMOTE SENSING FOR ESTIMATION OF PHENOLOGY AND PLANT BIOMASS IN ARCTIC WETLANDS.

16:15 McNair, J. N.; Gereaux, L. C.; Weinke, A. D.; Sesselmann, M. R.; Kendall, S. T.; Biddanda, B. A.: USING QUASI-MECHANISTIC STATISTICAL MODELS AND HIGH-FREQUENCY SENSOR DATA TO ESTIMATE COMPONENTS OF LAKE METABOLISM BY THE FREE-WATER DISSOLVED-OXYGEN METHOD

16:30 Li, C.; da Silva, G.; Hesp, P.: TEACHING AND LEARNING WITH NEW TECHNOLOGY AND EXCITEMENT: BEACH EXPERIMENTS OF LAB-MADE GPS DRIFTERS WITH STUDENTS

16:45 Head, M. J.; Elliott, K. M.: TELEMETERING WATER QUALITY MEASUREMENTS AT 1-MINUTE RESOLUTION

17:00 Gebrai, Y. A.: USING CYCLOPS 7 SENSORS WITH AN AUTONOMOUS SURFACE VENHICLE TO DETERMINE CONCENTRATIONS OF CRUDE OIL AND REFINED FUELS IN INTER-COASTAL WATERS

17:15 Tiano, L.; Revsbech, N. P.: MEASURING OXYGEN AT VANISHNGLY LOW OXYGEN CONCENTRATIONS: IN SITU AND LABORATORY APPLICATIONS OF THE STOX SENSOR

17:30 Mullins-Perry, R. L.; Jochens, A. E.: BUILDING TOWARD A SUSTAINABLE, INTEGRATED, AND OPERATIONAL DATA NETWORK IN THE GULF OF MEXICO

17:45 Peri, F.; Chen, R. F.; Meile, C. D.; Esch, M.; Cable, J. E.; Cato, H. S.: DEVELOPING SENSORS TO STUDY CREEKBANK EXCHANGE AND EBB TIDE DRAINAGE OF CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) IN AN URBAN MACROTIDAL SALT MARSH

(*) represents Invited presentations

SS56 CARBON FLUXES IN AQUATIC ECOSYSTEMS AT CATCHMENT, REGIONAL AND CONTINENTAL SCALES

Chair(s): Sebastian Sobek, sebastian.sobek@ebc.uu.se
Cory McDonald, cmcdonald@usgs.gov
Edward Stets, estets@usgs.gov

Location: Room 345

10:00 Räike, A.; Kortelainen, P.; Mattsson, T.; Thomas, D. N.: TRENDS IN ORGANIC AND INORGANIC CARBON EXPORT TO THE BALTIC SEA FROM FINNISH RIVERS

10:15 Campeau, A.; Del Giorgio, P. A.: CURRENT AND PREDICTED FUTURE CO2 AND CH4 EMISSIONS FROM BOREAL RIVER NETWORKS IN NORTHERN QUBBEC

10:30 Wallin, M. B.; Grabs, T.; Buffam, I.; Laudon, H.; Ågren, A.; Öquist, M.; Bishop, K.: EVASION OF CO2 FROM STREAMS – THE DOMINANT COMPONENT OF THE CARBON EXPORT THROUGH THE AQUATIC CONDUIT IN A BOREAL LANDSCAPE

10:45 Cialino, K. T.; Chen, R. F.; Huang, W.; Wang, X.; Peri, F.; Heath, T. D.: HIGH RESOLUTION MEASUREMENTS OF DISSOLVED ORGANIC CARBON DURING EPISODIC EVENTS IN AN URBAN NEW ENGLAND RIVER

11:00 Kominoski, J. S.; Benstead, J. P.; Rosemond, A. D.; Manning, D. P.: BALANCING STREAM METABOLIC DEMANDS FOR CARBON AND NUTRIENTS: N:P ENRICHMENT STIMULATES WHOLE-STREAM HETEROTROPHIC RESPIRATION DESPITE A REDUCED CARBON BASE

11:15 Cai, Y.; Shim, M.; Guo, L.; Shiller, A. M.: FLOODPLAIN INFLUENCE ON CARBON SPECIATION AND EXPORT FROM THE LOWER PEARL RIVER, MISSISSIPPI

11:30 Schindler, D. E.; Jankowski, K.; Lisi, P. J.; Holtgrieve, G. W.: GEOMORPHIC CONTROLS ON THE METABOLISM OF AUTOCHTHONOUS AND ALLOCHTHONOUS CARBON IN STREAMS

13:30 Sobek, S.; McDonald, C. P.; Lauerwald, R.; Kortelainen, P.; Hartmann, J.; Raymond, P. A.: REGIONALLY RESOLVED CO2 EMISSION OF GLOBAL LAKES AND RESERVOIRS

13:45 McDonald, C. P.; Stets, E. G.; Striegl, R. G.: CARBON DIOXIDE EMISSIONS FROM LAKES AND RESERVOIRS IN THE CONTIGUOUS UNITED STATES

14:00 Vachon, D.; del Giorgio, P. A.: ANNUAL CYCLE OF DISSOLVED ORGANIC MATTER DEGRADABILITY AND LINKS TO CO2 DYNAMICS IN BOREAL LAKES

14:15 Natchimuthu, S.; Panneer Selvam, B.; Bastviken, D.: TEMPORAL VARIATIONS OF AQUATIC FRESHWATER METHANE AND CARBON DIOXIDE FLUXES – A KEY FOR ACCURATE UPSCALING

14:30 Boutet, L.; St-Pierre, A.; Prairies, Y. T.; del Giorgio, P. A.: CONTRIBUTION OF EBULLITION TO TOTAL METHANE EMISSIONS FROM BOREAL LAKES AND WETLANDS

14:45 Bogard, M. J.; Garcia Chavez, M. C.; Gauthier-Fautaux, S.; Boutet, L.; del Giorgio, P. A.; Prairie, Y. T.; Derry, A.: PELAGIC METHANE PRODUCTION IN OXIC WATER COLUMNS OF LAKES

15:00 Soued, C.; del Giorgio, P. A.; Maranger, R. J.: NITROUS OXIDE (N_2O) CONCENTRATIONS AND FLUXES ACROSS BOREAL RIVERS, LAKES, AND WETLANDS

15:15 West, W. E.; Coloso, J. J.; Creamer, K. P.; Jones, S. E.: LANDSCAPE-INFORMED STRATEGIES FOR ESTIMATING CONTRIBUTIONS TO THE GLOBAL METHANE CYCLE

16:00 Abrams, J. F.; Hohn, S.; Merico, A.: THE EFFECTS OF THE DEGRADATION OF INDONESIAN PEATLANDS ON THE REGIONAL AND GLOBAL CARBON CYCLE

16:15 Morris, E. P.; Flecha, S.; Figuerola, J.; Costas, E.; Navarro, G.; Rodriguez, P.; Huertas, I. E.: AIR-WATER CARBON DIOXIDE FLUXES IN A MEDITERRANEAN WETLAND

16:30 Wilson, B. J.; Mortazavi, B. M.; Kiene, R. K.; Starr, G. S.: COUPLED METHANE AND CARBON DIOXIDE FLUXES IN COASTAL MARSHES ALONG A SALINITY GRADIENT

16:45 Moseman-Valtierra, S.; Tang, J.; Morkeski, K.; Govenar, B.; Egan, K.; Lima, T.; Martin , R.; Garate, M.: CONTRASTING ZONATION PATTERNS IN GREENHOUSE GAS FLUXES FROM NEW ENGLAND SALT MARSHES

17:00 Faber, P. A.; Cook, P. L.; Kessler, A. J.; Bull, J. K.; Meysman, F. J.; McKelvie, I. D.: THE ROLE OF ALKALINITY GENERATION IN CONTROLLING INORGANIC CARBON FLUXES FROM INTERTIDAL SEDIMENTS

SS57 TRACE ELEMENTS AND ISOTOPES IN THE OCEAN AND ATMOSPHERE: THE GEOTRACES PROGRAM

Chair(s): Carl Lamborg, clamborg@whoi.edu
Peter Morton, pmorton@fsu.edu

Location: Room 355

10:00 Rijkenberg, M.; Gerringa, L.; Laan, P.; Schoemann, V.; Middag, R.; van Aken, H.; de Jong, J.; van Haren, H.; de Baar, H.: GEOTRACES: WHAT WE LEARNT FROM THE DISTRIBUTION OF DISSOLVED IRON IN THE WESTERN ATLANTIC OCEAN

10:15 Dulaquais, G. R.; Boye, M.; Carton, X.: CONTRASTING FEATURES OF THE BIOGEOCHEMICAL CYCLE OF COBALT IN THE WEST ATLANTIC OCEAN

10:30 Casacuberta, N.; Christl, M.; Lachner, J.; Rutgers van der Loeff, M.; Puigcorbé, V.; Synal, H. A.; Masqué, P.: THE FIRST TRANSECT OF U-236 IN THE NORTH ATLANTIC OCEAN

10:45 Achterberg, E. P.; Moore, C. M.; Steigenberger, S.; Marsay, C.; Rogan, N.; Henderson, S.; Sanders, R.: IRON BIOGEOCHEMISTRY IN THE HIGH LATITUDE NORTH ATLANTIC OCEAN

11:00 Fitzsimmons, J. N.; Carrasco, G.; Wu, J.; Boyle, E. A.: DISSOLVED IRON SIZE PARTITIONING INTO SOLUBLE AND COLLOIDAL PHASES ALONG THE U.S. GEOTRACES NORTH ATLANTIC TRANSECT

11:15 Wu, J.; Roshan, S.; Measures, C.; Hatta, M.; Fitzsimmons, J. N.; Morton, P.: COMPARATIVE DISTRIBUTION OF DISSOLVED FE, MN, ZN, CU AND CD IN THE NORTH ATLANTIC DURING US GEOTRACES NORTH ATLANTIC 2010 AND 2011 CRUISES

11:30 Shiller, A. M.: A DISSOLVED GALLIUM SECTION ACROSS THE NORTH ATLANTIC

11:45 Bowman, K. L.; Hammerschmidt, C. R.; Lamborg, C. H.; Swarr, G.: NEW INSIGHTS ON MERCURY SPECIATION WITH FULLY RESOLVED HIGH-RESOLUTION PROFILES ACROSS A ZONAL SECTION OF THE NORTH ATLANTIC OCEAN

13:30 Shelley, R. U.; Landing, W. M.: THE SOLUBILITY OF TRACE METALS FROM NORTH ATLANTIC AEROSOLS (US GEOTRACES)

13:45 Landing, W. M.; Shelley, R. U.: PARTICLE SIZE EFFECTS ON AEROSOL IRON SOLUBILITY FROM THE U.S. GEOTRACES NORTH ATLANTIC ZONAL TRANSECT (2010, 2011)

14:00 Ohnemus, D. C.; Lam, P. J.; Shelley, R.; Landing, W. M.: LITHOGENIC PARTICULATE TRACERS IN THE NORTH ATLANTIC U.S. GEOTRACES SECTION: INPUTS, SCAVENGING, BIOLOGICAL UPTAKE

[T] represents Tutorial presentations

14:15 Pöhle, S.; Koschinsky, A.; Moos, S. B.; Sander, S. G.: CHROMIUM SPECIATION IN THE OCEANIC WATER COLUMN

14:30 Lohan, M.; Wyatt, N.; Milne, A.; Woodward, M.; Schlosser, C.; Klar, J.: BIOGEOCHEMICAL CYCLING OF DISSOLVED ZINC AND COBALT ALONG 40OS GEOTRACES TRANSECT

14:45 Schlosser, C.; Castrillejo, M.; Klar, J.; Klunder, M.; Lohan, M.; Achterberg, E. P.: REGIONAL SINKS AND SOURCES OF TRACE METALS IN THE SOUTH ATLANTIC OCEAN ALONG 40°S

15:00 de Brauwere, A.; Jeandel, C.; Lacan, F.; van Beek, P.; Venchiarutti, C.; Fripiat, F.: PUTTING THE PIECES TOGETHER: A MULTI-TRACER MODEL TO QUANTITATIVELY IDENTIFY THE MAJOR PROCESSES RELATED TO THE FERTILIZED BLOOM ON THE KERGUELEN PLATEAU

15:15 Aguilar-Islas, A. M.; Rember, R.; Nishino, S.; Kikuchi, T.; Itoh, M.: LATERAL TRANSPORT OF IRON IN THE CANADA BASIN

16:00 Munson, K. M.; Lamborg, C. H.; Saito, M. A.: MERCURY METHYLATION AND DEMETHYLATON RATE MEASUREMENTS FROM THE OPEN OCEAN WATER COLUMN

16:15 Buck, C. S.; Landing, A. M.; Bowman, K. L.; Gill, G. A.; Hammerschmidt, C.; Landing, W. M.: RIVERINE SUPPLY OF INORGANIC AND METHYL MERCURY TO THE GULF OF MEXICO

16:30 Jones, P. R.; Maiti, K.; Bargu-Ates, S.; Gambrell, R.: POLONIUM-210 REMOBILIZATION IN THE GULF OF MEXICO HYPOXIA

16:45 Kiene, R. P.; Motard-Cote, J.; Oswald, L.; Kieber, D. J.: DISSOLVED DMSP IN SEAWATER – A DYNAMIC POOL WITH A REFRACTORY COMPONENT

17:00 Guo, L. D.; Lin, P.; Chen, M.; Cai, Y.: DISTRIBUTIONS, PARTITIONING AND MIXING BEHAVIOR OF PHOSPHORUS SPECIES IN THE JIULONG RIVER ESTUARY

17:15 Ebling, A. M.; Landing, W. M.: TRACE METALS IN THE SEA SURFACE MICROLAYER

17:30 Kimoto, H.; Yamamoto, K.: THE DISTRIBUTION OF TRACE METALS IN SUBOXIC WATER IN MIKAWA-BAY, JAPAN

17:45 Duteil, O.; Koeve, W.; Oschlies, A.: OXYGEN UTILIZATION IN THE OCEAN: IMPROVEMENT OF A CLASSICAL CONCEPT AND MEASURE OF THE BIOLOGICAL PUMP

SS61 ECOSYSTEM ENGINEERING AS COASTAL PROTECTION - LESSONS FROM THEORY AND PRACTICE

Chair(s): Jasper Dijkstra, jasper.dijkstra@deltares.nl
Denise Reed, djreed@uno.edu
Luca A. van Duren, luca.vanduren@deltares.nl

Location: Room 348-349

16:00 de Vriend, H. J.: BUILDING WITH NATURE: ECO-ENGINEERING AND INFRASTRUCTURE DEVELOPMENT[T]

16:30 Dorgan, K. M.: PERISTALTIC BURROWING IN BEACH SANDS

16:45 Cozzoli, F.; Bouma, T. J.; Ysebaert, T.; Herman, P. M.: MODELLING BIOTA-SEDIMENT INTERACTIONS IN ESTUARINE ENVIRONMENTS

17:00 Dijkstra, J. T.; van Prooijen, B. C.; Volp, N. C.; Bergsma, E. W.; Walles, B.; Ysebaert, T.: THE EFFECTIVENESS OF ARTIFICIAL OYSTER REEFS AS COASTAL PROTECTION

17:15 Harder, T. M.; David, G. L.; Arienti, T. W.; Gill, S. M.; Tilburg, C. E.: CHANNEL MORPHOLOGY SHIFTS FOLLOWING DREDGING, IN A NORTHEASTERN JETTY BOUND ESTUARY SYSTEM, SACO RIVER, MAINE

17:30 Smaal, A. C.; Walles, B.; Van Sluis, C.; Ysebaert, T.: FARMING WITH NATURE: COMBINING AQUACULTURE AND COASTAL PROTECTION

17:45 Reed, D. J.: SAGE (SYSTEMS APPROACH TO GEOMORPHIC ENGINEERING): MERGING GREEN AND GRAY SOLUTIONS TO SUPPORT TRANSFORMING COASTAL LANDSCAPES AND COMMUNITIES

SS76 MICROBIAL INTERACTIONS: FROM SPECIES SURVIVAL TO BIOGEOCHEMICAL CYCLES

Chair(s): Shady A. Amin, shadyam@uw.edu
Laura R. Hmelo, lhmelo@uw.edu

Location: Room 353

10:00 Rappe, M. S.; Grote, J.; Brucks, E.; Shulse, C.: GENETIC HETEROGENEITY BETWEEN SYMPATRIC SAR11 STRAINS

10:15 McDaniel, L. D.; Rosario-Cora, K.; Breitbart, M.; Paul, J. H.: COMPARISON OF LYTIC AND TEMPERATE VIRAL METAGENOMES FROM TAMPA BAY, FLORIDA

10:30 Nguyen, D.; Maranger, R.; Balagué, V.; Coll, M.; Fernández-Gómez, B.; Lovejoy, C.; Pedrós-Alió, C.: SEASONAL PATTERNS IN PROTEORHODOPSIN GENE DYNAMICS IN THE ARCTIC OCEAN

10:45 Zielinski, B. L.; Sharma, S.; Satinsky, B. M.; Smith, C. B.; Doherty, M.; Coles, V.; Crump, B.; Yager, P.; Moran, M.; Paul, J. H.: USING METATRANSCRIPTOMICS TO REVEAL THE EUKARYOTIC PHYTOPLANTON'S RESPONSE TO DYNAMIC ENVIRONMENTS WITHIN THE AMAZON RIVER PLUME

11:15 Nelson, C. E.; Goldberg, S. J.; Kelly, L. W.; Haas, A. F.; Smith, J. E.; Rohwer, F.; Carlson, C. A.: DIFFERENTIAL BACTERIAL POPULATION GROWTH AND COMMUNITY METABOLISM ON ORGANIC EXUDATES OF CORAL AND MACROALGAE IN A REEF ECOSYSTEM

11:30 Krupke, A.; LaRoche, J.; Mohr, W.; Fuchs, B. M.; Amann, R. I.; Kuypers, M. M.: PHYSIOLOGICAL INSIGHTS INTO THE NOVEL ASSOCIATION BETWEEN A UNICELLULAR PRYMNESIOPHYTE AND THE N2 FIXING CYANOBACTERIUM UCYN-A

11:45 Liu, Z.; Liu, S.: INTERACTION OF PEPTIDE HYDROLYSIS AND BACTERIAL COMMUNITIES IN COASTAL WATERS

13:30 Schauer, R.; Larsen, S.; Kjeldsen, K. U.; Bjerg, J. J.; Schreiber, L.; Risgaard-Petersen, N.; Schramm, A.; Nielsen, L. P.: DEVELOPMENT OF LONG DISTANCE ELECTRON TRANSPORT BY MICROBIAL COMMUNITIES IN MARINE SEDIMENT

13:45 Mackey, K. R.; Saito, M. A.: PROTEOMIC RESPONSE OF SYNECHOCOCCUS TO LIGHT AND TEMPERATURE

14:00 Song, B.; Carini, S. A.; Arfken, A.; Lisa, J. A.; Duernberger, K. A.; Tobias, C. R.: IMPACT OF SEA LEVEL RISE ON ANAMMOX AND DENITRIFYING COMMUNITIES IN A TIDAL FRESHWATER ECOSYSTEM

14:15 Lisa, J. A.; Tobias, C. R.; Duernberger, K. A.; Song , B.: TIDAL INFLUENCES ON MICROBIAL COMMUNITIES RESPONSIBLE FOR SEDIMENTARY NITROGEN CYCLING IN THE CAPE FEAR RIVER ESTUARY, USA

WEDNESDAY

14:30 Comte, J.; Langenheder, S.; Lindström, E. S.: CONTRIBUTION OF SEED BANKS AND AIR DEPOSITION TO LAKE BACTERIOPLAKNTON METABOLIC RESPONSE TO SALINITY GRADIENT

14:45 Reese, B. K.; Ariza , M.; St. Peter, R. C.; Mills, H. J.: EXPANDING THE SUBSURFACE BIOSPHERE: DETECTING VIABLE FUNGAL POPULATIONS IN THE SOUTH PACIFIC GYRE

SS78 ASSESSING VULNERABILITY OF U.S. LAKES AND RESERVOIRS TO CLIMATE CHANGE

Chair(s): S. Geoffrey Schladow, gschladow@ucdavis.edu
Christopher Clark, clark.christopher@epa.gov
Craig Williamson, craig.williamson@muohio.edu
Daniel Nover, dmnover@gmail.com
Kevin Rose, RoseKC@si.edu

Location: Room 357

13:30 Tranvik, L. J.; Gudasz, C.; Kellerman, A.; Koehler, B.; Kothawala, D. N.: LAKE METABOLISM, DISSOLVED ORGANIC MATTER, AND CLIMATE – A TUTORIAL

14:00 Hook, S.; Schneider, P.; Wilson, C.; Hulley, G.: INLAND WATERS AND CLIMATE*

14:15 Saros, J. E.; Strock, K. E.; Slemmons, K. E.; Stone, J. R.: CLIMATE-INDUCED CHANGES IN LAKE THERMAL STRUCTURE AND PRODUCTIVITY INFERRED FROM PALEOLIMNOLOGICAL RECONSTRUCTIONS*

14:30 Schladow, S. G.; Forrest, A. L.; Sahoo, G. B.: CLIMATE-DRIVEN STRATIFICATION CHANGES AT LAKE TAHOE: WATER QUALITY AND ECOSYSTEM CONSEQUENCES

14:45 Kane, D. D.; Perello, M. M.; Hughes, M. C.; Golnick, P.; Thomas, M. A.; Conroy, J. D.: LAKE ERIE AS A SENTINEL FOR CLIMATE CHANGE: WEATHER AFFECTS STRATIFICATION AND HYPOXIA FORMATION

15:00 Markfort, C. D.; Resseger, E. L.; Porté-Agel, F.; Stefan, H. G.: WIND SHELTERING EFFECTS ON MEASUREMENTS AND MODELING OF AIR-WATER INTERFACIAL FLUXES

15:15 Williamson, C. E.; Zhang, J.; Brentrup, J. A.; Knoll, L. B.; Hargreaves, B.; Renwick, W.; Overholt, E. P.; Rose, K. C.: LAKES AS SENSORS IN THE LANDSCAPE: OPTICAL SENTINELS OF CLIMATE CHANGE

16:00 Winston, B. A.; Pollock, E.; Jackson, A.; Scott, J. T.: CAN CO2 LIMIT PRODUCTIVITY OR ALTER PHYTOPLANKTON STOICHIOMETRY ON AN ECOSYSTEM SCALE?

16:15 Zepp, R. G.; Molina, M.; Cyterski, M.; Fitzgerald, C.; Williamson, C. E.; Corsi, S. R.: IMPACTS OF CHANGING PRECIPITATION ON NATURAL ORGANIC MATTER AND MICROORGANISMS IN LAKES AND RESERVOIRS

16:30 Cattaneo, A.; Hudon, C.; Vis, C.; Gagnon, P.: HYDROLOGICAL CONTROL OF FILAMENTOUS GREEN ALGAE IN A LARGE FLUVIAL LAKE OF THE ST. LAWRENCE RIVER, CANADA

16:45 Swinton, M. W.; Eichler, L.; Boylen, C. W.: CLIMATE CHANGE AND LAND-USE HAS CHANGED LAKE GEORGE, NY OVER THE LAST 30 YEARS

17:00 Johnson, L. B.; HERB, W.: PREDICTING COLD-WATER FISH HABITAT IN LAKES OF THE GLACIAL LAKES REGION UNDER CHANGING LAND USE AND CLIMATE REGIMES

17:15 Brooks, M. L.; Hallman, T. A.; Guilford, Z. T.: SYNERGISTIC EFFECTS OF GLOBAL WARMING ON GROWTH AND PEJUS TEMPERATURE IN AMPHIBIANS AND FISH ACROSS MARGINALLY POLLUTED WATERWAYS

17:45 Nover, D. M.; Clark, C. M.; Johnson, T. E.: ASSESSMENT OF VULNERABILITY OF U.S. LAKES AND RESERVOIRS TO CLIMATE CHANGE

SS82 PROGRESS IN UNDERSTANDING NUTRIENT BUDGETS IN MARGINAL BASINS AND COASTAL SYSTEMS SUBJECT TO EUTROPHICATION AND CLIMATE WARMING

Chair(s): Volker Bruchert, volker.bruchert@geo.su.se
Barbara Deutsch, barbara.deutsch@itm.su.se

Location: Room 357

10:00 Rowe, O. F.; Paczkowska, J.; Lefebure, R.; Brutemark, A.; Traving, S. J.; Miranda, F.; Deutsch, B.; Båmstedt, U.; Riemann, L.; Andersson, A.: THE INFLUENCE OF RIVER INFLOW ON COASTAL COMMUNITIES IN THE BALTIC SEA – A COMPLETE FOOD WEB STUDY.

10:15 Brüchert , V.; Deutsch, B.; Bonaglia, S.: BENTHIC BOUNDARY LAYER NUTRIENT AND OXYGEN BIOGEOCHEMISTRY IN A EUTROPHIED BALTIC SEA ESTUARY

10:30 Aigars, J.; Muller-Karulis, B.; Poikane, R.; Jansons, M.; Lavrinovics, A.; Eglite, E.: IMPLICATIONS OF SEASONAL NUTRIENT FLUXES AT THE SEDIMENT-WATER INTERFACE FOR THE NUTRIENT BUDGET OF THE GULF OF RIGA, BALTIC SEA

10:45 Marchant, H. K.; Holtappels, M.; Tegetmeyer, H. E.; Strous, M.; Kuypers, M. M.: N2O EMISSIONS IN COASTAL PERMEABLE SEDIMENTS SUBJECT TO HIGH ANTHROPOGENIC FIXED NITROGEN INPUTS

11:00 Kumar, S.; Bhavya, P. S.; Godhe, A.; Ramesh, R.; Chiriboga, F.; Singh, A.; Gupta, G. V.; Karunasagar, I.: NITROGEN UPTAKE POTENTIAL UNDER DIFFERENT TEMPERATURE AND SALINITY CONDITIONS

11:15 Parker, A. E.; Kress, E.; Glibert, P. M.; Wilkerson, F. P.; Dugdale, R. C.: NUTRIENT RATIOS: NITROGEN FORM AND N:P INFLUENCES ESTUARINE HETEROTROPHIC BACTERIA

11:30 Bartoli, M.: IS MACROFAUNA SUFFICIENTLY INTEGRATED IN BIOGEOCHEMISTRY?

11:45 Lyngsgaard, M. M.; Markager, S. S.; Richardson, K.: THE VERTICAL DISTRIBUTION OF PRIMARY PRODUCTION MAY CHANGE IN RESPONSE TO REDUCED NUTRIENT LOADING.

WEDNESDAY

[T] represents Tutorial presentations

THURSDAY, 21 FEBRUARY - ORALS

GS05 FOOD WEB INTERACTIONS AND TROPHIC LINKAGES

Chair(s): Jill Olin, jolin@lsu.edu
Mike Vanni, vannimj@muohio.edu
Maria Gonzalez, gonzalmj@muohio.edu
Just Cebrian, jcebrian@disl.org

Location: Room 354

14:00 Cebrian, J.; Stutes, J.; Christiaen, B.: IMPACTS OF GRAZING AND FERTILIZATION ON EPIPHYTE GROWTH DYNAMICS UNDER MODERATELY EUTROPHIC CONDITIONS: IMPLICATIONS FOR GRAZING RATE ESTIMATES

14:15 Collingsworth, P. D.; Warren, G. J.: IMPACTS OF LOCAL AND BASIN-SCALE FACTORS ON THE RELATIONSHIP BETWEEN TOTAL PHOSPHORUS AND CHLOROPHYLL IN LAKE ERIE

14:30 Rock, A. M.; Hall, M. R.; Gonzalez, M. J.; Vanni, M. J.: EXPLORING THE INTERACTIVE EFFECTS OF LIGHT, NUTRIENTS, AND CARNIVORE IDENTITY ON AQUATIC FOOD CHAIN EFFICIENCY

14:45 Thompson, B. A.; Scott, J. T.: USING CARLSON'S TROPHIC STATE INDEX TO DETERMINE FERTILIZATION RATES FOR WHOLE-LAKE MANIPULATIONS

15:00 VanBlaricom, G. R.; Blaud, B. M.; Neuman, M. J.; Friedman, C. S.: MICROHABITAT-SPECIFIC DENSITY DEPENDENT RESPONSES OF BLACK ABALONE AFTER PATHOGENIC MASS MORTALITIES AT SAN NICOLAS ISLAND, CALIFORNIA USA

15:15 Macanowicz, N.; Boeing, W. J.: UNIQUE HABITATS FOR UNIQUE COMMUNITIES: WHAT FACTORS DRIVE BENTHIC MACROINVERTEBRATE COMMUNITIES IN DESERT SINKHOLES?

16:00 Francis, T. B.; Carey, M. P.; Harvey, C. J.: LITTLE FISH, LITTLE DATA: FORAGE FISH IN PUGET SOUND, WA

16:15 Gonzalez, M. J.; Duncan, J. M.; Lyons, T.; Aman, C.; Bremigan, M. T.; Bunnel, D.; Conroy, J.; Pollard , A. I.; Renwick, W. H.; Vanni, M. J.: A 15-YEAR FISHING EXPEDITION: WHAT REGULATES INTERANNUAL VARIATION IN YOUNG-OF-YEAR GIZZARD SHAD POPULATION DYNAMICS?

16:30 Charles, F.; Nozais, C.; Pruski, A.; Lantoine, F.; Orignac, J.: TROPHIC ECOLOGY OF COASTAL SOFT BOTTOMS: A DIVE INTO THE STEW OF MARINE SEDIMENT

16:45 Demi, L. M.; Benstead, J. P.; Rosemond, A. D.; Maerz, J. C.: CONSUMER RESPONSE TO EXPERIMENTAL GRADIENTS IN DISSOLVED N:P ACROSS FIVE HEADWATER STREAMS

17:00 Macek, M.; Montiel-Hernández, J. R.; Flórez-Márquez, A. E.: WHO IS WHO IN PICOCYANOBACTERIA STRATIFICATION: VIRUS VS. CILIATE PREDATION?

17:15 Han, E.; Park, H.; Choy, E.; Choi, K.; Kang, C.: INTERMEDIATE-TERM EFFECT OF *HEBEI SPIRIT* OIL SPILL ON INTERTIDAL MACROFAUNAL COMMUNITY REVEALED BY CARBON AND NITROGEN STABLE ISOTOPES

17:30 Prins, T. C.; Smaal, A. C.: EFFECTS OF SUSPENSION FEEDING BIVALVES ON THE FOOD WEB OF AN ESTUARINE ECOSYSTEM

17:45 Wiegand, M. D.; Elsasser, M.; Johnston, T. A.; Porteous, L. R.; Szmadyla, R. L.; Moles, M. D.; Leggett, W. C.: CHANGES IN WALLEYE OVA FATTY ACID PROFILES IN LAKE NIPISSING (ONTARIO, CANADA) FOLLOWING THE INVASION OF SPINY WATER FLEA

GS08B PLANKTON ECOLOGY - ZOOPLANKTON

Chair(s): Gustav-Adolf Paffenhofer, gustav.paffenhofer@skio.usg.edu
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Frederic Maps, frederic.maps@gmail.com
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John Dolan, dolan@obs-vlfr.fr

Location: Room 354

10:00 Turner, J. T.: ZOOPLANKTON FECAL PELLETS IN MARINE ECOSYSTEMS: REVIEW AND UPDATE[T]

10:30 Koester, M.; Meuche, A.; Paffenhofer, G. A.; Schlueter, R.: WHEN AND WHERE ARE PELAGIC FECAL PELLETS COLONIZED BY BACTERIA?

10:45 Svensen, C.; Iversen, M. H.: WHO IS RESPONSIBLE FOR THE ATTENUATION OF COPEPOD FAECAL PELLET FLUX?

11:00 Richardson, K.; Bendtsen, J.; Christensen, J. T.; Adjou, M.; Lyngsgaard, M. M.; Hilligsøe, K. M.; Pedersen, J. B.; Vang, T.; Nielsen, M. H.: WHY ARE EEL LARVAE FOUND IN FRONTAL REGIONS OF THE STCZ IN THE SARGASSO SEA?

11:15 Malinich, T. D.; Pangle, K. L.; Zheng, T.: THE IMPACTS OF ACTIVE MOVEMENT ON PELAGIC LARVAL DISPERSAL IN A GREAT LAKE

11:30 Pivor, J.; Daniel, J.; Siuda, A. N.; Bucklin, A.; Blanco-Bercial, L.; Amaral-Zettler, L.; Zettler, E.: SWEEPSTAKES REPRODUCTIVE SUCCESS OF THE CARIBBEAN SPINY LOBSTER (PANULIRUS ARGUS) IN THE SARGASSO SEA

11:45 Paffenhofer, G. A.: DOLIOLID FECAL PELLETS AND PLANKTONIC COPEPODS: WHAT HAPPENS?

SS10 SHEDDING LIGHT ON THE 'BLACK BOX' OF DISSOLVED ORGANIC NITROGEN: INSIGHTS INTO THE SOURCES, SINKS, CYCLING, AND COMPOSITION OF AQUATIC DON

Chair(s): Katye E. Altieri, kaltieri@princeton.edu
Rachel E. Sipler, sipler@vims.edu

Location: Room 350-351

16:00 Letscher, R. T.; Hansell, D. A.; Carlson, C. A.; Lumpkin, R.; Knapp, A. N.: GLOBAL PATTERNS OF SURFACE OCEAN DISSOLVED ORGANIC NITROGEN WITH INVESTIGATION OF ITS FATE

16:15 Oviedo-Vargas, D.; Royer, T. V.; Johnson, L. T.: CHARACTERIZATION OF DISSOLVED ORGANIC NITROGEN IN A STREAM DRAINING A HEAVILY MODIFIED AGRICULTURAL LANDSCAPE

16:30 Jackson, K. V.; Duran, D.; Tysor, E. H.; Pullin, M. J.: AMINO ACIDS IN THE DON POOL: ANALYTICAL METHODOLOGY AND DYNAMICS IN FRESHWATER STREAMS

16:45 Fiedler, D.; Grossart , H. P.; Zwirnmann, E.; Koehler, J.: CONCENTRATION AND UTILIZATION OF DON FRACTIONS IN LIMNIC ECOSYSTEMS

17:00 Vaquer-Sunyer, R.; Conley, D.: EFFECTS OF DISSOLVED ORGANIC NITROGEN (DON) INPUTS ON PLANKTONIC METABOLISM IN THE BALTIC SEA

17:15 Sipler, R. E.; Killberg-Thoreson, L.; Bronk, D. A.: INVESTIGATING THE SOURCES AND BIOAVAILABILITY OF DISSOLVED ORGANIC NITROGEN TO HARMFUL ALGAL BLOOMS

17:30 Calleja, M. L.; McCarthy, M. D.: COUPLED COMPOUND-SPECIFIC 15N AMINO ACID ISOTOPE SIGNATURES AND D/L RATIOS AS A NEW TRACER FOR MICROBIAL SOURCE AND ALTERATION IN DISSOLVED ORGANIC NITROGEN

17:45 Hoer, D. R.; Martens, C. S.; Lindquist, N. L.: SPONGE MEDIATED RESPIRATION AND CYCLING OF DISSOLVED ORGANIC MATTER

SS13 INTEGRATIVE APPROACHES TO ECOLOGICAL RISK ASSESSMENT OF NONINDIGENOUS AQUATIC SPECIES: FRAMEWORKS FOR ENHANCING PREDICTION, REDUCING UNCERTAINTY, AND IMPROVING MANAGEMENT

Chair(s): Jennifer Howeth, jghoweth@as.ua.edu
Marion Wittmann, Marion.E.Wittmann.3@nd.edu

Location: Room 357

10:00 Lodge, D. M.: INVASIVE SPECIES FORECASTING: BRIDGING THE CULTURES OF SCIENCE, POLICY, AND MANAGEMENT[T]

10:30 Mandrak, N. E.; Keller, R. P.: IDENTIFYING CLIMATE MATCH HOT SPOTS TO FACILITATE RISK SCREENING OF FRESHWATER FISHES IN TRADE

10:45 Howeth, J. G.; Gantz, C. A.; Frimpong, E. A.; Hoff, M.; Keller, R. P.; Lodge, D. M.; Mandrak, N. E.; Marchetti, M. P.; Olden, J. D.; Romagosa, C. M.: TRAIT-BASED RISK ASSESSMENT OF NON-NATIVE FISHES IN TRADE

11:00 Cudmore, B. C.; Mandrak, N. E.: ASSESSING AQUATIC INVASIVE SPECIES RISK BY CONSENSUS: PATTERNS, PROCESSES, AND EMERGENT PROPERTIES

11:15 Wittmann, M. E.; Cooke, R. M.; Rothlisberger, J. D.; Rutherford, E.; Zhang, H.; Lodge, D. M.; Mason, D.: USING STRUCTURED EXPERT JUDGMENT TO QUANTIFY THE IMPACT OF ASIAN CARPS (BIGHEAD AND SILVER) ON THE LAKE ERIE COMMERCIAL AND RECREATIONAL FISHERY

11:30 Vander Zanden, M. J.; Hansen, G. J.; Latzka, A. W.: AQUATIC INVASIVE SPECIES IN NORTH-TEMPERATE LAKES: WIDESPREAD AND RARELY ABUNDANT*

11:45 Jerde, C. L.; Wittmann, M. E.; Lodge, D. M.: MODELING ALLEE EFFECTS DUE TO STERILE GRASS CARP INTRODUCITONS: AN UNPLANNED EXPERIEMENT IN THE LAURENTIAN GREAT LAKES

14:00 Havel, J. E.; Bruckerhoff, L. A.; Knight, S.: SECONDARY SPREAD OF INVASIVE AQUATIC PLANTS DEPENDS ON SURVIVAL TIME DURING AIR EXPOSURE

14:15 Goldman, C. R.: LAKE TAHOE: A HALF CENTURY OF ENVIRONMENTAL CHANGE DRIVEN BY EUTROPHICATION, INVASIVE SPECIES, AND THE INCREASING IMPACT OF GLOBAL WARMING*

14:30 Chandra, S.; Umek, J.; Henery, R.; Goldman, C.: ECOLOGY AND MANAGEMENT OF NONNATIVE CRAYFISH IN LARGE LAKES*

14:45 Nierzwicki-Bauer, S. A.; Farrell, J.; Marelli, D.; Resler, S.: ENHANCING PREDICTION, REDUCING UNCERTAINTY AND IMPROVING MANAGEMENT/ERADICATION OF ASIAN CLAMS IN LAKE GEORGE, NEW YORK

15:00 Zhang, H.; Rutherford, E. S.; Mason, D. M.; Ivan, L.; Beletsky, D.; Adamack, A. T.; Hoff, M.; Fulton, E. A.; Barbiero, R. P.; Gorton, R. J.: FORECASTING ASIAN CARP IMPACTS ON LAKE MICHIGAN'S FOOD WEB AND FISHERIES - USING THE ATLANTIS ECOSYSTEM MODEL

15:15 Ivan, L. N.; Zhang, H.; Rutherford, E. S.; Mason, D. M.; Hoff, M.; Sable, S.; Adamack, A. T.: MODELING THE IMPACTS OF ASIAN CARPS IN THE GREAT LAKES: A CASE STUDY IN NEARSHORE AND OFFSHORE LAKE HURON

16:00 Drake, J. M.: SOME NEW COMPUTATIONAL METHODS FOR FORECASTING SPECIES POTENTIAL DISTRIBUTIONS

16:15 Capps, E. M.; Papes, M.: PATTERNS OF AQUATIC INVASIONS IN UNITED STATES AND RELATIONSHIPS WITH KEY GEOGRAPHIC VARIABLES

16:30 Sieracki, J. L.; Bossenbroek, J. M.: MODELING THE SECONDARY SPREAD OF INVASIVE SPECIES BY BALLAST WATER IN THE LAURENTIAN GREAT LAKES

16:45 Briski, E.; Bailey, S.; Casas-Monroy, O.; DiBacco, C.; Kaczmarska, I.; Levings, C.; MacGillivary, M. L.; McKindsey, C. W.; Nasmith, L. E.; Parenteau, M.; Piercey, E. G.; Rochon, A.; Roy, S.; Simard, N.; Villac, M. C.; Weise, A. M.; MacIsaac, H. J.: RELATIONSHIP BETWEEN PROPAGULE PRESSURE AND COLONIZATION PRESSURE IN INVASION ECOLOGY: A TEST WITH SHIPS' BALLAST

17:00 Welch, J. B.; Reed, A. J.; Hicks, R. E.: IMPROVED DETECTION OF POTENTIALLY HARMFUL BACTERIA DISCHARGED WITH THE BALLAST WATER OF COMMERCIAL SHIPS USING MULTIPLE MOLECULAR APPROACHES

17:15 Adams, J. K.; Briski, E.; Bailey, S. A.: EVALUATION OF VITAL FLUORESCENT STAINS FOR ANALYSIS OF VIABLE ORGANISMS TRANSPORTED BY BALLAST WATER

17:30 Brown, M. E.; Branstrator, D. K.; Shannon, L. J.: POPULATION REGULATION OF THE SPINY WATER FLEA IN A RESERVOIR AND IMPLICATIONS FOR INVASION DYNAMICS

17:45 Hallidayschult, T.; Easton, J.; Easton, A.; Zamor, R. M.; Glenn, K.; Beyer, J.; Remmel, E.; Hambright, K. D.: POTENTIAL EFFECTS OF ZEBRA MUSSELS IN A LARGE SUBTROPICAL RESERVOIR

SS16 OPPORTUNITIES IN THE STUDY OF OCEAN PARTICLE FLUX

Chair(s): Adrian Burd, adrianb@uga.edu
Oscar Schofield, oscar@marine.rutgers.edu

Location: Room 353

10:00 Lampitt, R. S.: DOWNWARD PARTICLE FLUX IN THE OPEN OCEAN. HIGHLIGHTS FROM THE PAST AND A VISION OF THE FUTURE.[T]

10:30 Estapa, M. L.; Buesseler, K. O.; Boss, E.; Gerbi, G. P.: RAPID, AUTONOMOUS PARTICLE FLUX OBSERVATIONS IN THE OLIGOTROPHIC OCEAN

10:45 Stemmann, L.; Guidi, L.; Boss, E.; Claustre, H.: FROM SHIP-TETHERED TO FREE DRIFTING IMAGING SYSTEMS; WHAT WE OBSERVED IN THE PAST AND WHAT WE SHALL OBSERVE IN THE FUTURE TO BETTER UNDERSTAND PARTICLE FLUX

11:00 Bishop, J. K.; Hann, C. H.; Wood, T. J.: ROBOTIC MEASUREMENT OF PARTICULATE FLUX DYNAMICS IN THE TWILIGHT ZONE

[T] represents Tutorial presentations

11:15 Lam, P. J.: RELATING PARTICULATE ORGANIC CARBON STOCKS TO FLUXES: THE CASE OF VERTIGO

11:30 Giering, S. L.; Sanders, R.; Lampitt, R. S.; Anderson, T. R.; Marsay, C. M.; Tamburini, C.; Boutrif, M.; Cook, K.; Henson, S. A.; Mayor, D. J.: BALANCING THE CARBON BUDGET IN THE TWILIGHT ZONE

11:45 McDonnell, A. M.; Boyd, P. W.; Buesseler, K. O.: THE EFFECTS OF SINKING VELOCITIES AND MICROBIAL RESPIRATION RATES ON THE ATTENUATION OF PARTICLE FLUX THROUGH THE OCEAN'S TWILIGHT ZONE

14:00 Stewart, G. M.: THE ROUGHAGE EFFECT ON ZOOPLANKTON GRAZERS AND OCEAN PARTICLE FLUX*

14:15 Van Mooy, B.; Edwards, B. R.; Hmelo, L. R.; May, A. L.; Campagna, S. R.; Keil, R. G.; Mincer, T. J.; Ossolinski, J. E.; Sofen, L. E.: INFLUENCE OF BACTERIAL QUORUM SENSING ON ORGANIC MATTER HYDROLYSIS IN SINKING PARTICLES.

14:30 Petit, M.; Suroy, M.; Sempété, R.; Vaultier, F.; Rontani, J. F.: IMPLICATIONS OF THE PHOTOOXIDATION STATE OF BACTERIA ATTACHED TO PHYTODETRITUS ON THE PRESERVATION OF ALGAL ORGANIC MATTER IN THE MARINE ENVIRONMENT

14:45 Baumann, M. S.; Moran, S. B.; Lomas, M. W.; Kelly, R. P.; Bell, D. W.: SEASONAL DECOUPLING OF PRIMARY PRODUCTION AND POC EXPORT IN RELATION TO SEA-ICE EXTENT AT THE SHELF BREAK OF THE EASTERN BERING SEA

15:00 Smith, K. A.; Stock, C. A.; Dunne, J. P.; Sarmiento, J. L.: THE EFFECTS OF THERMOCLINE CHARACTERISTICS AND BACTERIAL FLUX ON PARTICLE REMINERALIZATION IN THE DARK OCEAN

15:15 Tamelander, T.: THE CRITICAL ROLE OF STOICHIOMETRY IN MODELS OF THE BIOLOGICAL CARBON PUMP

16:00 Kriest, I.; Oschlies, A.: PARTICLE SINKING AND BURIAL: THEIR REPRESENTATION IN GLOBAL BIOGEOCHEMICAL MODELS, AND THEIR IMPACT ON DISTRIBUTIONS OF TRACERS AND FLUXES

16:15 Key, T. A.; Burd, A. B.: MODELING MARINE PARTICLE COAGULATION USING THE QUADRATURE METHOD OF MOMENTS

16:30 Pabortsava, K.; Lampitt, R. S.; Poulton, A. J.: NOVEL INSIGHTS INTO TEMPORAL VARIATIONS IN CARBON SEQUESTRATION FLUXES IN THE NORTH AND SOUTH ATLANTIC OLIGOTROPHIC GYRES

16:45 Maiti, K.; Charette, M. A.; Buesseler, K. O.; Kahru, M.: REVISITING THE RELATION BETWEEN EXPORT AND PRODUCTION IN THE SOUTHERN OCEAN

17:00 Adhikari, P. L.; Maiti, K.; Overton, E.: VERTICAL FLUXES OF POLYCYCLIC AROMATIC HYDROCARBONS IN THE NORTHERN GULF OF MEXICO

17:15 Waples, J. T.; Liao, L.; Klump, V.; Bootsma, H.: MEASURING RAPID PARTICLE FLUX IN COASTAL WATERS DOMINATED BY BENTHIC FILTER FEEDING.

17:30 Sørensen, N.; Daugbjerg, N.; Richardson, K.: CHOICE OF PORE SIZE CAN INTRODUCE ARTEFACTS WHEN FILTERING PLANKTON FOR MOLECULAR BIODIVERSITY STUDIES

17:45 Gallinari, M.; Bucciarelli, E.; Moriceau, B.; Ragueneau, O.: DISSOLUTION PROPERTIES OF BIOGENIC SILICA FROM DIATOMS GROWN UNDER FE-REPLETE AND FE-LIMITED CONDITIONS

SS28 IN SITU AQUATIC SENSORS FOR THE 21ST CENTURY.

Chair(s): Veronique Garcon, veronique.garcon@legos.obs-mip.fr
Douglas P. Connelly, dpc@noc.soton.ac.uk

Location: Room 346-347

14:00 Donis, D.; McGinnis, D. F.; Holtappels, M.; Noss, C.; Cathalot, C.; Wenzhöfer, F.; Hancke, K.; Lorke, A.; Glud, R. N.; Meysman, F.: IMPROVING PRECISION AND CONFIDENCE OF AQUATIC EDDY CORRELATION BENTHIC SOLUTE EXCHANGE MEASUREMENTS - FROM FLUMES TO THE DEEP SEA

14:15 Holtappels, M.; Glud, R. N.; Donis, D.; Liu, B.; Hume, A. C.; Wenzhöfer, F.; Kuypers, M. M.: EFFECTS OF TRANSIENT BOTTOM WATER CURRENTS AND OXYGEN CONCENTRATIONS ON BENTHIC EXCHANGE RATES AS ASSESSED BY EDDY COVARIANCE MEASUREMENTS

14:30 Long, M. H.; Berg, P.; Zieman, J. C.: HIGH-RESOLUTION METABOLIC RATES OF SUBTROPICAL SEAGRASS BEDS EVALUATED WITH THE IN SITU EDDY CORRELATION TECHNIQUE

14:45 Richardson, T. L.; Swanstrom, J. A.; Abernathy, E. A.; Tazik, S. K.; Goldman, E. A.; Shaw, T. J.; Sosik, H. M.; Myrick, M. L.: DEVELOPMENT OF SENSORS FOR THE IN SITU CLASSIFICATION OF PHYTOPLANKTON USING SPECTRAL FLUORESCENCE SIGNATURES AND IMAGING MULTIVARIATE OPTICAL COMPUTING

15:00 Thompson, C. M.; North, E. W.; Gallager, S. M.; Kennedy, V. S.; White, S. N.: USING RAMAN SPECTROSCOPY TO IDENTIFY BIVALVE LARVAE

15:15 Chekalyuk, A.: LASER IN SITU FLUOROSENSING OF NATURAL AQUATIC ENVIRONMENTS

16:00 Chennu, A.; Volkenborn, N.; Janssen, F.; de Beer, D.; Polerecky, L.: MAPPING THE DISTRIBUTION AND DYNAMICS OF CHLOROPHYLL IN COASTAL SEDIMENTS USING IN SITU HYPERSPECTRAL IMAGING

16:15 Demir-Hilton, E.; Yamahara, K.; Preston, C.; Marin III, R.; Birch, J.; Pargett, D.; Jensen, S.; Roman, B.; Scholin, C.: REAL-TIME MONITORING OF PSEUDO-NITZSCHIA SPP IN COASTAL SETTINGS USING SANDWICH HYBRIDIZATION AND QPCR IN PARALLEL ABOARD THE ENVIRONMENTAL SAMPLE PROCESSOR

16:30 Groleau, A.; Escoffier, N.; Darmoul, Y.; Staniszewski, Y.; Agrinier, P.; Bensoussan, N.; Jézéquel, D.: CARBON BIOGEOCHEMISTRY IN CONTINENTAL AQUATIC ECOSYSTEMS: CAN WE DECIPHER INORGANIC AND ORGANIC PROCESSES COMBINING IN-SITU SENSORS AND HIGH FREQUENCY ?

16:45 Takeshita, Y.; Martz, T. R.; Johnson, K. S.; Jannasch, H. W.; Coletti, L.: PH PROFILING WITH THE DEEP SEA DURAFET: RESULTS OF THE FIRST AT-SEA TESTS, AND AUTONOMOUS MEASUREMENTS ON PROFILING FLOATS

17:00 Rérolle, V. M.; Floquet, C. F.; Harris, A. J.; Mowlem, M. C.; Bellerby, R. G.; Achterberg, E. P.: DEVELOPMENT OF A COLORIMETRIC MICROFLUIDIC SENSOR FOR SEAWATER PH ANALYSIS

17:15 Atamanchuk, D.; Kononets, M.; Thomas, P. J.; Hovdenes, J.; Tengberg, A.; Apostolodis, A.; Hall, P. O.: A NEWLY DEVELOPED PCO_2 FLUORESCENCE LIFETIME OPTODE FOR MARINE STUDIES

17:30 Bastviken, D.; Sundgren, I.; Natchimithu, S.; Reyier, H.; Gålfalk, M.: A NEW TECHNIQUE TO LOG CO2 IN AQUATIC ENVIRONMENTS

THURSDAY

(*) represents Invited presentations

17:45 King, D. W.; Williams, T. L.; Nzamubona, K. F.; Kim, B. S.; Morotti, J.; Helm, Z.; Wells, M. L.; Gammana, M.; Tripp, C. T.: DEVELOPMENT OF SOLID-STATE MATERIALS FOR IRON (III) ANALYSIS IN NATURAL WATERS

SS30 BIOLOGICAL AND BIOGEOCHEMICAL RESPONSES TO HUMAN IMPACTS AT THE SEDIMENT-WATER INTERFACE

Chair(s): Katja Fennel, katja.fennel@dal.ca
Wally Fulweiler, rwf@bu.edu
Roxane Maranger, r.maranger@umontreal.ca
John Lehrter, lehrter.john@epa.gov

Location: Room 352

10:00 Lee, Z. M.; Steger, L.; Corman, J.; Souza, V.; Elser, J. J.: BIOGEOCHEMICAL AND MICROBIAL RESPONSES TO PHOSPHORUS ENRICHMENT AND N:P STOICHIOMETRY IN LAGUNITA, A DESERT POND IN THE CUATRO CIENEGAS BASIN

10:15 Bourque, J. R.; Demopoulos, A. W.; Stamler, K. M.; Frometa, J.: THE IMPACT OF THE DEEPWATER HORIZON OIL SPILL ON COLD-WATER CORAL ASSOCIATED BENTHOS IN THE GULF OF MEXICO

10:30 White, M. M.; McCorkle, D. C.; Mullineaux, L. S.; Cohen, A. L.: EARLY EXPOSURE TO HIGH-CO_2 OF BAY SCALLOP (*ARGOPECTEN IRRADIANS*) LARVAE HAS LASTING EFFECTS ON SIZE

10:45 Belyaeva, A. M.; Downing, J. A.: GETTING TO THE BOTTOM OF EUTROPHIC LAKES: SHIFTING BENTHOS COMPOSITION ACROSS A SHARP NUTRIENT GRADIENT

11:00 Govindarajan, A. F.; Manganini, S.; German, C. R.; Shank, T. M.: EFFECTS OF THE DEEPWATER HORIZON OIL SPILL ON BIOGENIC FLUXES AND LARVAL RECRUITMENT

11:15 Christiaen, B.; Stutes, J.; Ortmann, A.; Cebrian, J.: THE RELATIVE CONTRIBUTION OF BENTHOS AND WATER COLUMN TO TOTAL PRIMARY PRODUCTION IN SHALLOW LAGOONS WITH DIFFERENT DEGREES OF HUMAN DISTURBANCE

11:30 Koehl, M.: BEHAVIOR AND ADHESION OF MARINE LARVAE SETTLING ON THE SUBSTRATUM IN TURBULENT WATER FLOW

11:45 Palmer, T. A.; Montagna, P. A.: IMPACTS OF DROUGHTS AND LOW FLOWS ON HEALTH AND PRODUCTIVITY IN THREE TEXAS ESTUARIES

SS33 MICROBIAL NITROGEN CYCLING IN MARINE PELAGIC WATERS

Chair(s): Jonathan P. Zehr, zehrj@ucsc.edu
Julie LaRoche, julie.laroche@dal.ca
Lasse Riemann, lriemann@bio.ku.dk

Location: Room 350-351

10:00 Ward, B. B.; Jayakumar, A.; Peng, X.: PATTERNS IN NITROGEN-TRANSFORMING MICROBIAL ASSEMBLAGES RELATED TO HABITAT OR BIOGEOGRAPHY

10:15 Cernadas, S.; Scranton, M. I.; Tong, L. T.; Fanning, K. A.; Astor, Y.; Taylor, G. T.: AEROBIC AND ANAEROBIC AMMONIA OXIDIZERS IN THE CARIACO BASIN: IDENTIFICATION, QUANTIFICATION AND COMMUNITY STRUCTURE

10:30 Babbin, A. R.; Ward, B. B.: CONTROLS ON NITROGEN LOSS IN THE EASTERN TROPICAL NORTH PACIFIC OXYGEN DEFICIENT ZONE

10:45 Dalsgaard, T.; Stewart, F. J.; De Brabandere, L.; Thamdrup, B.; Revsbech, N. P.; Canfield, D. E.; Bristow, L.; Ulloa, O.; Young, C. R.; Delong, E. F.: THE EFFECT OF OXYGEN ON PROCESS RATES AND THE EXPRESSION OF ANAMMOX AND DENITRIFICATION GENES IN THE EASTERN SOUTH PACIFIC OXYGEN MINIMUM ZONE

11:00 Villanueva, L.; Bale, N.; Lipsewers, Y.; Buckles L.; Weijers, J.; Hopmans, E.; Schouten, S.; Sinninghe Damsté, J. S.: INTACT POLAR LIPIDS AND GENE EXPRESSION TO TRACE AMMONIA OXIDIZING ARCHAEAL POPULATIONS IN AQUATIC ENVIRONMENTS

11:15 Bristow, L. A.; Stewart, F. J.; Parris, D. J.; Ganesh, S.; Thamdrup, B.: HOW DO WE EXPLAIN NITRITE ACCUMULATION IN THE HYPOXIC BOTTOM WATERS OF THE GULF OF MEXICO?

11:30 Devol, A.; Fuchsman, C.; Horak, R.; Chang, B.; Ward, B.: EXCESS N_2: AND NITRATE DEFICIT IN THE EASTERN TROPICAL NORTH PACIFIC OXYGEN DEFICIENT ZONE

11:45 Buchwald, C.; Santoro, A. E.; Stanley, R. H.; Casciotti, K. L.: NITROGEN CYCLING IN THE PRIMARY AND SECONDARY NITRITE MAXIMA OF THE COSTA RICA UPWELLING DOME

SS34 BIOGEOCHEMISTRY OF RESUSPENDED SEDIMENTS IN AQUATIC AND COASTAL MARINE ENVIRONMENTS

Chair(s): Stephen Skrabal, skrabals@uncw.edu
G. Brooks Avery, averyg@uncw.edu
Ralph Mead, meadr@uncw.edu
John R. Helms, helmsj@uncw.edu

Location: Room 352

14:00 Lucas, S.; Moulin, F.; Guizien, K.: OSCILLATING GRID MESOCOSM FOR STUDYING OXYGEN DYNAMICS DURING UNSTEADY TURBULENT CONDITIONS

14:15 Tengberg, A.; Almroth-Rosell , E.; Atamanchuk , D.; Kononets , M.; Viktorsson, L.; Hall, P. O.: IMPORTANCE OF DIFFUSIVE BOUNDARY LAYER THICKNESS AND SEDIMENT RE-SUSPENSION FOR BENTHIC RECYCLING: STUDIED BY USING IN SITU METHODS

14:30 Kalnejais, L. H.; Percuoco, V.; Foster, D.; Wengrove, M. E.: FIELD AND LABORATORY OBSERVATIONS OF THE GEOCHEMICAL IMPACT OF SEDIMENT RESUSPENSION ON THE WATER QUALITY OF THE GREAT BAY ESTUARY, N.H.

14:45 Smith, E. M.; Buck, T. L.; Willman, A.; Denham, S.: IMPORTANCE OF SUSPENDED SEDIMENTS IN CONTROLING HETEROTROPHIC CARBON METABOLISM IN NEARSHORE COASTAL WATERS OF SOUTH CAROLINA, USA

15:00 Song, G.; Richardson, J. D.; Werner, J. P.; Kieber, D. J.; Xie, H.: CARBON MONOXIDE PHOTOPRODUCTION IN THE DELAWARE ESTUARY *

15:15 Helms, J. R.; Wetterauer, A. M.; Dingess, E. C.; Avery, G. B.; Kieber, R. J.; Mead, R. N.; Skrabal, S.; Mopper, K.: LIGHT INDUCED FLOCCULATION AND DISSOLUTION OF CHROMOPHORIC ORGANIC MATTER IN NATURAL WATERS

THURSDAY

(T) represents Tutorial presentations

16:00 Mead, R. N.; Hartrey, L.; Helms, J. R.; Avery, G. B.; Kieber, R. J.; Skrabal, S. A.: PHOTOCHEMICAL MOBILIZATION OF SEDIMENT BOUND MICROCYSTINS FROM RESUSPENDED SEDIMENT

16:15 Kieber, R. J.; Avery, G. B.; Helms, J. R.; Mead, R. N.; Probst, E. E.; Skrabal, S. A.: PHOTOCHEMICAL TRANSFORMATIONS OF THE ALGAL TOXIN PBTX 2 ON RESUSPENDED SEDIMENTS IN COASTAL ECOSYSTEMS

16:30 Paudel, B.; Montagna, P.; Adams, L.: RELATIONSHIP BETWEEN TOTAL SUSPENDED SOLIDS AND INORGANIC NUTRIENTS IN SOUTH TEXAS GULF COAST ESTUARIES.

16:45 Fan, C.; Shen, Q.; Lu, X.; Feng, Z.: BLACK BLOOM: A SERIOUS HYPOXIA PROBLEM CAUSED BY ACCUMULATED ALGAE AND POLLUTED SEDIMENTS IN THE COASTAL WATERS OF LAKE TAIHU, CHINA

17:00 Orvain, F.; Ubertini, M.; Rakotomalala, C.; Herman, P.: MODELLING THE IMPACT OF BIOTURBATION ON THE RESUSPENSION RATES OF BENTHIC DIATOMS

17:15 Ubertini, M.; Orvain, F.; Rakotomalala, C.; Lefebvre, S.; Lavaud, J.; Duchêne, J. C.: ASSESSMENT OF THE BIOTURBATOR *CERASTODERMA EDULE* IMPACT ON SEDIMENT AND MICROPHYTOBENTHOS RESUSPENSION: A FLUME STUDY

SS42 COMPARATIVE ANALYSIS OF MARINE ECOSYSTEM ORGANIZATION (CAMEO)

Chair(s): Michael Ford, michael.ford@noaa.gov
Lewis S. Incze, lincze@nsf.gov
Linda A. Deegan, ldeegan@mbl.edu

Location: Room 356

14:00 Ford, M. D.: OVERVIEW: COMPARATIVE ANALYSIS OF MARINE ECOSYSTEM ORGANIZATION

14:15 Gaichas, S.; Link, J. S.; Miller, T. J.; Essington, T. E.; Bundy, A.; Boldt, J.; Drinkwater, K. F.; Moksness, E.: WHAT DRIVES MARINE FISHERIES PRODUCTION? EMERGENT FEATURES FROM COMPARISONS ACROSS 13 NORTHERN HEMISPHERE ECOSYSTEMS

14:30 Fu, C.; Gaichas, S.; Link, J.; Bundy, A.; Boldt, J.; Cook, A.; Gamble, R.; Utne, K. R.; Liu, H.; Friedland, K.: QUANTIFYING THE IMPACTS OF PHYSICAL OCEANIC PROCESSES AND FISHERY EXPLOITATION ON ECOSYSTEM ATTRIBUTES ACROSS A SERIES OF MARINE ECOSYSTEMS

14:45 Buchheister, A.; Latour, R. J.; Wilberg, M. J.; Miller, T. J.: SIMULATED EFFECTS OF SPATIAL CONNECTIVITY AND BOTTOM UP PROCESSES ON PRODUCTION OF A MIGRATORY PREDATOR IN THE NORTHWEST ATLANTIC

15:00 Scheef, L. P.; Hampton, S. E.; Izmest'eva, L. R.: INFERRING PLANKTON COMMUNITY STRUCTURE FROM MARINE AND FRESHWATER LONG-TERM DATA USING MULTIVARIATE AUTOREGRESSIVE MODELS

15:15 Curchitser, E. N.; Rose, K.; Fiechter, J.; Hedstrom, K.; Bernal, M.; Creekmore, S.; Haynie, A.; Checkley, D.; McClatchie, S.; Werner, F.: DEVELOPMENT OF A CLIMATE-TO-FISH-TO-FISHERS MODEL: IMPLEMENTATION IN THE EASTERN PACIFIC SARDINE AND ANCHOVY SYSTEM.

16:00 Sugihara, G.; Ye, H.; Hsieh, C.; Deyle, E.; Rosenberg, A.; Forgarty, M.; Kaufman, L.; Perrettii, C.; glaser, S.; Altman, I.: HOW MUCH ECOSYSTEM DO WE NEED FOR ECOSYSTEM-BASED MANAGEMENT? COMPARING CONNECTIVITY IN PACIFIC VERUS ATLANTIC FISHERIES.

16:15 Ye, H.; Deyle, E. R.; Grant, S.; Richards, L. J.; Schnute, J. T.; Beamish, R. J.; Sugihara, G.: NONLINEAR STATE-SPACE RECONSTRUCTION TO ELUCIDATE ECOSYSTEM STRUCTURE OF FRASER RIVER SOCKEYE SALMON (*ONCORHYNCHUS NERKA*)

16:30 Baumann, H.; Doherty, O.: DECADAL CHANGES IN THE WORLD'S COASTAL LATITUDINAL TEMPERATURE GRADIENTS

16:45 Reisinger, A. S.; Gibeaut, J. C.: SUSPENDED SEDIMENT DYNAMICS IN TEXAS ESTUARIES

17:00 Santavy, D. L.; Bradley, P.; Gerritsen, J.; Jackson, S. K.; Fisher, W. S.: DEFINING THE BIOLOGICAL INTEGRITY OF CORAL REEFS USING A BIOLOGICAL CONDITION GRADIENT FRAMEWORK

17:15 Woodcock, S. H.; Walther, B. D.: A NON-LETHAL APPROACH TO ASSESSING MIGRATORY AND TROPHIC PATTERNS OF ATLANTIC TARPON USING SCALE CHEMISTRY

SS44 FACTORS PROMOTING THE EXPANSION OF HARMFUL ALGAL BLOOMS IN MARINE AND FRESHWATER ECOSYSTEMS

Chair(s): James Ammerman, James.Ammerman@stonybrook.edu
Christopher J. Gobler, christopher.gobler@stonybrook.edu

Location: Room 356

10:00 Thyng, K. M.; Hetland, R. D.; Zhang, X.; Campbell, L.: ORIGINS OF HARMFUL ALGAL BLOOMS ALONG THE TEXAS COAST

10:15 Meyer, K. A.; O'Neil, J. M.; Crump, B. C.; Heil, C. A.: CHANGES IN THE BACTERIAL COMMUNITY SURROUNDING MULTIPLE STAGES OF BLOOMS OF THE RED TIDE DINOFLAGELLATE KARENIA BREVIS

10:30 Zhao, Y.; Quigg, A.: NUTRIENT LIMITATION IN NORTHERN GULF OF MEXICO (NGOM): STUDY OF PHYTOPLANKTON COMMUNITY AND PHOTOSYNTHETIC ACTIVITY IN RESPONSE TO NUTRIENT ADDITIONS.

10:45 Phlips, E. J.; Badylak, S.; Lasi, M.: FROM RED TIDES TO GREEN AND BROWN TIDES IN THE INDIAN RIVER LAGOON FLORIDA: A RESPONSE TO SHIFTING CLIMATIC CONDITIONS?

11:00 Karp-Boss, L.; Thomas, M. A.; Lyczkowski, E. R.; Townsend, D. W.: BLOOM DYNAMICS OF *ALEXANDRIUM* IN THE GULF OF MAINE: INSIGHTS FROM LABORATORY EXPERIMENTS ON NITRATE UTILIZATION AND ALLELOPATHIC INTERACTIONS

11:15 Senft-Batoh, C. D.; Dam, H. G.; Shumway, S. E.; Wikfors, G. H.; Schlichting, C. D.: INDUCTION OF TOXIN PRODUCTION IN THE DINOFLAGELLATE ALEXANDRIUM FUNDYENSE DEPENDS UPON PREDATOR-PREY EVOLUTIONARY HISTORY

11:30 Petitpas, C. M.; Deeds, J. R.; Turner, J. T.: PSP TOXIN LEVELS AND GRAZER COMPOSITION AND ABUNDANCE IN PLANKTON SIZE FRACTIONS DURING ALEXANDRIUM FUNDYENSE BLOOMS IN THE GULF OF MAINE AND ON GEORGES BANK

11:45 Wall, C. C.; Merlo, L.; Koch, F.; Griffith, A.; Gobler, C. J.: THE ABILITY OF HARD CLAMS (MERCENARIA MERCENARIA) AND EASTERN OYSTERS (CRASSOSTREA VIRGINICA) TO CONTROL THE BROWN TIDE ALGAE, AUREOCOCCUS ANOPHAGEFFERENS

(*) represents Invited presentations

SS46 GROUNDWATER AND COASTAL ECOLOGY: MICROBIAL ALTERATIONS AND ECOLOGICAL CONSEQUENCES OF GROUNDWATER DISCHARGE

Chair(s): Charles Schutte, cschutte@uga.edu
Justin D. Liefer, jliefer@disl.org

Location: Room 348-349

10:00 Burnett, W. C.; MacIntyre, H. L.; Liefer, J. D.; Taniguchi, M.: GROUNDWATER DISCHARGES AND ECOLOGICAL RESPONSES*

10:15 Schutte, C. A.; Joye, S. B.: HOTSPOTS OF GREENHOUSE GAS PRODUCTION IN THE SUBTERRANEAN ESTUARY

10:30 Hill, C. L.; Jordan, T. E.; Brenner, D. C.; Snyder, A.; Leviton, V. E.; Fisher, T. R.; Gustafson, A. B.: THE FATE OF AGRICULTURAL NITROGEN AND THE BIOGEOCHEMICAL VARIABILITY OF GROUNDWATER EMERGING FROM AN AGRICULTURAL WATERSHED

10:45 Couturier, M.; Tommi-Morin, G.; Nozais, C.; Chaillou, G.: MICROBIAL DYNAMICS OF GROUNDWATERS IN SANDY SEDIMENTS EXPOSED TO NORTHERN CLIMATE CONDITIONS

11:00 Lamborg, C. H.; Kent, D. B.; Swarr, G. J.; Munson, K. M.; Kading, T. J.; O'Connor, A. E.; Fairchild, G. M.; Bothner, M. H.; Wiatrowski, H. A.: MERCURY SPECIATION AND MOBILIZATION IN WASTEWATER-CONTAMINATED COASTAL GROUNDWATER

11:15 Lewandowski, J.; Meinikmann, K.; Nuetzmann, G.; Rosenberry, D. O.: SHOULD WE CONSIDER GROUNDWATER DISCHARGE TO LAKES IN THEIR NUTRIENT BUDGETS?

11:30 Zamora, P. B.; Cardenas, M. R.; Senal, M. S.; Jacinto, G. S.; Rodolfo, R. S.; Cabria, H. B.; Siringan, F. P.; Befus, K. M.: TRANSFORMATION OF NITROGEN NEAR A DISCRETE ZONE OF SUBMARINE GROUNDWATER DISCHARGE

11:45 Meile, C. D.; Waldbusser, G. G.; Kaza, S.: QUANTIFICATION OF TWO-DIMENSIONAL SOLUTE AND SOLID PHASE MOVEMENT IN MARINE SEDIMENTS DRIVEN BY BIOTURBATION

14:00 Prince, D. M.; Schwartz, M. C.: NUTRIENT BIOGEOCHEMICAL TRANSFORMATIONS DURING SUBMARINE GROUNDWATER DISCHARGE TO A SUBTROPICAL ESTUARY IN NORTHWEST FLORIDA.

14:15 Chappel, S. L.; Peterson, R. N.; Viso, R.; Libes, S.; Peterson, L.; Hutchins, P.; Gregorcyk, K.: GEOCHEMICAL TRACERS LINKING SUBMARINE GROUNDWATER DISCHARGE TO HYPOXIA FORMATION IN LONG BAY, SOUTH CAROLINA, USA

14:30 Waters, C. A.; Dulaiova, H.: UNTWISTING WESTERN HAWAII'S GROUNDWATER FLUXES: FRESH AND SALINE DISCHARGE EFFECTS ON PRODUCTIVITY IN KONA

14:45 Paytan, A.; Lecher, A.; Ryan, J.; Kudella, R.; Fisher, A.: SUBMARINE GROUNDWATER DISCHARGE FUELING ALGAL BLOOMS IN MONTEREY BAY

15:00 Liefer, J. D.; MacIntyre, H. L.; Burnett, W. C.; Novoveska, L.: THE ROLES OF SUBMARINE GROUNDWATER DISCHARGE AND MICROZOOPLANKTON GRAZING IN PROMOTING A HARMFUL ALGAE HOT-SPOT

15:15 Nigro, O. D.; De Carlo, E. H.; Steward, G. F.: POSSIBLE GROUNDWATER INFLUENCE ON THE ABUNDANCE OF THE HUMAN PATHOGEN VIBRIO VULNIFICUS IN A TROPICAL URBAN ESTUARY

SS51 IRON, CARBON CYCLING, AND ECOSYSTEM DYNAMICS IN THE SOUTHERN OCEAN

Chair(s): Stephane Blain, stephane.blain@obs-banyuls.fr
Stephane Blain, stephane.blain@obs-banyuls.fr
Bernard Queguiner, bernard.queguiner@univ-amu.fr
Volker Strass, Volker.strass@awi.de
Dieter Wolf-Gladrow, Dieter.Wolf-Gladrow@awi.de

Location: Room 348-349

16:00 Klaas, C.; EIFEX and LOHAFEX shipboard Scientific Party: CONTROLS ON PRODUCTIVITY AND BIOGEOCHEMISTRY IN THE SOUTHERN OCEAN: INSIGHTS FROM TWO IRON FERTILIZATION EXPERIMENTS IN THE POLAR FRONT REGION[T]

16:30 Blain, S.; Queguiner, B.; KEOPS2 Team: SPATIAL AND TEMPORAL RESPONSES OF THE SOUTHERN OCEAN TO LARGE SCALE NATURAL IRON FERTILIZATION (KERGUELEN REGION)*

16:45 Strass, V. H.; Leach, H.; Prandke, H.; Donnelly, M. S.; Klaas, C.; Bracher, A.; Cheah, W.; Wolf-Gladrow, D.: PHYSICO-BIOGEOCHEMICAL DIFFERENCES ALONG THE ACC IN THE ATLANTIC SECTOR DURING ONE LATE SUMMER - FIRST RESULTS OBTAINED FROM EDDY PUMP*

17:00 Mitchell, B. G.; Reynolds, R.; Kahru, M.; Hewes, C.; Schieber, B.; Wieland, J.; Seegers, B.; Holm-Hansen, O.: A SATELLITE NET PRIMARY PRODUCTION (NPP) ALGORITHM FOR THE SOUTHERN OCEAN BASED ON THE VGPM FRAMEWORK - PERFORMANCE EVALUATION AND TIME-SERIES APPLICATIONS

17:15 Tagliabue, A.; Sallee, J. B.; Bowie, A. R.; Boyd, P. W.; Levy, M.; Swart, S.: TOWARDS RECONCILING IRON SUPPLY AND DEMAND IN THE SOUTHERN OCEAN

17:30 Jones, E. M.; Hauck, J.; Salt, L. A.; Hoppema, M.; van Heuven, S. M.; de Baar, H. J.: DO OCEAN EDDIES CREATE HOTSPOTS OF CARBON UPTAKE IN THE SOUTHERN OCEAN?

17:45 Zhou, M.; d'Ovidio, F.; Park, Y. H.; Zhu, Y.; Durand, I.; Kestenare, E.; Sanial, V.; Van-Beek, P.; Queguiner, B.; Blain, S.: ESTIMATES OF HORIZONTAL SURFACE CIRCULATION AND UPWELLING USING SURFACE DRIFTERS IN KERGUELEN PLATEAU REGIONS DURING THE 2011 AUSTRAL SPRING CRUISE

SS53 SENSOR NETWORKS IN AQUATIC SYSTEMS: RESEARCH AND EDUCATION

Chair(s): Joe Needoba, needobaj@ebs.ogi.edu
Brian Bergamaschi, bbergama@usgs.gov
Janice McDonnell, mcdonnel@marine.rutgers.edu
Bob Chen, bob.chen@umb.edu

Location: Room 346-347

10:00 Byars, N. L.; Wetz, M. S.: SPATIAL-TEMPORAL DISTRIBUTION OF PHYTOPLANKTON IN APALACHICOLA BAY, FLORIDA

10:15 Gadner, B.; Chen, R. F.; Peri, F.; Wang, X.; Arriola, J.; Meile, C.; Esch, M.: EXAMINATION OF CHROMOPHORIC DISSOLVED ORGANIC MATTER (CDOM) DYNAMICS IN A MICROTIDAL SALT MARSH WITH HIGH TEMPORAL AND SPATIAL RESOLUTION OBSERVATIONS

[T] represents Tutorial presentations

10:30 Thomas, F. I.; Guadayol, O.; Silbiger, N.; Toonen, R. J.; Donahue, M.: HIGH FREQUENCY DATA REVEAL SMALL-SCALE TEMPORAL AND SPATIAL VARIATIONS IN MICROHABITATS ACROSS A CORAL REEF

10:45 Guadayol, O.; Silbiger N.; Donahue M.; Thomas, F. I.: THE TEMPORAL DISTRIBUTION OF SMALL FLUCTUATIONS IN TEMPERATURE, PH AND O_2 IS DEFINING SPATIAL HETEROGENEITY IN A TROPICAL CORAL REEF

11:00 Thomas, F. I.; Guadayol, O.; Lemus, J.: PARTNERSHIPS LINKING EDUCATION AND SCIENCE IN COMMUNITY BASED MANAGEMENT

11:15 Lee, Z.; Riley, R.; Teng, C.; Ko, D.; Dong, Q.: LINKING BUOY OBSERVATIONS AND SATELLITE PRODUCTS WITH DYNAMIC MODELS FOR THE STUDY OF COASTAL WATERS

11:30 Smith, L. M.; McManus, M. C.; Stoffel, H.; Oviatt, C. A.: UTILIZING *IN SITU* METABOLISM ESTIMATES TO EXAMINE LONG-TERM IMPACTS OF METABOLISM AS A FORCING FACTOR OF HYPOXIA IN NARRAGANSETT BAY, RI

11:45 Amador, A. M.; Canals, M. F.: PROBING THE INTERNAL STRUCTURE OF PLUNGING WAVES USING INSTRUMENTED LAGRANGIAN DRIFTERS

SS56 CARBON FLUXES IN AQUATIC ECOSYSTEMS AT CATCHMENT, REGIONAL AND CONTINENTAL SCALES

Chair(s): Sebastian Sobek, sebastian.sobek@ebc.uu.se
Cory McDonald, cmcdonald@usgs.gov
Edward Stets, estets@usgs.gov

Location: Room 345

10:00 Pace, M. L.; Cole, J. J.; Carpenter, S. R.; Wilkinson, G. M.: ARE INPUTS OF TERRESTRIAL ORGANIC CARBON TO LAKES LARGE OR SMALL RELATIVE TO PRIMARY PRODUCTION?

10:15 Wilkinson, G. M.; Pace, M. L.; Cole, J. J.: TERRESTRIAL DOMINANCE OF ORGANIC MATTER IN NORTH TEMPERATE LAKES

10:30 Zwart, J. A.; Godwin, S.; Solomon, C. T.; Weidel, B. C.; Sebestyen, S. D.; Coloso, J. J.; Jones, S. E.: MAGNITUDE AND COMPOSITION OF BASAL CARBON SUPPLIES IN LAKE ECOSYSTEMS ACROSS A DISSOLVED ORGANIC CARBON GRADIENT

10:45 Koren, L. M.; Minor, E. C.; McCallister, S. L.: TEMPORAL VARIABILITY IN LAKE SUPERIOR METABOLISM: COUPLING IN-SITU PCO_2, $DI^{13}C$ AND OXYGEN-18 ISOTOPIC MEASUREMENTS

11:00 Vidal, L.; Abril, G.; Artigas, F.; Lobão, L.; Melo, M. L.; Bernardes, M. C.; Roland, F.: BACTERIAL CARBON DEMAND AND EFFICIENCY IN CONTRASTING FRESHWATER AMAZONIAN ECOSYSTEMS

11:15 Bateson, D. E.; Wissel, B.: METABOLIC PROCESSES OF WINTER PRAIRIE LAKES

11:30 McCallister, S. L.; del Giorgio, P. A.: EVIDENCE FOR THE RESPIRATION OF ANCIENT TERRESTRIAL ORGANIC C IN NORTHERN TEMPERATE LAKES: IMPLICATIONS FOR THE TERRESTRIAL C BUDGET

14:00 Mendonça, R.; Kosten, S.; Sobek, S.; Bastos, A.; Cole, J. J.; Barros, N.; Tranvik, L.; Scheffer, M.; Cardoso, S.; Roland, F.: ORGANIC CARBON BURIAL IN HYDROELECTRIC RESERVOIRS: AN INTEGRATIVE APPROACH USING A SEISMIC SURVEY

14:15 Roland, F.; Barros, N.; Cimbleris, A.; Assireu, A.; Cole, A.; Mendonça, R.; Huszar, V.: AMBIGUOUS EFFECT OF TROPICAL HYDROELECTRIC RESERVOIRS ON THE CARBON CYCLE BASED ON AN ECOSYSTEM MASS BALANCE

14:30 Biddanda, B. A.; Kendall, S. T.; Strickler, E. A.; Weinert, M. E.; Defore, A. L.; Driza, K. M.; Coveney, K. E.; Deborah, D. K.; Weinke, A. C.; Gereaux, L. C.: LAND-LAKE LINKAGES IN A GREAT LAKE WATERSHED: PRODUCTION AND RESPIRATION OF CARBON IN LAKE MICHIGAN

14:45 Winslow, L. A.; Read, J. S.; Hanson, P. C.; Stanley, E. H.: THE DISTRIBUTION OF AQUATIC-TERRESTRIAL INTERFACES IN THE CONTINENTAL U.S. AND ITS IMPLICATIONS FOR TERRESTRIAL-AQUATIC ORGANIC CARBON FLUX

15:00 Köhler, J.; Brothers, S. M.; Hilt, S.: SHIFTS FROM TURBID TO CLEAR-WATER REGIME INCREASE THE PRODUCTIVITY OF SHALLOW LAKES AND LOWLAND RIVERS

15:15 Premke, K.; Moreano, M.; Weisse, L.; Gessler, A.; Kayler, Z.; Ulrich, A.: IMPACT OF WATER LEVEL FLUCTUATION ON ORGANIC CARBON TRANSFORMATION IN SEDIMENTS

SS63 LONG-TERM PERSPECTIVES ON LAKE RESEARCH AND MANAGEMENT

Chair(s): Stephanie Hampton, hampton@nceas.ucsb.edu
Paul Hanson, pchanson@wisc.edu
Emily Stanley, ehstanley@wisc.edu

Location: Room 344

16:00 Jeppesen, E.; Søndergaard, M.; Lauridsen, T. L.; Trolle, D.; Bjerring, R.; Johansson, L. S.: USE OF MONITORING DATA IN FRESHWATER RESEARCH: DENMARK AS AN EXAMPLE.

16:15 Hampton, S. E.; O'Reilly, C. M.; Sharma, S.; Gray, D. K.; Read, J. S.; Lenters, J. D.; Hook, S. J.: GLOBAL LAKE WARMING TRENDS AND REGIONAL HOTSPOTS

16:30 Kraemer, B. M.; McIntyre, P. B.; Hook, S.; Huttula, T.; Kotilainen, P.; O'reilly, C. B.; Peltonen, A.; Plisnier, P. D.; Sarvala , J.; Vadeboncoeur, Y.; Wehrli, B.: CLIMATE CHANGE IN LAKE TANGANYIKA: A LITTLE BIT GOES A LONG WAY IN THE TROPICS

16:45 Moore, M. V.; Hampton, S. E.; Izmest'eva, L. R.: BOTTOM-UP EFFECTS OPERATING IN LAKE BAIKAL, SIBERIA

17:00 Gray, D. K.; Hampton, S. E.; Izmest'eva, L. R.: LONG-TERM CHANGES IN THE DEPTH DISTRIBUTION OF LAKE BAIKAL ZOOPLANKTON: A CONSEQUENCE OF WARMING?

17:15 Gaiser, E. E.; Quillen, A.; Swain, H. M.: COMBINING LONG-TERM OBSERVATIONAL AND PALEOLIMNOLOGICAL RECORDS TO DISTINGUISH CLIMATE FROM LOCAL LAND USE SIGNALS IN A REFERENCE WATERSHED

17:30 Stanley, E. H.; Lottig, N. R.; Soranno, P. A.; Cheruvilil, K. S.: ILLUMINATING DARK DATA: THE SEARCH FOR AND USE OF LONG-TERM LAKE DATA SETS

17:45 Hanson, P. C.; Solomon, C.; Read, J.; Muraoka, K.: DATA FROM GLEON PROVIDE NEW UNDERSTANDING OF PHYSICAL AND BIOLOGICAL CONTROL IN LAKES

(*) represents Invited presentations

SS65 THE ROLE OF ARABIA'S SEAS IN PROJECTING MARINE ECOSYSTEM RESILIENCE AND ADAPTATION TO GLOBAL CLIMATE CHANGE

Chair(s): Cornelia Roder, cornelia.roder@kaust.edu.sa
Christian R Voolstra, christian.voolstra@kaust.edu.sa

Location: Room 343

14:00 Riegl, B.; Purkis, S.; Al-Cibahy , A.: CLIMATE CHANGE DISRUPTS LONG-TERM COMMUNITY STABILITY AND ADAPTATION IN PERSIAN/ARABIAN GULF*

14:30 Voolstra, C. R.; Roder, C.; Roik, A.; Rothig, T.: CORAL REEF ECOSYSTEMS MONITORING IN THE CENTRAL RED SEA

14:45 Ziegler, M.; Roder, C.; Roelke, D. L.; Büchel, C.; Voolstra, C. R.: FUNCTIONAL RESPONSES OF THE CORAL-DINOFLAGELLATE SYMBIOSIS TO ENVIRONMENTAL CHANGE ALONG A CROSS-SHELF AND DEPTH TRANSECT IN THE CENTRAL RED SEA

15:00 Sawall, Y.; Al-Sofyani, A.: CORAL ACCLIMATIZATION: PHOTOSYNTHESIS, CALCIFICATION AND MUCUS RELEASE OF THE CORAL POCILLOPORA VERRUCOSA ALONG THE NUTRIENT AND SST GRADIENT OF THE RED SEA

15:15 Davis, K. A.; Pineda, J.; Lentz, S.; Farrar, J. T.; Starczak, V.: DID ANOMALOUS 2010 WINDS CONTRIBUTE TO A MAJOR CORAL BLEACHING EVENT IN THE RED SEA?

16:00 Wiedenmann, J.; D'Angelo, C.; Hume, B.; Burt, J.: HEAT TOLERANCE OF GULF CORALS: A RESULT OF THE PHYSICOCHEMICAL ENVIRONMENT?*

16:30 Roder, C.; Voolstra, C. R.: DEEP-SEA CORALS FROM THE CENTRAL RED SEA – A CRYSTAL BALL FOR COLD-WATER REEFS?

16:45 Withrow, F. G.; Roelke, D. L.; Walton, J.; Zieler, M.; Roder, C.; Voolstra, C. R.: POTENTIAL CHANGES IN SPECTRAL QUALITY OF LIGHT IN THE RED SEA WITH SHIFTS IN PHYTOPLANKTON BIOMASS AND COMPSOSITION

17:00 Quigg, A.; Al-Ansi, M.; Nour Al Din, N.; Wei, C. L.; Nunnally, C. C.; Al-Ansari, I. S.; Rowe, G.; Soliman, Y.; Al-Maslamani, I.; Mahmoud, I.: PHYTOPLANKTON DYNAMICS ON THE COASTAL SHELF OF AN OLIGOTROPHIC HYPER SALINE PENINSULA IN A SEMI-ENCLOSED MARGINAL SEA

17:15 Polikarpov, G. G.; Al-Yamani, F.; Nezlin, N.: CLIMATIC FACTORS REGULATING PHYTOPLANKTON VARIABILITY IN THE ARABIAN GULF

17:30 El-Sammak, A.: MARINE AND COASTAL ENVIRONMENTAL POLICY OPTIONS FOR WEST ASIA

SS67 ROLE OF THE METALIMNION AND OTHER INTERNAL TRANSITION ZONES IN LAKES

Chair(s): Tom Shatwell, shatwell@igb-berlin.de
Bertram Boehrer, bertram.boehrer@ufz.de
Klaus Jöhnk, Klaus.Joehnk@csiro.au

Location: Room 344

10:00 Eckert, W.: THE ROLE OF PHYSICAL FORCING FOR THE BIOGEOCHEMICAL EVOLUTION IN THE WATER COLUMN OF A WARM MONOMICTIC LAKE*

10:15 Castendyk, D. N.; Gallagher, H. A.; Priscu, J. C.; Lyons, W. B.: EFFECTS OF INTERFLOW ON A SHALLOW TRANSITION ZONE WITHIN A PERMANENTLY ICE-COVERED, MEROMICTIC LAKE IN THE MCMURDO DRY VALLEYS, ANTARCTICA

10:30 Boehrer, B.; Kiwel, U.; Rahn, K.; Schultze, M.: CHEMOCLINE EROSION IN TWO MEROMICTIC SALT LAKES

10:45 Downing, J. A.; Jones, J. R.: THE ROLE OF STRATIFICATION, FETCH, AND SEDIMENT-WATER INTERACTIONS IN THE "IMPAIRMENT" OF UNDEVELOPED LAKES

11:00 Frindte, K.; Eckert, W.; Allgaier, M.; Attermeyer, K.; Grossart, H. P.: SHIFTS IN MICROBIAL COMMUNITIES AND FUNCTIONAL DIVERSITY IN RELATION TO REDOX CHANGES AT THE SEDIMENT-WATER-INTERFACE

11:15 Grantz, E. M.; Haggard, B. E.; Scott, J. T.: HYDROLOGICALLY-DYNAMIC IN-LAKE HABITATS DETERMINE VARIABILITY IN NITROGEN REMOVAL THROUGH DENITRIFICATION AS A PROPORTION OF WHOLE-RESERVOIR RETENTION

11:30 Arafat, S.; Cook, P.; Grace, M.; Western, A.: FACTORS AFFECTING NITROUS OXIDE AND METHANE EMISSION FROM A TEMPERATE AGRICULTURAL FARM DAM IN SOUTH-EASTERN AUSTRALIA

14:00 Baustian, M. M.; Stevenson, R. J.: IMPACTS OF NUTRIENT ENRICHMENT TO THE BENTHIC-PELAGIC COUPLING MECHANISMS IN THE NATIONS FRESHWATER LAKES

14:15 Ackerman, J. D.; Bouffard, D.; Boegman, L.: THE DEVELOPMENT AND DYNAMICS OF HYPOXIA IN LAKE ERIE AND OTHER LARGE SHALLOW LAKES

14:30 Shatwell, T. A.; Padisák, J.; Hupfer, M.; Kasprzak, P.: PHYTOPLANKTON INTERACTIONS WITH OXYGEN AND PHOSPHORUS DYNAMICS IN AN OLIGOTROPHIC LAKE

14:45 Aguilar, C.; Cuhel, R. L.: UNICELLULAR CYANOBACTERIAL DOMINANCE IN THE METALIMNION: RELATION TO EPISODIC CLIMATE EVENTS IN LAKE MICHIGAN

SS71 WATERSHEDS OF THE CARIBBEAN: GLOBAL CHANGE, SCIENCE, POLICY AND SECURITY

Chair(s): Robyn E. Hannigan, robyn.hannigan@umb.edu
Alonso Ramirez, aramirez@ramirezlab.net
Alex Eisen-Cuadra, alexeisencuadra@gmail.com
Helenmary Hotz, Helenmary.Hotz@umb.edu
Alan D. Christian, alan.christian@umb.edu

Location: Room 343

10:00 Bowen, R. E.; Kress, M.: INTEGRATING APPROACHES TO INTEGRATIVE INDICATORS RELATING GLOBAL ENVIRONMENTAL CHANGE, HUMAN HEALTH AND SOCIAL WELL-BEING: AN ARCHITECTURE FOR COMPLEX SYSTEMS*

10:30 Wagner, K.; Ramirez, A.; Rosas, K.; Seguinot-Barbosa, J.; Mendez-Lazaro, P.; Lugo, A. E.: THE RIO PIEDRAS WATERSHED, PUERTO RICO – A HIGHLY URBANIZED AND DIVERSE NOVEL ECOSYSTEM

10:45 Ramirez, A.; Vazquez, G.; Novelo-Gutiérrez, R.: LAND USE EFFECTS ON BIODIVERSITY AND WATER QUALITY AT LA ANTIGUA WATERSHED, MEXICO

11:00 Hotz, H. M.; Christian, A. D.: EVIDENCE OF RECENT GLOBAL CHANGE EFFECTS ON LAKE AND LAKE BASIN CHARACTERISTICS OF TTANGE SAUMTTRE, HAITI

11:15 Christian, A. D.; Hotz, H.; Eisen-Cuadra, A.; Dorval, E.; Hannigan, R. E.: PHYSICAL AND CHEMICAL ANALYSIS AND PRODUCTIVITY CLASSIFICATION OF A GLOBAL CHANGE INFLUENCED BRACKISH CARIBBEAN LAKE: 2 YEARS OF DATA ON TTANG SAUMTTRE, HAITI

THURSDAY

[T] represents Tutorial presentations

11:30 Eisen-Cuadra, A.; Christian, A.; Dorval, E.; Dorval, E.; Hannigan, R.: HISTORICAL TRENDS IN PRODUCTIVITY AND THE ROLE OF GLOBAL CHANGE IN LAKE SEDIMENT GEOCHEMISTRY: A CASE STUDY OF A BRACKISH CLOSED LAKE

11:45 Jessen, B. J.; Oviatt, C. A.; Johnson, D. S.; Nixon, S. W.: BENTHIC METABOLISM RESPONSE TO TWO NUTRIENT-ENRICHMENT SCENARIOS IN A COASTAL FRINGE MANGROVE

SS77 TRANSMISSION OF TERRESTRIAL SIGNALS TO THE COASTAL OCEAN BY (LARGE) RIVERS

Chair(s): Robert Max Holmes, rmholmes@whrc.org
Bernhard Peucker-Ehrenbrink, behrenbrink@whoi.edu

Location: Room 355

10:00 Carey, J. C.; Fulweiler, R. W.: LAND USE CHANGE DIRECTLY ALTERS RIVERINE DISSOLVED SILICA FLUXES

10:15 Schultz, G. E.; Kovatch, J.: THE BACTERIAL DIVERSITY OF THE OHIO RIVER AS DETERMINED BY PYROSEQUENCING

10:30 Teodoru, C. R.; del Giorgio, P. A.: CARBON TRANSPORT, EMISSION AND PROCESSING IN THE LARGE BOREAL RIVERS OF QUBBEC

10:45 Griffin, C. G.; McClelland, J. W.: NITROGEN AND ORGANIC CARBON EXPORT UNDER VARYING PRECIPITATION REGIMES ALONG THE TEXAS COAST: THE IMPORTANCE OF DAMS, DROUGHTS AND STORMS

11:00 McCrackin, M. L.; Harrison, J. A.; Compton, J. E.: PATTERNS AND CONTROLS OF DISSOLVED ORGANIC MATTER EXPORT BY MAJOR RIVERS: A NEW SEASONAL, SPATIALLY EXPLICIT, GLOBAL MODEL

11:15 Peucker-Ehrenbrink, B.; Holmes, R. M.; Eglinton, T. I.; Spencer, R.; Galy, V.; Wang, Z. A.; Coolen, M.; Mann, P.; Voss, B.; Vonk, J. E.: BUILDING THE GLOBAL RIVERS OBSERVATORY

11:30 Carmichael, R. H.; Crim, R. N.; Dzwonkowski, B.; Park, K.; Taylor, M. N.; Patterson, H. K.: THE TROPHIC IMPORTANCE OF LAND-DERIVED ORGANIC MATTER IN A FRESHWATER DOMINATED NORTHERN GULF OF MEXICO ESTUARY

11:45 Dzwonkowski, B.; Park, K.; Lee, J.; Webb, B.; Valle-Levinson, A.: SPRING SEASON VELOCITY STRUCTURE ON A RIVER-INFLUENCED INNER SHELF: WHERE IS THE COASTAL CURRENT?

SS79 PHYTOPLANKTON INTERACTIONS IN AQUATIC ECOSYSTEMS

Chair(s): Suzanne Strom, Suzanne.Strom@wwu.edu
Brian Palenik, bpalenik@ucsd.edu

Location: Room 355

14:00 Fuhrman, J. A.; Needham, D.; Cram, J.; Chow, C.: MICROBIAL INTERACTIONS AND NETWORKS[T]

14:30 van Tol, H. M.; Amin, S. A.; Armbrust, E. V.: COMPARATIVE GENOMICS REVEAL POTENTIAL NICHE-SPECIFIC ADAPTATIONS OF CROCEIBACTER ATLANTICUS TO DIATOM CELL SURFACE

14:45 Hmelo, L. R.; Amin, S.; Armbrust, V.; Parsek, M.: INVESTIGATION OF THE ROLE OF BACTERIAL COMMUNICATION IN THE SYNERGISTIC RELATIONSHIP BETWEEN SULFITOBACTER STRAIN SA11 AND PSEUDO-NITZCHIA MULTISERIES

15:00 Foster, R. A.; Franzke, D.; Littmann, S.; Hilton, J. A.; Tripp, H. J.; Villareal, T. A.; Zehr, J. P.: METABOLIC INTERACTIONS IN FIELD-COLLECTED HEMIAULUS-RICHELIA SYMBIOSES REVEALED BY NANOSIMS IMAGING, GENOME SEQUENCES AND QUANTITATIVE MRNA TRANSCRIPTION

15:15 Paz-Yepes, J.; Brahamsha, B.; Palenik, B.: MICROCIN-C-LIKE BIOSYNTHESIS GENES ARE INVOLVED IN ALLELOPATHIC INTERACTIONS IN *SYNECHOCOCCUS*

16:00 Berges, J. A.; Sandgren, C. D.; Kozik, C. R.; Hellweger, F.: DIVERSE CAUSES OF CELL DEATH IN PHYTOPLANKTON IN SMALL FRESHWATER ECOSYSTEMS

16:15 Liu, X.; Wu, Z. C.; Xu, C. P.; Chen, Y. W.: PHYTOPLANKTON COMMUNITY STRUCTURE IN THE LAKE POYANG-A WATER-LEVEL VARIABLE LAKE IN CHINA

16:30 Paver, S. F.; Kent, A. D.: INTERACTIONS WITH PHYTOPLANKTON AFFECT BACTERIAL COMMUNITY RESPONSE TO CHANGES IN TEMPERATURE AND LIGHT AVAILABILITY

16:45 Li, H.; Xing, P.; Wu, Q. L.: THE HIGH RESILIENCE OF THE BACTERIOPLANKTON COMMUNITY IN THE FACE OF A CATASTROPHIC DISTURBANCE BY A HEAVY MICROCYSTIS BLOOM

17:00 Mincer, T. J.; Aicher, A. C.: PRODUCTION OF METHANOL BY A WIDE PHYLOGENETIC ARRAY OF PHYTOPLANKTON AND IMPLICATIONS FOR EPIBIONT INTERACTIONS

17:15 Vernet, M.; Whitehead, K.; Glé, C.; Coesel, S.; Kozlowski, W.: AUTOINDUCTION OF GROWTH IN THE MARINE DIATOM *THALASSIOSIRA PSEUDONANA*

17:30 Paerl, R. W.; Palenik, B.; Azam, F.: EXPERIMENTAL EVIDENCE OF THIAMINE AUXOTROPHY IN THE ALGAE O. LUCIMARINUS AND THE SEARCH FOR MICROBIAL 'ALLEVIATORS' OF O.LUCIMARINUS THIAMINE GROWTH LIMITATION

17:45 Koch, F.; Sañudo-Wilhelmy, S.; Fisher, N. S.; Gobler, C. J.: THE ROLE OF VITAMIN B1 AND B12 IN CONTROLLING PHYTOPLANKTON BIOMASS, DIVERSITY AND DYNAMICS

(*) represents Invited presentations

THURSDAY, 21 FEBRUARY - POSTERS

GS05 FOOD WEB INTERACTIONS AND TROPHIC LINKAGES

Chair(s): Jill Olin, jolin@lsu.edu
Mike Vanni, vannimj@muohio.edu
Maria Gonzalez, gonzalmj@muohio.edu
Just Cebrian, jcebrian@disl.org

Location: Exhibit Hall E

246 Mitchell, C. J.; Lini, A.; Stockwell, J. D.: DIVERGENT BEHAVIOR IN DIEL VERTICAL MIGRATION OF *MYSIS DILUVIANA*: IS IT PLASTIC OR FIXED?

247 Brown, J. M.; Hewson, I.: INVESTIGATION OF MUTATION AND MIGRATION AS FACTORS INFLUENCING CYANOPHAGE DIVERSITY WITHIN TWO NEIGHBORING MEROMICTIC LAKES

248 Ball, S. C.; Mihuc, T. B.; Stockwell, J. D.: CHANGES IN OPOSSUM SHRIMP (*MYSIS DILUVIANA*) POPULATION DEMOGRAPHICS IN LAKE CHAMPLAIN, VERMONT, BETWEEN 1975 AND 2012

249 Olin, J. A.; Arts, M. T.; Fisk, A. T.: FATTY ACIDS QUANTIFY SEASONAL CHANGES IN PRODUCTION RESOURCES USED BY ESTUARINE CONSUMERS

250 Craig, C.; Kimmerer, W.; Cohen, C. S.: A MOLECULAR APPROACH TO DIET ANALYSIS OF LARVAL AND ADULT COPEPODS

GS06 RESTORATION ECOLOGY IN AQUATIC SYSTEM

Chair(s): Sandra Clinton, sclinto1@uncc.edu

Location: Exhibit Hall E

251 Padilla-Rivera, D. J.: COULD THE WATER LILIES REMOVAL BE BENEFICIAL?

252 Cruz-Marrero, W.; Meléndez , J.: WHAT COMES WITH THE ASIAN TIGER SHRIMP (*PENAEUS MONODON*) INVASION IN PUERTO RICO?

253 Crawford, M. K.; Phelps, J. H.; Graham, B. P.; Young, M. M.: PATTERNS OF SUBMERGED AQUATIC VEGETATION BIOMASS IN CURRITUCK SOUND, NC

GS09 COMMUNITY ECOLOGY

Chair(s): Markus Weitere, markus.weitere@ufz.de
Dina Leech, dinaleech@depauw.edu

Location: Exhibit Hall E

254 Cothias , G. E.; Christian, A. D.; Eisen-Cuadra, A.; Hannigan, R.: CHANGES IN PRODUCTIVITY OF TTANG SAUMTTRE, HATTI OBSERVED IN A SEDIMENT CORE: EVIDENCE OF SUCCESSION AND GLOBAL CHANGE?

255 Burke, S. M.; Persaud, A. D.; Dillon, P. J.: A REGIONAL COMPARISON OF BENTHIC MACROINVERTEBRATE COMMUNITY FUNCTION IN PRECAMBRIAN SHIELD AND ST. LAWRENCE LOWLAND LAKES: A STABLE ISOTOPE APPROACH

256 Maldonado, E. M.; Gárate, M.; Starczak, V.; Pineda, J.: RECRUITMENT PATTERNS DEPEND ON SETTLEMENT PREFERENCE FOR MACRO-HABITAT RATHER THAN MICRO-HABITAT IN THE BARNACLE *SEMIBALANUS BALANOIDES*

257 Izaguirre, I.; Saad, J.; Schiaffino, M. R.; Unrein, F.; Allende, L.; Sinistro, R.; Sánchez, M. L.; Vinocur, A.; Tell, G.: INFLUENCE OF SPATIAL AND ENVIRONMENTAL FACTORS ON NANOPLANKTON IN LAKES: A LATITUDINAL STUDY BASED ON MORPHOLOGICAL SPECIES, FUNCTIONAL AND MOLECULAR DIVERSITY

258 De Palma-Dow, A. A.; Cheruvelil , K. S.: THE ROLES OF CONNECTIVITY AND ABIOTIC LAKE AND LANDSCAPE FEATURES FOR UNDERSTANDING VARIATION IN MACROPHYTE RICHNESS AMONG LAKES

259 Kiser, R. F.; Pineda, J.; Starczak, V. R.: RECRUITMENT AND SURVIVAL OF THE BARNACLE *SEMIBALANUS BALANOIDES* IN WOODS HOLE, MASSACHUSETTS, FROM 2004 TO 2012

260 Coblentz, K. E.; Sigel, B. J.; Henkel, J. R.; Taylor, C. M.: SEDIMENT CHARACTERISTICS AND DIVERSITY IN THE SOFT-SEDIMENT INTERTIDAL OF THE NORTHERN GULF OF MEXICO

261 Demopoulos, A. W.; Bourque, J. R.; Phillips, R.: WRECKS AS REEFS: THE ROLE OF SHIPWRECKS IN SUPPORTING DEEP-WATER CORAL BENTHIC COMMUNITIES

262 Riedinger-Whitmore, M. A.; Whitmore, T. J.; Hoare, A.; Price, R. A.; Lauterman, F. M.: INTER-ANNUAL, SUBSTRATE, AND SEASONAL VARIATION IN PERIPHYTON COMMUNITIES IN A SUBTROPICAL, SPRING-FED FLORIDA STREAM

263 Nelson, D.; Benstead, J. P.; Cross, W. F.; Huryn, A. D.; Hood, J. M.; Johnson, P. W.; Junker, J. R.; Gislason, G. M.; Olafsson, J. S.: EXPERIMENTAL WHOLE-STREAM WARMING INCREASES ALGAL STANDING CROP AND REDUCES INVERTEBRATE BIOMASS

264 Keasberry, A. M.; Nelson, D.; Benstead, J. P.; Cross, W. F.; Huryn, A. D.: A COMPARISON OF RESPIRATION RATES OF A FRESHWATER SNAIL FROM TWO ICELANDIC GEOTHERMAL STREAMS: A TEST OF THE METABOLIC COLD ADAPTATION HYPOTHESIS

265 Farrell, J.; Boylen, C. W.; Sutherland, J. W.; Nierzwicki-Bauer, S. A.: ECOSYSTEM RESPONSES TO FISH RE-INTRODUCTION FOLLOWING THE RECOVERY OF AN ADIRONDACK LAKE FROM ACID DEPOSITION

SS05 ADVANCES IN COASTAL HYPOXIA MODELING: FROM PHYSICS TO FISH

Chair(s): Robert Hetland, hetland@tamu.edu
Dubravko Justic, djusti1@lsu.edu

Location: Exhibit Hall E

266 Klump, J. V.; Bravo, H. R.; Waples, J. T.; LaBuhn, S. L.; Anderson, P. D.; Grunert, B. R.; Valenta, T.; Zorn, M.: DRIVERS OF SEASONAL HYPOXIA IN GREEN BAY, LAKE MICHIGAN

267 Hagy, J. D.; Beddick, D. L.; Jarvis, B.; Murrell, M. C.; Plis, Y. M.: PHYSICAL AND BIOLOGICAL CONTROLS ON HYPOXIA IN PENSACOLA BAY, FLORIDA USA

268 Welle, P. M.; Llebot, C.; Lopez, J. E.; Roegner, G. C.; Needoba, J. A.; Spitz, Y.; Baptista, A. M.: DATA-SUPPORTED MODELING OF OXYGEN DEPLETION IN THE COLUMBIA RIVER ESTUARY

269 Brandt, S. B.; Sellinger, C.; Kolesar, S.; Jensen, D.: HYPOXIC IMPACT ON FISH HABITAT QUALITY: WINNERS AND LOSERS

[T] represents Tutorial presentations

SS08 BIOGEOCHEMISTRY OF METAL-BINDING ORGANIC LIGANDS IN THE OCEAN: SOURCES, COMPOSITION AND IMPACTS ON TRACE METAL CYCLING

Chair(s): Maeve C. Lohan, maeve.lohan@plymouth.ac.uk
Sylvia G. Sander, sylvias@chemistry.otago.ac.nz
Kristen N. Buck, kristen.buck@bios.edu

Location: Exhibit Hall E

270 Hawkes, J. A.; Gledhill, M.; Achterberg, E. P.; Connelly, D. P.: STABILISATION OF IRON BY LIGANDS IN HIGH TEMPERATURE HYDROTHERMAL VENT PLUMES

271 Chuang, C.; Ho, Y.; Santschi, P. H.: IS BIOGENIC SILICA RESPONSIBLE FOR SCAVENGING OF RADIONUCLIDES, 234TH, 233PA, 210PB, 210PO, 7BE, IN THE OCEAN? A CASE STUDY WITH PHAEODACTYLUM TRICORNUTUM

272 Burdige, D. J.; Komada, T.: LINKAGES BETWEEN FE REDOX CYCLING AND DOC ADSORPTION-DESORPTION IN SURFACE MARINE SEDIMENTS

273 Sander, S. G.: INTERACTIONS OF METALS WITH DISSOLVED ORGANIC MATTER IN MARINE AND FRESHWATER SYSTEMS

274 Takeda, S.; Ishimaru, A.: ORGANIC COMPLEXATION OF IRON IN THE INDIAN OCEAN DURING NE MONSOON

275 Hirose, K.; Saito, T.: SPATIAL DISTRIBUTION OF PARTICULATE ORGANIC LIGAND IN THE PACIFIC OCEAN

276 Powell, Z. D.; Koschinsky, A.; Sander, S.: STABILISATION OF DISSOLVED COPPER AT HYDROTHERMAL VENT SITES NEAR 5SS ON THE MID-ATLANTIC RIDGE

SS13 INTEGRATIVE APPROACHES TO ECOLOGICAL RISK ASSESSMENT OF NONINDIGENOUS AQUATIC SPECIES: FRAMEWORKS FOR ENHANCING PREDICTION, REDUCING UNCERTAINTY, AND IMPROVING MANAGEMENT

Chair(s): Jennifer Howeth, jghoweth@as.ua.edu
Marion Wittmann, Marion.E.Wittmann.3@nd.edu

Location: Exhibit Hall E

277 Woodcock, S. H.; Grieshaber, C. A.; Walther, B. D.: CAN AN ENRICHED STABLE ISOTOPE DIET BE USED TO MARK FISH?

278 Novoa, A.; Sinicrope Talley, T.; Talley, D.: DEFINING HABITAT PREFERENCE OF A NATIVE MOLLUSK IN SOUTHERN CALIFORNIA

279 Simmons, K. R.; Kerstetter, D. W.; Blanar, C. A.: THE ENDOPARASITE FAUNA OF THE INVASIVE LIONFISH COMPLEX (PTEROIS VOLITANS AND PTEROIS MILES) IN THE WESTERN ATLANTIC AND CARIBBEAN

280 Gitonga, K.; Ganju, N.: FACTORS AFFECTING LIGHT ATTENUATION IN SEAGRASS BEDS

281 Choi, K.: PREDICTING THE INVASION PATHWAY OF *BALANUS PERFORATUS* IN KOREAN SEAWATERS

282 Schwieterman, G. D.; Copeman, L.; Ryer, C.: THE EFFECT OF DIETARY LIPIDS AND FATTY ACIDS ON GROWTH RATES OF JUVENILE TANNER CRABS (CHIONOECETES BAIRDI)

SS16 OPPORTUNITIES IN THE STUDY OF OCEAN PARTICLE FLUX

Chair(s): Adrian Burd, adrianb@uga.edu
Oscar Schofield, oscar@marine.rutgers.edu

Location: Exhibit Hall E

283 Brown, C. W.; Schollaert Uz, S.; Corliss, B. H.: SEASONALITY OF OCEANIC PRIMARY PRODUCTION AND ITS INTERANNUAL VARIABILITY

284 Hayashi, K.; Pilskaln, C. H.: PARTICLE FLUX DYNAMICS IN THE GULF OF MAINE BENTHIC NEPHELOID LAYER AND IMPLICATIONS FOR CARBON CYCLING ON THE MARGIN

SS18 OXYGEN MINIMUM ZONES AND CLIMATE CHANGE: IMPACTS ON HIGHER TROPHIC LEVELS

Chair(s): Brad Seibel, seibel@uri.edu
Karen Wishner, kwishner@gso.uri.edu
Lisa Levin, llevin@ucsd.edu

Location: Exhibit Hall E

285 Malvezzi, A. J.; Chapman, D.; O'Leary, S.; Baumann, H.: IS RESISTANCE AGAINST ELEVATED CO2 LEVELS A HERITABLE TRAIT IN THE ATLANTIC SILVERSIDE, MENIDIA MENIDIA?

286 Baumann, H.; DePasquale, E. L.; Gobler, C.: IMPACTS OF OCEAN ACIDIFICATION AND ESTUARINE STRESSORS ON EARLY LIFE GROWTH AND SURVIVAL OF MENIDIA BERYLLINA

SS20 LET IT SNOW! AQUATIC EXOPOLYMERS, SUSPENDED PARTICLES, AND ORGANIC AGGREGATES

Chair(s): Karen Shapiro , kshapiro@ucdavis.edu
Fred C. Dobbs, fdobbs@odu.edu

Location: Exhibit Hall E

287 Chen, J.; Thornton, D. C.: EFFECT OF GROWTH RATE ON EXOPOLYMER PARTICLE PRODUCTION AND AGGREGATE FORMATION BY A PLANKTONIC DIATOM

288 Deng, W.; Monks, L.; Neuer, S.: MARINE *SYNECHOCOCCUS* AGGREGATION

289 Ortega-Retuerta, E.; Joux, F.; Jeffrey, W. H.; Ghiglione, J. F.: SPATIAL VARIABILITY IN PARTICLE ATTACHED AND FREE LIVING BACTERIAL DIVERSITY IN SURFACE WATERS FROM THE MACKENZIE RIVER TO THE BEAUFORT SEA (CANADIAN ARCTIC)

290 Li, W.; Williamson, K. E.; Dobbs, F. C.: WHAT IS THE ABUNDANCE AND DIVERSITY OF VIRUSES ASSOCIATED WITH MARINE AGGREGATES?

291 Cisternas-Novoa, C.; Lee, C.; Engel, A.; Dammrich, T.; De Jesus, R.: GEL PARTICLES AND AGGREGATION UNDER HIGH CO2 AND TEMPERATURE CONDITIONS DURING PHYTOPLANKTON BLOOM: RESULTS FROM A MESOCOSM STUDY

292 Ganesh, S.; Parris, D. J.; DeLong, E. F.; Stewart, F. J.: METAGENOMIC ANALYSIS OF SIZE-FRACTIONATED PICOPLANKTON IN A MARINE OXYGEN MINIMUM ZONE

293 Smith, C. J.; Hoskins, D. L.: AN ASSESSMENT OF MICROBIAL EXTRACELLULAR POLYMERIC SUBSTANCE (EPS) IN COASTAL GEORGIA SEDIMENTS

THURSDAY

(*) represents Invited presentations

SS22 VANISHING GLACIERS: CONSEQUENCES FOR AQUATIC ECOSYSTEMS

Chair(s): Ruben Sommaruga, ruben.sommaruga@uibk.ac.at
Tom Battin, tom.battin@univie.ac.at
Eran Hood, ewhood@uas.alaska.edu

Location: Exhibit Hall E

294 Dimova, N. T.; Paytan, A.: ARCTIC HYDROLOGICAL DYNAMICS NEAR THE PERMAFROST ACTIVE LAYER REVEALED BY RADON-222 AND ELECTRICAL RESISTIVITY MEASUREMENTS

SS24 MONITORING AND FORECASTING OF SURFACE CURRENT-AFFECTED PHENOMENA IN COASTAL REGIONS

Chair(s): Jeffrey Paduan , paduan@nps.edu
Alexei Sentchev, Alexei.Sentchev@univ-littoral.fr
Yves Barbin, yves.barbin@univ-tln.fr
Max Yaremchuk, max.yaremchuk@nrlssc.navy.mil

Location: Exhibit Hall E

295 Suursaar, U.; Kullas, T.: INFLUENCE OF CHANGES IN WIND CLIMATE ON WATER EXCHANGE BETWEEN THE SEMI-ENCLOSED SUB-BASINS OF THE BALTIC SEA

296 Dykes, J. D.; Keen, T. R.: USING LAGRANGIAN DRIFTERS TO STUDY THE GREAT PACIFIC GARBAGE PATCH

297 Ha, H. K.; Lee, H. J.: MEASUREMENT OF SUSPENDED PARTICULATE MATTER BENEATH THE SEA ICE DURING RAPIDLY-MELTING SUMMER SEASON

298 Spencer, L. J.; DiMarco, S. F.; Guinasso, Jr., N. L.: PHYSICAL OCEANOGRAPHIC CONDITIONS ON THE CONTINENTAL SHELF AND SLOPE OF THE NORTH CENTRAL GULF OF MEXICO NEAR THE DEEPWATER HORIZON SITE IN SUMMER 2012

299 Turner, E. L.; Paudel, B.; Sokoly, D.; Gu, Y.; Adams, L.; Montagna, P. A.: WEEKLY NUTRIENT DYNAMICS IN CORPUS CHRISTI BAY, TEXAS

300 Zimmerle, H. M.; DiMarco, S. F.; Guinasso, Jr., N. L.: INTERANNUAL VARIABILITY OF THE TEXAS COASTAL CURRENT IN THE NORTHWESTERN GULF OF MEXICO FROM 21 YEARS OF OBSERVATIONS

301 DiMarco, S. F.; Mullins-Perry, R. E.; Zhang, X.; Chapman, P.; Howard, M. K.: FLOOD VERSUS DROUGHT: COMPARING STABILITY AND DISSOLVED OXYGEN VARIABILITY ON THE LOUISIANA SHELF DURING THE SUMMERS OF 2011 AND 2012

SS25 EVOLUTION OF COASTAL CHANGE IN THE NORTHERN GULF OF MEXICO

Chair(s): Lisa Osterman, osterman@usgs.gov
Christopher G. Smith, cgsmith@usgs.gov

Location: Exhibit Hall E

302 Rodriguez, C. M.; O'Neil, J. M.: IDENTIFYING NITROGEN AND MICROBIAL CONTAMINANT HOTSPOTS IN TRIBUTARIES OF JOHNSON BAY, MARYLAND COASTAL BAYS

303 Logsdon, M. G.; Kleinhuizen, A.; Mortazavi, B.: EVOLUTION OF THE NITROGEN CYCLE OVER THE FORMATION OF A SALTWATER MARSH ECOSYSTEM

305 Wee, J. L.; Patters0n, J.; Cattolico, R. A.; Paul, J. H.; Millie, D. F.: EFFECTS OF LIGHT SLOP CRUDE OIL ON THE GROWTH OF A SKELETONEMA COSTATUM STRAIN ISOLATED FROM THE LAKE PONTCHARTRAIN BASIN ESTUARY

306 Johns, A. E.; Condon, R. H.; Darrow, E. S.; McCallister, S. L.; Carmichael, R. H.: A COMPARISON BETWEEN MEASURES OF ECOSYSTEM AND MICROBIAL METABOLISM IN A SUBTROPICAL ESTUARINE SYSTEM

307 Hoch, M. P.; Nelson, M. M.; Shrift, A.; Rice, L. S.; Tipparaju, S. M.: SEASONAL AND SPATIAL VARIATION IN SULFATE REDUCING PROKARYOTE COMMUNITIES IN SALT MARSH SEDIMENTS ALONG THE SOUTHEAST TEXAS COAST

SS28 IN SITU AQUATIC SENSORS FOR THE 21ST CENTURY.

Chair(s): Veronique Garcon, veronique.garcon@legos.obs-mip.fr
Douglas P. Connelly, dpc@noc.soton.ac.uk

Location: Exhibit Hall E

308 Kolomijeca, A.; Ahmad, H.; Kronfeldt, H. D.: COMBINATION OF SERS AND SHIFTED EXCITATION RAMAN DIFFERENCE SPECTROSCOPY (SERDS) FOR IDENTIFICATION OF CHEMICALS IN SEA WATER FROM THREE CONTINENTS

309 Chipman, L. E.; McCutchan, J. H.; Lewis, W. M.: APPLICATION OF THE EDDY CORRELATION TECHNIQUE TO SHALLOW RUNNING WATERS

310 Meier, A.; Tsaloglou, M. N.; Connelly, D. P.; Keevil, C. W.; Mowlem, M. C.: BIOFOULING ON ARTIFICIAL SURFACES AFTER LONG-TERM DEPLOYMENT IN THE DEEP-SEA

311 Milani, A.; Statham, P. J.; Connelly, D.; Mowlem, M.: DEVELOPMENT AND APPLICATIONS OF AN AUTONOMOUS ANALYSER FOR IN-SITU DETERMINATION OF IRON AND MANGANESE IN NATURAL AQUATIC SYSTEMS

312 Spaulding, R. S.; DeGrandpre, M. D.: SAMI-ALK, AN AUTONOMOUS IN-SITU SENSOR FOR TOTAL ALKALINITY MEASUREMENTS

313 Ahmad, H.; Fernandez Lopez, M.; Kronfeldt, H. D.: NEW SEAWATER-RESISTANT SUBSTRATES FOR IN-SITU SURFACE ENHANCED RAMAN SPECTROSCOPY

314 Marcon, Y.; Sahling, H.; Bohrmann, G.: A MATLAB TOOLBOX FOR LARGE-AREA PHOTOMOSAICKING

315 Twardowski, M. S.; Zhang, X.; Sullivan, J. M.: INVERSION OF IN SITU OPTICAL SCATTERING AS AN EMERGING TOOL FOR PARTICLE CHARACTERIZATION

316 Needoba, J. A.; Haddock, T.; Peterson, T. D.; Baptista, A. M.; Bado, P.: A MICROFLUIDIC INSTRUMENT FOR QUANTITATIVE PARTICLE DETECTION ON AUTONOMOUS PLATFORMS

317 Soto Neira, J. P.; Zhu, Q.; Aller, R. C.: A NEW PLANAR OPTICAL SENSOR FOR MEASURING 2-D MANGANESE DISTRIBUTIONS IN MARINE SEDIMENTS

318 McManus, M. C.; Smith, L. M.; Krumholz, J. S.; Oviatt, C. A.: USING *IN SITU* METABOLISM ESTIMATES TO IDENTIFY ECOSYSTEM RESPONSES TO ENVIRONMENTAL CHANGE IN NARRAGANSETT BAY, RI

THURSDAY

(T) represents Tutorial presentations

SS33 MICROBIAL NITROGEN CYCLING IN MARINE PELAGIC WATERS

Chair(s): Jonathan P. Zehr, zehrj@ucsc.edu
Julie LaRoche, julie.laroche@dal.ca
Lasse Riemann, lriemann@bio.ku.dk

Location: Exhibit Hall E

319 Hamza, I. S.; Le Moal , M.; Periot , M.; Ridame, C.; Tanaka, T.; Biegala, I. C.: NUTRIENTS AND SAHARAN DUST EVENTS CONTROL UNICELLULAR DIAZOTROPHIC CYANOBACTERIA DEVLOPMENT IN OLIGOTROPHIC MEDITERRANEAN SEA

320 Bentzon-Tilia, M.; Farnelid, H.; Jürgens, K.; Riemann, L.: ISOLATION OF HETEROTROPHIC N2-FIXING BACTERIA FROM AN OXYGEN MINIMUM ZONE IN THE BALTIC SEA

321 Liu, Q.; Lu, X.; Clevinger, C.; Mou, X.; Hollibaugh, J. T.: THE CONTRIBUTION OF POLYAMINES TO N AND C CYCLING IN THE TRANSECTS OF THE SOUTH ATLANTIC BIGHT, GEORGIA

322 Rouco, M.; Heithoff, A.; McGillicuddy, D.; Davis, C.; Waterbury, J.; Olson, E.; Joy-Warren, H.; Dyhrman, S. T.: NITROGEN FIXATION RATES AND ALKALINE PHOSPHATASE ACTIVITIES IN TRICHODESMIUM SP. POPULATIONS ALONG A CRUISE TRANSECT IN THE SUBTROPICAL NORTH ATLANTIC OCEAN.

323 Wawrik, B.; Cooper, J. T.; Bear, S. T.; Connelly, T.; Bronk, D. A.: CARBON AND NITROGEN STABLE ISOTOPE PROBING OF MICROBIAL COMMUNITIES IN ARCTIC COASTAL MARINE ENVIRONMENTS

324 Shiozaki, T.; Kodama, T.; Furuya, K.: LOCAL ACTIVE NITROGEN FIXATION ENHANCES LARGE-SCALE PRIMARY PRODUCTION IN THE WESTERN SOUTH PACIFIC OCEAN

325 Moisander, P. H.; Valery, C.; Parris, D. J.; Stewart, F. J.; Montoya, J. P.; Subramaniam, A.: DIVERSITY AND DISTRIBUTION OF DIAZOTROPHS IN THE MISSISSIPPI RIVER PLUME

326 Chang, B. X.; Babbin, A. R.; Jayakumar, A.; Revsbech, N. P.; Devol, A. H.; Ward, B. B.: EFFECT OF O_2 CONTAMINATION ON FIXED NITROGEN LOSS IN THE EASTERN TROPICAL NORTH PACIFIC AND ARABIAN SEA OXYGEN DEFICIENT ZONES

327 Widner, B.; Mopper, K.; Mulholland, M. R.: DISTRIBUTION AND UPTAKE OF CYANATE IN THE EASTERN TROPICAL NORTH PACIFIC

328 Dabundo, R. C.; Granger, J.: THE MARINE HETEROTROPHIC BACTERIUM VIBRIO NATRIEGENS FIXES NITROGEN IN THE PRESENCE OF NITRATE AND AMMONIUM

329 Zhang, X.; Gamarra, J.; Castro, S.; Hernandez, A.; Hadaegh, A.; Read, B.: GENOME-WIDE ANALYSIS OF MICRORNAS AND THEIR CORRESPONDING PRECURSOR SEQUENCES PRESENT IN THE MARINE COCCOLITHOPHORID, EMILIANIA HUXLEYI

330 Mulholland, M. R.; Chang, B.; Jayakumar, A.; Ward, B. B.; Widner, B.; Bernhardt, P. W.: DINITROGEN FIXATION IN THE EASTERN TROPICAL NORTH PACIFIC IN AND ABOVE THE OXYGEN MINIMUM ZONE

331 Ortell, N.; Ortmann, A. C.: NOT ALL THAUMARCHAEOTA ARE INVOLVED IN AMMONIUM OXIDATION

332 Gillard, J.; Kustka, A. B.; Allen, A. E.: EFFECTS OF DISSOLVED IRON CONCENTRATIONS AND DIEL CYCLING ON GLOBAL TRANSCRIPT PROFILES OF THE PENNATE MARINE DIATOM PHAEODACTYLUM TRICORNUTUM

SS34 BIOGEOCHEMISTRY OF RESUSPENDED SEDIMENTS IN AQUATIC AND COASTAL MARINE ENVIRONMENTS

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Ralph Mead, meadr@uncw.edu
John R. Helms, helmsj@uncw.edu

Location: Exhibit Hall E

333 He, D.; Mead, R.; Belicka, L.; Jaffé, R.: ASSESSING PARTICULATE ORGANIC MATTER DYNAMICS IN A SUBTROPICAL ESTUARY: A BIOMARKER APPROACH

334 Statham, P. J.; Cuceiro, F.; Fones, G. R.; Thompson, C. E.; Parker, E. R.; Sivyer, D.: IMPACT OF RESUSPENSION OF COHESIVE SEDIMENTS IN COASTAL SEAS ON NUTRIENT EXCHANGE ACROSS THE SEDIMENT-WATER INTERFACE

335 Nguyen, J. C.; Avery, G. B.; Helms, J. R.; Mead, R. N.; Skrabal, S. A.; Kieber, R. J.: PHOTOCHEMICAL RELEASE OF AMINO ACIDS FROM RESUSPENDED SEDIMENTS

SS39 SCIENCE AND POLICY FRAMEWORK FOR FUTURE DEVELOPMENT OF THE OIL AND GAS RESOURCES OF THE USA OUTER CONTINENTAL SHELF (OCS)

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Kelly Hammerle, kelly.hammerle@boem.gov

Location: Exhibit Hall E

336 DeGrasse, S.; Vanegas, C.; Conrad, S.: PARALYTIC SHELLFISH TOXINS IN THE SEA SCALLOP PLACOPECTEN MAGELLANICUS ON GEORGES BANK: IMPLICATIONS FOR AN OFFSHORE ROE-ON AND WHOLE SCALLOP FISHERY

337 Baker, K.; Epperson, D.; Goldstein, H.; Skrupky, K.; Lewandowski, J.; Smith, B.; Gitschlag, G.; Turk, T.: IMPROVING PROTECTED SPECIES MANAGEMENT THROUGH STANDARDIZED OBSERVER PROGRAMS IN THE U.S.A.

SS40 PERSPECTIVES ON RESTORATION: COASTAL HABITATS TO THE DEEP SEA

Chair(s): Erik E. Cordes, Ph.D., ecordes@temple.edu
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Amanda W.J. Demopoulos, Ph.D., ademopoulos@usgs.gov

Location: Exhibit Hall E

339 Malizzi, L. D.; Carrere, L.; Marshall, P. J.; Marshall, M.; Parsons, A.; Domangue, S.; Moss, M.: GULF SAVERS3 BAG: AN INNOVATIVE APPROACH FOR MARSH RESTORATION AT POPCORN BEACH, PASS A LOUTRE WMA, VENICE, LA

340 DeSanti, B.; MacDonald, I.; Chanton, J.: SPATIAL ECOLOGY OF LOPHELIA PERTUSA REEFS IN THE NE GULF OF MEXICO

341 Milton, N. B.; Schulz, C. J.; Childers, G. W.: EFFECTS OF LAND USE AND ENVIRONMENTAL FACTORS ON THE PRESENCE OF ESCHERICHIA COLI PATHOGENICITY GENES ACROSS MULTIPLE WATERSHEDS IN SOUTHEAST LOUISIANA

SS43 LONG ISLAND SOUND, AMERICA'S URBAN ESTUARY: SCIENCE, POLICY, AND PUBLIC OUTREACH

Chair(s): James Ammerman, james.ammerman@stonybrook.edu
Christopher Gobler, christopher.gobler@stonybrook.edu
Cornelia Schlenk, cornelia.schlenk@stonybrook.edu

Location: Exhibit Hall E

342 Cole, K. M.; Johnson, C.: THE POTENTIAL OF WATER COLUMN SUSPENSION IN MINIMIZING THE ACCUMULATION OF POTENTIALLY PATHOGENIC VIBRIOS IN THE EASTERN OYSTER CRASSOSTREA VIRGINICA

343 Gregorcyk, K. L.; Hill, J. C.: BENTHIC HABITAT MAPPING OF PORT JEFFERSON HARBOR IN LONG ISLAND SOUND, NY

SS44 FACTORS PROMOTING THE EXPANSION OF HARMFUL ALGAL BLOOMS IN MARINE AND FRESHWATER ECOSYSTEMS

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Christopher J. Gobler, christopher.gobler@stonybrook.edu

Location: Exhibit Hall E

344 Hickcox, R.; Harvey, E.; Menden-Deuer, S.: ENVIRONMENTAL PARAMETERS AFFECTING THE HALO-TOLERANCE OF THE TOXIC RAPHIDOPHYTE *HETEROSIGMA AKASHIWO*

345 Dapremont, A. M.; Goodson, A. M.; Brock, L. M.; Greenfield, D. I.: THE GEOGRAPHIC DISTRIBUTION OF PSEUDO-NITZSCHIA SPP. ACROSS THE SOUTHEASTERN U.S. COAST.

346 Viggiano, M. V.; Martínez, G.; Sotomayor, D.: USE OF ARTIFICIAL SUBSTRATA TO ESTIMATE PERIPHYTON GROWTH RATE IN TROPICAL STREAMS

347 VanLandeghem, M. M.; Patiño, R.: PREDICTING THE RISK OF TOXIC GOLDEN ALGA BLOOMS FROM CELL DENSITY AND ENVIRONMENTAL VARIABLES

348 Isles, P. D.; Giles, C. D.; Schroth, A. W.; Schuett, E.; Gearhart, T. A.; Druschel, G.: HIGH-TEMPORAL-RESOLUTION MONITORING OF HARMFUL ALGAL BLOOM DYNAMICS IN A HIGHLY EUTROPHIC SHALLOW BAY OF LAKE CHAMPLAIN

349 Lacey, C. N.; Schwartz, M. C.: SPATIAL AND TEMPORAL VARIABILITY OF*KARENIA BREVIS* WITHIN THE CHOCTAWHATCHEE BAY SYSTEM

350 Tedesco, L. P.; Graham, J. L.; Clercin, N.; Stouder, M.: CYANOBACTERIAL ASSEMBLAGES AND ENVIRONMENTAL VARIABLES ASSOCIATED WITH CO-OCCURRENCE OF CYANOTOXINS AND T&O

351 Davis, S. L.; Roelke, D. L.; Lundgren, V. M.; Grover, J. P.; Brooks, B. W.: SPREAD OF *P. PARVUM* BLOOMS IN THE SOUTHCENTRAL USA: POTENTIAL INTERPLAY BETWEEN SALNITY, GRAZING AND BLOOM INITIATION

352 Dixon, L. K.; Kirkpatrick, G. J.; Nissanka, A.: MULTIPLE KARENIA SPP. BLOOMS: PATTERNS OF PHYTOPLANKTON COMMUNITY WITH SELECTED NUTRIENTS (AND LACK THEREOF).

353 Harred, L. B.; Jackson, G. A.; Campbell, L.: INTERACTIONS BETWEEN*DINOPHYSIS OVUM* AND *MYRIONECTA RUBRA*: INVESTIGATING BLOOM VERSUS NON-BLOOM YEARS

354 Jayroe, D. S.; McLean, T. I.: PRELIMINARY STUDIES OF A KARENIA BREVIS ENDOSYMBIONT/ PARASITE

355 Hayes, N. M.; Rock, A. M.; Gonzalez, M. J.; Vanni, M. J.: COMPARING NUTRIENT LIMITATION OF CHLOROPHYTES AND CYANOBACTERIA UNDER CONTRASTING CONDITIONS OF NUTRIENT SUPPLY, NUTRIENT RATIOS, AND LIGHT

356 Lee, J.; Parker, A. E.; Wilkerson, F. P.: NITROGEN UPTAKE KINETICS OF MICROCYSTIS AERUGINOSA IN THE SAN FRANCISCO ESTUARY DELTA

357 Johnson, A. N.; Parker, A. E.; Wilkerson, F.: CLIMATE CHANGE EFFECTS ON CYANOBACTERIA BLOOMS IN ESTUARIES: RESULTS FROM THE SAN FRANCISCO BAY DELTA

358 Blanco, S.; Sreenivasan, A.: ISOLATION AND CULTURE OF TOXIC *MICROCYSTIS*FOR MOLECULAR CHARACTERIZATION OF TOXICITY IN PINTO LAKE (WATSONVILLE, CA)

SS46 GROUNDWATER AND COASTAL ECOLOGY: MICROBIAL ALTERATIONS AND ECOLOGICAL CONSEQUENCES OF GROUNDWATER DISCHARGE

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Location: Exhibit Hall E

359 Befus, K. M.; Cardenas, M. B.; Swanson, T. E.; Tait, D.; Santos, I. R.; Erler, D.: THERMAL DYNAMICS OF INTERTIDAL SEDIMENT AFFECTED BY DIFFUSE GROUNDWATER DISCHARGE

360 Smythe, W. F.; McAllister, S. M.; Kadake, M.; Lee, S. W.; Davis, R. E.; Moyer, C.; Tebo, B. M.: IRON & MANGANESE DEPOSITING COLD-SEEPS: A LOTIC TO MARINE ECOSYSTEM

SS51 IRON, CARBON CYCLING, AND ECOSYSTEM DYNAMICS IN THE SOUTHERN OCEAN

Chair(s): Stephane Blain, stephane.blain@obs-banyuls.fr
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Location: Exhibit Hall E

361 Jacquet, S. H.; Dehairs, F.; Cavagna, A. J.; Planchon, F.; Closset, I.; Cardinal, D.: SEASONAL VARIABILITY OF MESOPELAGIC ORGANIC CARBON REMINERALIZATION IN THE NATURALLY IRON-FERTILIZED KERGUELEN AREA (SOUTHERN OCEAN)

362 Mosby, A. F.; Smith, W. O.; Delizo, L. M.; Doan, N. H.: PHYTOPLANKTON GROWTH RATES IN THE ROSS SEA, ANTARCTICA

363 Kruse, S.; Pakhomov, E. A.; Hunt, B. P.: TROPHIC INTERACTIONS BETWEEN*THEMISTO GAUDICHAUDII* AND *SALPA THOMPSONI* IN THE ANTARCTIC POLAR FRONTAL ZONE

364 González, M. L.; Oriol, L.; Dehairs, F.; Cavagna, A. J.; Fernandez, C.: MOLECULAR NITROGEN FIXATION IN THE SOUTHERN OCEAN: CASE OF STUDY OF THE FE-FERTILIZED KERGUELEN REGION (KEOPSII CRUISE)

365 Ardelan, M. V.; Olsen, L. M.; Bizsel, N.; Bizsel, K. C.: CO-LIMITATION BY IRON AND LIGHT AT DEEP CHL A MAXIMUM IN THE SOUTHERN OCEAN

THURSDAY

[T] represents Tutorial presentations

366 Olsen, L. M.; Ardelan, M. V.; Holm-Hansen, O.; Bizsel, N.; Hewes, C.; Reiss, C.; Sakshaug, E.; Vadstein, O.: MICROBIAL COMMUNITIES IN THE SURFACE WATER MASSES SURROUNDING THE SOUTH SHETLAND ISLANDS, ANTARCTICA

367 Carlotti, F.; Nowaczyk , A.; Jouandet, M. P.; Lefèvre , D.; Harmelin, M.: MESOZOOPLANKTON STRUCTURE AND FUNCTIONING DURING THE ONSET OF THE KERGUELEN SPRING BLOOM: FIRST RESULTS OF THE KEOPS2 SURVEY.

SS52 POPULATIONS AND ACTIVITY OF AMMONIA-OXIDIZING AND DENITRIFYING ORGANISMS IN COASTAL WATERS

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Chris Francis, caf@stanford.edu
Bradley Tolar, btolar1@uga.edu
James Hollibaugh, aquadoc@uga.edu

Location: Exhibit Hall E

368 Smith, J. M.; Preston, C. M.; Roman, B.; Scholin, C. A.; Francis, C. A.: USING ADAPTIVE, AUTONOMOUS SAMPLING TO UNRAVEL THE RELATIONSHIP BETWEEN UPWELLING INTENSITY AND THE ABUNDANCE AND ACTIVITY OF AMMONIA-OXIDIZING ARCHAEA

369 Feinman, S. G.; Bowen, J. L.: THE ROLE OF URBANIZATION IN STRUCTURING AMMONIA OXIDIZING COMMUNITIES IN ESTUARINE SEDIMENTS AND WATER COLUMNS

370 Milinic, T.; Madison, M. J.; Ziebis, W.: A STUDY OF NITROUS OXIDE PRODUCING MICROBIAL COMMUNITIES IN COASTAL SEDIMENTS UNDER CHANGING ENVIRONMENTAL CONDITIONS

371 Damashek, J.; Francis, C. A.: NITROGEN CYCLING IN THE MUD: FUNCTIONAL GENE AND BIOGEOCHEMICAL ANALYSES OF NITRIFICATION IN A LARGE URBAN ESTUARY.

SS53 SENSOR NETWORKS IN AQUATIC SYSTEMS: RESEARCH AND EDUCATION

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Brian Bergamaschi, bbergama@usgs.gov
Janice McDonnell, mcdonnel@marine.rutgers.edu
Bob Chen, bob.chen@umb.edu

Location: Exhibit Hall E

372 Wright, V. M.; Conlon, L.; Gyory, J.; Idrisi, N.: OCEANOGRAPHIC AND METEOROLOGICAL OBSERVATIONS OF THE UNITED STATES VIRGIN ISLANDS: A CLIMATOLOGICAL HISTORY FROM WEATHER STATION AND DATA BUOY MEASUREMENTS

373 Ramos-Chavez, J. C.; Lougheed, V. L.; Tweedie, C. E.; Sowards, S.; Syaifudin, Y.: ADDRESSING TROPICAL MANGROVE FOREST CONSERVATION THROUGH COMMUNITY-BASED AND REMOTE MONITORING OF PHENOLOGY

374 Buskey, E. J.; Scheef, L. P.; Ward, G.: MONITORING CURRENT PATTERNS WITHIN THE MISSION-ARANSAS ESTUARY, TEXAS, WITH TILT CURRENT METERS

375 Martignette, A. J.; Milbrandt, E. C.; Siwicke, J. J.; Thompson, M. A.: EPISODIC EVENTS: DEMONSTRATING THE NEED FOR CONTINUOUS WATER-QUALITY SENSOR NETWORKS.

376 Siwicke, J. J.; Martignette, A. J.; Milbrandt, E. M.: PROMOTING A MULTI NODE SENSOR NETWORK TO SCIENTISTS, POLICY MAKERS, AND THE GENERAL PUBLIC IN A WAY TO BENEFIT ALL USERS.

377 Sharp, J. H.: CAPTURING VARIABLE WATERSHED AND COASTAL INFLUENCES ON DELAWARE BAY WITH FERRY MONITORING

378 Wetherill, B. R.; Wood, J. D.; Chen, R. F.; Peri, F.: REAL-TIME PREDICTIONS OF MICROBIAL PATHOGENS IN THE CHARLES RIVER, MA USING ON-LINE WEATHER STATIONS AND RIVER FLOW GAUGES

379 Bergamaschi, B. A.; Pellerin, B. A.; Fleck, J. A.; Downing, B. D.; Saraceno, J. F.; Sauer, M. J.; Kraus, T. E.; Fujii, R.: QUANTIFICATION OF NITRATE DYNAMICS IN TIDAL WETLAND SYSTEMS USING IN SITU CONTINUOUS MEASUREMENTS

380 Lerner, P.; Bishop, J. K.; Strabhar, W. D.; Bernard, A.; Moore, C.: TRANSMISSOMETER MEASUREMENT OF PARTICLE BEAM ATTENUATION COEFFICIENT

SS56 CARBON FLUXES IN AQUATIC ECOSYSTEMS AT CATCHMENT, REGIONAL AND CONTINENTAL SCALES

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Cory McDonald, cmcdonald@usgs.gov
Edward Stets, estets@usgs.gov

Location: Exhibit Hall E

381 Pedersen, T. M.; Markager, S.; Rasmussen, E. K.; Sand-Jensen, K.; Nielsen, S. L.: DYNAMICS OF DISSOLVED ORGANIC MATTER IN A SHALLOW DANISH ESTUARY

382 Duffy, A. E.; Schaeffer, B. A.; Conmy, R.; Aukamp, J.; Yates, D.: AN ANALYSIS OF MODIS ALGORITHMS FOR COLORED DISSOLVED ORGANIC MATTER AND DISSOLVED ORGANIC CARBON IN NORTHWEST FLORIDA ESTUARIES.

383 Williams, C. J.; Xenopoulos, M. A.: POINT-SCALE CARBON CYCLING AND WATERSHED-SCALE LANDSCAPE INFLUENCES ON STREAM DISSOLVED ORGANIC MATTER POOLS

384 Attermeyer, K.; Tittel, J.; Kamjunke, N.; Hilt, S.; Grossart, H. P.: CONTRASTING EFFECTS OF LIGHT EXPOSURE AND ALGAE LYSATES ON BACTERIAL GROWTH EFFICIENCIES WITH TERRESTRIAL SUBSIDIES

385 Lammers, J. M.; Schubert, C. J.; Middelburg, J. J.; Scharfbillig, A. A.; Reichart, G. J.: CARBON CYCLING IN LACUSTRINE FOOD WEBS, AN IN SITU PULSE-CHASE 13C-LABELING EXPERIMENT

386 Kokic, J.; Chmiel, H.; Wallin, M.; Denfeld, B.; Sobek, S.: RELEVANCE OF FLUVIAL CARBON FLUXES FOR THE CARBON BUDGET OF A SMALL BOREAL LAKE

387 Seekell, D. A.; Pace, M. L.; Tranvik, L. J.; Verpoorter, C.: LAKE SIZE-DISTRIBUTIONS: THEORETICAL AND EMPIRICAL RESULTS

388 Cardoso, S. J.; Enrich-Prast, A.; Pace, M. L.; Roland, F.: DOES HOTTER MEAN HIGHER ORGANIC CARBON MINERALIZATION IN TROPICAL SEDIMENTS?

389 Chmiel, H.; Kokic, J.; Denfeld, B.; Wallin, M.; Sobek, S.: THE RELEVANCE OF SEDIMENTS FOR THE CARBON BUDGET OF A SMALL HUMIC LAKE

390 Gray, S. E.; Adams, E. J.; Furgueson, C. E.: SPATIAL AND TEMPORAL VARIABILITY OF INORGANIC CARBON IN SUB-BASINS OF THE LOWER CONNECTICUT RIVER

391 DeGrandpre, M. D.; Beatty, C. M.; Peterson, B.; Krishfield, R. A.; Toole, J. M.: AN ARCTIC OCEAN OBSERVING NETWORK FOR SEA SURFACE PCO2 AND PH

392 Cato, H. S.; Chen, R. F.; Wang, X.; Gardner, G. B.; Peri, F.: SEASONAL CHANGES IN DISSOLVED ORGANIC MATTER OUTWELLING IN AN URBAN SALT MARSH SYSTEM

393 Eiermann, E. E.; Schulz, C. J.; Olivier, H.; Childers, G. W.: AVAILABILITY OF CARBON FOR RESPIRATION DIFFERS BY SEASON AND WATERSHED IN THE LAKE PONTCHARTRAIN BASIN AND IS DEPENDENT ON TOC, NOT MICROBIAL COMPOSITION

SS57 TRACE ELEMENTS AND ISOTOPES IN THE OCEAN AND ATMOSPHERE: THE GEOTRACES PROGRAM

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Peter Morton, pmorton@fsu.edu

Location: Exhibit Hall E

394 Martell, L.; Love, B.: ACIDIFIED SEAWATER AT THE SHANNON POINT MARINE CENTER, ANACORTES, WA

395 Swarr, G.; Kading, T.; Lamborg, C.; Hammerschmidt, C.: PROFILES OF CYSTEINE AND GLUTATHIONE FROM THE U.S. NORTH ATLANTIC GEOTRACES ZONAL TRANSECT

396 Amrani, A.; Said-Ahamed, W.; Shaked, Y.; Kiene, R. P.: THE SULFUR ISOTOPE COMPOSITION OF DMS AND DMSP IN MARINE WATER

397 Labatut, M.; Radic, A.; Lacan, F.; Poitrasson, F.; MURRAY, J.: STORY OF FE IN THE WESTERN EQUATORIAL PACIFIC, INSIGHTS FROM ITS ISOTOPIC COMPOSITION IN THE DISSOLVED AND PARTICULATE FRACTIONS OF SEAWATER AND ITS SOURCES

398 Yamaguchi, H.; Katahira, R.; Ichimi, K.; Tada, K.: OPTICALLY ACTIVE COMPONENTS AND LIGHT ATTENUATION IN AN OFFSHORE STATION OF HARIMA SOUND, EASTERN SETO INLAND SEA, JAPAN

399 Vokhshoori, N. L.; McCarthy, M. D.: ENSO-DRIVEN TEMPORAL VARIATION IN D13C AND D15N BASELINES OF THE CALIFORNIA UPWELLING SYSTEM RECORDED BY CALIFORNIA MUSSELS (MYTILUS CALIFORNIANUS)

400 Gao, S.; Völker, C.; Wolf-Gladrow, D. A.: FRACTIONATION DURING BIOGENIC SILICON DISSOLUTION: CONSEQUENCES FOR GLOBAL MARINE SILICON ISOTOPES DISTRIBUTIONS--A MODELING STUDY

401 Woodward, E. M.; Bouman, H.; Sabadel, A.; Reynolds, S.; Browning, T.: NUTRIENT DYNAMICS AND BIOLOGICAL IMPLICATIONS DURING THE UK GEOTRACES CRUISE IN THE ATLANTIC OCEAN AT 40 DEGREES SOUTH

402 Harper, A. R.; Chanton, J.; Landing, W.: STABLE ISOTOPE δ34S, δ13C, AND δ15N TRACING OF METHYLMERCURY PRODUCTION AND BIOACCUMULATION IN FLORIDA BIG BEND SEA-GRASS BEDS

SS58 OCEAN PROVINCES, FOOD WEB STRUCTURE AND PARTICLE FLUX

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Adrian Burd, adrianb@uga.edu
Deborah Steinberg, debbies@vims.edu

Location: Exhibit Hall E

405 De Martini, F.; Neuer, S.; Hamill, D.; Lomas, M. W.: GROWTH AND GRAZING RATES OF NANO AND PICO-PHYTOPLANKTON IN THE SARGASSO SEA USING QPCR IN COMBINATION WITH DILUTION EXPERIMENTS

406 Frank, A. H.; Reinthaler, T. H.; Garcia, A. J.; Herndl, G. J.: CHANGES IN PROKARYOTIC COMMUNITY COMPOSITION IN BIOGEOGRAPHIC PROVINCES OF THE MESO-& BATHYPELAGIC NORTH ATLANTIC

407 Macdonald, I.; Howarth, E.; Lazaravich , P.: DEEP-C PROJECT PRELIMINARY RESULTS OF PHOTOGRAPHIC SURVEY OF DESOTO CANYON

408 Chakraborty, S.; Lohrenz, S. E.; Shiller, A. M.; Lojek, A.: PHYTOPLANKTON COMMUNITY DYNAMICS IN THE DIFFERENT BIO-OPTICAL PROVINCES IN THE NORTHERN GULF OF MEXICO.

409 Chandler, C. L.; Allison, M. D.; Groman, R. C.; Gegg, S. R.; Wiebe, P. H.; Glover, D. M.: BCO-DMO: AN OCEAN BIOGEOCHEMISTRY DATA RESOURCE

410 Loick-Wilde, N.; Gehre, M.; Miltner, A.; Conroy, B. O.; Steinberg, D. K.; Montoya, J. P.: DIURNAL VARIATION IN AMINO ACID CONCENTRATIONS AND NITROGEN STABLE ISOTOPES REVEAL TROPHIC STRUCTURE AND NITROGEN DYNAMICS IN EPI- AND MESOPELAGIC ZOOPLANKTON

411 Brown, C. A.; Huot, Y.; Cullen, J. J.; Claustre, H.: TOWARDS REMOTE SENSING OF PHYTOPLANKTON TYPES IN THE BERING SEA

SS59 ATMOSPHERIC FORCING OF MARINE MICROBIAL DIVERSITY AND ACTIVITY

Chair(s): Xavier Mari, xavier.mari@ird.fr
Markus Weinbauer, wein@obs-vlfr.fr

Location: Exhibit Hall E

412 Naoe, R.; Yamada, M.; Tamura, K.; Takeda, S.: THE SIGNIFICANCE OF ATMOSPHERIC NITROGEN INPUTS TO THE EASTERN EAST CHINA SEA SURFACE WATERS

413 Chien, C.; Paytan, A.: ATMOSPHERIC DRY DEPOSITION A SOURCE OF NUTRIENTS AND TRACE METALS TO LAKE TAHOE

414 Wang, X.; Gonzalez, K.; Moberly, J.; Sarno, A.; Young, G.; Hadaegh, A.; Zhang, X.; Read, B.: IDENTIFYING AND VALIDATING NOVEL SELENOPROTEINS IN THE MARINE COCOLITHOPHORE EMILIANIA HUXLEYI

SS61 ECOSYSTEM ENGINEERING AS COASTAL PROTECTION - LESSONS FROM THEORY AND PRACTICE

Chair(s): Jasper Dijkstra, jasper.dijkstra@deltares.nl
Denise Reed, djreed@uno.edu
Luca A. van Duren, luca.vanduren@deltares.nl

Location: Exhibit Hall E

415 Li, J.; Li, J.; Terlizzi, D. E.: A SIMPLE CULTIVATION METHOD OF CHESAPEAKE BAY ENTEROMORPHA SPP. FOR ALGAL SEED STOCK AND MASSIVE AQUACULTURE

SS62 CO2-INDUCED ENVIRONMENTAL CHANGE AND THE OCCURRENCE AND SEVERITY OF HARMFUL ALGAL BLOOMS

Chair(s): Charles Trick, cyano@uwo.ca
Mark Wells, mlwells@maine.edu

Location: Exhibit Hall E

416 Henry, J. E.; Tarrant, A. M.; dePutron, S. J.; McCorkle, D. C.; Church, C.; Cohen, A. L.: MATERNAL EFFECTS ON SKELETAL SIZE AND SENSITIVITY TO OCEAN ACIDIFICATION IN JUVENILE CORALS

[T] represents Tutorial presentations

417 Leinweber, A.; Shipe, R. F.; Gruber, N.: DOES OCEAN ACIDIFICATION PLAY A ROLE IN SUMMER PHYTOPLANKTON COMMUNITY COMPOSITION IN SANTA MONICA BAY, CA ?

SS63 LONG-TERM PERSPECTIVES ON LAKE RESEARCH AND MANAGEMENT

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Paul Hanson, pchanson@wisc.edu
Emily Stanley, ehstanley@wisc.edu

Location: Exhibit Hall E

418 Martinez, G.: ELEMENTAL ANALYSIS OF WATER SAMPLES FROM SIX RESERVOIRS OF PUERTO RICO

419 Halfman, J. D.: CENTURY- AND DECADE-SCALE MAJOR ION AND WATER CLARITY FLUCTUATIONS IN SENECA LAKE, THE LARGEST FINGER LAKE OF CENTRAL NEW YORK, USA.

420 Julich, H. M.; Downing, J. A.: USE OF PALYNOLOGICAL TECHNIQUES TO RECONSTRUCT MACROPHYTE LOSS AND MULTIPLE STABLE STATES IN A EUTROPHIC LAKE

421 Cáceres-Charneco, R. I.; Ortiz-Zayas, J. R.: LIMNOLOGICAL ASPECTS OF THE TEMPORARY PONDS USED FOR REPRODUCTION BY THE PUERTO RICAN CRESTED TOAD

SS64 QUASI-LAGRANGIAN APPROACHES IN PELAGIC ECOLOGY

Chair(s): Mark D. Ohman, mohman@ucsd.edu
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Location: Exhibit Hall E

479 Nickels, C. F.; Ohman, M. D.: CHANGES IN COPEPOD EGG PRODUCTION RATES ACROSS MICROPLANKTON CONCENTRATIONS AND SPATIAL GRADIENTS IN THE CALIFORNIA CURRENT ECOSYSTEM

SS71 WATERSHEDS OF THE CARIBBEAN: GLOBAL CHANGE, SCIENCE, POLICY AND SECURITY

Chair(s): Robyn E. Hannigan, robyn.hannigan@umb.edu
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Alex Eisen-Cuadra, alexeisencuadra@gmail.com
Helenmary Hotz, Helenmary.Hotz@umb.edu
Alan D. Christian, alan.christian@umb.edu

Location: Exhibit Hall E

422 Flanders, K. L.; Eisen-Cuadra, A. M.; Christian, A. D.; Hannigan, R. E.: THE PALEOLIMNOLOGICAL RECONSTRUCTION OF ETANG SAUMATRE: A FATTY ACID BIOMARKER ANALYSIS OF HAITI SEDIMENTS

423 Ortiz-Hernandez, G. L.; Garcia-Romero, A.: COMPARISON OF THE OVERALL WIDTH AND WATER QUALITY OF THE RIPARIAN ZONE HABITAT BETWEEN SITES

424 McGill, C. J.; Barron , M. G.; Randall-Speaks, C.: SETTLEMENT SUCCESS OF FAVIA FRAGUM PLANULAE EXPOSED TO DIFFERENT SEDIMENT SOURCES FROM PUERTO RICO

425 Demopoulos, A. J.; Cormier, N.: USE OF STABLE ISOTOPES TO DISCERN TROPHIC LINKAGES AND HABITAT CONNECTIVITY AMONG BENTHIC INVERTEBRATE COMMUNITIES OF THE VIRGIN ISLANDS NATIONAL PARK

SS72 STUDIES F ZOOPLANKTON AND OTHER PARTICLES USING OPTICAL INSTRUMENTS

Chair(s): David M. Checkley, Jr., dcheckley@ucsd.edu
George A. Jackson, gjackson@tamu.edu

Location: Exhibit Hall E

426 Garrison, H. S.; Tang, K. W.: A SIMPLE STAINING PROTOCOL TO ASSESS MORTALITY IN MARINE PHYTOPLANKTON

427 Sauer, M. J.; Bergamaschi, B.; Downing, B.; O'Donnell, K.; von Dessonneck, T.; Saraceno, J.: INFLUENCE OF PARTICLE PROPERTIES ON HABITAT QUALITY IN THE SAN FRANCISCO ESTUARY (SFE)

SS76 MICROBIAL INTERACTIONS: FROM SPECIES SURVIVAL TO BIOGEOCHEMICAL CYCLES

Chair(s): Shady A. Amin, shadyam@uw.edu
Laura R. Hmelo, lhmelo@uw.edu

Location: Exhibit Hall E

428 Shibazaki, A.; Enomoto, N.; Kurihara, M.; Hashimoto, S.: VOLATILE ORGANIC COMPOUND PRODUCTION FROM CULTURES OF THALASSIOSIRA PSEUDONANA

429 Ichikawa, K.; Yoneyama, Y.; Kurihara, M.; Tamegai, H.; Hashimoto, S.: PRODUCTION OF VOLATILE ORGANIC COMPOUNDS IN THE CULTURE OF MARINE BACTERIA

430 Abe, M.; Kurihara, M.; Hashimoto, S.: SURVEY OF VOLATILE ORGANIC COMPOUNDS IN CULTURES OF *CHLAMYDOMONAS* SP.

431 Nishi, H.; Kurihara, M.; Hashimoto, S.: PRODUCTION OF METHYL CHLORIDE AND METHYL BROMIDE BY *CHAETOCEROS* SP.

432 Pinto, F.; Casper, P.: VIRIOBENTHOS IN AQUATIC SEDIMENTS: VARIABILITY IN ABUNDANCE AND PRODUCTION AND IMPACT ON C-CYCLE.

433 Jones, A. K.; Spinette, R.; Brown, S. M.; Jenkins, B. D.: ISOLATING ENVIRONMENTAL ANAEROBES THAT DRIVE NITROGEN FIXATION IN ESTUARINE SEDIMENTS

434 Naruse, H.; Nagaosa, K.; Aoki, K.; Yoshikawa, H.; Kato, K.: VIRAL AND PROTOZOAN CONTROL OF DEEP GROUNDWATER PROKARYOTES

435 Shepard, A. K.; McInnes, A.; Jiang, Y.; Quigg, A.: UNDERSTANDING INTERACTIONS BETWEEN COEXISTING MICROBIAL COMMUNITIES AND THEIR RESPONSES TO NUTRIENT ENRICHMENT IN GALVESTON BAY, TEXAS

436 Madinger, H. L.; Bernot, M. J.; Wilson, K. P.; Goldstein, J. A.: BIOGEOCHEMISTRY OF MICROBIAL BIOFILMS IN A DESERT LIMNOCRENE, DEVILS HOLE, NV

437 Arfken, A.; Song, B.; Tobias, C.: SALINITY EFFECTS ON BACTERIAL COMMUNITY COMPOSITION IN A TIDAL FRESHWATER ECOSYSTEM

438 Millar, J. J.; Payne, J. T.; Ochs, C. A.; Jackson, C. R.: MICROBIAL EXTRACELLULAR ENZYME ACTIVITY IN MAJOR TRIBUTARIES OF THE LOWER MISSISSIPPI RIVER

439 Bae, H. S.; Ogram, A. V.: ANAEROBIC NITROGEN FIXATION AS A CONTROLLING FACTOR OF METHANOGENIC ASSEMBLAGE COMPOSITION IN THE FLORIDA EVERGLADES

SS77 TRANSMISSION OF TERRESTRIAL SIGNALS TO THE COASTAL OCEAN BY (LARGE) RIVERS

Chair(s): Robert Max Holmes, rmholmes@whrc.org
Bernhard Peucker-Ehrenbrink, behrenbrink@whoi.edu

Location: Exhibit Hall E

440 Mayfield, K. K.; Peucker-Ehrenbrink, B.; Calabro, R.; Cole Ekberg, M.; Prescott, D.: THE BIOGEOCHEMISTRY OF SMALL PASSIVE MARGIN RIVERS ALONG THE NORTHERN U.S. EAST COAST

441 Ficek, D.; Meler, J.; Cieslucinski, M.; Pawlik M.; Zapadka, T.; Majchrowski R.: SPECTRAL ABSORPTION PROPERTIES OF DISSOLVED AND PARTICULATE MATTER IN VARIOUS NATURAL WATER IN POLAND

SS78 ASSESSING VULNERABILITY OF U.S. LAKES AND RESERVOIRS TO CLIMATE CHANGE

Chair(s): S. Geoffrey Schladow, gschladow@ucdavis.edu
Christopher Clark, clark.christopher@epa.gov
Craig Williamson, craig.williamson@muohio.edu
Daniel Nover, dmnover@gmail.com
Kevin Rose, RoseKC@si.edu

Location: Exhibit Hall E

442 Jackson, A. D.; Winston, B. A.; Scott, J. T.: THE EFFECT OF INCREASED ATMOSPHERIC CO2 ON PHYTOPLANKTON ACROSS AN EXPERIMENTAL PHOSPHORUS GRADIENT

443 Bélanger, C.; Huard, D.; Jeong, D. I.; Mingelbier, M.; Auclair, J. C.; Laurion, I.; Legault, M.; St-Hilaire, A.; Gratton, Y.: AN ESTIMATION OF FUTURE TEMPERATURES IN LAKES OF NORTHERN QUEBEC

444 Kim, Y.; Roulet, N. T.; Tremblay , A.: MODELLING OF CARBON DIOXIDE FLUX FROM BOREAL AND TEMPERATE LAKES

445 Tolotti, M.; Thies, H.; Nickus, U.; Psenner, R.: TEMPERATURE MODULATED EFFECTS OF NUTRIENTS ON PHYTOPLANKTON CHANGES IN A MOUNTAIN LAKE

446 Brentrup, J. A.; Williamson, C. E.; Fischer, J. M.; Olson, M. H.; Rose, K. C.: RAPID INCREASES IN TRANSPARENCY IN AN ALPINE LAKE FOLLOWING ICE-OUT

SS79 PHYTOPLANKTON INTERACTIONS IN AQUATIC ECOSYSTEMS

Chair(s): Suzanne Strom, Suzanne.Strom@wwu.edu
Brian Palenik, bpalenik@ucsd.edu

Location: Exhibit Hall E

447 Thibodeau, P. S.; Roesler, C. S.; Goes, J. I.; Gomes, H. D.; Matondkar, P.: WHERE IS NOCTILUCA IN THE ARABIAN SEA: AN EVALUATION OF IN SITU MULTISPECTRAL FLUORESCENT SIGNATURES

448 Lycett, K. A.; Bahkt, H. B.; Chen, F.; Pitula, J. S.: PHYLOGENETIC ANALYSIS OF HEMATODINIUM, AN EARLY BRANCHING MEMBER OF THE PHYLUM DINOFLAGELLATA

449 Esparra Escalera, H. J.; Rodríguez Santiago, M. A.; Sánchez Santana, B. I.; Santos Flores, C. J.: NET-PHYTOPLANKTON SURVEY IN GUAJATACA RESERVOIR, A MESOTROPHIC LAKE IN PUERTO RICO

450 Acevedo-Correa, S. M.; Rivera-García, L. G.; Pierson, J.; Gómez-Garzon, D.: PUERTO RICO'S BIOLUMINESCENT LAGOONS: ECOLOGICAL ROLE OF SECONDARY PRODUCTION

451 Bargu, S.; Beyhan, S.; Fong, J.; Steele, B.; Yildiz, F.: ECOLOGICAL RELATIONSHIPS BETWEEN FREE-LIVING STATES OF PATHOGENIC VIBRIOS IN THE WATER COLUMN AND ASSOCIATED ALGAL COMMUNITY

452 Diaz-Negron, E. M.; Aguilar-Diaz, C.: SIZE SELECTIVE ANALYSIS OF GROWTH LIMITATION OF PHYTOPLANKTON IN LAKE MICHIGAN

453 Román Morales, C. D.; Tirado Polo, F.; Raymond Biaggi, C. M.; Sánchez Santana, B. I.; Santos Flores, C. J.: NET-PHYTOPLANKTON SURVEY IN PATILLAS RESERVOIR, A HYPEREUTROPHIC LAKE IN PUERTO RICO

454 Roldan Irizarry, D.; Algarin Millan, A. P.; Santos Flores, C. J.; Sanchez Santana, B. I.: NET-PHYTOPLANKTON SURVEY AT THE CERRILLOS RESERVOIR IN PUERTO RICO

455 Bandyopadhyay , D.; Biswas, H.: AN EXPERIMENTAL APPROACH TO UNDERSTAND WHETHER IN THE MARINE ENVIRONMENT CHLA CAN BE USED AS A RELIABLE PHYTOPLANKTON BIOMASS INDICATOR?

456 Marra, J. F.; Lance, V. P.; Vaillancourt, R. D.; Hargreaves, B. R.: RESOLVING THE DEPTH OF THE OCEAN'S EUPHOTIC ZONE

457 Majchrowski, R.; Ston-Egiert, J.; Ficek, D.: PRELIMINARY COMPARISON OF THE INFLUENCE OF PHOTO- AND CHROMATIC ACCLIMATION ON PHYTOPLANKTON COMMUNITIES IN THE BALTIC AND IN THE OCEAN WATERS

458 Kurtz, J. C.; Murrell, M. C.; Lehrter, J. C.; Schaeffer, B. A.: PHYTOPLANKTON COMMUNITY STRUCTURE, BIOMASS AND DIVERSITY ON THE LOUISIANA CONTINENTAL SHELF

459 Taub, F. B.; McLaskey, A. K.: CARBON LIMITATION EFFECTS ON OXYGEN DYNAMICS IN ALGAL-GRAZER FOOD CHAINS IN CLOSED ECOLOGICAL SYSTEMS

460 Muhl, R. M.; Roelke, D. L.; Grover, J. P.: INTERFERENCE COMPETITION IN PHYTOPLANKTON: AN ASSESSMENT OF ALLELOPATHY EFFECTS ON NEUTRALITY, LUMPY COEXISTENCE AND THE "ROCK-PAPER-SCISSORS" GAME

461 McKie-Krisberg, Z. M.; Sanders, R. W.: MIXOTROPHY IN THE ARCTIC PICOEUKARYOTE, *MICROMONAS*

462 Johnson, T. L.; Palenik, B.; Paz-Yepes, J.; Brahamsha, B.: EXPOSURE TO PHYSICAL STRESS AND HETEROTROPHIC BACTERIA INDUCES A VANADIUM-DEPENDENT BROMOPEROXIDASE IN MARINE *SYNECHOCOCCUS*

463 Thamatrakoln, K.; Bailleul, B.; Laber, C.; Bidle, K. D.: SHEDDING LIGHT ON VIRAL INFECTION OF DIATOMS AND COCCOLITHOPHORES: ASSESSING THE INTERPLAY BETWEEN PHOTOSYNTHESIS AND HOST-VIRUS INTERACTIONS

464 Kent, A. D.; Paver, S. F.; Youngblut, N. D.; Whitaker, R. J.: PHYTOPLANKTON SHAPE THE COMPOSITION OF *POLYNUCLEOBACTER*

THURSDAY

(T) represents Tutorial presentations

SS80 ILLUMINATING THE BIOGEOCHEMICAL ROLES OF MICROBES WITH COMBINED SECTIONAL GENOMIC, BIOMOLECULAR, AND GEOCHEMICAL DATASETS

Chair(s): Robert M. Morris, morrisrm@uw.edu
Benjamin Van Mooy, bvanmooy@whoi.edu

Location: Exhibit Hall E

465 Eggleston, E. M.; Lee, D. Y.; Doherty, M.; Crump, B. C.; Cornwell, J. C.; Owens, M.; Barbosa, J. G.; Hewson, I.: METATRANSCRIPTOMIC INSIGHTS INTO MICROBIAL COMMUNITY RESPIRATION IN SEASONALLY ANOXIC CHESAPEAKE BAY

466 Alstad, T.; Stabb, E.; Mann, E.: GENE EXPRESSION IN IRON LIMITED *VIBRIO FISCHERI*: INVESTIGATING THE RYHB REGULON

467 Whitney, L. P.; Chappell, P. D.; Jenkins, B. D.: USING MOLECULAR TOOLS TO ASSESS THE RESPONSE TO FE AVAILABITY IN THE DIATOM THALASSIOSIRA OCEANICA FROM THE NORTHEAST PACIFIC

468 Chiang, T.; Parker, M.; Koester, J.; Berthiaume, C.; Iverson, V.; Ruzzo, W.; Armbrust, E.: WHOLE GENOME STATISTICAL ANALYSIS OF SEVEN STRAINS OF*THALASSIOSIRA PSEUDONANA* REVEAL HIGHLY STRUCTURED NATURAL GENETIC VARIATIONS

SS82 PROGRESS IN UNDERSTANDING NUTRIENT BUDGETS IN MARGINAL BASINS AND COASTAL SYSTEMS SUBJECT TO EUTROPHICATION AND CLIMATE WARMING

Chair(s): Volker Bruchert, volker.bruchert@geo.su.se
Barbara Deutsch, barbara.deutsch@itm.su.se

Location: Exhibit Hall E

469 Price, L. M.; Fisher, K.; Wetz, M. S.: CAUSES AND SYMPTOMS OF EUTROPHICATION IN AN URBANIZING ESTUARY (OSO BAY, CORPUS CHRISTI, TEXAS)

470 Villazan, B.; Pedersen, M. F.; Brun, F. G.; Vergara, J. J.: ADVERSE EFFECTS OF AMMONIUM ENRICHMENT AND LIGHT REDUCTION IN *EMMARINA* (EELGRASS)

471 Rogers, J.; Russell, M.: TIDAL MIXING BOX SUBMODEL FOR TAMPA BAY: CALIBRATION OF TIDAL EXCHANGE FLOWS WITH THE PARAMETER ESTIMATION TOOL (PEST)

472 Leichter, J. J.: LONGTERM AND ALONGSHORE COHERENCE OF INTERNAL WAVE ACTIVITY ALONG THE FLORIDA KEYS REEF TRACT

473 Bonaglia, S.; Nascimento, F.; Bartoli, M.; Klawonn, I.; Brüchert, V.: EFFECT OF MEIOFAUNA ON BENTHIC ELEMENT CYCLING IN A BALTIC SEA COASTAL AREA

474 Chen, N.; Chigbu, P.; Ishaque, A. B.; May, E. B.: DISSOLVED BARIUM IN MARYLAND COASTAL BAYS AND ITS USE AS INDICATOR OF GROUNDWATER INPUT

475 Serramalera, L.; Wesselmann, M.; Von Dassow, P.; Fernandez, M.; Beltran, J.; Flores, V.: FIRST DESCRIPTION OF A NOXIOUS MACROALGAL BLOOM OF THE CHLOROPHYTA *ULVA SPP.* IN CENTRAL CHILE: EVIDENCE OF BOTTOM-UP AND TOP-DOWN CONTROL

476 Ribeiro, R. B.; Gianesella, S. M.; Harari, J.: NUMERICAL MODELING OF THE INFLUENCE OF NUTRIENTS LOAD ON SANTOS ESTUARY WATER QUALITY

SS85 ROBERT WHARTON TRIBUTE SESSION

Chair(s): Diane McKnight, Diane.Mcknight@colorado.edu
Peter Doran, pdoran@uic.edu

Location: Exhibit Hall E

477 Edwardson, C. F.; Hollibaugh, J. T.: PHYLOGENETIC AND METATRANSCRIPTOMIC INSIGHTS INTO THE MICROBIAL DIVERSITY OF MONO LAKE, CA

478 Khan, A. L.; Ding, Y.; Jaffe, R.; McKnight, D. M.: USING BLACK CARBON AS A TRACER OF HUMAN IMPACT IN THE MCMURDO DRY VALLEYS, ANTARCTICA

(*) represents Invited presentations

FRIDAY 22, FEBRUARY - ORALS

GS05 FOOD WEB INTERACTIONS AND TROPHIC LINKAGES

Chair(s): Jill Olin, jolin@lsu.edu
Mike Vanni, vannimj@muohio.edu
Maria Gonzalez, gonzalmj@muohio.edu
Just Cebrian, jcebrian@disl.org

Location: Room 354

10:00 Craig, N.; Solomon, C. T.; Sumner, A.; Jones, S. E.; Weidel, B. C.: DISSOLVED ORGANIC CARBON (DOC) DECREASES BENTHIC INVERTEBRATE PRODUCTION IN A CROSS-LAKE SURVEY.

10:15 Fugère, V.; Chapman, L. J.: EFFECTS OF DEFORESTATION ON STREAM FOOD WEB STRUCTURE AND ECOSYSTEM FUNCTIONING IN AND AROUND KIBALE NATIONAL PARK, UGANDA.

10:30 Moderan, J. M.; Kimmerer, W. J.; Stewart, R. A.: STABLE ISOTOPE ANALYSIS OF HISTORICAL ZOOPLANKTON SAMPLES TO DOCUMENT FOOD WEB AND BIOGEOCHEMICAL CHANGES IN THE URBANIZED SAN FRANCISCO ESTUARY

10:45 Nanayakkara, L.; Cooper, R.; Starks, E.; Wissel, B.: BENTHIC SUBSIDIES IN LAKES: NEW INSIGHTS FROM HARDWATER LAKES

11:00 Solomon, C. T.; Jones, S. E.; Weidel, B. C.; Craig, N.; Kelly, P.; Zwart, J.; Coloso, J. J.: TERRESTRIAL DOC EFFECTS ON AQUATIC FOOD WEBS - SUBSIDY OR SUBTRACTION? EVIDENCE FROM WHOLE-LAKE EXPERIMENTS, SURVEYS, AND MODELS

11:15 Vanni, M. J.; Boros, G.; McIntyre, P. B.: WHEN ARE FISH AND OTHER ANIMALS SOURCES VERSUS SINKS OF NUTRIENTS IN ECOSYSTEMS?

11:30 Broek, T. A.; Kamath, T. P.; McCarthy, M. D.: NEW METHOD FOR DETERMINING NITROGEN ISOTOPIC VALUES OF GLUTAMIC ACID AND PHENYLALANINE FOR PRECISE ESTIMATION OF TROPHIC POSITION IN FOOD WEB STUDIES

11:45 Bucolo, P.; Dunton, K. H.: DOES THE MICROPHYTOBENTHOS OF HANNA SHOAL (CHUKCHI SEA, AK) EXHIBIT NET *IN SITU* PHOTOSYNTHETIC PRODUCTION?

13:30 Agersted, M. D.; Nielsen, T. G.: KRILL - NOT A FUSSY EATER

13:45 Frischer, M. E.; Costa Leal, M.; Thompson, M. E.; Calado, R.; Nejstgaard, J. C.: MOLECULAR ASSESSMENT OF HETEROTROPHY AND PREY DIGESTION IN SYMBIOTIC CORALS

14:00 Johnson, A. D.; Kimmerer, W. J.; Bennett, W. A.: DIETARY SHIFTS IN AN ENDANGERED ESTUARINE FISH DURING THE SEASONAL FIRST FLUSH OF TURBIDITY

14:15 Vogt, R. A.; Kimmerer, W. J.; Ignoffo, T. R.; Herndon, J.; Stillman, J.: USING EPIFLUORESCENCE MICROSCOPY AND A MICROPLATE READER TO INVESTIGATE FEEDING BY COPEPOD NAUPLII, THE NEGLECTED LIFE HISTORY STAGE

14:30 Cleary, A. C.; Durbin, E. G.; Rynearson, T. A.: FEEDING BY THREE PSEUDOCALANUS CONGENERS IN THE BERING SEA: NEW TROPHIC LINKAGES AND A POTENTIAL MECHANISM FOR NICHE PARTITIONING

14:45 Kline, T. C.: HIGH-LATITUDE PELAGIC FOOD WEB SHIFTS INFERRED FROM STABLE ISOTOPE ANALYSIS AT SEASONAL, INTER-ANNUAL, AND INTER-DECADAL TIME SCALES

15:00 Stockwell, J. D.; Yule, D. L.; Hrabik, T. R.; Sierszen, M. E.; Isaac, E. J.: NATIVE FISH COMMUNITIES AND HABITAT COUPLING: DELIVERY OF A NEARSHORE ENERGY SUBSIDY BY AN OFFSHORE PLANKTIVORE

15:15 Collier, J. L.; Fitzgerald, S. P.; Hice, L. A.; Frisk, M. G.; McElroy, A. E.: BLUE CRAB PREDATION ON JUVENILE WINTER FLOUNDER DEMONSTRATED BY A NEW PCR METHOD

GS09 COMMUNITY ECOLOGY

Chair(s): Markus Weitere, markus.weitere@ufz.de
Dina Leech, dinaleech@depauw.edu

Location: Room 355

10:00 Galindo-Estronza, A. M.; Alfaro, M.; Schizas, N. V.: DIVERSITY OF BENTHIC OSTRACODS FROM CARIBBEAN MESOPHOTIC REEFS

10:15 Gamble, R. B.; Cebrian, J.; Heck, K. L.: RELATIONSHIP BETWEEN SEAGRASS COVER AND MACROINVERTEBRATE AND FINFISH POPULATIONS IN SHALLOW COASTAL EMBAYMENTS

10:30 Rodriguez , G. E.: A MULTI-FACETED INVESTIGATION OF FOLIAGE TURNOVER IN GIANT KELP

10:45 Gallo, N. D.; Levin, L. A.; Cameron, J. F.; Bartlett, D. H.: SUBMERSIBLE EXPLORATION OF SW PACIFIC TRENCHES: BIODIVERSITY TRENDS FROM 1000 TO 10,900 M

11:00 Johnston, M. K.; Leibold, M. A.: META-ECOSYSTEMS: WATERFOWL MEDIATED MOVEMENT OF MATERIALS AND ORGANISMS IN PRAIRIE POTHOLE WETLANDS

11:15 Livermore, J. A.; Emrich, S. J.; Tan, J. F.; Jones, S. E.: FRESHWATER BACTERIAL LIFESTYLES INFERRED FROM COMPARATIVE GENOMICS

11:30 Leech, D. M.; May, M.; Metternich, A.; Rominger, R.; Pistoia, A.; Fortino, K.; Bedard, L.: TEMPORAL DIVERISTY DYNAMICS IN FRESHWATER BACTERIA

11:45 Weitere, M.; Wey, J. K.; Marcus, H.; Norf, H.: EFFECTS OF WARMING ON COMMUNITIES: LESSONS FROM EXPERIMENTS WITH BIOFILM-DWELLING CILIATES

13:30 Leon Soon, S.; Thomas, F.; Ward, B. B.: INVESTIGATING COMMUNITY RESPONSES TO ENVIRONMENTAL FLUCTUATIONS USING MICROARRAY ANALYSIS

13:45 Voss, K. A.; King, R. S.; Bernhardt, E. S.: BAYESIAN HIERARCHICAL MODELING: A FLEXIBLE TEMPLATE FOR SETTING CONDUCTIVITY BENCHMARKS FOR AQUATIC LIFE IN APPALACHIAN STREAMS

14:00 Larsen, S.; Ormerod S.: ANTHROPOGENIC MODIFICATION DISRUPTS SPECIES CO-OCCURRENCE PATTERNS IN STREAM INVERTEBRATES

14:15 Michelena, T. M.; Nierzwicki-Bauer, S. A.; Boylen, C. W.: WATER QUALITY IMPACTS OF HURRICANE IRENE ON ECOSYSTEMS AT THE CONFLUENCE OF TRIBUTARIES TO THE HUDSON RIVER ESTUARY

14:30 Zamor, R. M.; Hambright, K. D.: EFFECTS OF PROPAGULE PRESSURE AND INVASION RESISTANCE ON ESTABLISHMENT SUCCESS OF THE TOXIC GOLDEN ALGA,*PRYMNESIUM PARVUM*.

14:45 Norton Henry, E. N.; Cheruvelil, K. S.: LAKE SHORELINE DEVELOPMENT AFFECTS TURTLE IN-LAKE HABITAT USE

(T) represents Tutorial presentations

15:00 LaBuhn, S. L.; Maas, M. G.; Klump, J. V.; Kaster, J. L.: HYDROCHEMICAL PARAMETERS OF LAGUNA BACALAR, QUINTANA ROO, MEXICO

SS24 MONITORING AND FORECASTING OF SURFACE CURRENT-AFFECTED PHENOMENA IN COASTAL REGIONS

Chair(s): Jeffrey Paduan , paduan@nps.edu
Alexei Sentchev, Alexei.Sentchev@univ-littoral.fr
Yves Barbin, yves.barbin@univ-tln.fr
Max Yaremchuk, max.yaremchuk@nrlssc.navy.mil

Location: Room 345

10:00 Yaremchuk, M.; Wei, M.; Spence, P.; Jacobs, G.: MONITORING SURFACE TRANSPORT IN THE NORTHERN GULF OF MEXICO WITH COASTAL RADARS

10:15 Marmain, J.; Molcard, A.; Forget, P.; Barth, A.: OPTIMIZATION OF BOUNDARY CONDITIONS OF A NORTH WESTERN MEDITERRANEAN COASTAL ZONE USING HF RADAR MEASUREMENTS

10:30 Jouanneau, N.; Sentchev, A.; Dumas, F.: ASSESSMENT OF CIRCULATION AND DISPERSION PROCESSES ALONG THE FRENCH COAST IN THE EASTERN ENGLISH CHANNEL

10:45 Mitarai, S.; Uchiyama, Y.; Sakagami, T.; Siegel, D. A.; McWilliams, J. C.: TYPHOONS ALTER DISPERSAL PATTERNS IN THE KUROSHIO CURRENT SYSTEM

11:00 Wakamatsu, T.; Foreman, M.; Masson, D.; Fine, I.; Hickey, B.: COASTAL EDDY FIELDS AND THEIR IMPACTS ON TRAJECTORIES OF THE BLOOM OF TOXIC PSEUDO-NITZSCHIA ALONG THE WASHINGTON/OREGON COAST.

11:15 Bockelmann, F. D.; Callies, U.; van Bernem, K. H.: ASSMANT MODELING OF CHEMICAL DISPERSANT OPERATION ISING LAGRANGIAN PARTICLE TRACKING WITHIN A GIS-FRAMEWORK

11:30 Cambazoglu, M. K.; Blain, C. A.: IMPACT OF ATMOSPHERIC FORCING RESOLUTION ON SEA SURFACE CIRCULATION IN A SHALLOW, SEMI-ENCLOSED SEA

11:45 Warn-Varnas, A. C.; Gangopadhyay, A.; Schmidt, A.; Jensen, J. K.: NONLINEAR STUDIES OF NORWEGIAN COASTAL CURRENT FROM EULERIAN AND LAGRANGIAN POINT OF VIEWS.

13:30 McKay, P.; Blain, C. A.: MODELING THE SURFACE CURRENT EXPRESSION OF SUBMERGED BATHYMETRY IN RIVERS

13:45 Chardón, P.; Canals, M. F.: HYDROGRAPHIC SURVEYS USING A JETSKI-BASED BATHYMETRIC SURVEYING SYSTEM FOR MONITORING MORPHOLOGICAL CHANGES IN RINCNN, PUERTO RICO

14:00 Wilkerson, C. N.; Brubaker, J. M.: STORM TIDES IN THE LOWER CHESAPEAKE BAY: THE INFLUENCE OF PRE-STORM WATER LEVEL ANOMALIES

14:15 Smith, J. N.; Smethie Jr., W. M.: ^{129}I TRANSPORT BETWEEN THE LABRADOR SEA AND LINE W IN THE DEEP WESTERN BOUNDARY CURRENT (DWBC) IN THE NORTH ATLANTIC

14:30 Calbat, K. A.; DiMarco, S. F.: INVESTIGATING THE HORIZONTAL DISTRIBUTION OF HYDROGRAPHIC PROPERTIES OF THE TEXAS-LOUISIANA SHELF USING AN UNDULATING TOWED VEHICLE

14:45 Murgulet, D.; Bighash, P.; Scotch , C. G.: EVALUATION OF GROUNDWATER INFLOWS TO A SEMIARID COASTAL BAY IN SOUTH TEXAS

15:00 Mullins-Perry, R. L.; DiMarco, S. D.: A TALE OF TWO YEARS: A FLOOD AND A DROUGHT AND THE IMPACTS ON HYPOXIA FORMATION ON THE TEXAS SHELF

SS25 EVOLUTION OF COASTAL CHANGE IN THE NORTHERN GULF OF MEXICO

Chair(s): Lisa Osterman, osterman@usgs.gov
Christopher G. Smith, cgsmith@usgs.gov

Location: Room 353

10:00 Anderson, J. B.; Simms, A.: UNPRECEDENTED RESPONSE OF GULF COAST BARRIERS AND BAYS TO ACCELERATED SEA-LEVEL RISE AND DIMINISHED SEDIMENT SUPPLY*

10:15 Blain, C. A.; McKay, P.; Graham, W.: ASSESSMENT OF CLIMATE CHANGE INFLUENCES ON INLAND SURGE AND INUNDATION ALONG COASTAL REGIONS OF THE NORTHERN GULF OF MEXICO

10:30 Flocks, J.; Twichell, D.; Pendleton, E.: COAST-WIDE GEOLOGIC-ASSESSMENT PROJECTS: UNRAVELING REGIONAL COASTAL EVOLUTION

10:45 Miselis, J. L.; Kindinger, J. L.; Buster, N. A.: REFINING THE LINK BETWEEN THE HOLOCENE DEVELOPMENT OF THE MISSISSIPPI RIVER DELTA AND THE GEOLOGIC EVOLUTION OF CAT ISLAND, MS

11:00 Carlin, J. A.; Dellapenna, T. M.: DEVOLPMENT OF THE MODERN BRAZOS RIVER DELTA: A DELTAIC RESPONSE TO NATURAL AND ANTHROPOGENIC CHANGES IN THE COASTAL ZONE AND THE WATERSHED

11:15 Clark, R.; Georgiou, I.; FitzGerald, D.: AN EVOLUTIONARY MODEL OF A RETROGRADING SUBDELTAIC DISTRIBUTARY OF A RIVER-DOMINATED SYSTEM

11:30 Kindinger, J. L.; Lee, D. M.; Kulp, M. A.; Khalil, S. M.; Buster, N. A.; Flocks, J. G.; Bernier, J. C.; Raynie, R.: LOUISIANA BARRIER-ISLAND COMPREHENSIVE MONITORING (BICM) PROGRAM 2006-2010: BEGINNINGS OF A LARGE-SCALE COASTAL-SYSTEM-MONITORING PROGRAM

11:45 Smith, C. G.; Marot, M. E.: PRELIMINARY ANALYSIS OF BACK-BARRIER SEDIMENTATION ON THE CHANDELEUR ISLANDS, LOUISIANA, FOLLOWING THE CONSTRUCTION OF THE OIL-MITIGATION SAND BERM.

13:30 Johnson, K. W.; Dellapenna, T. M.; Sugla, R.; Webster, R.: EPISODIC EVENT CONTROLS ON BARRIER ISLAND SYSTEM MORPHODYNAMICS IN THE NORTHERN GULF OF MEXICO: IMPACT OF HURRICANE IKE ON GALVESTON ISLAND SHELF

13:45 Osterman, L. E.; Smith, C. G.: A CENTURY OF ENVIRONMENTAL DEGRADATION IN MOBILE BAY, ALABAMA, USA, RECORDED BY FORAMINIFERS

14:00 Spear, K. A.; Handley, L.; Thatcher, C.; Wilson, S.: EMERGENT WETLANDS STATUS AND TRENDS IN THE NORTHERN GULF OF MEXICO: 1950-2010

14:15 Cherry, J. A.; McKee, K. L.; Ramsey, R. C.: BUYING TIME: HURRICANE SEDIMENT INPUTS AS ELEVATION CAPITAL FOR COASTAL WETLANDS

14:30 White, D. A.; Visser, J. M.: EFFECTS OF THE MISSISSIPPI RIVER WATER ON WETLAND PLANT ECOLOGY WITHIN ITS BIRD-FOOT DELTA OVER A 2.5 DECADE STUDY PERIOD.

FRIDAY

(*) represents Invited presentations

14:45 Turner, R. E.; Bodker, J. E.; Tweel, A. W.: CONSEQUENCES OF INCREASED NUTRIENT LOADING TO MARSHES BELOWGROUND

15:00 Armitage, A. R.; Highfield, W. E.; Norwood, M. J.; White, N.; Brody, S. D.; Louchouarn, P.: GEOGRAPHICAL AND HISTORICAL SHIFTS IN BLUE CARBON SEQUESTRATION IN TEXAS WETLANDS

15:15 Mayo, M.; Smoak, J. M.; Smith, C.; Fanning, K.; Smith, T. J.: A COMPARISON OF URANIUM BUDGETS FOR ESTUARINE WETLANDS OF THE EVERGLADES NATIONAL PARK, FLORIDA AND MOBILE BAY, ALABAMA

SS28 IN SITU AQUATIC SENSORS FOR THE 21ST CENTURY.

Chair(s): Veronique Garcon, veronique.garcon@legos.obs-mip.fr
Douglas P. Connelly, dpc@noc.soton.ac.uk

Location: Room 346-347

10:00 Cooray, A. T.; Schwingle, R.; Pullin, M. J.: DEVELOPMENT OF A COMPACT, AUTOMATED IN-SITU SENSOR BASED ON FERROZINE COLORIMETRY TO STUDY IRON REDOX DYNAMICS IN FRESHWATER SYSTEMS

10:15 Helm, Z.; Tripp, C.; Whitney King, D.; Gammana, M.; Williams, T.; Nzamubona, K.; Kim, B.; Morotti, J.; Wells, M. L.: OPTICAL DETECTION OF SUB-NANOMOLAR CONCENTRATIONS OF DISSOLVED FE IN SEAWATER ON A MEMBRANE INTERFACE

10:45 Garcon, V.; Barus, C.; Giraud, W.; Jonca, J.; Comtat, M.; Armengaud, M.; Striebig, N.; Temple, P.; Lacroix, P.: ELECTROCHEMICAL MICROSENSOR FOR IN SITU MEASUREMENTS OF DISSOLVED SILICATE IN MARINE SYSTEMS

11:00 Legiret, F.; Woodward, M.; Kaed-Bey, S.; Rérolle, V.; Mowlem, M.; Connelly, D.; Achterberg, E.: MICROFLUIDIC PHOSPHATE ANALYSERS FOR THE MARINE ENVIRONMENT.

11:15 Jonca, J.; Giraud, M.; Paulmier, A.; Comtat, M.; Stramma, L.; Garçon, V.: REAGENTLESS AND SILICATE INTERFERENCE FREE ELECTROCHEMICAL METHOD FOR PHOSPHATE DETECTION IN SEAWATER IN THE OXYGEN MINIMUM ZONE OFFSHORE PERU

11:30 Contreira Pereira, L.; Brulport, J. P.; Omanovic, D.; Le Bris, N.: SILVER-BASED ELECTROCHEMICAL SENSORS FOR AUTONOMOUS MONITORING OF SULFIDE IN MARINE ENVIRONMENTS

11:45 Klimant, I.; Borisov, S. M.: NEW OPTICAL CHEMOSENSORS FOR MARINE RESEARCH

13:30 Gibson, P. J.; Elrod, V.; Massion, G.; Coletti, L.; Jannasch, H.; Plant, J.; Sakamoto, C.; Johnson, K. S.: MAKER OCEANOGRAPHY: DIY DEVELOPMENT OF PRECISE AND AFFORDABLE *IN SITU* CHEMICAL SENSORS WITH EMBEDDED ELECTRONICS

13:45 Tomczyk, M.; Sahling, H.; Berges, B. J.; Ferreira, C.: HYDROACOSTIC METHODS FOR QUANTIFICATION OF GAS BUBBLE EMISSIONS FROM THE SEAFLOOR OF SHELF AREAS IN THE ARCTIC REGION

14:00 Sullivan, J. M.; Twardowski, M. S.; Katz, J.; Donaghay, P.; McFarland, M.: PARTICLE CHARACTERIZATION USING IN-SITU HOLOGRAPHIC MICROSCOPY

14:15 Buermans, J.; Lemon, D.: PRESSURE EFFECTS ON THE ACOUSTIC CALBRATION OF A MULTIPLE-FREQUENCY BOTTOM-MOORED SCIENTIFIC ECHOSOUNDER FOR OBSERVATIONS OF ZOOPLANKTON

14:30 Miles, T. N.; Schofield, O.; Glenn, S.; Kohut, J.; Stammerjohn, S.; Martinson, D.: COASTAL OCEAN MIXING NEAR PALMER STATION ANTARCTICA: OBSERVATIONS FROM A GLIDER MOUNTED ADCP

14:45 Vidoudez, C.; Marcon, Y.; Bach, W.; Lebris, N.; Dubilier, N.; Girguis, P. R.: MAPPING OF HYDROTHERMAL VENT CHEMOSYNTHESIS USING IN SITU MASS SPECTROMETRY

15:00 Batt, R. D.; Carpenter, S. R.; Cole, J. J.; Pace, M. L.; Johnson, R. A.: AUTOMATED MEASURES OF ECOSYSTEM METABOLISM PROVIDE EARLY WARNING OF REGIME SHIFT

15:15 Collins, J. R.; Ossolinski, J. E.; Keil, R. G.; Van Mooy, B. A.: COMMUNITY RESPIRATION AND PRODUCTIVITY ESTIMATES FROM OPEN-OCEAN DEPLOYMENTS OF THE *PHORCYS*, AN AUTONOMOUS, DUAL-CHAMBER *IN SITU* INCUBATOR

SS51 IRON, CARBON CYCLING, AND ECOSYSTEM DYNAMICS IN THE SOUTHERN OCEAN

Chair(s): Stephane Blain, stephane.blain@obs-banyuls.fr
Bernard Queguiner, bernard.queguiner@univ-amu.fr
Volker Strass, Volker.strass@awi.de
Dieter Wolf-Gladrow, Dieter.Wolf-Gladrow@awi.de

Location: Room 343

10:00 Bowie, A. R.; Quéroué, F.; Sarthou, G.; Chever, F.; van der Merwe, P.; Bucciarelli, E.; Townsend, A. T.; Blain, S.: DISSOLVED AND PARTICULATE TRACE METALS IN THE VICINITY OF THE KERGUELEN ISLANDS, SOUTHERN OCEAN, DURING THE KEOPS 2 EXPERIMENT

10:15 Sanial, V.; van Beek, P.; Lansard, B.; Zhou, M.; Kestenare, E.; Souhaut, M.: USE OF THE RADIUM QUARTET (223RA, 224RA, 226RA, 228RA) TO STUDY THE NATURAL IRON FERTILIZATION OFF CROZET AND KERGUELEN ISLANDS (SOUTHERN OCEAN)

10:30 Sedwick, P. N.; McGillicuddy, D. J.; Dinniman, M. S.; Bibby, T. S.; Greenan, B. J.; Hofmann, E. E.; Klinck, J. S.; Marsay, C. M.; Smith, W. O.; Sohst, B. M.: AN ASSESSMENT OF IRON SOURCES ON THE ROSS SEA CONTINENTAL SHELF: INITIAL RESULTS FROM THE PRISM PROJECT

10:45 Laglera, L. M.; Santos-Echeandía, J.; Klaas, C.; Wolf-Gadrow, D. A.: IRON PARTITION IN SURFACE WATERS OF A LARGE-SCALE SUMMER BLOOM SOUTH OF THE ANTARCTIC POLAR FRONT

11:00 Lasbleiz, M.; Closset, I.; Quéguiner, B.; Leblanc, K.; Cardinal, D.; Navez, J.: SPECIES–SPECIFIC CONTRIBUTION OF DIATOMS TO SI PRODUCTION IN THE FE-FERTILIZED KERGUELEN REGION OF THE SOUTHERN OCEAN (KEOPS2)

11:15 Dinasquet, J.; Swalethorp, R.; Kjellerup, S.; Bertilsson, S.; Nielsen, T. G.; Riemann, L.: PARTICULATE MATTER AND PROTOZOANS AFFECT BACTERIOPLANKTON COMMUNITY STRUCTURE IN THE PRODUCTIVE AMUNDSEN SEA POLYNYA, ANTARCTICA

11:30 Cavagna, A.; Quéguiner, B.; Planchon, F.; Jacquet, S.; Closset, I.; Dehairs, F.: PRODUCTION REGIME AND POTENTIAL FOR CARBON EXPORT IN THE NATURALLY IRON FERTILIZED KERGUELEN AREA (SOUTHERN OCEAN)

11:45 Closset, I.; Lasbleiz, M.; Leblanc, K.; Quéguiner, B.; Navez, J.; Cardinal, D.: COMPARISON OF SI BIOGEOCHEMICAL BUDGET IN CONTRASTED SOUTHERN OCEAN REGIONS THROUGH SILICA PRODUCTION-DISSOLUTION MEASUREMENTS (KEOPS-2)

[T] represents Tutorial presentations

13:30 Dehairs, F.; Trull, T. W.; Fernandez, C.; Davies, D.; Cavagna, A. J.; Piniella, A. E.: NITRATE ISOTOPIC COMPOSITION IN THE KERGUELEN AREA (SOUTHERN OCEAN) DURING KEOPS 2

13:45 Roca-Martí, M.; Puigcorbé, V.; Masqué, P.; Rutgers van der Loeff, M.; Stimac, I.; Iversen, M.; Strass, V.; Klass, C.; Wolf-Gladrow, D.: IMPACT OF EDDY STRUCTURES AND THE POLAR FRONT REGION ON CARBON EXPORT FLUXES IN THE WATER COLUMN OF THE SOUTHERN OCEAN

14:00 Jouandet, M.; guidi, L.; carlotti, F.; Stemmann, L.; Picheral, M.; Zhou, M.; Trull, T.; Blain, S.: PARTICLE SIZE DISTRIBUTIONS IN RESPONSE TO NATURAL IRON FERTILISATION IN THE SOUTHERN OCEAN (KERGUELEN ISLAND)- IMPLICATION FOR CARBON EXPORT.

14:15 Zhu, Y.; Zhou , M.; Queguiner, B.; Leblanc, K.; Carlotti, F.; Armand, L.; Jouandet, M. P.; Kestenare, E.; Trull, T.; Blain, S.: ESTIMATES OF PARTICLE SETTLING AND SCAVENGING USING LISST-LOPC IN KERGUELEN PLATEAU REGIONS DURING THE 2011 AUSTRAL SPRING KEOPS II CRUISE

14:30 Trimborn, S.; Hoppe, C. J.; Brenneis, T.; Norman, L.; Santos-Echeandía, J.; Laglera, L.; Hassler, C.: ROLE OF DIFFERENT IRON SOURCES ON PHYTOPLANKTON GROWTH AND SPECIES COMPOSITION OF THE ANTARCTIC CIRCUMPOLAR CURRENT UNDER OCEAN ACIDIFICATION.

14:45 Jones, B. M.; Sahin, M. S.; New, A. M.; Kustka, A. B.: INTEGRATING PHYSIOLOGY AND 3RD GENERATION DNA SEQUENCING TO CHARACTERIZE THE EFFECT OF MCDW, IRON AND LIGANDS ON ROSS SEA EUKARYOTIC PHYTOPLANKTON ASSEMBLAGES

15:00 Bennett, J. M.; Sedwick, P. N.; DiTullio, G. R.: IMPACT OF IRRADIANCE AND IRON ON THE GROWTH AND PHYSIOLOGY OF THE ANTARCTIC DIATOM*FRAGILARIOPSIS CYLINDRUS*

15:15 Boutorh, J.; Moriceau, B.; Ragueneau, O.; Bucciarelli, E.: IMPACT OF COPPER STARVATION AND OF IRON LIMITATION ON THE FRUSTULE COMPOSITION AND DISSOLUTION OF THE PSEUDO-NITZSCHIA DIATOM

SS52 POPULATIONS AND ACTIVITY OF AMMONIA-OXIDIZING AND DENITRIFYING ORGANISMS IN COASTAL WATERS

Chair(s): Jennifer Bowen, jennifer.bowen@umb.edu
Chris Francis, caf@stanford.edu
Bradley Tolar, btolar1@uga.edu
James Hollibaugh, aquadoc@uga.edu

Location: Room 350-351

10:00 Wang, L.; Bernard, R. J.; Mortazavi, B.; Ortmann, A. C.: A *JUNCUS ROEMARIANUS* MARSH OVERCOMES SULFIDE ACCUMULATION THAT INHIBITS NITRIFICATION AND DENITRIFICATION IN OTHER VEGETATED COASTAL HABITATS

10:15 Peng, X.; Angell, J.; Babbin, A. R.; Ji, Q.; Kearns, P. J.; Bowen, J. L.; Ward, B. B.: EFFECT OF LONG-TERM FERTILIZATION ON NITROGEN REMOVAL FROM A SALT MARSH ECOSYSTEM

10:30 Lipsewers, Y. A.; Bale, N.; Hopmans, E. C.; Schouten, S.; Sinninghe Damsté, J. S.; Villanueva, L.: DIVERSITY AND ACTIVITY OF AEROBIC AND ANAEROBIC AMMONIA OXIDIZERS IN THE OXYGEN TRANSITION ZONE OF MARINE SEDIMENTS BY A COMBINED DNA, RNA AND LIPID APPROACH

10:45 Newell, S. E.; Eveillard, D.; McCarthy, M. J.; Gardner, W. S.; Liu, Z.; Ward, B. B.: AMMONIA OXIDIZING ARCHAEAL COMMUNITY COMPOSITION IN GULF OF MEXICO SEDIMENTS INVESTIGATED WITH AN *AMOA* FUNCTIONAL GENE MICROARRAY

11:00 Horak, R. E.; Devol, A.; Qin, W.; Armbrust, V.; Ingalls, A.; Moffett, J.; Stahl, D.: ARCHAEAL AMMONIA OXIDATION IN A PUGET SOUND FJORD: VERTICAL DISTRIBUTION, KINETICS, AND TEMPERATURE DEPENDENCY

11:15 Smith, J. M.; Casciotti, K. L.; Chavez, F. P.; Francis, C. A.: RELATING FUNCTIONAL GENE MARKERS FOR AMMONIA-OXIDIZING ARCHAEA TO RATES OF NITRIFICATION ACROSS OCEAN GRADIENTS

11:30 Hollibaugh, J. T.; Gifford, S. M.; Moran, M. A.; Ross, M.; Sharma , S.; Tolar, B. B.: SEASONAL VARIATION OF THE THAUMARCHAEOTA METRATRANSCRIPTOME IN SE USA COASTAL WATERS

11:45 Tolar, B. B.; Powers, L. C.; Miller, W. L.; Popp, B. N.; Hollibaugh, J. T.: RESPONSE OF MARINE THAUMARCHAEOTA TO REACTIVE OXYGEN SPECIES

13:30 Baer, S. E.; Connelly, T. L.; Yager, P. L.; Bronk, D. A.: AMMONIUM UPTAKE AND NITRIFICATION IN A WARMING ARCTIC

13:45 Madison, M. J.; Ziebis, W.: NITROUS OXIDE PRODUCTION IN COASTAL SEDIMENTS IN RESPONSE TO ENVIRONMENTAL CHANGES

14:00 Trimmer, M.; Purdy, K. J.: ANAMMOX AS A SYMBIONT TO DENITRIFICATION, DRIVING NITRITE LOSS UNDER CARBON LIMITATION

14:15 Pritchard, W. J.; Trimmer, M.: SEASONAL VARIATION OF ANAMMOX IN A TEMPERATE ESTUARY

14:30 Munoz Ucros, J.; Reed, A. J.; Hicks, R. E.: PLANKTONIC ARCHAEAL DIVERSITY AND AMMONIA OXIDIZER ABUNDANCE CHANGE WITH DEPTH IN EAST AFRICAN GREAT LAKES MALAWI AND KIVU

14:45 Massé, S.; Walsh, D.; Maranger, R.: SEASONAL CHANGES OF NITRIFICATION RATES AND AMMONIA OXIDIZING MICROBIAL COMMUNITIES IN AN OLIGOTROPHIC LAKE

15:00 Bade, D. L.; Clevinger, C. C.; Heath, R. T.; Ndinga Muniania, C.: NITRIFICATION CONTRIBUTES SIGNIFICANTLY TO OXYGEN CONSUMPTION IN LAKE ERIE

15:15 Bollmann, A.; McKay, R. M.; Bullerjahn, G. S.: ABUNDANCE AND DIVERSITY OF AMMONIA-OXIDIZING ARCHAEA AND BACTERIA IN LAKE SUPERIOR AND LAKE ERIE

SS63 LONG-TERM PERSPECTIVES ON LAKE RESEARCH AND MANAGEMENT

Chair(s): Stephanie Hampton, hampton@nceas.ucsb.edu
Paul Hanson, pchanson@wisc.edu
Emily Stanley, ehstanley@wisc.edu

Location: Room 344

10:00 Zohary, T.; Gal, G.; Hambright, K. D.: THE FOOD WEB OF LAKE KINNERET: A FOUR-DECADAL RETROSPECTIVE

10:15 Luecke, C.; Budy, P.; Giblin, A. E.; Kling, G. W.: RESPONSE OF SHALLOW AND DEEP LAKES TO LOW LEVEL NUTRIENT ADDITION IN THE SUB-ARCTIC REGION OF NORTHERN ALASKA.

10:30 Deutsch, E. S.; Alameddine, I.: CHALLENGES AND OPPORTUNITIES FOR LONG-TERM LIMNOLOGICAL RESEARCH IN DEVELOPING COUNTRIES: A CASE STUDY FOR LEBANON

FRIDAY

(*) represents Invited presentations

10:45 Maki, R. P.: PROVIDING SCIENCE TO DECISION-MAKERS: MULTI-DISCIPLINARY PREPARATION FOR A REVIEW OF RULES GOVERNING DAM OPERATION, RAINY AND NAMAKAN LAKES, MINNESOTA-ONTARIO

11:00 Kopacek, J.; Hejzlar, J.; Posch, M.: LONG-TERM MONITORING OF WATER CHEMISTRY – A CHRONICLE OF SOCIO-ECONOMICAL CHANGES

11:15 Heathcote, A. J.; Filstrup, C. T.; Downing, J. A.: LAKE SEDIMENTS SHOW ACCELERATION OF AGRICULTURAL SOIL EROSION, DESPITE SUBSIDIES

11:30 Whitmore, T. J.; Brenner, M.; Curtis, J. H.; Riedinger-Whitmore, M. A.; Zimmerman, A. R.; Kenney, W. F.; Lauterman, F. M.: PALEOLIMNOLOGICAL ASSESSMENT OF LAKE LOCHLOOSA: EVIDENCE OF LONG-TERM EUTROPHIC CONDITIONS AND CYANOBACTERIAL PRESENCE IN A LARGE CENTRAL-FLORIDA LAKE

11:45 Vogt, R. J.; Sharma, S.; Leavitt, P. R.: EFFECTS OF CLIMATE, HYDROLOGY, AND LAKE PHYSICO-CHEMISTRY ON WATER QUALITY IN THE NORTHERN GREAT PLAINS (QU'APPELLE LTER)

13:30 Allison, M. D.; Groman, R. C.; Gegg, S. R.; Chandler, C. L.; Sterner, R. W.; Brovold, S.; Galvarino, C. R.; Wiebe, P. H.; Glover, D. M.: MANAGING DATA FOR THE LONG HAUL: THE BCO-DMO PERSPECTIVE

13:45 Bennington, V.; Cline, T.; Kitchell, J.: SPATIAL PATTERNS, TRENDS, AND IMPLICATIONS OF CHANGING TEMPERATURES IN LAKES SUPERIOR AND MICHIGAN

14:00 Reavie, E. D.; Chraïbi, V.; Allinger, L. E.; Kireta, A. R.: NEW PROBLEMS, NEW TOOLS: UPDATING THE PALEOLIMNOLOGY OF THE LAURENTIAN GREAT LAKES

14:15 Paterson, G.; Hebert, C. E.; Drouillard, K. G.; Haffner, G. D.: LAKE HURON: A GREAT LAKE IN A STATE OF GREAT DECLINE

14:30 Chraibi, V. L.; Kireta, A. R.; Reavie, E. D.; Cai, M.; Brown, T. N.: AN UPDATED PALEOLIMNOLOGY OF LAKE SUPERIOR

14:45 Li, Y.: EXPLORING DYNAMIC CAUSAL LINKAGE BETWEEN LAKE NUTRIENTS AND CHLOROPHYLL-A: AN INTEGRATED GRANGER CAUSALITY TEST AND NEURAL NETWORK APPROACH

15:00 Mansfield, R.; Hendry, K.; White, K. N.: MANCHESTER DOCKS TO SALFORD QUAYS: LESSONS FOR FRESHWATER ECOSYSTEM MANAGEMENT

15:15 Smith, V. H.: ALGAL BIOFUELS RESEARCH: WHERE ARE THE AQUATIC ECOLOGISTS?

SS72 STUDIES OF ZOOPLANKTON AND OTHER PARTICLES USING OPTICAL INSTRUMENTS

Chair(s): David M. Checkley, Jr., dcheckley@ucsd.edu
George A. Jackson, gjackson@tamu.edu

Location: Room 356

10:00 Checkey, D. M.: SEEING IN THE SEA

10:15 Yen, J.; Murphy, D. W.; Webster, D. E.: TIME-RESOLVED TOMOGRAPHIC PIV MEASUREMENTS OF ZOOPLANKTON: LINKS BETWEEN LAB AND FIELD OBSERVATIONS

10:30 Heath, T. D.; Whipple, T. C.; Neve, R.; Hall, N. S.; Leuttich, R. A.: EVALUATION AND INTERPRETATION OF LASER SCATTERING IN THE NEUSE RIVER ESTUARY

10:45 Briseño-Avena, C.; Jaffe, J. S.; Franks, P. J.; Roberts, P. L.: EXPLORING PHYTOPLANKTON AGGREGATIONS-ZOOPLANKTON INTERACTIONS USING TWO CAMERA SYSTEMS: FIDO-F AND O-CAM

11:00 Wenczel, A. A.; Bushek, D.: DOES SINGLE SPECIES RESTORATION ALTER THE INTERACTIONS OF NATIVE BIVALVE MOLLUSKS?:USING AQUACULTURE METHODS AND IMAGING TECHNOLOGY TO QUANTIFY BIVALVE FEEDING

11:15 Currie, W. J.; Linley, R. D.; Bailey, S. A.; Koops, M. A.: SHRIMP: SPATIALLY HI-RES INTENSIVE MAPPING OF PLANKTON DISTRIBUTIONS IN A COASTAL ECOSYSTEM

11:30 Marcolin, C. R.; Lopes, R. M.: TEMPORAL VARIATION OF PLANKTON BIOMASS SIZE SPECTRA AND PARTICLE SIZE DISTRIBUTION OFF UBATUBA, BRAZIL

11:45 Mines, C. H.; Ghadouani, A.; Ivey, G. N.: THE USE OF LOPC IN FRESHWATER SYSTEMS – EXPLORING THE METHODOLOGY, IN SITU AND LABORATORY DEPLOYMENT IN THE CONTEXT OF HARP LAKE, ONTARIO

13:30 Trudnowska, E.; Blachowiak-Samolyk, K.; Szczucka, J.; Wichorowski, M.: PROMISING PROSPECTS OF OPTICAL ZOOPLANKTON INVESTIGATIONS IN THE EUROPEAN ARCTIC

13:45 Basedow, S. L.; Möller, K. O.; Giering, S. L.: CALANUS AND MARINE SNOW IN THE NORTH ATLANTIC AS SEEN BY LASER OPTICAL PLANKTON COUNTER (LOPC), VIDEO PLANKTON RECORDER (VPR) AND MARINE SNOW CATCHER (MSC)

14:00 Romagnan, J. B.; Roullier, F.; Guidi, L.; Forest, A.; Vandromme, P.; Picheral, M.; Jackson, G.; Checkley, D.; Stemmann, L.: VARIABILITY IN PLANKTON AND PARTICLE SIZE DISTRIBUTIONS (PSDS) IN DIFFERENT OCEAN BASINS

14:15 Marin, F. D.; Sutor, M. M.: VERTICAL PATTERNS OF THE BIOMASS AND COMMUNITY COMPOSITION OF PLANKTON RELATIVE TO PHYSICAL PARAMETERS IN THE GULF OF MEXICO SPRING 2011 AS MEASURED BY THE VPR

14:30 Norrbin, F.: PATTERNS OF ZOOPLANKTON DIVERSITY AND DISTRIBUTION IN SUBARCTIC FJORDS DETERMINED USING AN AUTONOMOUS VPR

14:45 Haraldsson, M.; Båmstedt, U.; Tiselius, P.; Aksnes, D. L.; Titelman, J.: FINE SCALE VERTICAL DISTRIBUTION AND DIEL VERTICAL MIGRATION OF THE CTENOPHORE *MNEMIOPSIS LEIDYI*

15:00 Benfield, M. C.; Cook, S.; Strickler, J. R.; DiMauro, R.; Bi, H.; Sutor, M. M.: ZOOVIS-DEEP: A SELF-CONTAINED, HIGH-RESOLUTION ZOOPLANKTON IMAGING SYSTEM WITH APPLICATIONS FROM ESTUARIES TO THE THE DEEP SEA

15:15 Cowen, R. K.; Guigand, C. M.; Greer, A. T.; Luo, J. Y.: IN SITU ICHTHYOPLANKTON IMAGING SYSTEM (ISIIS): DESIGN, CAPABILITIES, AND RESULTS FROM FOUR CASE STUDIES

FRIDAY

(T) represents Tutorial presentations

SS79 PHYTOPLANKTON INTERACTIONS IN AQUATIC ECOSYSTEMS

Chair(s): Suzanne Strom, Suzanne.Strom@wwu.edu
Brian Palenik, bpalenik@ucsd.edu

Location: Room 357

10:00 Sosik, H. M.; Peacock, E. E.; Olson, R. J.: AUTOMATED PHYTOPLANKTON IMAGING PROVIDES A UNIQUE PERSPECTIVE ON INTERACTIONS IN NATURAL COMMUNITIES

10:15 Ortmann, A. C.; Christiaen, B.; Condon, R. H.: INTERACTONS BETWEEN MEMBERS OF THE MICROBIAL LOOP IN AN ESTUARY DOMINATED BY MICROZOOPLANKTON GRAZING

10:30 Peace, A. L.; Zhao, Y.; Loladze, I.; Elser, J. J.; Kuang, Y.: A STOICHIOMETRIC PRODUCER-GRAZER MODEL INCORPORATING THE EFFECTS OF EXCESS FOOD-NUTRIENT CONTENT ON CONSUMER DYNAMICS.

10:45 Brahamsha, B. M.; Strom, S. L.; Daniels, E. F.; Simkovsky, R.; Golden, S.: GRAZING AND THE CYANOBACTERIAL CELL SURFACE*

11:00 Strom, S. L.; Bright, K. J.; Brahamsha, B.: ROLE OF CELL PROTEIN COATINGS IN THE TROPHIC ECOLOGY OF MARINE SYNECHOCOCCUS

11:15 Palenik, B.; Paz-Yepes, J.; Daniels, E.; Brahamsha, B.: MARINE*SYNECHOCOCCUS* AGGREGATE FORMATION

11:30 Ryan, D. E.; Campbell, L.: *KARENIA BREVIS* REFERENCE TRANSCRIPOME ASSEMBLY AND GENE EXPRESSION ANALYSIS IN RESPONSE TO OSMOTIC STRESS

11:45 Corcoran, A. A.; Flewelling, L. J.; Richardson, B.: THE EFFECTS OF NUTRIENT LIMITATION ON BREVETOXIN PRODUCTION IN CONTINUOUS CULTURES OF KARENIA BREVIS

13:30 Mausz, M. A.; Rosenwasser, S.; Schatz, D.; Sheyn, U.; Weinstock, E.; Segovia, M.; Vardi, A.; Pohnert, G.: METABOLOMIC INVESTIGATION OF THE MICROALGA*EMILIANIA HUXLEYI* UNDER THE INFLUENCE OF DIFFERENT MANIPULATIONS IN LAB AND MESOCOSM EXPERIMENTS

13:45 Mueller, J. A.; Culley, A. I.; Schvarcz, C. R.; Steward, G. F.: DYNAMICS AND DIVERSITY OF NOVEL PHYTOPLANKTON-INFECTING RNA VIRUSES IN THE WESTERN ANTARCTIC PENNINSULA THROUGHOUT A SUMMER BLOOM

14:00 Hawco, N. J.; McIlvin, M. R.; Waterbury, J. B.; Saito, M. A.: PROTEOMIC ANALYSIS OF PHAGE-INFECTED *SYNECHOCOCCUS* WH8102 REVEALS FLUCTUATIONS IN IRON METALLOENZYMES.

14:15 Wang, P.; Burd, A. B.; Hood, R. R.; Coles, V. J.; Moran, M. A.; Yager, P. L.: INCORPORATING GENOMIC AND TRANSCRIPTOMIC INFORMATION INTO A SIMPLIFIED MARINE BIOGEOCHEMICAL MODEL

14:30 Wallace, R. B.; Gobler, C. J.: FACTORS CONTROLLING AND PROMOTING BLOOMS OF MICROALGAE (THALASSIOSIRA SPP.) AND MACROALGAE (ULVA SP.) IN A HYPEREUTROPHIC, URBAN ESTUARY, JAMAICA BAY, NY, USA

14:45 OSEJI, O. F.; CHEN, N.; CHIGBU, P.; WAGUESPACK, Y. Y.: CHROMATOGRAPHIC ANALYSIS OF PHYTOPLANKTON PIGMENTS FROM THE MARYLAND COASTAL BAYS

15:00 Bizsel, K. C.; Inanan, B. E.; Bizsel, N.; Adalioglu, S.; Tumer, T.; Kankus, J.; Erguden, C.; Sonmez, R.: STATE OF NUTRIENT COMPOSITION AND ITS CONSEQUENCES ON PHYTOPLANKTON COMMUNITY AT AN AQUACULTURE SITE IN THE MEDITERRANEAN

15:15 Jahan, R.; Choi, J. K.: PHYTOPLANKTON COMMUNITY REORGANIZATION IN THE MACROTIDAL GYEONGGI BAY FOLLOWING OCEAN CLIMATE REGIME SHIFT

SS80 ILLUMINATING THE BIOGEOCHEMICAL ROLES OF MICROBES WITH COMBINED SECTIONAL GENOMIC, BIOMOLECULAR, AND GEOCHEMICAL DATASETS

Chair(s): Robert M. Morris, morrisrm@uw.edu
Benjamin Van Mooy, bvanmooy@whoi.edu

Location: Room 352

10:00 Armbrust, E. V.: "GEOMICS:" A GEOCHEMICAL AND MOLECULAR STUDY OF MARINE TRANSITION ZONES[T]

10:30 Kujawinski, E. B.; Johnson, W.: SHIFTS IN DISSOLVED ORGANIC MATTER COMPOSITION ACROSS A COASTAL-OPEN OCEAN GRADIENT IN THE EASTERN PACIFIC OCEAN

10:45 Bender, S. J.; Durkin, C. A.; Durham, B. P.; Berthiaume, C.; Armbrust, E. V.: NITROGEN TRANSPORTERS IN LABORATORY TRANSCRIPTOMES AND FIELD METATRANSCRIPTOMES REVEAL SPECIES-SPECIFIC METABOLIC RESPONSES OF DIATOMS TO NITROGEN AVAILABILITY

11:00 Barbeau, K. A.; King, A. L.; Hogle, S. L.; Hopkinson, B. M.; Dupont, C. L.; Mann, E. L.; Johnson, Z. I.; Allen, A. E.: EVIDENCE FOR A SPECTRUM OF IRON LIMITATION EFFECTS ALONG A TRANSECT OF SUB-SURFACE OCEANIC PHYTOPLANKTON COMMUNITIES

11:15 Chappell, P. D.; Whitney, L. P.; Maness, S. L.; Vedamati, J.; Moffett, J. W.; Jenkins, B. D.: PROFILING THALASSIOSIRA COMMUNITY COMPOSITION AND IRON STATUS ON THE GEOMICS CRUISE USING MOLECULAR METHODS

11:30 Saito, M. A.; Moran, D. M.; McIlvin, M. R.; Santoro, A.; Lamborg, C. H.; Goepfert, T. J.; Waterbury, J. W.: DETECTION AND DISTRIBUTION OF METALLOENZYMES BY METAPROTEOMIC ANALYSIS IN PACIFIC OCEAN ENVIRONMENTS

11:45 Martin, P.; Van Mooy, B.; Bender, S.; Armbrust, G.: OCEAN SECTIONS OF POLYPHOSPHATE AND MEMBRANE LIPIDS SHOW DISTINCT MICROBIAL RESPONSES TO PHOSPHORUS STRESS AND RESUPPLY

13:30 Dyhrman, S. T.; Haley, S. T.: TRACING MARINE MICROBIAL PHOSPHORUS BIOGEOCHEMISTRY: INSIGHTS FROM SECTIONAL SURVEYS AND PROCESS STUDIES FOCUSED ON ALKALINE PHOSPHATASE ACTIVITY.

13:45 Saunders, J. K.; Rocap, G.: BASIN SCALE DIFFERENCES IN PROCHLOROCOCCUS ARSENIC DETOXIFICATION MECHANISMS: CONNECTING BIOCHEMICAL PATHWAYS WITH THEIR BIOGEOCHEMICALLY RELEVANT END PRODUCTS

14:00 Popendorf, K. J.; Tanaka, T.; Pujo-Pay, M.; Lagaria, A.; Courties, C.; Conan, P.; Oriol, L.; Sofen, L. E.; Moutin, T.; Van Mooy, B. A.: SHIFTS IN THE RATIOS OF PHOSPHOLIPIDS TO NON-PHOSPHORUS LIPIDS ACROSS THE MEDITERRANEAN SEA: INDICATORS OF MICROBIAL RESPONSE TO NUTRIENT CONDITIONS

FRIDAY

(*) represents Invited presentations

14:15 Dupont, C. L.; McCrow, J. P.; Valas, R.; Walworth, N.; Hogel, S.; Palenik, B.; Johnson, Z.; Barbeau, K.; Allen, A. E.: MICROBIAL COMMUNITY COMPOSITION AND GENE EXPRESSION ACROSS THE SOUTHERN CALIFORNIA BIGHT

14:30 Wear, E. K.; Carlson, C. A.; Brzezinski, M. A.; Siegel, D.; Guillocheau, N.; Windecker, L.: PATTERNS OF BACTERIOPLANKTON COMPOSITION ALONG BIOGEOCHEMICAL AND PRODUCTIVITY GRADIENTS IN THE SANTA BARBARA CHANNEL, USA

14:45 Ekman, M.; Celepli, N.; Larsson, J.; Ininbergs, K.; Brindefalk, B.; Dupont, C. L.; Yooseph, S.; Goll, J.; Thiagarajan, M.; Bergman, B.: METAGENOMIC ANALYSIS OF MICROBIAL PRIMARY PRODUCERS IN THE BALTIC SEA: COMMUNITY COMPOSITION AND FUNCTIONAL ADAPTATIONS

15:00 Alexander, H.; Jenkins, B. D.; Rynearson, T. A.; Saito, M. A.; Mercier, M. L.; Dyhrman, S. T.: IDENTIFYING REFERENCE GENES WITH STABLE EXPRESSION FROM HIGH THROUHGPUT SEQUENCE DATA

15:15 Kustka , A. B.; Reinfelder, J. R.; Gates, C.; New, A. M.; Bidle, K. D.; Milligan, A. J.: THE METABOLIC RESPONSE OF DIATOMS TO LOW CO2 INCLUDES C4-ASSISTED PHOTOSYNTHESIS AND RECOVERY OF PHOTORESPIRATORY PRODUCTS: IMPLICATIONS FOR BLOOM SUSTENANCE

SS85 ROBERT WHARTON TRIBUTE SESSION

Chair(s): Diane McKnight, Diane.Mcknight@colorado.edu
Peter Doran, pdoran@uic.edu

Location: Room 348-349

10:00 Doran, P. T.: INTRODUCTION TO SS85 ROBERT WHARTON TRIBUTE SESSION

10:15 Rummel, J. D.: FROM EXOBIOLOGY TO ASTROBIOLOGY IN THE DRY VALLEYS (ASAP, TOO!): NASA, BOB, ET AL.*

10:30 Meyer, M. A.: LIFE AQUATIC*

10:45 McKnight, D. M.; Doran, P. T.; Fountain, A. G.; Lyons, W. B.; Priscu, J. C.; Virginia, R. A.; Wall, D. H.: WHARTON TRIBUTE: LONG-TERM MONITORING OF TWENTY YEARS OF ECOSYSTEM CHANGE IN TAYLOR VALLEY, ANTARCTICA

11:00 Head, J. W.; Marchant, D.; Fassett, C.; Mustard, J. F.; Goudge, T.; Aureli, K.: WHARTON TRIBUTE - LESSONS FROM THE MCMURDO DRY VALLEY LAKES FOR CLOSED AND OPEN-BASIN LAKES ON NOACHIAN MARS: "WARM AND WET" OR "COLD AND ICY"?*

11:15 Cabrol, N. A.; The High Lakes Project Team: RELEVANCE OF HIGH ALTITUDE LAKES IN THE ANDES TO EARLY MARS *

11:30 Doran, P. T.; Obryk, M. K.; Priscu, J. C.: WHARTON TRIBUTE: ROBOTIC 3D BIOGEOCHEMISTRY IN AN ICY WORLD ANALOG LAKE OF EAST ANTARCTICA

11:45 Andersen, D. T.; McKay, C. P.; Galchenko, V. F.: LIFE UNDER ICE: EXPLORING LAKE UNTERSEE IN QUEEN MAUD LAND, ANTARCTICA*

13:30 Yang, N.; Welch, K. A.; Telfeyan, K.; Mohajerin, T. J.; Chevis, D. A.; Lyons, W. B.; Johannesson, K. H.: WHARTON TRIBUTE: ARSENIC CONCENTRATIONS AND SPECIATION IN TAYLOR VALLEY LAKE WATERS, MCMURDO DRY VALLEYS, ANTARCTICA

13:45 Lyons, W. B.; Welch, K. A.; McKnight, D. M.; Doran, P. T.; Priscu, J. C.; Fountain, A. G.: GEOCHEMICAL DYNAMICS OF LAKE HOARE, ANTARCTICA: SENSITIVITY TO CLIMATE VARIATION: WHARTON TRIBUTE*

14:00 Morgan-Kiss, R. M.; Bollmann, A.; Owens, S.; Gilbert, J.: WHARTON TRIBUTE: DIFFERENTIAL ENRICHMENT OF ALGAE-BACTERIA CONSORTIA FROM CHEMICALLY STRATIFIED ANTARCTIC LAKES*

14:15 Howard-Williams, C.; Hawes, I.: WHARTON TRIBUTE: SEASONAL FLUCTUATIONS IN ENVIRONMENTAL CONDITIONS MAKE ANTARCTIC PONDS PLACE EXTREME DEMANDS ON MIRCOBIAL POPULATIONS*

14:30 Hawes, I.; Howard-Williams, C.; Jungblutt, A.; Doran, P.: WHARTON TRIBUTE:LAMINATED PHOTOSYNTHETIC MICROBIAL MATS IN LAKE HOARE, ANTARCTICA*

14:45 Kohler, T. J.; Stanish, L. F.; McKnight, D. M.: MICROBIAL MAT PERISTENCE AND CHANGE FROM TWO LONG-TERM EXPERIMENTS IN THE MCMURDO DRY VALLEY STREAMS OF ANTARCTICA

15:00 Stanish, L. F.; Kohler, T. J.; Nemergut, D. R.; McKnight, D. M.: THE LEGACY CONTINUES: PROBING THE BACTERIAL COMMUNITIES IN MICROBIAL MATS ACROSS AN EXPERIMENTALLY REACTIVATED STREAM CHANNEL

15:15 MacIntyre, S.; Vidal, J.: UNUSUAL PATTERNS OF STRATIFICATION IN ICE-COVERED ARCTIC LAKES*

16:00 Tazaz, A. M.; Detweiler, A. M.; Bebout, B. M.; Nicholson, B. E.; Mauney, M. T.; Kelley, C. A.; Chanton, J. P.: METHANE PRODUCTION AND ISOTOPIC ANALYSIS FROM HYPERSALINE MICROBIAL MAT INCUBATIONS WHEN SULFATE REDUCTION IS INHIBITED.

16:15 Mauney, M. T.; Tazaz, A. M.; Bebout, B. M.; Chanton, J. P.; Kelley, C. A.; Nicholson, B. E.; Detweiler, A. M.; Davia, A. F.: ISOTOPIC ANALYSIS OF METHANE BUBBLES OBTAINED FROM MARS ANALOGUE HYPERSALINE ENVRIONMENTS.

16:30 Virginia, R. A.; Wall, D. H.: WHARTON TRIBUTE: THE LEGACY OF ANTARCTIC LAKES ON SOIL HABITATS: FROM ECOLS TO LTER*

16:45 Barrett, J. E.; Virginia, R. A.; Wall, D. H.; Gooseff, M. N.; Takacs-Vesbach, C.: WHARTON TRIBUTE: THE LEGACY OF AQUEOUS ENVIRONMENTS ON SOILS OF THE MCMURDO DRY VALLEYS *

17:00 Wall, D. H.; Virginia, R. A.: WHARTON TRIBUTE: THE LEGACY OF ANTARCTIC LAKES ON SOIL BIODIVERSITY AND THE LTER*

17:15 Adams, B. J.; Adhikari, B. N.; Wall, D. H.; Virginia, R. A.: WHARTON TRIBUTE: THE RELEVANCE OF BOB'S DRY VALLEYS TO ASTROBIOLOGY - IF MULTICELLULAR ANIMALS LIVE(D) ON MARS, THIS IS HOW THEY COULD DO IT *

[T] represents Tutorial presentations

AUTHOR INDEX

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UPCOMING ASLO MEETINGS

2014 Ocean Sciences Meeting
(with AGU and TOS)
23-28 February 2014
Honolulu, Hawaii, USA

2014 Joint Aquatic Sciences Meeting
(with SFS, PSA, SWS)
18-23 May 2014
Portland, Oregon, USA

2015 International Aquatic Sciences Meeting
22-27 February 2015
Granada, Spain

ASLO
Association for the Sciences of Limnology and Oceanography

For more information on the 2013 ASLO Aquatic Sciences Meeting,
address all correspondence and questions regarding registration,
conference logistics, and hotel accommodations to:

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