ASLO 2004 Summer Meeting
The Changing Landscapes of Oceans and Freshwater
June 13-18, 2004 · Savannah International Trade & Convention Center · Savannah, Georgia · USA
www.aslo.org/savannah2004
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Welcome to the ASLO 2004 Summer Meeting!

The ASLO 2004 Summer Meeting will provide a forum for researchers to highlight recent advances with an emphasis on fully exploring the changing landscapes of oceans and freshwater. In addition to traditional topics presented at ASLO summer meetings, participation has been expanded to include those in wetland sciences, marine processes, biodiversity and ecosystems function, interfaces among terrestrial, freshwater, and marine environments, and new instrumentation approaches. Presentations will be inclusive of all areas of aquatic science.

Make your plans to arrive early! This year's meeting will begin on Sunday afternoon with a Presidential Address from Pete Jumars, ASLO President, on The State of the Society, followed by an opening welcome mixer reception. Plan to arrive in time to register and hear this exciting talk before you attend the reception. On Monday morning, the 2004 ASLO Awards will be announced, followed by the plenary lecture featuring Wallace S. “Wally” Broecker. Poster sessions and receptions are scheduled to provide a second opportunity to make professional connections in a social setting. Daily conference events will be held at the Savannah International Trade and Convention Center.

2004 Summer Meeting Presidential Address
The State of the Society
Peter Jumars, ASLO President
Sunday, June 13, 2004, 5:30 to 6:30 p.m.
Chatham Ballroom

ASLO President Peter Jumars will address the “state of the society” on Sunday afternoon immediately prior to the opening welcome mixer reception. He will talk about ASLO’s present and past accomplishments and its future directions.

ASLO President Peter A. “Pete” Jumars is professor of oceanography and marine science at the Darling Marine Center, University of Maine, Walpole, Maine. He received his B.A. in biological sciences in 1969 from the University of Delaware, Newark, Delaware, and his Ph.D. in oceanography in 1974 from Scripps Institution of Oceanography, University of California San Diego. He completed his postdoctoral work from 1974 to 1975 at the University of Southern California in polychaete systematics.

Pete Jumars has been in his current position at the Darling Marine Center since 1999. Prior to that he was at the School of Oceanography, University of Washington, in Seattle, Washington, and with the Oceanic Biology Program and Sediment Dynamics Program in the Office of Naval Research, Arlington, Virginia. Throughout his career he has supervised 11 completed Ph.D.s and substantially more assorted MS students and interns in addition to four postdocs. His research interests are biological-physical interactions, including biomechanics, unsteady flows at low Reynolds numbers, and sedimentary acoustic; predictive theory in ecology; deposit feeding; digestion theories and observations, both for animals with guts and for bacteria; and biology of polychaetes.

His teaching interests include fluid and sedimentary biomechanics and organism-sediment-chemistry-physics interactions.

Jumars holds numerous society affiliations in addition to ASLO. He is involved with the American Association for the Advancement of Science, American Geophysical Union, British Ecological Society, Council of Scientific Society Presidents, and the Society for Integrative and Comparative Biology. Jumars became president of ASLO in 2002 and will serve through 2004. He has served on the board as a member-at-large and president-elect. He also was editor-in-chief, Limnology and Oceanography, from 1986 to 1992. The society recognized Jumars with the G. Evelyn Hutchinson Award in 1994.

Plenary Address
The Great Ocean Conveyor and the Angry Climate Beast
Wallace S. “Wally” Broecker, Newberry Professor of Earth and Environmental Sciences, Lamont-Doherty Earth Observatory
Monday, June 14, 2004, 9:00 a.m.
Chatham Ballroom

Wallace S. “Wally” Broecker will be the plenary speaker for Monday. He is the Newberry Professor of Earth and Environmental Sciences at the Lamont-Doherty Earth Observatory in Palisades, New York. He received his Ph.D. from Columbia University in 1958 and became an assistant professor there in 1959. Broecker was made associate professor in 1961 and became professor in 1964. He has been the Newberry Professor of Earth and Environmental Sciences since 1977. Broecker became a member of the National Academy of Sciences in 1979. His research interests include paleoclimatology, ocean chemistry, isotope dating and environmental science.

In his work, he explores the clear evidence that different parts of the earth’s climate system are linked in very subtle yet dramatic ways and that the climate system has jumped from one mode of operation to another in the past. He is trying to understand how the earth’s climate system is engineered, so we can understand what it takes to trigger mode switches. Until we do, we cannot make good predictions about future climate change. Broecker’s research is directed toward the role of the oceans in climate change. Over the last several hundred thousand years, climate change has come mainly in discrete jumps that appear to be related to changes in the mode of thermohaline circulation. We place strong emphasis on using isotopes as a means to understand physical mixing and chemical cycling in the ocean, and the climate history as recorded in marine sediments.

Broecker’s career has included numerous honors and awards. Among his most recent awards are the Tyler Prize for Environmental Achievement from the University of Southern California and the Arthur L. Day Prize and Lectureship from the National Academy of Sciences in 2002. The Don J. Easterbrook Distinguished Scientist Award from the Geological Society of America was awarded him in 2000, and he received the Desert Research Institute’s 1999 Nevada Medal. In 1996, Broecker received the National Medal of Science. His honors include the DOCS Distinguished Lecturer (Louisiana State University), 1997; Zucker Fellow (Yale University), 1997; Silver Lecturer (University of New Mexico), 1997; Fellow, American Geophysical Union; Fellow, European Geophysical Union, 1992; National Academy of Science, 1979; and American Academy of Arts and Sciences, 1976.
About Savannah

Savannah is a city rich in history, Southern charm, and old-fashioned hospitality. Savannah traces its roots back to 1733 when British General James Oglethorpe first founded the city on a bluff above River Street. Today, Savannah offers world-class restaurants, Civil War forts, dozens of art galleries, fine antique shops, and much more. Visitors revel in our elegant architecture, ornate ironworks, fountains and lush green squares. Savannah’s natural beauty is rivaled only by the city’s hospitable reputation and charm.

Savannah has one of the largest historic districts in the United States, with thousands of architecturally significant buildings nestled under giant live oaks hung with Spanish moss. Known as The Hostess City of the South, Savannah attracts visitors from across the country and around the world. The city is brimming with activity all year round. From walking tours to deep-sea fishing excursions, there are plenty of things to do in Savannah. Whether you’re looking to relax at a local day spa or to explore Savannah’s historic treasures, you can discover Savannah at your own pace!

When it comes to sightseeing, Savannah has some of the finest historic homes, museums, and historic sites in the Southeast. From Civil War forts to English Regency house museums, Savannah offers a broad range of sightseeing options for visitors and residents alike. With all of the area’s unique history, arts and architecture, be sure to take the time to enjoy all that Savannah has to offer!

Savannah is situated at the mouth of the Savannah River, which forms the border between Georgia and South Carolina. The city is precisely located at 31 degrees, 4 minutes north latitude and 81 degrees, 5 minutes west longitude. The area has a large network of rivers and creeks, many of them under tidal influence. The Intracoastal Waterway runs along the east coast, much of which is comprised of ecologically vital marshes.

Savannah enjoys a subtropical climate that makes outdoor activities possible year-round. The summers are hot, and the winters are mild. The temperatures during the month of June typically reach into the upper 80° Fahrenheit (27° Celsius) range during the day with evening lows near 70° Fahrenheit (21° Celsius).

Housing Arrangements

Housing arrangements for the 2004 ASLO Summer Meeting have been made at a variety of hotels, all easily accessible to the convention center by water taxi or alternate transportation, and offering a wide range of room rates that will allow you to select the one that best fits your needs. Room rates range from $113 USD per night to $152 USD per night. Hotel reservation information is included in this brochure with complete room rate and reservation information listed for each hotel.

Transportation

The Savannah International Trade and Convention Center is a waterfront property located on Hutchinson Island. Thus, its location will provide a unique opportunity for the attendees to use water transportation. A water transportation system, including ferries and water taxis, links Hutchinson Island with River Street and Chatham Area Transit’s free shuttle bus service. Bus service will be available from conference hotels to the convention center on a regular schedule from 7 a.m. until 6 p.m. The busses will run every 15 minutes during peak times and every 30 minutes at other times. Free water transportation passes and bus service will be provided only to those staying at one of the official conference hotels. (See page 11 of this brochure for a list and information on these hotels.)

For More Information

For more information on the ASLO 2004 Summer Meeting, please contact:

Helen Schneider Lemay
Registration Coordinator and Meeting Manager
ASLO Business Office
5400 Bosque Boulevard, Suite 680
Waco, Texas 76710-4446
Phone: 254-399-9635, Toll-Free: 800-929-ASLO
Fax: 254-776-3767
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Conference Committee

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Alan Decho, University of South Carolina
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Lynda Shapiro, Treasurer
Oregon Institute of Marine Biology
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Institute of Ecosystem Studies
William Lewis, Past-President
Center for Limnology, University of Colorado
Deborah Bronk, Member-at-Large
College of William and Mary/VIMS
Robert Sterner, Member-at-Large
University of Minnesota
Daniel Conley, Member-at-Large
National Environmental Research Institute, Denmark
Carol Folt, Member-at-Large
Dartmouth College
Morten Sondergaard, Member-at-Large
University of Copenhagen
Curtis Suttle, Member-at-Large
University of British Columbia
Peter Williams, Member-at-Large
School of Ocean Sciences, United Kingdom
Letise Houser, Student Representative
University of Delaware
Colin Stedmon, Student Representative
National Environmental Research Institute

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Lucille Doucette, Journals Manager
Limnology & Oceanography
Gregory Cutter, Editor, L&O Bulletin
Old Dominion University
Paul Kemp, Web Editor and Editor, L&O Methods
Stony Brook University
Susana Feng, Managing Editor
L&O Methods
Adrienne Froelich, Director of Public Policy
Helen Schneider Lemay, Business Manager
ASLO Meeting & Marketing Services

Future ASLO Meetings
ASLO 2005 Aquatic Sciences Meeting
February 20-25, 2005
Salt Lake City, Utah

ASLO 2005 Summer Meeting
June 19-25, 2005
Santiago de Compostela, Spain

ASLO 2006 Summer Meeting
June 4-9, 2006
Victoria, B.C., Canada

ASLO 2007 Winter Meeting
February 4-9, 2007
Santa Fe, New Mexico

Presentation Archive
Abstracts of papers presented during the ASLO 2004 Summer Meeting will be published in the conference abstract book as well as archived on the ASLO web site following the meeting.

Commercial and Nonprofit Exhibits and Additional Sponsorship Opportunities
An exhibit area will be set up in Exhibit Hall A in the Savannah International Trade and Convention Center. Due to the location of the convention center, sessions and exhibits will begin at 9:00 a.m. Exhibits will be open Tuesday, June 15, Wednesday, June 16, and Thursday June 17, during conference hours. Attendees will have access to the exhibit hall during the conference hours, posters will be on display in the exhibit hall, and morning and afternoon coffee breaks will be set Tuesday, Wednesday, and Thursday in the exhibit area as well.

Academia Book Exhibits
Bruce Davis
3512 Willow Green Court
Oakton, VA 22124
703-716-5537 Voice, 703-620-3676 Fax
http://www.acadbkex.com

Astoria-Pacific, Inc.
Tom Swenson
PO Box 830
Clackamas, OR 97015-0830
321-409-1195 Voice, 321-409-1882 Fax
http://www.astoria-pacific.com

Elsevier
Diana Murray
360 Peirn Avenue South
New York City, NY 10010
212-633-3767 Voice, 212-633-3112 Fax
http://www.elsevier.com
Exhibitors are invited to participate in the topical sessions by utilizing the two complimentary registrations, which have been allotted to each organization. Additional representatives may attend the various social activities associated with the meeting by paying the spouse/guest fee of $100.00 USD. For more information, please see the registration section on page 10. Both commercial and nonprofit exhibitors are encouraged to participate. The costs for exhibits are as follows:

- Commercial (For-profit) ........................................... $1150.00 USD
- Non-profit .................................................................$750.00 USD

Several opportunities are available for sponsorship of various breaks, receptions and other functions throughout the meeting. Please contact the Exhibits/Sponsorship Coordinator at the ASLO Business Office, (800) 929-ASLO or (254) 399-9635 if you would like more information.

Opportunities and Information for Students

For up-to-date information on all planned student events, housing recommendations, room sharing opportunities and the Career Link Program, please check the ASLO conference web site at http://www.aslo.org/savannah2004 and click on Student Information.

ASLO Student Meeting

The ASLO Student Meeting will be held from 12:00 to 1:15 p.m. on Monday, June 14, 2005 in Ballroom A.

Minorities Program

The 15th annual ASLO Minorities Program will be held at the 2004 Summer Meeting. The initiative is a shared undertaking between Hampton University and ASLO and is funded by the Ocean Sciences Division of the National Science Foundation. Minority students will attend a field trip and give presentations in a student symposium. These students will participate in a special session on Monday, June 14, in room 205 of the Savannah International Trade and Convention Center. Students participating in this program will be aided by ASLO member volunteers who will serve as meeting mentors. If you would like to recommend a student for the program, or if you are interested in serving as one of the meeting mentors, please contact:

Dr. Ben Cuker
Marine Science Department
Hampton University
Hampton, VA 23668
Phone: 757-727-5884 · Fax: 757-727-5740
E-mail: benjamin.cuker@hamptonu.edu

Outstanding Student Poster Awards

ASLO will present several awards for the most outstanding posters presented by student members. Posters in all areas of aquatic science are appropriate, including theory, modeling, and laboratory or field experimentation. To be eligible, the student must be an ASLO member and first author on research that has not been presented previously at ASLO or other scientific meetings. Presentations will be judged on the basis of innovation/scientific insight, quality of experimental design/methods, and clarity/effectiveness of presentation. All posters submitted by students will be considered for the student poster awards. There is no need to apply.

Student posters will be judged immediately following the conclusion of the poster set-up time on Monday afternoon, June 14, 2004. Therefore, posters that are not in place by this time will not be eligible for awards and will not be judged.

Volunteers Needed for Poster Judging

Post docs and professionals who are members of ASLO are invited to serve as poster judges. Each judge will be responsible for evaluating 10 posters. Please indicate your area of expertise and interest in serving as a volunteer by sending an e-mail to: Colin Stedmon at CST@DMU.dk.

Career Link Program

Prospective employers and supervisors are invited to post job announcements free of charge at the conference. Positions advertised on the ASLO web site will be printed out and posted. In addition, advertisements can be sent to Letise Houser at lthouser@Udel.edu, who will ensure that they are posted for viewing during the meeting. Likewise, students are invited to post one-page resumes for viewing. Electronic versions of ads and resumes will be distributed free of charge after the meeting. To learn more about the Career Link Program, please go to the following page on the ASLO web site: http://www.aslo.org/career/careerlink.html.

Roommates Wanted

Roommates Wanted is a free on-line service to those who are seeking roommates during ASLO meetings. To participate, visit ASLO’s website at http://www.aslo.org/meetings/roommates.html.
Conference Events

Registration
Dates: Sunday, June 13, 2004 - 3:00 to 9:00 p.m.
      Monday, June 14, 2004 through Thursday,
      July 17, 2004 - 7:00 a.m. to 5:00 p.m.
Location: Exhibit Hall A Lobby

Conference attendees are encouraged to register on Sunday afternoon so that they will have their programs and materials prior to the opening reception for the conference on Sunday evening and before the general session begins on Monday morning.

Presidential Address The State of the Society
Date: Sunday, June 13, 2004 - 5:30 p.m. to 6:30 p.m.
Location: Chatham Ballroom

ASLO President Peter J. umars will address the “state of the society” on Sunday afternoon immediately prior to the opening welcome mixer reception. He will talk about ASLO’s present and past accomplishments and its future directions.

Opening Welcome Mixer Reception
Date: Sunday, June 13, 2004 - 6:30 p.m. to 8:30 p.m.
Location: River Concourse Foyer

An opening welcome mixer reception will be held on Sunday evening at the Savannah International Trade and Convention Center. In addition to the reception, the conference registration area will be open so that you can check-in for the meeting at this time.

Opening Session and ASLO Awards Presentation
Date: Monday, June 14, 2004 - 9:00 to 10:40 a.m.
Location: Chatham Ballroom

Attendees of the 2004 ASLO Summer Meeting will attend the welcome and opening session on Monday morning. Society awards and the plenary lecture will immediately follow. Society award recipients will be recognized and honored as part of the general session.

Annual Business Meeting
Date: Monday, June 14, 2004 - 5:30 to 6:30 p.m.
Location: Room 100

ASLO’s annual business meeting is scheduled for Monday evening from 5:30 to 6:30 p.m. at the convention center. All ASLO members and meeting participants are encouraged to attend.

Poster Sessions and Receptions
Dates: Tuesday, June 15 and Wednesday,
       June 16, 2004 - 3:30 to 5:30 p.m.
Location: Exhibit Hall A

Poster sessions and receptions will take place in the convention center on Tuesday and Wednesday evenings. Poster sessions are an important part of the 2004 Summer Meeting and provide an invaluable contribution to the theme. Posters will be on display during the reception each evening and exhibits will be open during this time.

National Science Foundation - Update on Funding Opportunities for Biological Research
Date: Tuesday, June 15, 2004 - 12:00 to 1:30 p.m.
Location: Room TBD

During recent years, the National Science Foundation has developed many new opportunities for funding that are directly applicable to scientists involved in ocean, freshwater/terrestrial, and other forms of biological research. Dr. Matthew Kane, National Science Foundation, Div. Molecular and Cellular BioSciences (BIO/MCB), will discuss such new and emerging funding programs. Examples will include: Assembling the Tree of Life (Atol); Biocomplexity in the Environment (BE); Frontiers in Integrative Biological Research (FIBR); Interagency NSF/USDA Microbial Genome Sequencing Program (MGSP); Interagency NSF/NIH Ecology of Infectious Diseases Program (EID); Microbial Observatories and Microbial Interactions & Processes (MO & MP); National Ecological Observatory Network (NEON); Research in BioGeosciences (BioGeo); Research Coordination Networks (RCN). For more information, contact Dr. Kane at mkane@nsf.gov.

Wednesday Evening Riverboat Cruise and Dinner (Optional)
Date: Wednesday, June 16, 2004
Participants will board at the riverboat dock located at 9 East River Street at 6:30 p.m. and will return at 9:30 p.m.
Cost: Adults: $38.00 per person
      (Price includes the riverboat cruise and dinner.)
      Tickets may be purchased thru 12:00 p.m.

No visit to Savannah is complete without a riverboat cruise along beautiful historic River Street. The River Street Riverboat Company operates Savannah’s premier dinner entertainment cruise ships. The riverboats cruise year round from their riverfront dock located at 9 East River Street (directly behind City Hall and next door to the Hyatt Regency). The dinner will have a truly Southern flair with assorted salads, fried chicken, barbeque pork, macaroni and cheese, Savannah red rice, green beans, buttered corn, cornbread, fresh fruit, desserts and iced tea and coffee. A cash bar will be available on board the riverboat. Participants will be shown a view of Savannah and will experience a part of the South that they will never forget!

Field Trip: Tour of Savannah Coastal Environments and Marine Science Facilities by Bus and Boat
Date: Sunday, June 13, 2004 - Participants will board busses at 8:00 a.m. and will return at approximately 2:00 p.m.
Cost: $70.00 (Price includes bus transportation, tour of facilities, boat transportation, and lunch) Tickets may be purchased thru Wednesday, June 9, 2004.

Led by faculty and staff from Savannah State University (SSU), the Skidaway Institute of Oceanoigrophy (SkIo), and the University of Georgia (UGA), field trip participants will board busses on River Street at 8:00 a.m. on Sunday, June 13, 2004, for a tour of the marine science facilities and habitats at SSU and on Skidaway Island (SkIo, UGA, NOAA Gray's Reef National Marine Sanctuary). Here the group will board the “Spirit of Harbortown” for a lunch
cruise/tour along coastal salt marsh waterways. Local researchers will provide brief presentations about harvested resources, crab decline, dying marshes, local natural history (birds, reptiles, and dolphins), coastal water quality and dynamics (coastal oceanography). Students from the ASLO Minorities Program will join field trip participants. The group will tour the Savannah River and will return back to Savannah by mid-afternoon.

Additional Conference Events and Organized Activities
Information on workshops and field trips may be added at a later date. Please check the conference web site: http://www.aslo.org/savannah2004 or call the ASLO Business Office: (254) 399-9635 or (800) 929-ASLO.

Instructions for Poster Presenters, Oral Presenters, and Session Chairs
Abstracts
Abstracts for this meeting will be posted and archived on the ASLO Website (http://www.aslo.org), and a complete book of abstracts will be distributed to registered attendees at the meeting.

Poster Presentations
Poster sessions are an important part of the ASLO 2004 Summer Meeting and provide invaluable contributions to the theme and sub-themes. Posters will be on display in Exhibit Hall A of the Savannah International Trade and Convention Center on Tuesday, Wednesday, from 8:00 a.m. to 5:30 p.m., and Thursday from 8:00 a.m. until 3:30 p.m. Poster sessions will coincide with the poster reception Tuesday and Wednesday afternoons from 3:30 to 5:30 p.m. Refreshments will be served during the poster sessions. Authors should be available for discussion purposes during each poster session reception.

All poster presenters were notified of their poster number in advance of the meeting. If you did not receive such notification, please contact the conference management office at business@aslo.org or call 800-929-2756 or 254-399-9635.

Actual poster space will be 40 inches high by 44 inches wide (3 ft. 4 in. high by 3 ft. 8 in. wide or 1.016m high by 1.117m wide) in size. Size requirements must be strictly adhered to so that they fit within the space assigned to them. If your poster exceeds these specifications, it may be subject to removal.

It is very important that poster presenters adhere to the designated set up and tear down instructions and times. Posters may be set up on Monday, June 14, 2004, from 3:00 to 5:00 p.m. You will set up and tear down instructions and times. Posters may be set up and torn down within the space assigned to them. If your poster exceeds these size requirements, it may be subject to removal.

Actual poster space will be 40 inches high by 44 inches wide (3 ft. 4 in. high by 3 ft. 8 in. wide or 1.016m high by 1.117m wide) in size. Size requirements must be strictly adhered to so that they fit within the space assigned to them. If your poster exceeds these specifications, it may be subject to removal.

It is very important that poster presenters adhere to the designated set up and tear down instructions and times. Posters may be set up on Monday, June 14, 2004, from 3:00 to 5:00 p.m. You will set up your poster according to your assigned number and to the sequential numbers on the poster boards. Student posters will be judged immediately following the conclusion of the poster set-up time on Monday afternoon. Therefore, student posters that are not in place by this time will not be eligible for awards and will not be judged.

All posters must be dismantled on Thursday, June 17, from 3:30 to 5:30 p.m. If the presenting author has not dismantled a poster by the designated time, the convention decorator may discard it.

Oral Presentations
All concurrent sessions will take place at the Savannah International Trade and Convention Center. With the exception of tutorials, oral presentations will be a total of 20 minutes in length, including set up, questions, and discussion. Please plan to allow at least five minutes for questions and discussion time. Session chairs have been instructed to strictly adhere to the schedule so that participants may move quickly among the concurrent session locations. If a presentation should be cancelled for any reason, this time will be used for additional discussion or a stretch break.

Presenters will not be allowed to provide their own laptop computer, and, in fact, personal laptop computers cannot be plugged into projectors in oral session rooms.

Pre-Conference Presentation Uploading
It is highly recommended that you submit your presentation prior to the conference via the conference FTP site established through AVHQ Speaker Services. All individual presentations will be password protected. As a presenter for the 2004 ASLO Summer Meeting, you will access the site and your presentation using the same user name and password you were given for your conference abstract submission.

Please follow these easy instructions for pre-conference uploading of your presentation via the secure FTP site:

1. Go to the ASLO 2004 Summer Meeting Website (www.aslo.org/meetings/savannah2004)
2. On the front page of the conference web site, select the link for AVHQ Speaker Services (www.avhqspeakerseervices.com)
3. Select "Submit Your Presentation."
4. Select 2004 ASLO Summer Meeting from the dropdown list of available conference/shows.
5. Select "Poster Login."
6. Login with the same user name and password that you were assigned for the ASLO 2004 Summer Meeting. (You received your user name and password in your Abstract Submission Confirmation for the ASLO 2004 Summer Meeting.)
7. You will be presented with two options: Update "Previously Added Presentation" or "Submit New Presentation." If you are submitting your presentation for the first time, select "Submit New Presentation."
8. Click on "Upload New Presentation."
9. Fill out questionnaire.
10. Click "Submit."
11. Click the "Upload File" button. An "Upload File" box will open up. Use the Browse button to find your presentation and click "Upload File."
12. Wait for the website to tell you that your presentation has been submitted.
13. You will receive an immediate confirmation of receipt. Within 72 hours, you will receive another e-mail that your file has been checked and accepted.

This is the best way to submit your presentation. You will receive confirmation of your submitted presentation from AVHQ Speaker Services. You will also find helpful information and tips on creating better presentations.

If there is a problem with uploading during the submission process, a technician will walk you through the steps on the telephone tech support line. Once uploaded, speaker technicians will open the presentation file to make sure everything will open and execute...
correctly. If any changes are made, AVHQ will notify the presenter via e-mail or phone and advise them as to whether it is correct or if further work is needed. Regarding security, AVHQ will download the presentations that are uploaded each day, take them off the ftp site, and place them on their local secure server.

**Bring a back-up copy of your presentation with you to the meeting on either a disk/CD-ROM or DVD-ROM.**

**Speaker Ready Room**
A speaker ready room will be located in Room 102 of the Savannah International Trade and Convention Center for presenters to preview their materials and run-through their presentations. The speaker ready room will be open from 1:00 to 9:00 p.m. on Sunday, from 7:00 a.m. to 7:00 p.m. on Monday, Tuesday, and Wednesday, and then from 7:00 a.m. to 3:30 p.m. on Thursday.

**Presentation Room**
Audio-visual technicians will be available in the Room 101 of the Savannah International Trade and Convention Center from 1:00 to 9:00 p.m. on Sunday and from 7:00 a.m. to 7:00 p.m. on Monday, Tuesday, Wednesday, and Thursday.

If you do not submit your presentation prior to the conference, you must bring your PowerPoint presentation to Room 101 at least 24 hours before your presentation. Qualified technicians can help you transfer your presentation from your laptop, if necessary. Speakers will have the ability to review and make changes to their PowerPoint presentations in the presentation room. It is recommended that each presentation be reviewed no less than three hours before the start of the session.

If you are using slides, extra slide carousels will be provided. If you are using one of these carousels, please mark it with your name using the tape and markers that will be provided in the room.

**PC and Macintosh Platforms**
All PC computers in the presentation room will be installed with Microsoft Office 2000®. PowerPoint presentations created on the Macintosh platform should work, but Macintosh presentations should be reviewed in the speaker ready room to make sure all fonts and video clips are present in the form they were created in. Macintosh users should name their presentations with a .ppt suffix (example: presentation.ppt).

**Microsoft XP**
If you are using Microsoft Office XP, please save your PowerPoint presentation down to the PowerPoint 97-2000 version.

**“Pack & Go”**
The “Pack & Go” utility within Microsoft PowerPoint is a useful tool to use when you place video and/or sound files within your presentation. It is also helpful when using non-standard fonts within your presentation. This utility will compress your presentation along with the associated files into a single compressed file. You can then copy your presentation onto a floppy disk, CD-R, CD-RW, or Zip disk and bring it to the speaker ready room, where it can be unpacked and reviewed. It is important to remember that Macintosh only offers this option in its Macintosh Office for OS X.

**Laptop Support**
A-V technicians will offer support to remove presentations from laptops. This action will require the installation of Zip Disk drivers or the installation of other drivers for removable media. It also might be required to configure the network card. If you plan on having to remove your presentation from your laptop, it is advisable to show up to the presentation room as soon as possible, to work out any unforeseen problems.

**Media Support**
We recommend you bring at least 2 copies of your presentation to the meeting in case there is a problem with one of them. When bringing your presentation on a disk, it may be on a Zip 100, Zip 250, CD-R, CD-RW, Compact Flash, Memory Stick, or 1.44 floppy. It is recommended that at least one backup copy of your presentation be brought to the presentation room when you check in.

**Additional Presentation Guidelines**
Keep animations to a minimum. Although, when using a bulleted list of points, it may be useful to have the points appear.

Zip Disks, 1.44 Floppy, and CD’s will be returned to the speaker.

All presentations will be deleted at the end of the day. All copies will be deleted at the end of the meeting.

If you plan to do a PowerPoint presentation, it is highly recommended that you have a backup of your presentation in the form of overhead transparencies.

All oral session rooms will be equipped with the following audio-visual equipment:
- 1 computer projector (PowerPoint)
- 1 PC computer
- 1 overhead projector
- 1 screen
- 1 laser pointer
- 1 timer
- 1 lavaliere microphone

**Rental of additional audio-visual equipment:**
Rental of a VCR, 35 mm slide projector, monitor, audio systems, provision of extra power outlets, extra tables, stands, etc. can be handled for an additional cost. Internet connectivity in the session room is also available at an additional cost. If you did not request extra equipment at the time your abstract was submitted, please contact Ed Berru at AVHQ Speaker Services by phone at 214-210-8075 or by email at eberru@avhq.com

Any costs for additional equipment will be billed to the abstract’s presenting author.

For any PowerPoint presentation or audio-visual related questions, please contact:
Ed Berru
AVHQ Speaker Services
10540 N. Stemmons Freeway
Dallas, TX 75220
Office: 214-210-8075
Email: eberru@avhq.com
Registration Information

Online registration is preferred and highly recommended. You can register electronically on the conference web site (http://www.aslo.org/savannah2004). Electronic registrations must include complete credit card information.

Every attempt has been made to allow secure transmissions of your credit card information and transaction, but ASLO assumes no liability for your credit card information when it is released electronically. All credit card transactions will be processed through the conference web site. Transactions are protected and encrypted using a secure socket layer (SSL) certificate provided by Verisign, Inc. SSL technology is the industry-standard method for protecting web communications. The SSL security protocol provides data encryption, server authentication, message integrity, and optional client authentication for a TCP/IP (internet) connection. Credit card verification and debit services will be provided by Authorize.net, a leading provider of Internet-based transaction services with thousands of online and traditional business customers around the world.

You will receive a separate electronic confirmation for each on-line form that you submit.

If registration by electronic means is not possible, please complete the registration form included in this book and send to the address listed below with payment or charge card information. Please return mailed-in registrations to:

ASLO Business Office
5400 Bosque Boulevard, Suite 680
Waco, Texas 76710-4446

Please make checks payable to: ASLO
(All payments must be in U.S. currency only.)

Registrations complete with purchase order or credit card information that are not accompanying an abstract submission can be faxed to: (254) 776-3767.

The full registration fee includes admission to all sessions, exhibits, optional special organized activities, field trips, and the program book (sent to all registrants prior to the conference). Optional events such as any coffee breaks, book of abstracts, and the poster receptions (Tuesday and Wednesday), only the conference social events such as the Sunday welcome reception, coffee services, and the poster receptions (Tuesday through Thursday). Optional events are not included. However, spouses and guests are encouraged to register for the special activities. Spouses and guests cannot be admitted to the sessions without paying the appropriate full registration fee.

Substitutions or Cancellations

We understand that occasionally other responsibilities and personal obligations prevent you from attending a program for which you have registered. If you find that you will not be able to attend the ASLO meeting, we encourage you to send a substitute. Substitutions can be made at any time, even on-site at the conference.

If you find it necessary to cancel after you have already paid, we can refund your conference fee (less an $80 USD processing fee) if we receive notice in writing on or before May 10, 2004. Due to the limited number of enrollments available, registrants who cancel on or after May 11, 2004, will be not be eligible for any part of a refund.

To provide cancellation notice and request a refund, please send a letter to: Helen Schneider Lemay, ASLO Business Office, 5400 Bosque Boulevard, Suite 680, Waco, Texas 76710-4446, fax your request to (254) 776-3767, or via e-mail to business@aslo.org.

Registration Fees

Fees are stated in U.S. dollars and must be paid in U.S. dollars.

In order to register as an ASLO member, you must be a current member of the society at the time that you register. Registration fee refunds will not be issued to those who register as a non-member and then later join the society.

- ASLO Members: $350.00 USD on or before May 10, 2004 ($410.00 USD after May 10, 2004)
- Non-members (Those who are not a member of ASLO): $450.00 USD by May 10, 2004 ($510.00 USD after May 10, 2004)
- ASLO Student Members: $200.00 USD by May 10, 2004 ($260.00 USD after May 10, 2004)
- Non-Member Students: $250.00 USD by May 10, 2004 ($310.00 USD after May 10, 2004)
- One-day registrations: $150.00 USD
- Spouse/Guest: $100.00 USD (Spouse and guest fees cover only the conference social events such as the Sunday welcome reception, coffee services, and the poster receptions (Tuesday through Thursday). Optional events are not included. However, spouses and guests are encouraged to register for the special activities. Spouses and guests cannot be admitted to the sessions without paying the appropriate full registration fee.

- A late fee of $60.00 USD will be added to all registrations received after May 10, 2004.

Fees to attend ASLO’s 2004 Summer Meeting must be paid in advance. Due to the limited numbers, registrations are not considered guaranteed until a check, money order, purchase order, or charge card information is received. All fax registrations must include complete credit card information, including number, expiration date, and cardholder name. VISA, MasterCard, and American Express are accepted. Organizations can be billed only if a purchase order accompanies the registration either by fax or by mail.

Registration and any other fees listed on the conference registration form are payable in U.S. currency only.

If desired, confirmation will be sent to attendees upon receipt of each completed and paid registration.

Conference Check-In and Registration

Registration prior to the meeting is strongly encouraged. By doing so, you will greatly reduce the amount of time necessary to complete the on-site registration process and pick up your meeting materials.

Meeting materials and name badges can be picked up on Sunday, June 13, 2004, at the Savannah International Trade and Convention Center, Exhibit Hall A Lobby, from 3:00-9:00 p.m. Registration will be opened each day at the convention center, Exhibit Hall A Lobby, from Monday, June 14, through Thursday, June 17, from 7:00 a.m. to 5:00 p.m.
Name badges will be included in your registration packet and must be worn at all times throughout the meeting. Your conference receipt will be included in with your badge.

Maps showing the various session and meeting room locations are included at the end of this program, so be sure to bring it with you to the meeting.

**Special Needs**
If you have a disability or limitation that may require special consideration in order to fully participate, please contact the meeting's planning organization to discuss how we can accommodate your needs. Call 800-929-ASLO or 254-399-9635 or send e-mail to business@aslo.org.

**Childcare**
If you would like to connect with other attendees and arrange childcare together, please e-mail alexisn@sgmeet.com. You may also want to check with your hotel to see if they offer in-house day care services. Any arrangements made represent a contractual agreement between the individual and the childcare agency/provider selected. ASLO assumes no responsibility for the services rendered.

**Message and Jobs Boards**
Messages for colleagues can be posted on message boards at the Savannah International Trade and Convention Center. A bulletin board also will be available to post job listings. If you know of pertinent job announcements, you are encouraged to take advantage of this opportunity by posting them on this board. If you know of a job opportunity and would like to submit a listing but will not be able to attend the meeting, please e-mail a brief description to the ASLO student board representative Letise Houser at lthouser@udel.edu by May 17, 2004.

**E-mail Access**
E-mail terminals to access electronic mail will be set up in Room 104 of the Savannah International Trade and Convention Center during conference hours Sunday through Thursday. We also suggest you check with your hotel regarding the e-mail facilities and instructions on access.

**For More Information**
For more information on the ASLO Summer Meeting, address all correspondence and questions regarding registration, conference logistics, and hotel accommodations to:

Helen Schneider Lemay
Registration Coordinator and Meeting Manager
ASLO Business Office
5400 Bosque Boulevard, Suite 680
Waco, Texas 76710-4446
Phone: 254-399-9635, Toll-Free: 800-929-ASLO
Fax: 254-776-3767
E-mail: business@aslo.org

If your questions pertain to the program, please contact one of the meeting chairs. If you need information regarding content of a particular session, please contact the appropriate session organizer.

**Hotel and Accommodation Information**
ASLO has selected eight (8) Savannah hotels to host attendees of the ASLO Summer Meeting. These hotels provide a range of sleeping room rates.

Please make your hotel reservations directly with the hotel of your choice by phone, fax, mail or Internet by the appropriate reservation cut-off date in order to guarantee the special meeting rates. We strongly encourage you to support ASLO by making your hotel reservations at one of the conference hotels listed in this program. As stated earlier, free water transportation will be provided to those who stay at one of the official conference hotels listed below. Alternate transportation also will be available for ASLO meeting attendees who are guests at these same hotels.

**Conference Hotels**

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<tr>
<th>Hotel Name</th>
<th>Address</th>
<th>Phone</th>
<th>Fax</th>
<th>Rates</th>
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Located on the eastern edge of the historic riverfront and connected via the riverwalk to world-famous River Street, The Savannah Marriott Riverfront is within easy walking distance of the historic district where guests can enjoy the beautiful squares, historic house museums, art galleries, and antique shops. The Savannah Marriott Riverfront offers newly renovated guest rooms specifically designed for the business traveler. The hotel also features an indoor atrium with an indoor pool and lobby bar. Self-parking is available at the Marriot for $7 per night.
The Mulberry Hotel
601 E. Bay Street
Savannah, Georgia 31401
Phone: 912-234-6400
Fax: 912-790-7070
Rates: $138 single occupancy/$141 double occupancy
Reservation Cut-off Date: May 17, 2004

Located on beautiful Washington Square and within steps of Savannah's rich history, The Mulberry Inn takes you back to the elegance and graciousness of another era. Located in the heart of the historic district, the hotel features 145 newly renovated guest rooms. Throughout the hotel, you are sure to find that the period furnishings, oil paintings, polished hardwood floors, and elegant chandeliers offer an endless escape into Savannah's rich history. The Mulberry represents a style of service and hospitality that is traditional to the Old South. Self-parking is available at the Mulberry Hotel for $8 per night.

River Street Inn
124 East Bay Street
Savannah, Georgia 31401
Phone: 912-234-4229
Fax: 912-234-1478
Rates: $138 single occupancy/$141 double occupancy
Reservation Cut-off Date: May 17, 2004

The River Street Inn is located at the beginning of Savannah's landmark historic district. Wrapped around a central atrium, this five-story historic inn on Savannah's Riverfront is preserved to offer leisure and business travelers a taste of yesterday with all the modern conveniences. Rooms vary in theme and décor, from hardwood floors and four-poster beds, to plush carpeting and private balconies. All 86 guest rooms are well appointed, offering views of the Savannah River to the North and Savannah's Historic District to the South. The romantic ambiance of Savannah and the antebellum south is right outside your guest room. Guests can enjoy walking onto the French-style balconies to watch the huge ocean freighters pass, or watch the night sky through floor-length windows. The River Street Inn provides self-parking for registered guests at a charge of $7 per day. Valet parking is available for a charge of $10 per day.

Planters Inn
29 Abercorn Street
Savannah, Georgia 31401
Phone: 912-232-5678
Fax: 912-232-8893
Rates: $132 single occupancy/$135 double occupancy
Reservation Cut-off Date: May 17, 2004

The elegant Planters Inn was created with a lavish attention to detail. This award-winning property blends the warmth and charm of a small Inn with the services of a grand hotel. A landmark building, Planters Inn opens onto historic Reynolds Square, where live oak trees, flowering azaleas, and horse drawn carriages set a tranquil mood. A short stroll through the park leads to Savannah's bustling riverfront where renovated cotton warehouses now feature quaint shops and varied restaurants. It is only a short walk from the riverfront. The Inn’s 60 guest rooms are all individually decorated in the finest fabrics and Baker furnishings. Our guest rooms are all accessed from quiet interior hallways, and offer four-poster rice beds, period furnishings and private baths. The Planters Inn will provide either self or valet parking to ASLO overnight guests for $7 per night.

Royal Inn
201 East Bay Street
Savannah, Georgia 31401
Phone: 912-790-7070
Fax: 912-790-7070
Rates: $128 single occupancy/$131 double occupancy
Reservation Cut-off Date: May 17, 2004

The Hampton Inn Savannah Historic District is a beautiful new property built from the ground up. The lobby is furnished with antiques, lustrous heart pine floors, and authentic Savannah gray brick exposed brick walls. The hotel features a rooftop pool with a spectacular view of the Savannah River, fitness center, English pub-style fireside lobby bar and complimentary continental breakfast. The hotel also offers trolley pick-up for tours. The Hampton Inn will provide overnight self-parking for $8 per night. Hotel parking is limited and overflow space should be available at the city garage located right across the street at the same rate.

Radisson Hotel Historic Savannah
411 West Bay Street
Savannah, Georgia 31401
Phone: 912-231-9700
Fax: 912-231-0440
Rates: $122 single occupancy/$125 double occupancy
Reservation Cut-off Date: May 17, 2004

As an upscale boutique hotel, the Radisson Hotel Historic Savannah was designed to compliment its historic setting, while meeting the expectations of contemporary hotel guests. Throughout the hotel a subtle Celtic design can be found. Guest rooms feature 10-14 foot ceilings trimmed in crown molding that frame four poster mahogany beds. Suites feature marble spa tubs with separate showers, while the second floor hosts aencial meeting space, a cardio fitness center, terrace heated pool and spa. Radisson Hotel Historic Savannah has 150 guestrooms, featuring custom furnishings with an Irish accent such as mahogany 4-poster king beds and two 2-poster queen beds. The hotel, located at the corner of Montgomery Street and Bay Street, directly adjacent to “City Market,” sits in the heart of Savannah's Historic District. The Radisson provides self-parking for registered guests at a charge of $7 per day. Valet parking is available for a charge of $10 per day.
Savannah-Days Inn & Suites Historic District
201 W. Bay Street
Savannah, Georgia 31401
Phone: 912-236-4440
Toll-free: 877-542-7666
Fax: 912-232-2725
Rates: $113 single occupancy/$116 double occupancy; $130 one-bedroom suites plus $3 per person
Reservation Cut-off Date: May 17, 2004

The Days Inn Historic Riverfront Savannah is a seven-story all interior corridor property cradled by majestic live oaks, beautiful flowing rivers and fascinating historic homes. The hotel is conveniently located between River Street and Old City Market. To reach River Street simply walk across Bay Street and follow the stone stairs down to enjoy unique shops, magnificent galleries, numerous restaurants and harbor cruises. A quick step behind the hotel will place you in City Market, a delightful area with artists at work in their studios, horse drawn carriage tours, outdoor cafes and a wonderful variety of live music. The Days Inn will provide parking for overnight guests at a rate of $5 for self-parking per day.

Transportation Information

Special Airline Rates
The Savannah/Hilton Head International Airport is approximately 15 minutes from downtown Savannah. Delta Airlines is providing special rates for ASLO Summer Meeting attendees as the official airline for flights to Savannah. Simply contact Delta's toll-free number at (800) 241-6760. You also can call your travel agent. To take advantage of the discounted airfares being offered by Delta, please refer to Delta File Number: 201012A when making your reservations. Delta's new "bonus" program has increased the discount to 10% off the lowest applicable fare for tickets purchased less than 60 days prior to departure and 15% for tickets purchased at least 60 days prior to departure. By ensuring that the meeting number appears on your ticket, you will be supporting ASLO.

Airport Shuttle Service
For a list of companies that provide courtesy vehicles, taxi cabs, and limited ground transportation services including limousines and shuttles to and from the Savannah International Airport to the various downtown hotels, please go to the airport's web site at: http://www.savannahairport.com/groundtransport.php

Car Rental
AVIS has been appointed the official car rental company for the American Society of Limnology and Oceanography meeting in Savannah, Georgia. To make reservations if you are calling from the U.S., please call (800) 331-1600. If you live outside the U.S., please visit the website www.avis.com for a list of international numbers to call and select Customer Service. You may also contact your travel agent. The AVIS Worldwide Discount Number for the ASLO meeting is: D130903. You also can make your reservations online and have your discount number automatically included by accessing the AVIS web site at: http://www.avis.com/AvisWeb/html/meetings/go.html?1452

When you complete the on-line reservation process, you will receive an email confirmation.

Taxi/ Bus Service to the Airport
Taxi service from the Savannah International Airport to any of the conference hotels will cost approximately $20.00 USD for one passenger. Typically taxi service operators charge for additional passengers at a rate of $5.00 per passenger. If you prefer to take an airport shuttle bus or another type of transportation, please consult the Savannah International Airport web site for a list of services: http://www.savannahairport.com/groundtransport.php

Local City Transportation
Chatham Area Transit (CAT) provides free transportation service on its CAT Shuttles between the Savannah Visitors Center on MLK, Jr. Boulevard and the waterfront, as well as throughout the historic district. The shuttle makes five stops in the waterfront area. The free CAT Shuttle serves Savannah's Downtown and Historic District and connects to other CAT bus routes and the Savannah Belles Ferry service that provides daily service between Hutchinson Island and River Street.

Savannah International Trade and Convention Center Parking
For those attendees planning to bring their vehicles with them while visiting the Savannah International Trade and Convention Center, there are designated specific areas strictly to be used by clients and guests. The main parking lot is located adjacent to the facility and can be accessed by either of the two parking booths located at the east and west entrances of the center. The daily charge is $2.00 per day per car.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sunday, June 13, 2004</strong></td>
<td></td>
<td>Field Trip: Tour of Savannah Coastal Environments and Marine Science Facilities by Bus and Boat Busses will board at the Savannah International Trade and Convention Center on River Street at 8:00 a.m. and return to the same location at 2:00 p.m.</td>
</tr>
<tr>
<td>8:00 a.m. - 2:00 p.m.</td>
<td>10:40 - 11:00 a.m.</td>
<td>Break Savannah International Trade and Convention Center - Chatham Ballroom Foyer</td>
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<tr>
<td>11:00 a.m. - 12:00 p.m.</td>
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<td>Morning Concurrent Oral Sessions Savannah International Trade and Convention Center - Various Rooms</td>
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<tr>
<td>12:00 - 1:30 p.m.</td>
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<td>Lunch Attendees on their own for lunch</td>
</tr>
<tr>
<td>3:00 - 8:30 p.m.</td>
<td>1:30 - 3:10 p.m.</td>
<td>Afternoon Concurrent Oral Sessions Savannah International Trade and Convention Center - Various Rooms</td>
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<tr>
<td>5:30 - 6:30 p.m.</td>
<td>3:00 - 5:00 p.m.</td>
<td>Poster Set-up Savannah International Trade and Convention Center - Exhibit Hall A Foyer</td>
</tr>
<tr>
<td>6:30 - 8:30 p.m.</td>
<td>3:10 - 3:30 p.m.</td>
<td>Break Savannah International Trade and Convention Center - Exhibit Hall A Foyer</td>
</tr>
<tr>
<td><strong>Monday, June 14, 2004</strong></td>
<td></td>
<td>3:30 - 5:30 p.m. Afternoon Concurrent Oral Sessions Savannah International Trade and Convention Center - Various Rooms</td>
</tr>
<tr>
<td>7:00 a.m. - 5:00 p.m.</td>
<td>5:30 - 6:30 p.m.</td>
<td>ASLO Business Meeting Savannah International Trade and Convention Center - Room 100</td>
</tr>
<tr>
<td>8:00 - 9:00 a.m.</td>
<td></td>
<td>7:00 a.m. - 5:00 p.m. Registration Savannah International Trade and Convention Center - Exhibit Hall A Lobby</td>
</tr>
<tr>
<td>9:00 - 10:40 a.m.</td>
<td></td>
<td>8:00 a.m. - 5:30 p.m. Exhibits Savannah International Trade and Convention Center - Exhibit Hall A</td>
</tr>
<tr>
<td><strong>Tuesday, June 15, 2004</strong></td>
<td></td>
<td>9:00 - 10:20 a.m. Morning Concurrent Oral Sessions Savannah International Trade and Convention Center - Various Rooms</td>
</tr>
</tbody>
</table>
10:20 - 10:40 a.m. Break Savannah International Trade and Convention Center - Exhibit Hall A  
3:30 - 5:30 p.m. Poster Sessions and Receptions Savannah International Trade and Convention Center - Exhibit Hall A

10:40 a.m. - 12:00 p.m. Morning Concurrent Oral Sessions Savannah International Trade and Convention Center - Various Rooms  
6:30 - 9:30 p.m. Evening Riverboat Cruise and Dinner Participants board at the Riverboat dock at 9 East River Street at 6:30 p.m. and return to the same location at 9:30 p.m.

12:00 - 1:30 p.m. Lunch Attendees on their own for lunch

12:00 - 1:30 p.m. National Science Foundation - Update on Funding Opportunities for Biological Research Savannah International Trade and Convention Center - Room TBD

1:30 - 3:30 p.m. Afternoon Concurrent Oral Sessions Savannah International Trade and Convention Center - Various Rooms

3:30 - 5:30 p.m. Poster Sessions and Receptions Savannah International Trade and Convention Center - Exhibit Hall A

**Wednesday, June 16, 2004**

7:00 a.m. - 5:00 p.m. Registration Savannah International Trade and Convention Center - Exhibit Hall A Lobby

9:00 - 10:20 a.m. Morning Concurrent Oral Sessions Savannah International Trade and Convention Center - Various Rooms

10:20 - 10:40 a.m. Break Savannah International Trade and Convention Center - Exhibit Hall A

10:40 a.m. - 12:00 p.m. Morning Concurrent Oral Sessions Savannah International Trade and Convention Center - Various Rooms

12:00 - 1:30 p.m. Lunch Attendees on their own for lunch

1:30 - 3:30 p.m. Afternoon Concurrent Oral Sessions Savannah International Trade and Convention Center - Various Rooms

3:30 - 5:30 p.m. Exhibit and Poster Teardown Savannah International Trade and Convention Center - Exhibit Hall A
Monday, June 14, 2004

SS04: The Interacting Effects of Temperature and Resources on Composition, Structure and Function of Aquatic Biota

Chair(s): Edward Hall, hall0506@umn.edu

Location: Room 203

11:00 AM Pomeroy, L. R.; Sheldon, W. M.; Wiebe, W. J.: LIFE BEYOND THE EDGE: IT’S NOT JUST TEMPERATURE

11:40 AM Hall, E. K.; Cotner, J. B.: INTERACTING EFFECTS OF TEMPERATURE AND NUTRIENTS ON NATURAL BACTERIOPLANKTON COMMUNITIES

1:30 PM Koch, M. S.; Schopmeyer, S. A.; Madden, C.: HYPERSALINITY AND HIGH TEMPERATURE EFFECTS ON THREE TROPICAL SEAGRASSES

1:50 PM Blukacz, E. A.; Sprules, W. G.; Shuter, B.: EVALUATING THE EFFECTS OF PREY HETEROGENEITY ON PREDATOR CONSUMPTION

2:10 PM Whitman, K. J.; Oviatt, C. A.; Keller, A. A.; Borkman, D. G.; Libby, P. S.: THE EFFECT OF WINTER WATER TEMPERATURES ON THE WINTER-SPRING PHYTOPLANKTON BLOOM IN MASSACHUSETTS BAY

2:30 PM Nedwell, D. B.; Rusmana, I.; Lloyd, D. L.: SELECTION BY TEMPERATURE AND NITRATE CONCENTRATION OF BENTHIC NITRATE REDUCING BACTERIAL POPULATIONS IN A NUTRIFIED ESTUARY.*

SS09: Recovery of Shallow-Water Sediment Systems After Disturbance

Chair(s): Kristina Sundback, kristina.sundback@marbot.gu.se
Carolyn Cumin, Carolyn.Cumin@noaa.gov
Graham Underwood, gcu@essex.ac.uk

Location: Room 204


4:10 PM Norkko, A.: SCALE-DEPENDENT MACROFAUNAL RECOLONIZATION IN EPHEMERAL SOFT SEDIMENT HABITATS

4:50 PM Valente, R. M.: SEDIMENT-PROFILE IMAGING: A POTENTIAL TECHNIQUE FOR EVALUATING RECOVERY RATES OF SHALLOW-WATER SEDIMENT SYSTEMS

SS10: Biogeochemical Cycles and Macroecology in Coastal Wetlands

Chair(s): Yoko Funukawa, yoko.funukawa@nifscc.navy.mil
Erik Kristensen, ebk@biology.sdu.dk
Joel Kostka, jkostka@ocean.ocean.fsu.edu

Location: Room 201

11:00 AM Morris, J. T.: RESPONSES OF COASTAL WETLAND PRODUCTIVITY AND BIOGEOCHEMISTRY TO CHANGING SEA LEVEL*

11:40 AM Conwell, J. C.: NUTRIENT BURIAL IN COASTAL PLAIN TIDAL MARSHES

1:30 PM Cook, P. M.; Butler, E. C.; Eyre, B. D.; Revill, A. T.; Volkman, J. K.: CARBON AND NITROGEN CYCLING IN INTER-TIDAL MUDFLATS IN A TEMPERATE AUSTRALIAN ESTUARY

1:50 PM Gribsholt, B.; Boschker, H. T.; Andersson, M.; Struyf, E.; Tramer, A.; Brion, N.; De Brabander, L.; Van Damme, S.; Dehairs, F.; Meire, P.: WHOLE ECOSYSTEM 15N LABELLING TO IDENTIFY NITROGEN CYCLING IN MARSHES


2:30 PM Engelen, A.: Larson, F. M.: THE IMPACT OF SEDIMENT PROCESSES ON INITIATION AND GROWTH OF GREEN ALGAL MATS

2:50 PM Ding, H.; Sun, M.: DIFFERENTIAL EFFECTS OF BENTHIC GRASS SHRIMP ON DEGRADATION OF VARIOUS ALGAL LIPIDS: EVIDENCE FROM MICROCOG STUDY

3:30 PM Koretsky, C. M.; Miller, D.: A FIELD AND MODELING STUDY OF MACROPHYTE AND MACROFAUNAL EFFECTS ON SALTMARSH SEDIMENT PORE WATER AND SOLID PHASE GEOCHEMISTRY (SAPELO ISLAND, GA, USA)


4:10 PM Kristensen, E.; Alongi, D. M.; Kostka, J. E.: FIDDLER CRABS AND TREE ROOTS IN MANGROVE SEDIMENT: ECOLOGICAL AND BIOGEOCHEMICAL INTERACTIONS

4:30 PM Carey, E. A.; Taillefert, M.: NEW INSIGHTS ON THE FORMATION OF PYRITE IN SALT MARSH SEDIMENTS

4:50 PM Meile, C.; Berg, P.; Tuncay, K.: SPECIES DEPENDENT PORE WATER IRRIGATION: IMPLICATIONS FOR ELEMENTAL CYCLING IN EARLY DIAGENESIS

5:10 PM Funukawa, Y.: NUMERICAL MODEL REPRESENTATION OF THE BIOGEOCHEMICAL CYCLES IN COASTAL SALTMARSH ENVIRONMENTS

CS02: Benthos

Chair(s): Mary C. Curran, curranc@savstate.edu

Location: Room 203

3:30 PM Corcoran, A. A.; Dunsmuir, A.; Cebrian, J.; Pennock, J. R.: INVESTIGATING THE ROLES OF UVB RADIATION AND NUTRIENT ENRICHMENT IN BENTHIC MICROALGAL COMMUNITIES


* represents Tutorial presentations
4:30 PM Hollebone, A. L.; Hay, M. E.: AN INVASIVE CRAB IN THE SOUTH ATLANTIC BIGHT: HOW MANY, WHERE, AND WHAT ARE THEIR EFFECTS?

4:50 PM Bennie, M. D.; Collins, N. C.; Purchase, C. F.; Tremblay, A.: PREDICTIVE MODELS OF BENTHIC INVERTEBRATE METHYLMERCURY IN ONTARIO AND QUÉBEC LAKES

CS08: Zooplankton
Chair(s): TBD
Location: Room 202

11:00 AM Kanz, M.; Arts, M. T.; Mazumder, A.: TRANSFER OF ESSENTIAL FATTY ACIDS WITHIN THE PLANKTONIC FOOD WEB AND ITS ECOLOGICAL ROLE FOR HIGHER TROPHIC LEVELS
11:20 AM Carotenuto, Y.; Lampert, W.: EFFECTS OF FRESHWATER DIATOMS ON FEEDING AND LIFE HISTORY OF DAPHNIA: NUTRITIONAL ADEQUACY AND OXYLIN PRODUCTION DURING POPULATION TRANSIENTS
1:50 PM Johnson, C. R.; O’Brien, W. J.: VERTICAL AND TEMPORAL DENSITY DISTRIBUTION OF TWO COPEPODS, CYCLOPS SCUTIFER AND DIAPTOMUS PRIBILOFENSIS, IN TOOLIK LAKE, AK
2:10 PM Spaak, P.; Wolinska, J.: DO PARASITES INFLUENCE THE CO-EXISTENCE OF HYBRID AND PARENTAL DAPHNIA IN LAKES?
2:30 PM Hall, C. J.; Mueller-Solger, A.; Alemdar, C.; Liston, A.: FOOD RESOURCES FOR CANALANOID COPEPODS IN THE SACRAMENTO-SAN JOAQUIN RIVER DELTA, CA.
3:30 PM Albai, B.; Kaufmann, R. S.: SWIMMING BEHAVIOR OF LARVAL MUSSELS (MYTILUS CALIFORNIANUS AND M. GALLOPROVINCIALIS)
3:50 PM Weithoff, G.: FOOD AND TEMPERATURE DRIVEN CHANGES IN LIFE HISTORY TRAITS OF TWO SYMPATRIC ROTTERS
4:30 PM Gilbert, I. J.: FEMALES FROM FERTILIZED, DIAPAUSING EGGS AND PARTHENOGENETIC, SUBITANEOUS EGGS IN THE ROTIFER BRACHIONUS CALYCIFLORUS: STARVATION RESISTANCE AND FECUNDITY

CS11: Trophic Dynamics
Chair(s): Carolyn A. Currin, carolyn.currin@noaa.gov
Location: Room 204

11:00 AM Bretsch, K. P.: PATTERNS AND MECHANISMS OF HABITAT PARTITIONING BY TIDAL MIGRATORY NEKTON
2:50 PM Romigh, M. M.; Davis, S. E.: ORGANIC CARBON FLUX AT THE MANGROVE SOIL-WATER COLUMN INTERFACE IN THE FLORIDA COASTAL EVERGLADES

3:30 PM Dai, J.; Sun, M.: VARIATIONS OF ORGANIC MATTER INPUT IN ALTAMAHA ESTUARINE SEDIMENTS WITH DISCHARGE CHANGES AND CORRESPONDING RESPONSES OF BACTERIA TO VARIABLE ORGANIC INPUTS


4:10 PM Kamjunke, N.; Bohn, C.; Grey, J.: DOES BENTHIC-PELAGIC COUPLING FUEL THE GROWTH OF PELAGIC HETEROTROPHIC BACTERIA IN EXTREMELY ACIDIC LAKES?

4:30 PM Cyr, H.; Sperling, A. T.: DISTRIBUTION AND DYNAMICS OF EPS IN THE LITTORAL SEDIMENTS OF AN OLGOTROPHIC LAKE


5:10 PM De Lange, H. J.; Peeters, E. T.; De Jonge, J.; Oosterbaan, J.: BENTHIC-PELAGIC COUPLING IN A FLOODPLAIN LAKE: IS PRODUCTION OF OLIGOCHAETES AND CHIRONOMIDS CONTROLLED BY PELAGIC FOOD?

CS29: Emerging Technologies

Chair(s): Lary A. Buchanan, laryabuchanan@earthlink.net

Location: Room 100

11:00 AM Barrios, A. T.; Rand, P.: USE OF PASSIVE ACOUSTIC MONITORING TO RESOLVE SPATIAL/TEMPORAL PATTERNS OF SPAWNING ACTIVITY FOR RED DRUM, SCIAENOPS OCELLATUS, IN THE NEUSE RIVER ESTUARY, NC.

11:20 AM Buchanan, L. A.; van der Wal, M.: AN ACOUSTIC MEANS OF DETERMINATION OF POLLUTANT MIGRATION

11:40 AM Haberstroh, P. B.; Brandes, J. A.; Gelinas, Y.; Dickens, A. F.; Wiltz, S.: NANOSCALE INVESTIGATIONS OF THE CHEMICAL COMPOSITION OF GRAPHITIC BLACK CARBON IN RIVERINE AND MARINE SEDIMENTS

1:30 PM Henrich, V. C.; Rublee, P. A.; Marshall, M. M.; Christensen, E. F.: MICROARRAYS AS ENVIRONMENTAL SURVEILLANCE TOOLS IN AQUATIC ECOSYSTEMS: MICROBIAL COMMUNITY DETECTION FROM LAKEWATER SAMPLES


2:10 PM Szela, T. L.; Marsh, A. G.: A HIGH-THROUGHPUT, OPTICAL METHOD FOR SIMULTANEOUSLY MEASURING RESPIRATION RATES IN MARINE INVERTEBRATE LARVAE

2:30 PM Wootton, L. S.; Burkitt, J. W.; VanWagner, C. L.; Myatt, S.: USE OF GIS IN ASSESSING PATTERNS OF DENSITY AND IMPACTS ON NATIVE DIVERSITY OF THE INVASIVE SEDGE CAREX KOBO'MUGI IN NEW JERSEY'S COASTAL DUNES

CS38: Modeling Approaches

Chair(s): Patrick T. Haertel, haertel@aero.und.edu

Location: Room 100


3:30 PM Davies, K. L.; Davies, L.: PRESENTING BERNOOULLI THE FISH - A FLUID FLOW COMPUTER SIMULATION SHOWING HOW A FISH MIGHT MAXIMIZE FORWARD SPEED BY DYNAMICALLY ADJUSTING HIS BODY SHAPE

3:50 PM Haertel, P. T.: SIMULATING LARGE LAKE CIRCULATIONS USING SLIPPERY SACKS

4:10 PM Helwegner, F. L.: MODELING PHOSPHORUS LUXURY UPTAKE IN LAKE BIWA, JAPAN

4:30 PM Saidi, A.; Khalili, A.; Joergensen, B. B.: ON DIFFUSIVE BOUNDARY LAYER OF SEDIMENTS WITH TOPOGRAPHY

4:50 PM Saidi, A.; Khalili, A.; Joergensen, B. B.: ON SHEAR STRESS IN BENTHIC FLUX CHAMBERS WITH EXTERNAL PUMPING CIRCUIT

Tuesday, June 15, 2004

**SS02:** Indicators of Environmental Condition and Change Along The Freshwater-Marine Continuum

**Chair(s):** Hans Paerl, hans_paerl@unc.edu
Ray Torres, torres@geol.sc.edu
Denice Heller Wardrop, dhw110@mail.psu.edu

**Location:** Room 205

1:30 PM Carrick, H. J.: BIOLOGICAL AND PHYSICAL INDICATORS OF HYPOXIA IN LAKE ERIE

1:50 PM Yin/Kedong, Y. K.; Harrison/Paul J.; ZHOU/Weihua: EFFECTS OF WINDS AND TOPOGRAPHY ON LOW OXYGEN WATERS IN THE PEARL RIVER ESTUARINE COASTAL WATERS

2:10 PM Puchniak, M. K.; Hall, R. I.; Hecky, R. E.; Wilkinson, P.: HOW IS LAKE MALAWI/NYASA RESPONDING TO RAPID LAND USE CHANGE?

2:30 PM Ginn, B. K.; Smol, J. P.; Cumming, B. F.: ASSESSMENT OF ACIDIFICATION IN CLEAR (LOW DOC) AND COLOURED (HIGH DOC) LAKES IN SOUTHERN NOVA SCOTIA, CANADA USING PALEOLIMNOLOGICAL TECHNIQUES


3:10 PM Montoya, J. P.; Rathbun, K. M.; Sheats, N.; Michener, R. M.; Mayo, C.: ISOTOPIC TRACKING OF SEWAGE NITROGEN IN MASSACHUSETTS BAY

**SS05:** The Educational Value of Coastal Ocean Observing Systems

**Chair(s):** Janet W. Campbell, janet.campbell@unh.edu
Amy Holt Cline, acline@cisunix.unh.edu
Tom Shyka, toml@gomoos.org

**Location:** Room 100

1:30 PM Rosenfeld, J. M.: SYNERGY IN SCIENCE: USING REAL TIME DATA ON THE INTERNET TO ADDRESS CONCERNS IN SECONDARY SCHOOL SCIENCE*


2:30 PM Sautter, L. R.; Sancho, G.: COORDINATED COASTAL OBSERVATION SYSTEM GROUND-TRUTHING CRUISES AS OCEANOGRAPHIC RESEARCH TRAINING PLATFORMS FOR POST-SECONDARY STUDENTS


**SS07:** New Methods in Microzooplankton Ecology

**Chair(s):** George McManus, george.mcmanus@uconn.edu
Peter Verity, peter@skio.peachnet.edu

**Location:** Room 203

1:30 PM Gallagher, S. M.: IMAGING MICROPLANKTON FOR IDENTIFICATION AND DESCRIPTION OF MOTILITY PATTERNS TO ASSESS PREY VULNERABILITY AND COMMUNITY STRUCTURE*

2:10 PM Frischer, M. E.: MOLECULES TO MICROZOOPLANKTON: THE APPLICATION OF MOLECULAR APPROACHES IN MICROZOOPLANKTON ECOLOGY*


2:50 PM Arnold, W. S.; Hitchcock, G. L.; Frischer, M. E.; Wanninkhof, R.; Sheng, Y. P.: DISPERSAL OF AN INTRODUCED LARVAL COHORT IN A COASTAL LAGOON

3:10 PM Gast, R. J.; Moran, D. M.: NEOPARAMOEBA DIVERSITY AND DISTRIBUTION IN LONG ISLAND SOUND

**SS09:** Recovery of Shallow-Water Sediment Systems After Disturbance

**Chair(s):** Kristina Sundback, kristina.sundback@marbot.gu.se
Carolyn Curnin, Carolyn.Curnin@noaa.gov
Graham Underwood, gcu@essex.ac.uk

**Location:** Room 204

9:00 AM Bell, S. S.; Stafford, N. B.: DISTURBANCE IN SEAGRASS LANDSCAPES: DETECTION AND ECOLOGICAL IMPLICATIONS*


9:40 AM Fellows, K. A.; Dunton, K. H.; Onuf, C. P.: IMPACTS OF HUMAN DISTURBANCES ON SEAGRASS COMMUNITIES IN A SOUTH TEXAS COASTAL LAGOON, USA


11:00 AM Underwood, G. J.: RECOVERY RATES AND RESPONSES OF INTERTIDAL BENTHIC MICROALGAE TO DISTURBANCE


1:30 PM Harper, S. J.; Hayes, A. R.: APPLICATION OF GIS AND HYDROACOUSTIC TECHNOLOGY TO MODEL RADIONU-
CLIDE DISTRIBUTIONS IN RESERVOIR SEDIMENTS

1:50 PM

Dunsmuir-Stutes, A. L.; Corcoran, A. A.; Cebrian, J.: EFFECTS OF REDUCED LIGHT AVAILABILITY AND NUTRIENT ENRICHMENT ON THE METABOLISM OF ESTUARINE MICROPHYTOPHETIC COMMUNITIES.

2:10 PM

Piehler, M. F.; Curin, C. A.; Winklemann, V.; Twomey, L. J.; Hall, N. S.; Paerl, H. W.: SANDFLAT MICROPHYTOPHETIC COMMUNITY EFFECTS AND RECOVERY FROM WEATHERED DIESEL FUEL EXPOSURE.

2:50 PM

Larson, F. M.; Groth-Petersen, D.; Dahllof, I.; Sundbäck, K.: RECOVERY FROM TOXICANT AND NUTRIENT LOAD OF A SHALLOW-WATER SEDIMENT SYSTEM -RESPONSE AND ROLE OF ORGANISM GROUPS.

3:10 PM


9:00 AM

Chair(s): Carol Pride, pridec@savstate.edu
Beth Christensen, bchristensen@gsu.edu
Deborah Freile, dfreile@berry.edu

Location: Room 205

9:00 AM

Alexander, C. R.: RETROSPECTIVE STUDIES IN MARGINAL MARINE ENVIRONMENTS: READING THE SEDIMENT RECORD*

9:40 AM

Kendrick, T.; Christensen, B. A.; Pride, C. J.: INDUCED PRESERVATIONAL BIAS IN MARSH FORAMINIFERA: EXAMPLES FROM SKIDAWAY ISLAND, GEORGIA.

10:00 AM

Hilbun, N. L.; Bianchi, T. S.; Aronson, R. B.: INFLUENCE OF LAND USE IN THE LAST CENTURY ON THE CORAL COMMUNITIES IN BAHÁ ALMIRANTE, BOCAS DEL TORO, PANAMA.

11:00 AM

McQuoid, M. R.; Nordberg, K.: DISCERNING BETWEEN NATURAL AND ANTHROPOGENIC INFLUENCE ALONG THE SWEDISH WEST COAST USING PALEODIATOM RECORDS.

11:20 AM


11:40 AM

Reuss, N.; Conley, D.; Bianchi, T. S.: SEDIMENT PIGMENTS AS A PROXY FOR LONG-TERM CHANGES IN PLANKTON COMMUNITY STRUCTURE.

CS12: Watershed Ecology and Ecosystems

Chair(s): Lauri Arvola, lauri.arvola@helsinki.fi

Location: Room 100

9:00 AM


9:20 AM

Goldman, C. R.: LAKE TAHOE: FOUR DECADES OF ENVIRONMENTAL CHANGE.

9:40 AM

Ensing, S. H.; Doyle, M. W.: QUANTIFYING CONTROLS ON TRANSIENT STORAGE AND NUTRIENT RETENTION USING CHANNEL MANIPULATIONS.

10:00 AM

Libes, S. M.; Bennett, J.; Ferguson, M.: BACTERIAL CONTAMINATION AND EUROPHTOCRICATION IN A BLACK-WATER RIVER.

TUESDAY

11:00 AM Scheliske, C. L.; Lowe, E. F.; Battoe, L. E.; Brenner, M.; Covone, M. F.; Kenney, W. F.; ABRUPT BIOLOGICAL RESPONSE TO HYDROLOGIC AND LAND-USE CHANGES IN LAKE APOPKA, FLORIDA (USA)

11:20 AM Soures, M. M.; Devito, K. J.; Mazzucchi, D.; HYDROGEOEMORPHIC LANDSCAPE AND LAKE ECOSYSTEM PROPERTIES


CS13: Wetlands Ecology
Chair(s): Robert J. Daoust, daoust@biol.sc.edu
Location: Room 203

9:00 AM Daoust, B. L.; Morris, J. T.; Hopkinson, C. S.; PATTERNS OF COMPATIBLE OSOMOLYTE ACCUMULATION IN THREE MARSH MACROPHYTE SPECIES ALONG AN ESTUARINE SALINITY GRADIENT

9:20 AM Scott, J. T.; Doyle, R. D.; Conry, T.; PERIPHYTON NUTRIENT LIMITATION AND NITROGEN FIXATION ALONG A WETLAND NUTRIENT DEPLETION GRADIENT

9:40 AM Ogbebo, F. E.; Ochs, C. A.; Britson, C. A.; Threlkeld, S. T.; MULTIPLE INTERACTION EFFECTS OF NATURAL AND ANTHROPOGENIC FACTORS ON PHYTOPLANKTON COMPOSITION AND PRIMARY PRODUCTION IN MODEL WETLANDS

10:00 AM Smith, W. T. J.; TRAJECTORIES OF RECOVERY 10 YEARS AFTER CATASTROPHIC DISTURBANCE IN THE MAN-GROVE FORESTS OF SOUTH FLORIDA

10:40 AM Biber, P. D.; Paerl, H. W.; Gallegos, C. L.; Kenworthy, W. J.; ARE SEAGRASSES THE CANARIES OF NORTH CAROLINA ESTUARIES?

11:00 AM Hunter, A. E.; Stutes, J.; Cebrian, J.; A COMPARISON OF PRIMARY PRODUCTION, DECOMPOSITION, AND HERBIVORY IN TWO JUNCUS ROMERIANUS MARSHES ON THE NORTHERN GULF OF MEXICO

11:20 AM Burfeind, D. D.; Stunz, G. W.; THE EFFECTS OF PROPEL-LER SCARRING ON SEAGRASS ASSOCIATED FAUNA

11:40 AM Nanez-James, S. E.; Minello, T.; THE EFFECT OF VIE TAGS ON GROWTH AND SURVIVAL OF JUVENILE BLUE CRABS CALLINECTES SAPIIDUS

CS43: Nutrient Dynamics
Chair(s): Mike T. Brett, mtbrett@uwashington.edu
Location: Room 202

9:00 AM Brett, M. T.; A REASSESSMENT OF THE NUTRIENT LOADING CONCEPT IN LIMNOLOGY AND PHOSPHORUS RETENTION IN LAKES

9:20 AM Fulton, R. S.; Smith, D. R.; DEVELOPMENT OF PHOSPHO-RUS LOAD REDUCTION GOALS FOR 7 LAKES IN THE UPPER OCKLAWAHA RIVER BASIN, FLORIDA, USA

9:40 AM O’Neill, L. P.; Benitez-Nelson, C. R.; SEDIMENT TRAP INORGANIC AND ORGANIC PHOSPHORUS COMPOSITION ACROSS AN OXIC-ANOXIC INTERFACE

10:00 AM Keller, T. A.; Dobberfuhr, D. R.; SETTING WATER QUALITY RESTORATION TARGETS

10:40 AM Velas Navasimento, R. A.; Anderson, M. A.; WATER QUALITY IMPACTS OF TERTIARY TREATED WASTEWATER DISCHARGE INTO A SMALL SOUTHERN CALIFORNIA LAKE

11:00 AM Yang, L. Y.; Qin, B. Q.; Hu, W. P.; Luo, L. C.; Song, Y. Z.; WET AND DRY ATMOSPHERIC DEPOSITION OF NITROGEN AND PHOSPHORUS TO A LARGE, SHALLOW,

(*) represents Invited presentations
ASLO 2004 Summer Meeting

TUESDAY

WELL-MIXED LAKE (LAKE TAIHU, CHINA)


11:40 AM Verburg, P.; Hecky, R. E.: CLIMATE EFFECT ON CIRCULAT-ION IN LAKE TANGANYKA: LOSS OF PRODUCTIVITY, DECREASED N LIMITATION AND N FIXATION RATES

1:30 PM Wissel, B.; Quiñones-Rivera, Z. J.; Justil, D.; Fry, B.: SEASONAL VARIABILITY OF DISSOLVED INORGANIC CARBON (DIC) AND NITROGEN STABLE ISOTOPES ACROSS THE GULF OF MEXICO'S HYPOXIC ZONE

1:50 PM Doyle, R. D.; Scott, J. T.; Conry, T.: PLANKTONIC NITROGEN FIXATION IN A TEXAS RESERVOIR: HOT SPOTS AND HOT MOMENTS


2:30 PM Linares, F.; Sundbäck, K.: UPTAKE OF DISSOLVED FREE AMINO ACIDS (DFAA) BY ISOLATED AND SEMI-NATURAL MICROPHYTOBENTHIC COMMUNITIES

2:50 PM Muholland, M. B.; Bonello, G. E.; Bernhardt, P.; Minor, E. C.: INTERANNUAL AND INTER-SITE DIFFERENCES IN BROWN TIDE (AUREOCOCCUS ANOPHAGEFFERENS) BLOOM PHYSIOLOGY.

3:10 PM Mason, B. M.; Szmat, A. M.: THE ROLES OF PARTICU-LATE MATTER AND MACROALGAE IN BOUNDARY LAYER NUTRIENT ENRICHMENT: FACTORS INFLUENCING THE GROWTH OF MACROALGAE ON CORAL REEFS?

POSTER SESSIONS

SS02: Indicators of Environmental Condition and Change Along The Freshwater-Marine Continuum

Chair(s): Hans Paerl, hans_paerl@unc.edu
Ray Torres, tores@geol.sc.edu
Denice Heller Wardrop, dhw110@mail.psu.edu

Location: Exhibit Hall A

1. Montgomery, M. T.; Smith, J. P.; Boyd, T. J.; Osburn, C. L.: EFFECT OF BENTHIC COMMUNITY CHANGE ON BACTERIAL PHA METABOLISM IN ANTHROPOGENICALLY IMPACTED ESTUARINE SEDIMENTS
2. Peeler, K. A.; Chanton, J. P.; Opsahl, S. P.: CAFFEINE AS AN ANTHROPOGENIC TRACER
5. Hadii, C. M.; Schalles, J. F.: AN IMPROVED ALGORITHM FOR REMOTE ESTIMATION OF CHLOROPHYLL IN OPTICALLY COMPLEX COASTAL WATERS
8. Connelly, W. J.; Houde, E. D.; Bichy, J. B.: BIOMASS SIZE SPECTRA OF FISH COMMUNITIES ALONG SALINITY GRADIENTS IN ESTUARINE TRIBUTARIES WITH DIFFERENT LAND-USE PATTERNS

SS09: Recovery of Shallow-Water Sediment Systems After Disturbance

Chair(s): Kristina Sundback, kristina.sundback@marbot.gu.se
Carolyn Currin, Carolyn.Currin@noaa.gov
Graham Underwood, gju@essex.ac.uk

Location: Exhibit Hall A


SS12: Reconstruction of Marginal Marine Environments Using the Sediment Record

Chair(s): Carol Pride, pridec@savstate.edu
Beth Christensen, bchristensen@gsu.edu
Deborah Freile, dfreile@berry.edu

Location: Exhibit Hall A


CS02: Benthos

Chair(s): Mary C. Curran, curanc@savstate.edu

*+* represents Tutorial presentations
17. Shostell, J. M.; Williams, B. S.: INCREASED HABITAT HETEROGENEITY: EFFECTS ON MACROINVERTEBRATE BIOMASS AND DISTRIBUTION PATTERNS IN A SHALLOW EUTROPHIC RESERVOIR

18. Curran, M. C.; Cross, R. E.: DYNAMICS OF BENTHIC MEDIFAUNA IN RESPONSE TO DISTURBANCE FROM RAY FEEDING ACTIVITY IN A MARSH CREEK


22. Chaplin-Ebanks, S. A.; Curran, M. C.: DIFFERENCES IN THE PREVALENCE OF BOPYRID PARASITISM ON THE GRASS SHRIMP PALAEMONETES PUGIO IN FOUR TIDAL CREEKS IN THE SOUTHEASTERN USA

CS08: Zooplankton
Chair(s): TBD
Location: Exhibit Hall A

23. Lopez, C. L.; Zoppi de Roa, E.: DAY-NIGHT VERTICAL DISTRIBUTION AND FEEDING PATTERNS OF FOURTH INSTAR OF CHAEBORUS LARVAE IN A NEOTROPICAL RESERVOIR (SOCUY RESERVOIR, VENEZUELA)


25. Houser, L. T.; Epifanio, C. E.: CAN LARVAL CRABS ALTER THEIR HORIZONTAL SWIMMING BEHAVIOR IN RESPONSE TO BIOCHEMICAL CUES?


27. Young, J. D.; Yan, N. D.: SUMMER DEATH RATES AND A PREDATOR REFUGE FOR BYTHOTREPHES LONGIMANUS IN HARP LAKE, ONTARIO, CANADA


29. Youn, S. H.; Choi, J. K.: GROWTH AND EGG PRODUCTION OF COPEPOD ACARTIA HONGI IN KYEONGGI BAY, KOREA


31. Costas, B. A.; McManus, G. B.; Dam, H. G.; Smith, A. N.: GRAZING ON COCCOLITHOPHORIDS AND CALCITE PARTICLES BY MICROZOOPLANKTON

32. Long, J. D.: VARIABLE FECAL PELLET PRODUCTION OF THREE CALANOID COPEPODS: THE IMPORTANCE OF ALGAL MORPHOLOGY, CULTURE AGE, AND GRAZER SPECIES

CS11: Trophic Dynamics
Chair(s): Carolyn A. Currin, currin@noaa.gov
Location: Exhibit Hall A


34. Mann, S. L.: Mancilla, M. A.: PATTERNS AND PROCESSES EXPLAINING ABUNDANCE OF SEA LICE, CALCIGUS ROGERCRESSEYI, ON EXPERIMENTAL CULTURE OF RAINBOW TROUT IN SOUTHERN CHILE

35. Smith, J. S.; Fisk, A. T.; Maruya, K. A.: USING STABLE ISOTOPES OF CARBON, NITROGEN, AND SULFUR TO CHARACTERIZE THE FOOD WEB IN A TOXAPHENE CONTAMINATED SALTMARSH

36. Goedkoop, W.; Åkerblom, N.; Demandt, M.: TROPHIC FRACTIONATION IN CHIRONOMUS RIPARIUS REARED ON FOOD OF AQUATIC AND TERRESTRIAL ORIGIN.

S12: Watershed Ecology and Ecosystems
Chair(s): Lauri Arvola, lauri.arvola@helsinki.fi
Location: Exhibit Hall A

37. Kelley, C. A.; Wicks, C. M.; Peterson, E. W.: ESTROGEN IN KARST SPRING BASINS OF MISSOURI

38. Medley, K. A.; Havel, J. E.: ZOOPLANKTON SPECIES RICHNESS AND COMMUNITY COMPOSITION IN FLOODPLAIN PONDS: EFFECTS OF FLOODING AND HABITAT CONNECTIVITY


41. Helms, B. S.; Feminella, J. W.: DETECTING RESPONSES TO URBANIZATION USING FISHES IN STREAMS OF WEST GEORGIA, USA

42. Mabney, K. O.; Burnette, A.; Mitchell, R. M.; Feminella, J. W.: ARE FISH ASSEMBLAGES INFLUENCED BY MILITARY LAND USE IN SMALL STREAMS AT FORT BENNING, GEORGIA?

43. Runck, C.; Elam, D. L.: DEL PATTERNS IN DISCHARGE AND WATER CHEMISTRY VARIABLES IN AN URBAN RIVER.

CS13: Wetlands Ecology
Chair(s): Robert J. Daoust, daoust@biol.sc.edu

(*) represents Invited presentations
44. Hutchens, J. J.; Walters, K.; Player, D. H.; Bevington, A.; Dukes, E.: GASTROPOD-HALOPHYTE ASSOCIATIONS IN SALT MARSHES OF SOUTH CAROLINA, USA


46. Tiling, G.; Smith, T. J.; Dismukes, J. S.: HISTORIC HABITAT CHANGES ON CAPE SABLE, FLORIDA

47. Graham, S. A.; Craft, C. B.; McCormick, P. V.; Aldous, A.: PEAT ACCRETION AND PHOSPHORUS ACCUMULATION: WATER QUALITY MANAGEMENT AT UPPER KLAMATH LAKE, OREGON THROUGH WETLAND RESTORATION

48. Touchette, B. W.; Boyko, A. L.; Steudler, S. E.: DROUGHT-INDUCED OXIDATIVE STRESS IN THE EMERGENT MACROPHYTE, JUSTICIA AMERICANA L.

49. Dismukes, J. S.; Smith, T. J.; Tiling, G.: INTERTIDAL VEGETATION IN THE TAMPA BAY ESTUARY: DYNAMIC RESPONSE TO HUMAN AND NATURAL IMPACT AND RESTORATION

50. Howell, K. A.; Reimers, C. E.; Stecher, H. A.; Alleau, Y.; Johnson, M. G.: OPTIMIZATION OF VOLTAMMETRIC METHODS FOR IN SITU DETERMINATION OF TOTAL SULFIDE IN ANOXIC POREWATER USING A MERCURY PLATED GOLD ELECTRODE

51. Slaby, E. F.; Hemond, H. F.; McCorkle, D. C.: DISSOLVED INORGANIC NITROGEN CYCLING IN A

52. Stringer, C. E.; Burnett, W. C.; Chanton, J. P.: ASSESSMENT OF GROUNDWATER FLOW VIA RADON TRACING INTO LAKE BARCO, FL USA: HOW MANY MEASUREMENTS ARE NEEDED?


55. Sansone, F. J.; Habenstroh, P. R.: POREWATER MOVEMENT WITHIN WAVE-I mpacted PERMEABLE SEDIMENTS: DO SURFACE-MOUNTED PRESSURE TRANS DUCERS TRACE INTERNAL WAVES?

56. Torres, I. C.; Reddy, K. R.: BIOGEOCHEMICAL PROPERTIES AND MICROBIAL ACTIVITY OF A EUTROPHIC LAKE SEDIMENT, LAKE OKEECHOBEE, USA


59. Ivanikova, N. V.; McKay, R. M.; Bullerjahn, G. S.: CONSTRUCTION OF A NITRATE RESPONSIVE CYANOBACTERIAL BIOREPORTER FOR ESTIMATING NITRATE BIOAVAILABILITY IN FRESHWATER

60. Sudo, Y.; Uchida, T.; FujWARA, K.: PHOTO-EMISSION TYPE NANOCHANNEL SENSOR FOR ALUMINUM DETECTION IN NATURAL WATERS


64. Abell, J.; Laverman, A.; Hyacinthe, C.; Van Cappellen, P.: RELATING DENITRIFICATION RATES AND ORGANIC CARBON AVAILABILITY IN AQUATIC SEDIMENTS USING PLUG FLOW-THROUGH REACTORS

65. Aké-Castillo, J. A.; Vázquez, G.: LITTER PRODUCTION AND DECOMPOSITION OF RHIZOPHORA MANGLE IN A TROPICAL COASTAL LAGOON


67. Torres, I. C.; Reddy, K. R.: BIOGEOCHEMICAL PROPERTIES AND MICROBIAL ACTIVITY OF A EUTROPHIC LAKE SEDIMENT, LAKE OKEECHOBEE, USA

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**CS20: Sediment-Water Interactions**

**Chair(s):** Hélène Cyr, helene@zoo.utoronto.ca

**Location:** Exhibit Hall A

50. Howell, K. A.; Reimers, C. E.; Stecher, H. A.; Alleau, Y.; Johnson, M. G.: OPTIMIZATION OF VOLTAMMETRIC METHODS FOR IN SITU DETERMINATION OF TOTAL SULFIDE IN ANOXIC POREWATER USING A MERCURY PLATED GOLD ELECTRODE

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**CS29: Emerging Technologies**

**Chair(s):** Larry A. Buchanan, larryabuchanan@earthlink.net

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**CS38: Modeling Approaches**

**Chair(s):** Patrick T. Haertel, haertel@aero.und.edu

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**CS40: Biogeochemical Cycles - Process Level**

**Chair(s):** Patrick W. Inglett, pwi@mail.ifas.ufl.edu

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**CS40: Biogeochemical Cycles - Process Level**

**Chair(s):** Patrick W. Inglett, pwi@mail.ifas.ufl.edu

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**Location:** Exhibit Hall A


69. Devereux, R.; Yates, D. F.; Quares, R. L.: SULFATE REDUCTION RATES IN A THALASSIA TESTUDINUM SEAGRASS BED, NORTHWEST FLORIDA USA GULF OF MEXICO COAST

70. Ransom, B. L.; Bano, N.; Budinoff, C.; Hollibaugh, R. A.; Hollibaugh, J. T.: SULFIDE OXIDATION DRIVES DISSIMILATORY ARSENATE REDUCTION IN ALKALINE, HYPERSALINE, MONO LAKE, CALIFORNIA

71. Inglett, P. W.; Reddy, K. R.: INTRINSIC VERSUS EXTRINSIC FACTORS AFFECTING STABLE ISOTOPE CHANGES DURING LITTER DECOMPOSITION


CS43: Nutrient Dynamics

Chair(s): Mike T. Brett, mtbrett@u.washington.edu

Location: Exhibit Hall A


75. Luyet, M. P.; Capper, N.; Libes, S. M.; Bennett, J.: CAN OFF-SHORE OUTFALL PIPES DISPERSE NUTRIENTS AND BACTERIA FROM STORMWATER RUNOFF?

76. Nielsen, O. I.; Koch-Rose, M.; Madden, C.: PHOSPHATE KINETIC IN SEAGRASS-DOMINATED SUBTROPICAL/TROPICAL CARBONATE SEDIMENTS

77. Perez-Rodriguez, R. Y.; Alfaro-De la Torre, M. C.; Huerta-Diaz, M. A.: EXTRACTION OF PHOSPHORUS ASSOCIATED TO IRON OXYHYDROXIDES IN RIVER AQUATIC SEDIMENTS

78. Usry, B. P.; Showers, W. J.; DeMaster, D. J.: NITRATE LOADING DETERMINED BY HOURLY MONITORING IN THE NEUSE RIVER BASIN, NORTH CAROLINA

79. White, W. R.; Threlkeld, S. T.: NUTRIENT STOICHIOMETRY IN ALGAL RESPONSES TO MULTIPLE STRESSORS IN EXPERIMENTAL AGRICULTURAL WETLANDS

Wednesday, June 16, 2004

SS02: Indicators of Environmental Condition and Change
**SS14:** Making Connections in Marine Science Research and Guided Inquiry: Undergraduate, Pre-College, and Teacher Programs

Chair(s): Susan Libes, susan@coastal.edu
Robert Young, ryoung@coastal.edu

**Location:** Room 202

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**9:00 AM**

**Program**


- **Lewitus, A. J.; Burke, M. K.; DeMattio, K. A.; Kempton, J. B.; Mason, L. J.; Wilde, S. B.; Williams, P. R.:** BRACKISH STORMWATER DETENTION PONDS AS NATURAL ‘INCUBATORS’ FOR HARMEFUL ALGAL BLOOMS

- **Bejarano, A. C.; Chandler, G. T.:** INFLUENCE OF NATURAL DISSOLVED ORGANIC MATTER (DOM) ON ACUTE AND CHRONIC TOXICITY OF THREE URBAN-USE PESTICIDES ON THE ESTUARINE COPEPOD AMPHHECUS TENUREMIS

- **DeLorenzo, M. E.; Key, P. B.; Chung, K. W.; Fulton, M. H.:** TOXICITY OF THE COMMONLY USED FUNGICIDE CHLOROTHALONIL TO THREE ESTUARINE ORGANISMS: AN URBANIZATION AND LAND USE STUDY

- **Ma, H. B.; Aelon, C. M.:** POTENTIAL RATES OF DENITRIFICATION (DNF) AND DISSIMILATORY NITRATE REDUCTION TO AMMONIUM (DNRA) IN SURFACE AND SUBSURFACE SEDIMENTS OF SC COAST, USA

- **Sanger, D. M.; Holland, A. F.; Filipowicz, A. B.; Gillett, D. J.:** LINKING LAND COVER TO THE ENVIRONMENTAL CONDITIONS IN TIDAL CREEKS

- **Delano, P.; Curin, C. A.:** SCIENCE-BASED COMMUNITY MONITORING OF RESTORED SALT MARSHES IN NORTH CAROLINA, USA

- **Lauritsen, D. D.:** LOCAL COMMUNITIES NEED SCIENTIST INVOLVEMENT IN COASTAL DEVELOPMENT DECISIONS

- **Mazumder, A.:** SUSTAINABLE CLEAN AND HEALTHY WATER AND COMMUNITIES: CHALLENGES OF INTEGRATING INTER-DISCIPLINARY SCIENCES TO COMMUNITIES AND POLICY MAKERS.

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**Location:** Room 204

**9:00 AM**

**Program**

- **Andersen, N. J.; Gibson, C. E.:** LANDSCAPE VERSUS CLIMATIC CONTROLS ON DOC VARIABILITY IN LOW ARCTIC LAKES IN SW GREENLAND

- **Reche, L.; Pulido-Vilena, E.; Morales-Baquero, R.:** Sommaruga, R.: GLOBAL CLIMATIC PATTERNS INFLUENCE THE ATMOSPHERIC DEPOSITION OF BIOAVAILABLE ORGANIC CARBON IN HIGH MOUNTAIN LAKES

- **Mladenov, N.; McKnight, D. M.:** INFLUENCE OF PHOTODEGRADATION AND FLOOD ON DOM PROPERTIES IN THE OKAVANGO DELTA, A LARGE ARID-ZONE WETLAND IN BOTSWANA

- **Goehring, L.: STUDENT EXPERIMENTS AT SEA (SEAS) – BRINGING REAL-TIME OCEAN SCIENCE DATA INTO THE CLASSROOM THROUGH COASTAL OCEAN OBSERVATORIES**

- **Nielsen, D. C.; Robigou, V.:** INTEGRATING RESEARCH AND EDUCATION THROUGH SEAGONG, RESEARCH EXPERIENCES FOR TEACHERS - THE REVEL PROJECT

(*) represents Invited presentations
THE LEARNING THROUGH OCEANOGRAPHIC RESEARCH EXPERIENCES: THE TRANSECTS PROGRAM
11:20 AM Valles-Lownson, A.: HIGH SCHOOL TEACHERS AND STUDENTS INTERACTING WITH GRADUATE STUDENTS IN HYDROGRAPHIC DATA COLLECTIONS

11:40 AM Young, R. F.: INCREASING THE PARTICIPATION BY UNIVERSITY FACULTY, LOCAL TEACHERS, AND UNDERGRADUATE STUDENTS IN SUSTAINABLE COLLABORATIVE RESEARCH: THE RISING TIDE PROJECT

SS19: Gelatinous Zooplankton
Chair(s): Monty Graham, mgraham@disl.org
Location: Room 100

9:00 AM Purcell, J. E.: TEMPERATURE AND SALINITY EFFECTS ON ASEXUAL REPRODUCTION IN THE SCYPHOZOA AURELIA LABIATA
9:40 AM Breitburg, D. L.; Fulford, R. S.: CHANGING SEA NETTLE ABUNDANCES IN THE PATUXENT RIVER: INDIRECT EFFECTS OF OYSTER DECLINE?

10:00 AM Higgins III, J. E.; Graham, W. M.: THE INFLUENCE OF WATER COLUMN STRUCTURE ON REPRODUCTION OF THE MOON JELLYFISH, AURELIA AURITA LINNÉ, IN THE NORTHERN GULF OF MEXICO
10:40 AM Rakow, K. C.; Graham, W. M.: MECHANICS OF ORIENTED SWIMMING BY THE JELLYFISH, AURELIA AURITA, IN SHEAR FLOW

11:00 AM Morris, A. K.; Hamner, W. M.: CAUGHT ON VIDEO! JELLYFISH AGGREGATIONS ALONG THE MONTEREY UPWELLING SHADOW, MONTEREY, CALIFORNIA
11:20 AM Condon, R. H.; Steinberg, D. K.: EFFECTS OF CTENOPHORES ON ORGANIC AND INORGANIC NUTRIENT CYCLING IN THE YORK RIVER ESTUARY, VIRGINIA, USA

1:30 PM Bayha, K. M.; McDonald, J. H.; Gaffney, P. M.: POPULATION GENETIC STRUCTURE OF THE SEA NETTLE CHRYSOAORA QUINQUECIRRHAA
1:50 PM Graham, W. M.; Bolton, T. F.: MOLECULAR AND MORPHOLOGICAL COMPARISONS OF NATIVE AND NONNATIVE POPULATIONS OF A JELLYFISH INVADER

2:10 PM Orman, B. D.; Bucklin, A.; Youngbluth, M.: LINKING MOLECULAR AND MORPHOLOGICAL CHARACTERS TO ASSESS GELATINOUS ZOOPLANKTON BIODIVERSITY
2:30 PM Chiaverano, L. M.; Graham, W. M.: THE EFFECT OF PARASITIC ANEMONES ON THE MORPHOLOGY OF AURELIA SP. (SCYPHOZOA: SEMAESOSTOMAEAE) IN ML ET LAKE, CROATIA.

CS19: Harmful Algal Blooms
Chair(s): Howard B. Glasgow, howard_glasgow@ncsu.edu
Location: Room 202

1:50 PM Glasgow, H. B.; Burkholder, J. M.; Touchee, B. W.; Rosen, N. H.; Allen, E. H.: TOXIC CYANOBACTERIA BLOOMS IN PIEDMONT RESERVOIRS, AND EARLY DETECTION BY REAL-TIME REMOTE MONITORING SYSTEMS

2:10 PM Lakeman, M. B.; Cattolico, R. A.: GENERATION AND CHARACTERIZATION OF A LOW-IRON TOLERANT MUTANT OF THE TOXIC ESTUARINE ALGA HETEROSIGMA AKASHIWO

CS37: Estuarine and Near-Shore Processes
Chair(s): James D. Hagy, hagy.jim@epa.gov
Location: Room 204


2:10 PM Dobberfuhl, D. R.: DROUGHT AND WATER QUALITY INFLUENCED PATTERNS IN SUBMERGED AQUATIC VEGETATION IN THE ST. JOHNS RIVER, FLORIDA
2:30 PM Pigg, R. J.; Millie, D. F.; Bendis, B. J.: AUTONOMOUS INSTRUMENTATION IN CONJUNCTION WITH ADAPTIVE SAMPLING ROUTINES TO CHARACTERIZE THE LOWER ST. JOHNS RIVER BASIN, USA

3:10 PM Jonsson, B. F.; Lundberg, P. A.; Döös, K.: BALTIC SUB-BASIN TURNOVER TIMES EXAMINED USING A NUMERICAL MODEL

CS42: Microbial Dynamics
Chair(s): Eric C. Milbrandt, emilbran@sccf.org
Location: Room 200

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Program 2004 Summer Meeting

WEDNESDAY

9:00 AM  Howard, M. H.; Connan, S. A.; Watwood, M. E.; Magnuson, T. S.: VIRAL AND BACTERIAL DYNAMICS IN SELECTED HYDROTHERMAL FEATURES OF THE ALVORD DESERT, OREGON

9:20 AM  Binder, B. J.: TESTING THE IMPORTANCE OF PHYSIOLOGICAL FACTORS IN REGULATING THE SEASONAL CYCLE OF PROCHLOROCOCCUS AND SYNECHOCOCCUS (PICOCYANOBACTERIA) IN THE SARGASSO SEA


10:00 AM  De Wever, A.; Muylaert, K.; Van der Gucht, K.; Pirlet, S.; Coquyt, C.; Flisnier, P. D.; Vyverman, W.: VERTICAL AND HORIZONTAL HETEROGENEITY IN PROKARYOTIC COMMUNITY COMPOSITION IN LAKE TANGANYIKA

10:40 AM  Milbrandt, E. C.; Shapiro, L. P.: BACTERIA PHYLOTYPES, COMMUNITY STRUCTURE, AND VARIABILITY IN PACIFIC NORTHWEST MUDFLATS

11:00 AM  Peeters, B. L.; Paet, H. W.: COUPLING AND DECOUPLING OF BACTERIAL AND ALGAL PRODUCTIVITY ALONG THE SALINITY GRADIENT IN A SHALLOW NORTH CAROLINA ESTUARY


1:30 PM  Ochs, C. A.; Ogbebo, F. E.: EFFECTS OF THE LIGHT ENVIRONMENT ON RELATIVE GROWTH RATES OF BACTERIOPLANKTON AND PHYTOPLANKTON UNDER VARIOUS DEGREES OF NUTRIENT-LIMITATION

1:50 PM  Lau, W. W.; Ambrust, E. V.: INFLUENCE OF PHYTOPLANKTON PHOTORESPIRATORY GLYCOLATE ON BACTERIAL COMMUNITY STRUCTURE

2:10 PM  Leech, D. M.; Wetzel, R. G.: INDIRECT EFFECTS OF ELEVATED CO2 AND UV ON ENERGY TRANSFER WITHIN THE MICRABAL LOOP

2:30 PM  Mille-Lindblom, C.; Fischer, H.; Tranvik, L. J.: BIOMASS AND COMMUNITY COMPOSITION OF PLANT DECOMPOSER BACTERIA AND FUNGI - A COMPARISON ACROSS LAKES AND PLANT SPECIES

POSTER SESSIONS

SS06: Science for Wetland Policy
Chair(s): R. J. Stevenson, rsjtev@msu.edu
Location: Exhibit Hall A

80. Chimney, M. J.; Newman, J. M.: ASSESSMENT OF TREATMENT PERFORMANCE IN LARGE-SCALE CONSTRUCTED WETLANDS DESIGNED TO REDUCE PHOSPHORUS LOADING TO THE FLORIDA EVERGLADES

SS08: Coastal Development: Connecting Research with Practical Application in Local Communities
Chair(s): Dwayne Porter, porter@sc.edu

 Rick DeVoe, rick.devoe@scseagrant.org
Angela Halfacre, halfacreaj@cofc.edu

Location: Exhibit Hall A


SS11: Cycling and Impact of Dissolved Organic Matter in Rivers, Lakes and Estuaries: Influence of Climate and Landscape
Chair(s): Colin Stedmon, cst@dmu.dk
Stig Markager, ssm@dmu.dk
Morten Søndergaard, msondergaard@zi.ku.dk

Location: Exhibit Hall A

83. von Wachenfeldt, E.; Tranvik, L. J.: TRANSFORMATIONS OF DISSOLVED ORGANIC NITROGEN DURING RESIDENCE IN LAKES - A COMPARISON OF BIOAVAILABILITY IN INLET AND OUTLET OF A LARGE LAKE

84. Liz, L. P.; Chen, R. F.: CDOM PRODUCTION BY THE SALT MARSH CORDGRASS, SPARTINA ALTERNIFLORA AND ITS FATE IN ESTUARIES

85. Kelly, S. P.; Rudnick, D. T.; Madden, C. J.: FATE AND EFFECTS OF EVERGLADES DISSOLVED ORGANIC MATTER IN FLORIDA BAY

SS13: Recent Advances in Organic Phosphorus Investigations: Linking Landscapes
Chair(s): Susan Newman, snewman@sfwmd.gov
Robert Heath, rheath@kent.edu

Location: Exhibit Hall A

86. Heighton, L.; Sieffert, R. L.; Schmidt, W.: AVAILABILITY OF PHYTIC ACID COMPLEXES OF FERRIC AND FERROUS IRON TO ENZYMATIC DEPHOSPHORALATION BY ASPERGILLUS FICUM


(*) represents Invited presentations
CS01: Bacteria

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<td>89. LeCleir, G. R.; Buchan, A.; Hollibaugh, J. T.: COMPARISON OF GROUP I CHITINASE GENE SEQUENCES FROM DIVERSE ENVIRONMENTS. IMPLICATIONS OF ENVIRONMENTAL EFFECTS ON EXTRACELLULAR ENZYMES.</td>
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<td>91. Foy, T. F.; Frischer, M. E.; Walters, T. L.; Danforth, J. M.; Schmit, J. P.; Shearer, C. A.: BACTERIAL AND FUNGAL ABUNDANCE, DIVERSITY, AND RESPONSE TO NUTRIENT ENRICHMENT IN MANGROVE SEDIMENT AND LEAF LITTER</td>
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<td>92. Williams, S. C.; Heaton, D. P.; Hristov, R.; Frischer, M. E.; Verby, P. G.: METHODOLOGICAL FACTORS THAT CONTRIBUTE TO VARIABILITY USING FLUORESCENCE IN SITU HYBRIDIZATION (FISH) IN MARINE PLANKTONIC ENVIRONMENTS</td>
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<td>93. Lit, X.; Astor, Y.; Scranton, M. L.; Taylor, G. T.: VERTICAL DISTRIBUTION OF BACTERIAL POPULATIONS IN THE CARACO BASIN PROBED BY FLUORESCENT IN SITU HYBRIDIZATION (FISH)</td>
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<td>95. Hoostal, M. J.; Bouzat, J. L.: INTERACTIVITY OF DOM AND MICROBIAL COMMUNITIES IN LAKE ERIE SEDIMENTS</td>
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<td>100. Filstrup, C. T.; Lind, O. T.: SPATIAL AND TEMPORAL PATTERNS OF DIATOM PRODUCTION AND COMPOSITION WITHIN A EUTROPHIC, POLYMICTIC IMPOUNDMENT</td>
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<td>102. Matsumoto, Y.; Kawakami, H.; Fujiiwa, K.: TOXICITY AND ACCUMULATION OF FIRST TRANSITION METAL IONS ON GREEN ALGAE, CHLORELLA KESSLERI, CHLAMYDOMONAS REINHARDTII</td>
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<td>103. Kawakami, H.; Matsumoto, Y.; Fujiiwa, K.: EVALUATIONS OF METAL TOXICITY AND ACCUMULATION ON PHYTOPHANTOM, CHLORELLA KESSLERI-BASED ON THE PERIODIC TABLE</td>
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<td>105. Ørnólfsdóttir, E. B.; Tester, P. A.: PHYTOPHANTOM, BACTE RIAL AND VIRUS DYNAMICS DURING A WINTER BLOOM IN A SUBTROPICAL ESTUARY, NEWPORT RIVER, NC.</td>
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CS03: Coral Reefs

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<td>97. Fullerton, S.; Rajan, J.; Le, T.; Romagni, J. G.: INDUCTION OF SUPEROXIDE DISMUTASE (SOD) ISOZYMES IN APTASIA PALLIDA IN RESPONSE TO ENVIRONMENTAL STRESS</td>
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<td>98. Snively, N. S.: VITALITY OF CORAL REEFS IN JEOPARDY: A FOCUS ON THE DETERIORATION OF CORAL HABITATS IN THE FLORIDA KEYS</td>
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<td>99. Rogers, J. E.; Marcovich, D.: GROWTH RESPONSE OF A CORAL Symbiont, SYMBIODIUM SP., TO COMBINED TEMPERATURE AND UV RADIATION EXPOSURE.</td>
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CS07: Phytoplankton

| Chair(s): Charles W. Boyle, Boylec@rpi.edu |
| Location: Exhibit Hall A |

CS15: Ecological Indicators

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<tr>
<td>110. LOUDA, J. W.; PIGMENT-BASED CHEMOTAXONOMIC EVALUATION OF NORTH- CENTRAL AND WESTERN FLORIDA BAY PHYTOPHANTOM</td>
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CS24: Environmental Ecotoxicology

| Chair(s): Carol L. Folt, carol.folt@dartmouth.edu |
| Location: Exhibit Hall A |


115. Robertson, M. J.; Anderson, M. R.; Scruton, D. A.; Robertson, G. J.: MERCURY CONCENTRATIONS IN FRESHWATER FISHES OF LABORADOR IN RELATION TO BIOLOGICAL AND ENVIRONMENTAL VARIABLES


117. Sastre, M. P.; Collado, E.: Morales, S.; Santiago, M.; Ayala, E.; Sánchez, E.; Muller, R.; Rodríguez, C.; Mansilla, I.: DNA SINGLE STRAND BREAKS IN THE MUSSEL BRACHIODONTES EXUSTUS; J. O. BOS BAY NATIONAL ESTUARINE RESEARCH RESERVE, PUERTO RICO

CS25: Harmful Algal Blooms
Chair(s): Howard B. Glasgow, howard_glasgow@ncsu.edu
Location: Exhibit Hall A


120. Firth, C. A.; Buskey, E. J.: GRAZING AND EGG PRODUCTION OF COPEPODS FED NATURAL RED TIDE (KARENIA BREVIS) ASSEMBLAGES OR LABORATORY REARED CULTURES

121. Frommlet, J. C.; Iglesias-Rodriguez, M. D.: ANALYSIS OF INTRASPECIFIC GENETIC DIVERSITY IN THE MARINE DIATOM LINGULODINIUM POLYEDRUM USING MICROARRAYS.


123. Madden, M. L.; Wamer, M. E.: INVESTIGATING THE EFFECTS OF LIGHT ON THE GROWTH AND PHOTOBIOLOGY OF HARMFUL BLOOMING ALGAE FROM DELAWARE.


CS37: Estuarine and Near-Shore Processes
Chair(s): James D. Hagy, hagy.jim@epa.gov
Location: Exhibit Hall A

126. Vaudrey, J. M.; Kremer, J. N.: EVALUATION OF THE USE OF AUTOMATED UNATTENDED SONDES FOR DETERMINING ECOSYSTEM METABOLISM IN SHALLOW COASTAL EMBAYMENTS.


129. Austin, J. A.; Atkinson, S.: THE DESIGN AND TESTING OF SMALL, LOW-COST GPS-TRACKED SURFACE DRIFTERS.

130. Szymczak-Zyka, M.; Lowalewska, G.: PHYTOPLANKTON PIGMENTS IN THE WISLA ESTUARY


CS42: Microbial Dynamics
Chair(s): Eric C. Milbrandt, emilbran@sccf.org
Location: Exhibit Hall A


133. Broffy, L.; Braxton, J.; Verity, P.; Frischer, M.: DYNAMICS AMONG NITRATE ASSIMILATORY REDUCTASE GENE (NASA) PHYLOTYPES DURING AN INDUCED PHAEOCYSTIS POUCHETII BLOOM.


135. Molina, M.; Burke, R. A.; Molinero, J.: RESPONSE OF SEDIMENTARY MICROBIAL COMMUNITIES TO DIFFERENT LAND USE PRACTICES AFFECTING HEADWATER STREAMS IN GEORGIA.


Supplemental Posters
Location: Exhibit Hall A


139. Zivalaen, S. D.; Willey, J. D.; Skrabal, S. A.; Kieber, R. J.: MERCURY SPECKULATION IN THE ORGANIC RICH CAPE FEAR RIVER, NORTH CAROLINA, USA.


(*) represents Invited presentations

142. Mwabira-Simera, S. H.; Wilson, F.: INTEGRATION OF REMOTE SENSING (RS) AND GEOGRAPHICAL INFORMATION SYSTEM (GIS) FOR PLANNING MANAGEMENT OF ENVIRONMENTAL ECOSYSTEMS FOR SUSTAINABLE DEVELOPMENT

Thursday, June 17, 2004

SS06: Science for Wetland Policy

*represents Tutorial presentations*
**SS11:** Cycling and Impact of Dissolved Organic Matter in Rivers, Lakes and Estuaries: Influence of Climate and Landscape

**Chair(s):** Colin Stedmon

**Time:** 11:00 AM

**Location:** Room 203

**Presentation:**
- **Fujiwara,*K*iao, E.; Ahara/Makoto, A.; Sakuma/Hidesuke, S.; Kumata/Hidetoshi, K.: DEVELOPMENT OF FLOW INJECTION SYSTEM FOR ESTIMATING PHOTO-INDUCED PRODUCTIVITY OF SUPEROXIDE ANION IN NATURAL WATERS**
- **Markager, S.; Stedmon, C.: A CROSS SYSTEM ANALYSIS OF CARBON SPECIFIC ABSORPTION OF DOM**
- **Miller, H. L.; Burd, A. B.: MECHANISTIC MODELS OF SEAGRASS PRODUCTION IN FLORIDA BAY**
- **Mitsh, W. I.; Day, J. W.; Li, Z.; Lane, R. R.: NITRATE-NITROGEN RETENTION BY WETLANDS IN THE MESSIPS/RIVER BASIN**
- **Craig, N. L.; Carter, K. S.; Gassman, N. J.: ASSESSING WATER QUALITY IN RECONSTRUCTED WETLANDS RECEIVING URBAN STORMWATER RUNOFF**
- **Fennessy, S.: TRANSLATING AN ASSESSMENT OF WETLAND MITIGATION SUCCESS INTO PERFORMANCE STANDARDS**
- **Hauer, F. R.; Lorang, M. S.; Stanford, J. A.; Whited, D. C.: APPLICATION OF AIRBORNE HYPERSONAL SPECTRAL REMOTE SENSING FOR ASSESSING RIVER FLOODPLAIN PROCESSES AND HABITATS**
- **Ainslie, W. B.: HYPOTHETICAL APPLICATIONS OF ALUS IN WETLAND MANAGEMENT WATER QUALITY STANDARDS AND SECTION 404: PARALLEL LINES OF CONVERGENCE**
- **Stevenson, R. J.; Lougheed, V. L.; Parker, C. A.: DEVELOPMENT OF TIERED BICRITERIA TO PROTECT THE BEST WETLANDS AND IMPROVE THE IMPAIRED WETLAND MITIGATION SUCCESS INTO PERFORMANCE STANDARDS**
- **Liang, Y.; Blake, R. E.: NEW INSIGHTS INTO P CYCLING FROM OXYGEN ISOTOPE EFFECTS OF PHOSPHOENZYMES**
- **Turner, B. L.; Newman, S.; Newman, J.: SOIL PHOSPHORUS COMPOSITION ALONG NUTRIENT GRADIENTS IN A SUBTROPICAL WETLAND**
- **Hill, J. E.; Elimelech, M.: MICROBIAL CYCLING OF ORGANIC PHOSPHORUS COMPOUNDS**

(*) represents Invited presentations
SS16: Permeable Sediments - Physics, Biology and Geochemistry

Chair(s): Richard Jahnke, rick@skio.peachnet.edu
Location: Room 100

2:30 PM Cade-Menun, B. J.; Paytan, A.: TEMPORAL TRENDS IN ORGANIC PHOSPHORUS FORMS IN SETTLING OCEAN PARTICULATE MATTER FROM MONTEREY BAY AND SANTA BARBARA BASIN, CALIFORNIA

2:50 PM Ortíz-Hernandez, M. C.; Camacho-Ibar, V. F.; Daasille-Heuser, L. W.: ORGANIC PARTICULATE PHOSPHORUS IN SEDIMENT CORES FROM A COASTAL LAGOON IN BAJA CALIFORNIA, MEXICO.

3:10 PM Haygarth, P. M.: ORGANIC PHOSPHORUS TRANSPORT THROUGH SOILS, STREAMS AND RIVER BASINS
CS24: Environmental Ecotoxicology

Chair(s): Carol L. Folt, carol.folt@dartmouth.edu

Location: Room 203

1:30 PM Filipowicz, A. B.; Weinstein, J. E.; Sanger, D. M.: BIOACCUMULATION OF A PAH IN THE ESTUARINE OLIGochaetae, Monopylephorus Rubronubes: POTENTIAL FOR TROPHIC TRANSFER.

1:50 PM Folt, C. L.; Shaw, J. R.; Dempsey, T. D.; Chen, C. Y.: LINKING ECOLOGICAL AND TOXICOLOGICAL RESPONSES TO MULTIPLE STRESSORS TO IDENTIFY A FRESHWATER SENTINEL SPECIES.

2:10 PM Griscom, S. B.; Senn, D. B.; Galvin, J. P.; Lewis, C. G.; Shine, J. P.: FREE METAL ION CONCENTRATIONS IN AN URBAN ESTUARY: TESTING A NEW EQUILIBRIUM SAMPLER AND COMPARING EQUILIBRIUM AND...
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Savannah International Trade & Convention Center - Second Floor
### Sunday, June 13, 2004

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<td>Off-Site Field Trip - Tour of Savannah Coastal Env. &amp; Marine Sci. Fac.</td>
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<td>1 - 9 PM</td>
<td>Speaker Ready Room - Room 102</td>
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<td>1 - 9 PM</td>
<td>Registration - Exhibit Hall A Lobby (River Concourse)</td>
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<td>3 - 9 PM</td>
<td>Presidential Address - Chatham Ballroom</td>
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<td>5:30-6:30 PM</td>
<td>Opening Welcome Mixer Reception - River Concourse Foyer</td>
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<td>8:00 - 9:00 AM</td>
<td>Complimentary Coffee Service - Chatham Ballroom Foyer</td>
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<td>9:00 - 10:40 AM</td>
<td>Conference Opening, Awards Presentations, and Introductions - Chatham Ballroom</td>
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<td>10:40 AM</td>
<td>ASLO Business Meeting - Ballroom A</td>
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<td>12:00 PM</td>
<td>Poster Set-Up - Exhibit Hall A</td>
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### Special Notes:
- CS38 has 7 speakers, which means the break in Room 100 will be at 2:50 PM.
- CS11 has 9 speakers and will carry over into lunch and resume on schedule.

All sessions are located at the Savannah International Trade & Convention Center, unless otherwise noted.

* - Tutorial Speaker, + - Invited Speaker
Tuesday, June 15, 2004

Registration - Exhibit Hall A Lobby (River Concourse)  7 AM - 5 PM
E-Mail Room - Room 104  7 AM - 5 PM
Wireless Areas - Tondees Café  7 AM - 5 PM
Speaker Ready Room - Room 102  7 AM - 7 PM
Presentation Room - Room 101  7 AM - 7 PM
Poster Session & Exhibits - Exhibit Hall A  8 AM - 5:30 PM
Poster Session, Exhibits & Reception - Exhibit Hall A  3:30-5:30 PM
Workshop: NSF - Update on Funding Opportunities for Biological Research  12:00-1:30 PM

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<th>Watershed Ecology and Ecosystems</th>
<th>Biogeochemical Cycles - Process Level</th>
<th>De InvertebratePredators Have Leading Roles or BitParts in Plankton Communities?</th>
<th>Nutrient Dynamics</th>
<th>Wetlands Ecology</th>
<th>Recovery of Shallow-Water Sediment Systems After Disturbance</th>
<th>Reconstruction of Marginal Marine Environments Using the Sediment Record</th>
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9:00 AM  Bumby, M. J.  Haas, J. R.  Hart, D. R.*  Brett, M. T.  Daucet, R. J.  Bell, S. S.*  Gotobstein, S. T.*  9:00 AM
10:00 AM Birdsall, W. A.  Libes, S. M.  Gomez-Moreno, J. M.  Kolser, T. A.  Keller, T. A.  Smith III, T. J.  Kendrick, T.  10:00 AM

10:20-10:40 AM  10:20-10:40 AM
11:00 AM  Squires, J. M.  Sigleo, A. J.  Ramcharan, C. W.  O’Neill, L. P.  Ogbebo, F. E.  Fellows, K. A.  Alexander, C. R.*  11:00 AM

12:00-1:30 PM  12:00-1:30 PM
2:10 PM  Murray, L.  Yoshimura, C.  Pichlava, R.  McCutchan, Jr., J. H.  Frischner, M. E.*  Puchnak, M. K.  2:10 PM
2:30 PM  Sautter, L. R.  Maie, N.  Branstrater, D. K.  Linares, F.  McManus, G. B.  Pehler, M. F.  Girn, B. K.  2:30 PM
## Wednesday, June 16, 2004

### Registration - Exhibit Hall A Lobby (River Concourse) 7 AM - 5 PM

### E-Mail Room - Room 104 7 AM - 5 PM

### Wireless Areas - Tondenes Café 7 AM - 5 PM

### Speaker Ready Room - Room 102 7 AM - 7 PM

### Presentation Room - Room 101 7 AM - 7 PM

#### 8 AM - 3:30 PM  
Poster Session & Exhibits - Exhibit Hall A

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<th>Session</th>
<th>SS19</th>
<th>CS42</th>
<th>SS03</th>
<th>CS25</th>
<th>SS11</th>
<th>SS02 (cont.)</th>
<th>Session</th>
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<tr>
<td>Title</td>
<td>Gelatinous Zooplankton</td>
<td>Microbial Dynamics</td>
<td>The State of Wetland Science</td>
<td>Cycling and Impact of Dissolved Organic Matter in Rivers, Lakes and Estuaries: Influence of Climate and Landscape</td>
<td>Coastal Development: Connecting Research with Practical Application in Local Communities</td>
<td>Indicators of Environmental Condition and Change Along The Freshwater-Marine Continuum</td>
<td>Title</td>
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</table>
| 9:00 AM  | Purcell, J. E.  
Howard, M. H.  
Richardson, J.  
Capello, H. E.  
Vincent, W. F.  
Walker, S. P.  
Dillon, K. S.  
Dillon, K. S.  
Dillon, K. S.  | Binder, B. J.  
Goering, L.  
Keener-Chavis, P.  
Bade, D. L.  
Bejarano, A. C.  
Kemp, P. F.  
Dillon, K. S.  
Dillon, K. S.  
Dillon, K. S.  | Purcell, J. E.  
Graham, W. M.  
Bredthauer, T. | Breitburg, D. L.  
Eldridge, M. L.  
Rasmussen, T. C.  
McDonnell, J. D.  | 10:00 AM  | Higgins III, J. E.  
De Wever, A.  
Young, R. F.  
Roche, I.  
Lauritsen, D. D.  
Keil, C. A.  | 10:40 AM  | Rakow, K. C.  
Milbrandt, E. C.  
Ogrem, A. V.  
Nielsen, D. C.  
Urban, N. R.  
Ma, H. B.  
Pincney, J. L.  | 11:00 AM  | Morris, A. K.  
Peeris, B. L.  
Gagerthey, S. E.  
Sancho, G.  
Di Loroardo, S. S.  
Sanger, D. M.  
Mile, D. F.  | 11:20 AM  | Moss, A. G.  
Jacquet, S.  
Reddy, K. R.  
Young, R. F.  
Roche, I.  
Lauritsen, D. D.  
Keil, C. A.  | 11:40 AM  | 12:00 PM  | Lunch  
Lunch  
Lunch  
Lunch  
Lunch  
Lunch  
Lunch  
Lunch  | 12:00 PM  | 1:30 PM  | Bayha, K. M.  
Ochs, C. A.  
Sklar, F. H.  
Bradt, S. R.  
Maidenov, N.  
Elfantzi, H.  
Mylar, K.  | 1:50 PM  | Graham, W. M.  
Lau, W. W.  
Grunwald, S.  
Glasgow, H. B.  
Frenette, J. J.  
Buurhdolder, J. M.  
Cebrian, J.  | 2:10 PM  | Ortman, B. D.  
Leech, D. M.  
Hurt, G. W.  
Lakeman, B. M.  
Trudel, G.  
Engelke, C. J.  | 2:30 PM  | Chiaverano, L. M.  
Mille-Lindblom, C.  
Rudnick, D. T.  
Scott, D. E.  
Barnard, C.  
Jonsson, B. F.  
Krupka, K. L.  | 2:50 PM  | 3:10 PM  | Crisman, T. S.  
Cebanlos, S. E.  
Hagy, J. D.  
Daves, S. B.  | 3:30-5:30 PM  | Poster Session, Exhibits & Reception - Exhibit Hall A 3:30-5:30 PM  | 6:30-9:30 PM  | Riverboat Cruise and Dinner (Optional) 6:30-9:30 PM  |

### Poster Sessions

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<th>SS06</th>
<th>SS13</th>
<th>CS01</th>
<th>CS07</th>
<th>CS24</th>
<th>CS37</th>
<th>SUPPLEMENTAL</th>
</tr>
</thead>
</table>
| 80. Chimney, M. J.  
86. Heighton, L.  | 89. LeClerc, G. R.  
90. Hristov, R.  
91. Foy, T. F.  
92. Williams, S. C.  
93. Lin, K.  
94. Smith, A. R.  
95. Christian, B. W.  
96. Hoostal, M. J.  | 100. Filstrup, C. T.  
101. Boyko, A. L.  
102. Matsumoto, Y.  
103. Kawakami, H.  
104. Rocha, A. M.  
105. Christian, B. W.  
106. Irarte, J. L.  
109. Boycoo, M. L.  
110. Robertson, M. J.  
111. Alexander, J. L.  
112. Sastre, M. P.  
113. Christian, B. W.  
114. Reed, R. E.  
115. Cebanlos, S. E.  
118. Vandyke, J. M.  
119. Vandyke, J. M.  
120. Vandyke, J. M.  
121. Vandyke, J. M.  
122. Vandyke, J. M.  
123. Vandyke, J. M.  
126. Vandyke, J. M.  
127. Vandyke, J. M.  
130. Vandyke, J. M.  |

### Special Notes:

- SS08 has 9 speakers for the morning session and will go into lunch

---

**All session are located at the Savannah International Trade & Convention Center, unless otherwise noted.**

- * - Tutorial Speaker, * - Invited Speaker

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## Thursday, June 17, 2004

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<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
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<tr>
<td>7 AM - 5 PM</td>
<td>SS16</td>
<td>Permeable Sediments - Physics, Biology and Geochemistry</td>
<td>Huettel, M. H., Meagher, J., Wetzel, R. G., Sommer, F.</td>
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<tr>
<td>7 AM - 5 PM</td>
<td>SS17</td>
<td>Science for Wetland Policy</td>
<td>Fujisawa/Kitao, F.</td>
</tr>
<tr>
<td>7 AM - 5 PM</td>
<td>SS18</td>
<td>Functional Differences in Zooplankton</td>
<td>Boylen, C. W.</td>
</tr>
<tr>
<td>7 AM - 5 PM</td>
<td>SS19</td>
<td>Phytoplankton</td>
<td>Nelson, J. R.</td>
</tr>
<tr>
<td>7 AM - 5 PM</td>
<td>SS20</td>
<td>Physical Processes</td>
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<tr>
<td>7 AM - 5 PM</td>
<td>SS21</td>
<td>Title</td>
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<tr>
<td>9:00 AM</td>
<td>SS16</td>
<td>Permeable Sediments - Physics, Biology and Geochemistry</td>
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<td>SS18</td>
<td>Functional Differences in Zooplankton</td>
<td>Boylen, C. W.</td>
</tr>
<tr>
<td>12:00 PM</td>
<td>SS19</td>
<td>Phytoplankton</td>
<td>Nelson, J. R.</td>
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<tr>
<td>1:30 PM</td>
<td>SS20</td>
<td>Physical Processes</td>
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<tr>
<td>2:10 PM</td>
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<td>Permeable Sediments - Physics, Biology and Geochemistry</td>
<td>Huettel, M. H., Meagher, J., Wetzel, R. G., Sommer, F.</td>
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<td>2:30 PM</td>
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<td>Science for Wetland Policy</td>
<td>Fujisawa/Kitao, F.</td>
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<td>Boylen, C. W.</td>
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<tr>
<td>5:30 PM</td>
<td>SS20</td>
<td>Physical Processes</td>
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</table>

**Special Note:**

SS18 has 9 speakers for the morning session and will go into lunch.
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<td>ADDRESS 3</td>
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<tr>
<td>ADDRESS 4</td>
<td></td>
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Enter no more than four in order of priority:

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