



TOS SCIENTIFIC MEETING

“Ocean Interfaces”

THE OCEANOGRAPHY SOCIETY (TOS) announces its 1997 Scientific Meeting, to be held in Seattle, Washington, April 1–4, 1997 at the Seattle Sheraton Hotel (plenary sessions) and the adjacent Washington State Convention & Trade Center (posters and exhibits).

The oceanographic community continues to respond very positively to the Society's meetings, praising the format, the scientific content and a schedule that permits time for personal interaction with colleagues. Ocean scientists believe the TOS meetings fill a special niche. In accordance with the TOS successful formula, the meeting will feature a strong scientific program, discussion of policy and educational issues pertaining to ocean scientists, social events, time for interaction with colleagues and a very attractive venue—the Society offers another valuable, informative and enjoyable meeting in an effort to continue filling that niche.

Plan now to join your colleagues in Seattle at one of the major oceanographic meetings of 1997.

MEETING FORMAT

The meeting format will feature four half-day morning plenary sessions of invited talks and three (April 1–3) afternoon sessions of contributed posters focussing on (**but not limited to**) the daily scientific themes as well as policy and educational topics. The fourth and final day will have only a plenary session. Posters relating to that day's talks will be incorporated in the poster sessions of the first three days. Commercial and educational exhibits will be co-located with the contributed posters. An evening reception, daily continental breakfasts and morning and afternoon coffee breaks are included in the registration fee and are an integral part of the TOS interactive format. Students are invited to participate and attend. 100 students will be permitted to register at a discounted student rate. The discounted registrations will be allocated on a first-come basis, but

preference will be given to students submitting abstracts and presenting posters.

CALL FOR POSTER ABSTRACTS General Information

Poster abstracts will be accepted for review until **February 21, 1997**. Scientific abstract titles and content need *not* be specific to one of the scientific session themes as indicated in the program. **Poster abstracts on ocean science policy and educational topics are also welcome.** Abstracts relating to the science theme of a given day will be presented on that day. Policy and education posters will be woven throughout the three days poster sessions. Scientific abstracts not specific to any of the themes will be presented on the day assigned them by the Abstract Manager. Every attempt will be made to assign posters for presentation on the day preferred by the author(s), but, to balance the number of posters over the course of the meeting, TOS reserves the right to make the final assignments. All participants, including poster presenters, must register for the meeting.

All submitted abstracts will be reviewed by the Program Chair. The Chairman, assisted by the Session Chairs, will determine which posters are accepted for presentation at the meeting. Notice of acceptance of abstracts will be issued no later than March 7, 1997. Every effort will be made to issue early notifications of poster acceptance to those who submit abstracts in advance of the deadline. If your attendance at the meeting is predicated upon acceptance of your abstract, we suggest you submit your abstract early or make provisional lodging and travel arrangements if your abstract is submitted close to the deadline.

Abstract Format

Abstracts are limited to 300 words, including title and author(s) information (name[s], affiliation[s], and address[es]). An e-mail address for at least the first author is requested. Overly long abstracts will be returned to the author for editing.

Abstract Fees

The abstract fee is \$70 (\$35 for students). Payment must be made at the time the abstract is submitted and can be made with check or money order, payable to “The Oceanography Society” (in **U.S. funds drawn on a U.S. bank**) or credit card (Mastercard or Visa only). Abstracts submitted via e-mail or fax must be paid with a credit card for which the account number and expiration date are provided when the abstract is sent. We regret that we are unable to process training or purchase orders and cannot issue invoices for payment. Fees for abstracts that are not accepted will be refunded. Revised abstracts must be treated as new submissions and charged an additional \$70 (\$35).

Abstract Submissions

Electronic mail is the preferred method for submitting abstracts and will ensure the quickest acceptance notification. Abstracts may also be submitted via fax, mail, or other delivery service.

E-mail and fax: Submit abstracts via e-mail as text files (*no “attachments”*). Abstracts submitted in this manner must include credit card information as below.

Mail or Delivery Service: Submit *in duplicate* to TOS with a check, money order or credit card information as below.

With all submissions, please indicate the following information:

- Credit card (Mastercard or VISA only) account number, expiration date and name as it appears on the card;
- Name, e-mail and mailing address and telephone and fax numbers of the person to receive the acceptance notice;
- Session to which the abstract relates, e.g. science topic, education or policy or preferred day of presentation if unrelated to a daily session.
- Special poster requirements, if any (see “Furnishings and Services for Posters” below).

Submit to: The Oceanography Society
 4052 Timber Ridge Drive
 Virginia Beach, VA 23455,
 USA
 E-mail: rhodesj@exis.net or
 jrhodes@ccpo.edu
 Fax: (757) 464-1759;
 Telephone: (757) 464-0131.

Furnishings and Services for Posters

TOS will provide a 4' by 8' frame with a display area of 46" (vertical) by 91" (horizontal) on which to mount posters with tacks or pushpins (no velcro). *If your poster requires electricity (approximately \$50/outlet) and/or additional furnishings (such as a table), there will be an additional charge.* Such special requirements must be indicated when your abstract is submitted. You will be billed for those additional items and payment must be received in advance of the meeting to ensure availability. On-site orders for additional services and/or furnishings (if available) will be at a substantially higher price and charges for them must be paid in full upon delivery.

Poster Presentations

All posters will be presented in the afternoon poster and exhibit sessions at the Washington State Convention & Trade Center. Halls 6E and 6F (800 Convention Place, Seattle, WA 98101) a block away from the Sheraton Seattle Hotel, TOS headquarters hotel. Presentation details will be provided prior to the meeting and on-site personnel will be on hand to assist as needed.

REGISTRATION

To register for the meeting, complete the enclosed registration form and mail or fax it with appropriate payment or credit card information to TOS at the above address. **The deadline for receipt of advance registration is March 7, 1997.** Registration after March 7 must be done on-site at the on-site registration price. We regret we are unable to process training or purchase orders and cannot issue invoices for payment. Notification of cancellations must be received in writing by TOS no later than **March 7** and refunds are subject to a \$25 cancellation fee. Your receipt for registration will be printed on the back of your meeting badge.

The registration fee covers attendance at all scientific and social functions, including four continental breakfasts at the Sheraton Seattle Hotel, coffee and soft drink breaks during the plenary and poster/exhibit sessions, and a no-host Welcome Reception on Monday (March 31). Each registrant will receive his/her badge and a volume containing the final Meeting Program, Abstracts and Exhibits Directory at the meeting.

HOTEL ACCOMMODATIONS

The headquarters hotel for the meeting is the Sheraton Seattle Hotel and Towers. The Welcome Reception, daily continental breakfasts and plenary sessions will be held at the Sheraton. The deadline for reservations within this room block is **February 28, 1997.** Hotel reservations are to be made by the attendee. Please note that reservations within the TOS room block **cannot** be confirmed through the Sheraton 1-800-325-3535 reservation center. Please call the

Sheraton Seattle direct at the number shown below and be certain to identify yourself as an Oceanography Society meeting participant in order to receive the discounted meeting rates. Reservations made after the deadline date will be accepted on a space and rate available basis. Early reservations are advised. All reservations must be guaranteed by a major credit card or one night's deposit. Cancellations must be handled directly with the hotel at least 48 hours prior to arrival; be sure to obtain a cancellation number when you call.

Sheraton Seattle Hotel & Towers
 1400 Sixth Avenue, Seattle, WA
 98101 USA

Reservations: (206) 447-5555
 Voice/Messages: (206) 621-9000;
 Fax: (206) 621-8441
 Rate: \$110 single and \$131.00 double
 (plus 15.2% tax)

CALL FOR EXHIBITS

The Exhibits Program is an important part of the TOS Scientific Meetings. Commercial and educational exhibits will be co-located with the daily poster presentations in the Washington State Convention & Trade Center. The rental fee for a standard 8' x 10' booth is \$800.00 which includes meeting registration for one exhibitor. The registration fee for additional exhibitor personnel from the same company is \$85.00. To request the exhibits brochure containing full information, please contact TOS headquarters (757) 464-0131; fax (757) 464-1759; Internet: rhodesj@exis.net or jrhodes@ccpo.edu.edu.

DAILY MEETING SCHEDULE

Monday, March 31		
Registration	Sheraton	2:00-7:00 pm
Welcome Reception	Sheraton	5:00-7:00 pm
Tuesday, April 1-Friday, April 4		
Registration	Sheraton	7:00 am-12:30 pm
Plenary Sessions	Sheraton	8:30 am-noon
Tuesday, April 1-Thursday, April 3		
Posters and Exhibits	Convention Center	1:00-5:00 pm
Registration	Convention Center	1:00-5:00 pm
Tuesday, April 1		
Special Education Session	Sheraton	5:30-7:30 pm
Wednesday, April 2		
TOS Annual Business Meeting	Sheraton	5:00-6:00 pm
Thursday, April 3		
National Science Foundation's GEO Town Meeting followed by no-host reception	Sheraton	5:30-7:30 pm
Meeting adjourns at noon on Friday, April 4		

MEETING PROGRAM

SCIENCE THEME

"INTERFACES OF THE VERTICAL OCEAN"

Meeting Program Chair: **Mike Reeve**, National Science Foundation (NSF), USA

TUESDAY, APRIL 1

"The Air-Sea Interface" (morning plenary)

Session Chair: **Robert Duce**, Texas A&M University, USA

- "MODEL STUDIES OF THE ROLE OF THE OCEAN IN GLOBAL WARMING"—**Suki Manabe**, NOAA Geophysical Fluid Dynamics Laboratory, Princeton University, USA
- "IRON, BIOLOGY AND CLIMATE"—**Peter Liss**, University of East Anglia, UK
- "THE TEMPORAL AND SPATIAL VARIABILITY OF AEROSOL CONSTITUENTS OVER THE WORLD'S OCEANS"—**Joseph Prospero**, University of Miami, USA
- "AIR-SEA INTERFACIAL FLUXES: SCIENCE AND TECHNOLOGY"—**Carl Friehe**, University of California at Irvine, USA
- "THE POLITICS OF GLOBAL CHANGE—ARE THERE LESSONS TO BE LEARNED?"—**John Knauss**, University of Rhode Island and Scripps Institution of Oceanography, USA

Education Special Session, 5:30–7:30 pm (please see below for details)

WEDNESDAY, APRIL 2

"THE MIXED LAYER-DEEP OCEAN INTERFACE" (morning plenary)

Session Chair: **Ann Gargett**, Institute of Ocean Sciences, Canada

- "TURBULENCE AND ADVECTION IN THE WIND-DRIVEN SURFACE LAYER"—**David Farmer**, Institute of Ocean Sciences, Canada
- "QUANTIFYING VERTICAL FLUXES IN THE OCEAN"—**James Moum**, Oregon State University, USA
- "MECHANISMS, METHODS, AND MEASUREMENTS OF THE VERTICAL FLUX OF PARTICLES TO THE DEEP SEA"—**WILF GARDNER**, Texas A&M University, USA
- "DIFFERENTIAL FLUXES OF HEAT AND SALT: IMPLICATIONS FOR CIRCULATION AND ECOSYSTEM MODELING"—**BARRY RUDDICK**, Dalhousie University, Canada
- "PHYSICS TO FISH: CONNECTIONS BETWEEN PHYSICS AND BIOLOGY ON A VARIETY OF SCALES"—**Ann Gargett**, Institute of Ocean Sciences, Canada
- "THE MOON AND MIXING"—**Walter Munk**, Scripps Institution of Oceanography, USA

THURSDAY, APRIL 3

"THE SEA FLOOR INTERFACE" (morning plenary)

Session Chair: **John Delaney**, University of Washington, USA

- "DESIGNING A SEA-FLOOR VOLCANIC OBSERVATORY"—**John Delaney**, UW
- "CIRCULATION BELOW THE SEAFLOOR—THE REST OF THE OCEAN"—**Andrew Fisher**, University of California at Santa Cruz, USA
- "THE HOT DEEP BIOSPHERE—THE EXTENT OF LIFE BELOW THE SEA-FLOOR"—**John Baross**, University of Washington, USA
- "THE INFLUENCE OF HYDROTHERMAL VENTING ON THE OCEAN WATER COLUMN"—**TBA**
- "EPILOGUE: ARE THERE OTHER OCEANS—AND LIFE—IN THE SOLAR SYSTEM?"—**John Delaney**, UW, USA

NSF's GEO Town Meeting

FRIDAY, APRIL 4

"POLICY, PERSPECTIVES, NEW DIRECTIONS AND LATE BREAKING NEWS" (morning plenary)

Session Chair: **Mike Reeve**, National Science Foundation, USA

This plenary session, consisting of five invited presentations, will explore the interface between public policy and oceanography and reflect on how we got here and where we might be heading into the 21st century. Posters relating to this session are welcomed and will be presented with the science and technology posters during the first three days of the meeting.

TECHNOLOGY THEME

"INTERFACE BETWEEN TECHNOLOGY AND OCEANOGRAPHY"

Session Chair: **Larry Clark**, National Science Foundation, USA

One of the most important interfaces that leads to scientific advances is the interface between science and technology. Progress in ocean science research is often coupled to the development and application of new instruments that measure, analyze, interpret, and display scientific information for studying various natural interfaces in the oceans. The technology theme will be interwoven throughout the meeting to include a plenary talk on each day. Submission of poster abstracts that present newly developed instrumentation or technology that would be of interest to a diverse audience is encouraged. They will be matched with the morning science themes as appropriate. Also, if you have an idea for clusters of thematically-related posters, write or call Larry Clark, tel: (703)306-1584; fax: (703)306-0390; e-mail: hclark@nsf.gov.

EDUCATION THEME (special Tuesday evening session)

"INTERFACES BETWEEN RESEARCH AND EDUCATION: OCEANOGRAPHERS IN THE KINDERGARTEN THROUGH HIGH SCHOOL ENVIRONMENT"

Session Chair: **M. Patricia Morse**, National Science Foundation, Education & Human Resources Directorate, USA

The integration of research and education is being strongly emphasized by U.S. agencies funding academic oceanographic research, consistent with major changes taking place in teaching science in the K–12 environment. All students should have opportunities to become scientifically literate and part of the process of the scientific inquiry process. Where does oceanography fit into this picture? What are the responsibilities of oceanographers to see that up-to-date concepts coming from findings in research are translated into the K–12 classrooms? Various scientist/teacher partnerships are developing around the country. In the first hour of this special session, presentations will provide the background, illustrations and a point of departure for the second hour, a panel discussion with questions invited from the floor.

The presentations include "New Paradigms for K–12 Science Education" by M. Patricia Morse, NSF Education and Human Resources; "Oceanography and alignment with the U.S. National Science Education Standards" by Rodger Bybee, U.S. National Academy of Sciences; and "Collaboration in the Development of a Curriculum-Glacier" by Clarice Yentsch and Stephanie Schipp. The panel will include these and other experts. Visual displays of other classroom enhancement materials will be offered. Clarice Yentsch and Patricia Morse will coordinate associated poster clusters. Potential poster presenters are invited to contact Clarice Yentsch (ClariceY@edc.org).