



SCOR Newsletter No. 12

December 2008

SCOR 50th Anniversary Symposium
SCOR's 50th Anniversary Symposium was held in Woods Hole, Massachusetts, USA-the site of the first SCOR meeting-on 19-21 October 2008. This open meeting was attended by about 125 scientists from around the world, including 27 young scientists selected by SCOR member nations. The young scientists presented posters to symposium participants and were hosted by the Woods Hole Oceanographic Institution (WHOI) to a special reception with WHOI post-docs.



The directors of the Marine Biological Laboratory (Gary Borisy) and WHOI (Susan Avery), opened the symposium. Peter Liss brought congratulations from SCOR's parent, the International Council for Science, and Bjørn Sundby welcomed participants on behalf of SCOR. George Hemmen and Elizabeth Gross, the former SCOR Executive Secretary and Executive Director, respectively, reviewed the history of SCOR, to set the stage for the remainder of the symposium, which focused on future ocean science. Excellent keynote presentations were given by Andy Ridgwell, Chris Scholin, and Martin Visbeck.

Seven SCOR Presidents (past, present, and presidentelect) participated in the symposium and all three of the SCOR Executive Secretaries/Executive Directors also participated. Sadly, one of the former SCOR Presidents. Warren Wooster, was not able to attend and died shortly after the symposium after a long illness. Elizabeth Gross wrote a short memorial for SCOR (see http://www.scorint.org/Warren_Wooster.pdf) to be presented at a memorial service for Warren.



SCOR Presidents (from left to right: Bjørn Sundby, Wolfgang Fennel, Luis Cappuro, Gerold Siedler, Robert Duce, Nick McCave, and Jarl-Ove Stromberg)



SCOR Executive Secretaries/Directors (from left to right: Elizabeth Gross, George Hemmen, and Ed Urban)

SCOR XXIXth General Meeting

The 2008 SCOR General Meeting followed the 50th Anniversary Symposium, held at the Woods Hole Oceanographic Institution.

Three members of the SCOR Executive Committee rotated off at the end of this meeting: Victor Akulichev (Vice-President, Russia), Robert Duce (Past President, USA), and Laurent Labeyrie (Co-opted Member, France). SCOR extends its thanks to these individuals for the time they invested in SCOR activities. Three new members assumed their posts at the end of the meeting: Wolfgang Fennel (President, Germany), Mary (Missy) Feeley (Vice-President, USA), and John Compton (Coopted Member, South Africa).







Wolfgang Fennel

Missy Feeley

John Compton

Meeting participants agreed to support three new working groups, made possible by joint funding:

OceanScope Working Group (Thomas Rossby, USA, chair)—This group will (1) address and prioritize the scientific challenges that can best be addressed by an integrated Volunteer Observing Ship (VOS) program, (2) outline and promote appropriate and necessary sensor, instrument, and software development; (3) develop an institutional framework that enhances the links between the merchant marine and ocean observation communities, including ongoing VOS programs, and (4) identify and develop an integrated framework for data management and distribution. The group will be cofunded by the International Association for the Physical Sciences of the Oceans.

Working Group on Hydrothermal Energy Transfer and its Impact on the Ocean Carbon Cycle (Chris German, USA and Nadine Le Bris, France, co-chairs)— This group will synthesize existing knowledge of chemical substrates, mechanisms and rates of chemosynthetic carbon fixation at hydrothermal systems as well as the transfer of phytoplankton-limiting micronutrients from these systems to the open ocean. The group will integrate these findings into conceptual models of energy transfer and carbon cycling through hydrothermal systems, which would lead to an estimation of the contribution of primary production from

these systems to the global ocean carbon cycle. Finally, the group will identify critical gaps in knowledge and propose a strategy for future field, laboratory, experimental and theoretical studies to bridge these gaps and better constrain the impact of deep-sea hydrothermal systems on ocean carbon cycles. The group will be co-sponsored by the InterRidge project.

Working Group on The Microbial Carbon Pump in the Ocean (Nianzhi Jiao, China, and Faroog Azam, co-chairs)—This group will summarize representative microbial data on biomass, production and diversity, as well as dissolved ocean carbon (DOC) data, along environmental gradients; establish the current state of knowledge of the microbial carbon pump; and identify essential scientific questions regarding the role of microbial processing in carbon cycling in the The group will also assess the available techniques for quantifying functional groups of prokaryotes and different types of DOC, document stateof-the-art techniques and parameters addressing microbial processing of organic carbon, establish/standardize key protocols for the essential observations and measurements. The group plans to convene international workshops, publish a practical handbook on measurements of the key parameters related to microbial processing of carbon in the ocean and develop recommendations for a future large-scale interdisciplinary research project related to the microbial carbon pump in the ocean. The Chinese National Science Foundation and State Key Laboratory for Marine Environmental Science will provide partial support for the group.

SCOR Committee on Capacity Building

The SCOR Committee on Capacity Building met in Woods Hole before the SCOR 50th Anniversary symposium and reviewed requests for travel support for scientists from developing countries and countries with economies in transition. The committee also approved development of (1) a program of SCOR Visiting Scholars and (2) Regional Networks for Graduate Education in Ocean Sciences. The committee will continue development of these activities over the next year.

Ocean Mixing Group Affiliated to SCOR

SCOR approved affiliation of the Ocean Mixing Group to SCOR. This group is chaired by Jennifer MacKinnon (USA) and is an outcome of IAPSO/SCOR WG 121 on Ocean Mixing. It will facilitate advances in our quantitative and dynamic understanding of ocean mixing processes and in our ability to depict these small-scale processes in large-scale models. The group will meet for the first time in conjunction with the IAMAS-IAPSO-IACS Joint Assembly, in July 2009 in Montréal, Québec, Canada.

Outreach from SCOR Activities

Participants at the SCOR General Meeting agreed that it is important for SCOR to make the outcomes from its working groups more readily available to groups outside the ocean science community. A group met during the meeting to develop recommendations for outreach. Each working group will be asked to include an outreach document as one of their products. The SCOR Secretariat will work with communication specialists to develop some model documents. Funding for outreach activities may be obtained, in part, by ceasing publication of hard-copy SCOR Proceedings in the future. (The Proceedings would still be available in pdf format from the SCOR Web site.)

Large-Scale Ocean Research Projects

GEOHAB—The GEOHAB Modeling Workshop is planned for June 2009 in Galway, Ireland, in conjunction with the 2009 GEOHAB SSC meeting (see https://www.confmanager.com/main.cfm?cid=1431).

The workshop will be open and some funding will be available for participation of students. Advancement of harmful algal bloom (HAB) modeling is important for GEOHAB to achieve its goals related to improving prediction of HABs.

GEOTRACES—GEOTRACES IPY cruises have been accomplished (or are planned) in the Arctic Ocean and Southern Ocean. Other cruises are planned in other ocean basins, starting in 2009. GEOTRACES continues work on data management and intercalibrations in preparation for future cruises. The project has hired a Data Liaison Officer, Dr. Ed Mawji, based at the British Oceanographic Data Centre in Liverpool, UK. Funding has been arranged for a one-person (to start) GEOTRACES International Project Office in Toulouse, France. The position will be advertized in the next few months.

GLOBEC—GLOBEC will hold its third Open Science Meeting in June 2009 (see https://www.confmanager.com/main.cfm?cid=1345&nid=9839). The final GLOBEC synthesis volume is well underway.



IMBER—IMBER has recently completed its first Imbizo in Miami, Florida, USA. The meeting focused on three topics: (1) End-to-end Food Webs, (2) the Mesopelagic Zone, and (3) the Bathypelagic Zone. IMBER is seeking a new Executive Officer (see

http://www.imber.info/jobsannouncements/IMBER_EO_ad.pdf) and is seeking topics for the second Imbizo.

SOLAS—SOLAS is planning its 2009 open science meeting, to be held in Barcelona, Spain in 16-19 November 2009. The 4th SOLAS Summer School will be held on 3-15 August 2009.



See http://www.uea.ac.uk/env/solas/summerschool/.

SCOR Panel on New Technologies for Observing Marine Life

The SCOR Panel on New Technologies for Observing Marine Life has embarked on its final activities, in support of the synthesis of results from the Census of Marine Life (CoML), which concludes at the end of 2010. These activities will include a special volume of papers highlighting CoML's contribution to technologies important for observing marine life, a workshop on ocean biology observatories, and continued work on electronic tag technology and oceanographic data available from animal-based tags. The Web site for the Panel is being redesigned to make it more useful for scientists and others interested in the state of observational technologies.

Other Activities

Second Symposium on The Ocean in a High-CO₂ World—The symposium was considered a great success by those who participated. The latest in ocean acidification science was presented, including much new information on the biological effects of ocean acidification. Following three days of scientific presentations in oral and poster form, a fourth day was designed for the public and the press, including a science summary, a presentation on economic aspects of ocean acidification, a presentation on working with policymakers, and an address by His Serene Highness Prince Albert II of Monaco, whose foundation co-funded

the symposium. The fourth day also included a session for teachers from Monaco and southern France. Products from the symposium will include a summary for policymakers, a summary for ocean scientists, a research priorities report, and a special issue of *Biogeosciences*. The symposium was co-sponsored by SCOR, the Intergovernmental Oceanographic Commission of UNESCO, the International Atomic Energy Agency, and the International Geosphere-Biosphere Programme.

SCOR/IODE Workshop on Data Publication—SCOR and the International Ocean Data and Information Exchange (IODE) cooperated in a workshop on data publication in June 2008, hosted by IODE in Oostende, Belgium. The meeting is documented in a report (see http://www.scor-int.org/Publications/wr207.pdf) that will be used as a foundation for future work between SCOR and IODE. Ed Urban will make a presentation at the Fall AGU meeting in San Francisco about this project, and Cisco Werner and Ed Urban are convening a meeting of journal editors at AGU to discuss the recommendations from the Oostende workshop.

Publications

Urban, E.R. Jr., B. Sundby, P. Malanotte-Rizzoli, and J. Mellilo (eds.). 2008. *Watersheds, Bays, and Bounded Seas: The Science and Management of Semi-Enclosed Marine Systems.* Island Press, Washington, D.C.

Lotze., H., M. Flitner, and E.R. Urban, Jr. *Coastal Basins on the Edge.* UNESCO-SCOPE-UNEP Policy Briefing No. 7. See http://www.scorint.org/Publications/PB07.pdf.

SCOR Annual Meetings

2009—The 2009 SCOR Executive Committee Meeting will be held in Beijing, China, on 20-22 October, in conjunction with an open science meeting of the GEOHAB Core Research Project on HABs in Eutrophied Systems and SCOR/LOICZ WG 132 on Land-based Nutrient Pollution and the Relationship to Harmful Algal Blooms in Coastal Marine Systems.

2010—SCOR has accepted an offer from the French SCOR Committee to hold the 2010 SCOR General Meeting in Toulouse, France.

2011—The Finnish SCOR Committee has invited SCOR to hold its 2011 Executive Committee meeting in Finland.

SCOR Secretariat

Ms. Lora Carter has accepted the part-time Financial Assistant position at the SCOR Secretariat. Lora has experience in both office management and banking.

For additional information about SCOR activities, please see the SCOR Web site: http://www.scorint.org.

Acronyms:

GEOTRACES an international study of the global marine

biogeochemical cycles of trace elements and

their isotopes (SCOR)

GLOBEC Global Ocean Ecosystem Dynamics project IACS International Association of Cryospheric

Colorada Association of Cryospher

Sciences

IAMAS International Association for Meteorology

and Atmospheric Sciences

IAPSO International Association for the Physical

Sciences of the Ocean

IGBP International Geosphere-Biosphere

Programme

IMBER Integrated Marine Biogeochemistry and

Ecosystem Research project

Intergovernmental Oceanographic

Commission

LOICZ Land-Ocean Interactions in the Coastal Zone

project

SCOPE Scientific Committee on Problems of the

Environment

SCOR Scientific Committee on Oceanic Research

SCOR Secretariat

College of Marine and Earth Studies

Robinson Hall

IOC

University of Delaware Newark, DE 19716 USA Tel: +1-302-831-7011

Fax: +1-302-831-7012

To reach Secretariat staff, please call the number above or send an email to Ed Urban (<u>Ed.Urban@scor-int.org</u>) Elizabeth Gross (<u>egross@scor-int.org</u>), or Lora Carter (<u>Lora.Carter@scor-int.org</u>).

Photos:

Page 1, banner: Copyright Woods Hole Oceanographic Inst. Page 1: Young Scientists at SCOR 50th Anniversary

Symposium, courtesy of Justine Compaore.

Page 1: Photos of SCOR Presidents and SCOR Executive

Secretaries/Directors by Tom Kleindinst, WHOI