

SCOR Electronic Newsletter #2
March 2005

The Scientific Committee on Oceanic Research (SCOR) is an international nonprofit organization whose purpose is to promote international cooperation in all branches of oceanic research. This purpose is achieved through the sponsorship of large-scale ocean research projects, working groups and panels on specific ocean science topics, and activities designed to increase the research capacity of developing nations.

Working Groups

SCOR WG 120 on Marine Phytoplankton and Global Change Regulation—This working group will hold a symposium on 30 August-4 September 2005 in Haren, The Netherlands, to bring together experts to discuss the role of *Phaeocystis* in ecosystem functioning, biogeochemistry, ocean-atmospheric interactions, and climate regulation. The following themes will be dealt with during 10 sessions with oral contributions by invited speakers: (1) taxonomy and distribution; (2) life cycle and phenomena; (3) role of viruses; (4) grazing and infochemicals; (5) vertical export/transport; (6) mucus, carbohydrates, and bacterial degradation; (7) DMS(P); (8) toxicity; (9) physiological ecology; and (10) modeling. The meeting will be concluded with a summary session in which the climate link with



Phaeocystis sp. will be described. Recommendations for future research will be formulated. Information about the meeting can be found at <http://www.jhu.edu/scor/calendar.htm>.

IAPSO/SCOR WG 121 on Ocean Mixing—The IAPSO/SCOR Conference on Ocean Mixing (11-14 October 2004) was the most recent of a small number of open international conferences to focus on the issue of ocean mixing. The conference was convened in response to community realization that our understanding of ocean mixing processes significantly lags our grasp of large-scale ocean circulation. There were 29 oral presentations; seventy-six presentations were made as posters, divided equally into two sessions each lasting for two days. The presentations were divided into four general subtopics: (1) global concepts and large-scale models, (2) observations, (3) processes, and (4) potential future activities. The more than 120 participants represented institutions in Australia, Canada, China, France, Germany, Japan, Korea, Mexico, Netherlands, Norway, Russia, Sweden, the United Kingdom, and the United States. It is planned

to publish a conference proceedings volume, to consist of topical and overview papers in a special “Ocean Mixing” issue of *Deep-Sea Research Part 2*. The working group continues to solicit additional contributions in an attempt to provide a balance of papers that will sufficiently represent the issues discussed at the conference. All manuscripts will be peer reviewed according to *Deep-Sea Research* publication criteria, with some members of the working group serving as guest editors. The target publication date of the proceedings volume will be in early to mid-2006.

The final post-conference action of the working group will be organization of a symposium on ocean mixing at the IUGG General Assembly in Italy in 2007. The working group will meet at the assembly and will finalize plans for a second dedicated mixing conference for early 2008. The working group has decided to pursue a follow-up meeting in the form of a Gordon Conference dedicated to Ocean Mixing processes, with a likely conference date being early in 2008. Topics would revisit and extend, as appropriate, those addressed in the 2004 Ocean Mixing Conference. If successful, this conference could be continued as an ongoing series with sequels at specified intervals of several years.

SCOR/LOICZ/IAPSO WG 122 on Mechanisms of Sediment Retention in Estuaries—This working group met for the first time on 12-16 September 2004, on the campus of Universidade do Algarve, Faro, Portugal. Discussion among the participants centered on the main terms of references: (1) mechanisms of sediment retention in estuaries, and (2) modeling perspectives and methodologies to study retention. Participants discussed the basic parameters needed to establish



adequate information for comparison of estuarine sediment retention globally. They developed a list of relevant parameters to be organized and circulated to the members of the group, for them to add values for estuaries for which data are available, from both published and unpublished sources. A Web site is being developed for working group members and others to enter the data for as many estuaries as possible. This will

constitute the database on which to test models and make comparisons. The group will hold its second meeting in conjunction with the LOICZ II Open Science Meeting in Texel, The Netherlands in June 2005.

SCOR WG 126 on The Role of Viruses in Marine Ecosystems—The working group is chaired by Markus Weinbauer (France) and Steven Wilhelm (USA). Other Full Members recently approved by SCOR include Gunnar Bratbak (Norway), Corina Brussaard (The Netherlands), Dolores Mehnert (Brazil), Mathias Middelboe (Denmark), Keizo Nagasaki (Japan), Curtis Suttle

(Canada), Willie Wilson (UK), and Eric Wommack (USA). Associate Members include Feng Chen (USA), Roberto Danovaro (Italy), Yoanna Eissler (Chile), Jed Fuhrman (USA), Sonia Giancesella (Brazil), Gerhard Herndl (The Netherlands), Nianzhi Jiao (China-Beijing), Nicholas Mann (UK), John Paul (USA), Declan Schroeder (UK), Telesphore Sime-Ngando (France), Grieg Steward (USA), and Dolors Vaqué (Spain). The working group will meet for the first time in conjunction with the ASLO meeting in June 2005 in Santiago de Compostela, Spain.

Major Projects Sponsored by SCOR

SCOR/IOC Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB)

Programme—The report for the first focused GEOHAB open science meeting (OSM), on harmful algal blooms (HABs) in upwelling systems, was recently published by IOC. (Copies of this report can be obtained from the SCOR Secretariat.) GEOHAB held the third of its series of OSMs in March 2005 in Baltimore, Maryland, USA, on HABs and Eutrophication. The purpose of this meeting was to help develop a research plan for this area of GEOHAB research. The final GEOHAB Open Science Meeting, on HABs in Stratified Systems, will be convened in Paris, France on 5-8 December 2005. Information about the meeting will be available on the SCOR Web site in the near future. GEOHAB is still looking for a host institution for its International Programme Office (IPO).



GEOTRACES—The GEOTRACES Planning Committee is working hard and making rapid progress. It circulated the draft GEOTRACES Science Plan widely in late February, including to the worldwide ocean chemistry research community, SCOR Nominated Members, working group chairs, liaisons, and other SCOR-sponsored research projects. The planning committee will be meeting in Vienna, Austria at the beginning of May following the European Geophysical Union meeting, in order to revise the GEOTRACES Science Plan on the basis of comments received, to prepare the plan for review by SCOR. The committee will also work on planning implementation activities.

SCOR/IGBP Integrated Marine Biogeochemistry and Ecosystem Research (IMBER)

Project—The IMBER Science Plan/Implementation Strategy has now been approved by SCOR and the International Geosphere-Biosphere Programme (IGBP) and will be published in mid-2005. The IMBER SSC will meet in Shanghai, China in April 2005 to continue implementing international IMBER activities. IMBER will establish its IPO in Brest, France in mid-2005 and is in the process of interviewing and hiring an Executive Officer.

SCOR/IGBP/IOC Global Ocean Ecosystem Dynamics (GLOBEC) Project

—The GLOBEC SSC will meet at FAO in Rome, Italy in June 2005 to continue implementing its integration and synthesis activities. GLOBEC chose FAO as a meeting site to increase the transfer of information generated by the project to application in ecosystem-based fisheries management. The GLOBEC SSC will also continue discussions about interactions with the IMBER project and joint work between the two projects.

SCOR/IGBP/WCRP/CACGP Surface Ocean – Lower Atmosphere Study (SOLAS)

—SOLAS is planning its second summer school for Corsica in 2005 (see

<http://www.uea.ac.uk/env/solas/summerschool/>). More than 200 applications were received for 72 positions. The SOLAS SSC will meet in Tokyo, Japan in June 2005. SOLAS and IMBER are working to create a joint plan for ocean carbon research. The new SOLAS Executive Officer is Jeff Hare, formerly of the University of Colorado.

SCOR Panel on New Technologies for Observing Marine Life



The SCOR Panel on New Technologies for Observing Marine Life, sponsored by the Alfred P. Sloan Foundation, met for the first time in Goa, India in February 2005. The panel is developing a Web site and Panel members will be attending meetings of new Census of Marine Life (CoML) projects to learn about the projects and offer suggestions for technologies that could be used to make the projects more successful. The Panel will also seek to assist the CoML projects in implementing molecular techniques, specifically to help the projects adopt “barcode of life” approaches.

Symposium on the Ocean in a High-CO₂ World

SCOR and IOC co-sponsored a symposium on the Ocean in a High-CO₂ World in May 2004. The meeting focused attention on the issue of surface ocean acidification, which was also highlighted by two papers in *Science* after the symposium. The topic was covered in newspaper articles worldwide, including an article in the weekly science section of the *New York Times* that mentioned the symposium. The Royal Society of the United Kingdom convened a committee on the topic, whose report is due out soon. Two papers were published by the planning committee, one in *EOS*¹ that summarizes the meeting presentations and another in *Oceanography* magazine² that gives the recommendations of the meeting. The research recommendations from the meeting have been transmitted to the SOLAS and IMBER projects. SCOR agreed at the recent IGBP-SC meeting to help IGBP with a new fast-track initiative on paleoceanographic investigations of ocean responses to high atmospheric CO₂ levels.

SCOR-SCAR Interactions

SCOR and SCAR have been developing several activities together, including a joint session on Southern Ocean Circulation and Marine Life at the IAG/IAPSO/IABO meeting in Cairns, Australia and the SCAR/SCOR Expert Group on Oceanography. For the latter group, Eileen Hofmann (USA) will serve on behalf of SCOR as the vice-chair of the group.

2005 SCOR Executive Committee Meeting

The 2005 SCOR Executive Committee Meeting will be held in Cairns, Australia, on 29 August-1 September, during the week following the IAG/IAPSO/IABO meeting. The meeting will be held at the Cairns Conference Centre and a block of rooms has been reserved at the Pacific International Hotel, located a short walk from the meeting site. Meeting participants will review

¹ Cicerone et al. 2004. The Ocean in a High CO₂ World. *EOS* 85:351, 353.

² Cicerone et al. 2004. The Ocean in a High-CO₂ World. *Oceanography Magazine* 17(3):72-78.

ongoing SCOR activities, discuss proposals for new SCOR working groups, and hear presentations about coral reef research in Australia.

The call for working group proposals to be considered at the 2005 SCOR Executive Committee meeting has been extended to **30 April 2005**. This call for proposals will emphasize physical oceanography and marine geology and geophysics activities, while also considering proposals on other topics.

SCOR 50th Anniversary Meeting in 2008

SCOR is planning its 50th anniversary meeting for Woods Hole, Massachusetts, USA, in 2008. A committee was formed to begin planning for the meeting. This committee will be chaired by Robert Duce (USA) and will also include Elizabeth Gross (USA), Laurent Labeyrie (France), Annelies Pierrot-Bults (The Netherlands), and Vere Shannon (South Africa). Fred Grassle, chair of the CoML Scientific Steering Committee, will participate in meeting planning to ensure that it will coordinate well with a CoML symposium held in conjunction with the SCOR meeting. The committee will work by email over the next 6 months and will make its first report at the 2005 SCOR Executive Committee Meeting in Australia.

Travel Grants for Scientists from Developing Countries and Countries With Economies in Transition

Meetings for which SCOR funds are allocated to travel for scientists from developing countries and countries with economies in transition are now noted in two ways on the SCOR Web site. First, they are shown in red on the master SCOR calendar. This calendar only lists meetings that are primarily or solely sponsored by SCOR projects. From the master calendar, there is a link to a complete listing of meetings for which SCOR travel funds are available, with links to the emails of meeting organizers.

For additional information about SCOR activities, please see the SCOR Web site at <http://www.jhu.edu/scor>.

Picture credits:

Page 1: *Phaeocystis* bloom on beach—

<http://www.natuurinformatie.nl/ecomare.devleet/natuurdatabase.nl/i000238.html>

Page 2: Satellite photo of Rio de la Plata—

<http://eol.jsc.nasa.gov/EarthObservatory/RiodelaPlata.htm>

Page 3: Scanning electron micrograph of Dinoflagellate—

http://www.utas.edu.au/docs/plant_science/research/algalblooms.htm

Page 4: Autonomous Benthic Explorer—

<http://oceanexplorer.noaa.gov/technology/subs/abe/abe.html>