



International Council for Science
Scientific Committee on Oceanic Research

Electronic Newsletter #6
June 2006

The Scientific Committee on Oceanic Research (SCOR) promotes international cooperation in ocean science by sponsoring working groups, large-scale ocean research projects, and other activities.

WORKING GROUPS

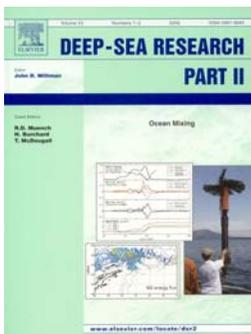
SCOR sets up working groups to advance new areas of ocean science and to overcome technical problems related to oceanographic measurements. SCOR working groups also document the state of the art in particular areas of ocean science, identify priority research questions, and identify needs for new observations.

WG 115 on Standards for the Survey and Analysis of Plankton held a mini-symposium (19-20 May) to prepare papers for a special issue of the *Journal of the Marine Biological Association of the United Kingdom*. The group identified research into automatic visual plankton identification as a possible topic for a future SCOR working group.



WG 116 on Sediment Trap and ^{234}Th Methods for Carbon Export Flux Determination has submitted a major review paper on upper-ocean sediment trap issues to the *Journal of Marine Systems*. The paper presents new data/synthesis, discusses calibration issues, and includes recommendations on best practices and what research is needed.

WG 119 on Quantitative Ecosystem Indicators for Fisheries Management (with IOC) will hold a workshop to follow up their successful March 2004 symposium. The workshop—“Comparing ecosystem dynamics in a global climatic context using meta-data analyses and ecosystem-based indicators: Increasing biological turnover rates in marine ecosystems”—is planned for November 2006.



WG 121 on Ocean Mixing (with IAPSO) recently published a special issue of *Deep-Sea Research II* (see Muench, R.D. et al. (eds.). 2006. Ocean Mixing. *Deep-Sea Research II* 53:1-245). The publication (the cover is shown at left) has been distributed to all those who attended the conference. The group has planned a special session at the International Union of Geodesy and Geophysics' General Assembly in Perugia, Italy in July 2007.

WG 127 on Thermodynamics and Equation of State of Seawater (with IAPSO) recently met in Warnemünde, Germany to begin its work. The group agreed on how to achieve their objectives and the members are excited about the opportunity to redefine the thermodynamics of seawater, for which the time may now be ripe. The group will write an article for *EOS* that outlines its plans and invites comments from the community.

WG 128 on Natural and Human-Induced Hypoxia and Consequences for Coastal Areas held its first meeting on 6-7 April. The group planned a set of potential review papers and original research papers for a special issue of an open-access journal such as *Biogeosciences* or *Advances in Geosciences*. The group plans to develop a Web site with a password-protected section (for exchanging documents and data among working group members) and a public section with information about coastal hypoxia.

Working Group Proposals

Seven proposals for new working groups were received by the May 31 deadline:

1. Working Group on Deep Ocean Exchanges with the Shelf
2. Working Group on Automatic Plankton Visual Identification
3. Working Group to coordinate the availability of a world register of marine species (WoRMS)
4. Working Group on The Legacy of in situ Iron Enrichments: Data Compilation and Modelling
5. Working Group on Ocean Time Series: Coordination and Integration of Science Objectives, Methods, Databases and Capacity-Building Efforts
6. Working Group on Tsunamis: Examination, Modeling and Risk Estimation
7. Working Group on the Role of Lanternfish in the Ocean

These proposals will be reviewed by SCOR National Committees and others; comments are due by **15 September**. Proposals can be downloaded at <http://www.jhu.edu/scor/2006GM.htm> and comments are welcome from anyone interested, preferably following the instructions in the call for review at <http://www.jhu.edu/scor/2006-WGReview.pdf>.

RESEARCH PROJECTS

SCOR sponsors five large-scale ocean research projects: the *Global Ecology and Oceanography of Harmful Algal Blooms* (GEOHAB) program (with IOC), GEOTRACES (an international study of the global marine biogeochemical cycles of trace elements and their isotopes), the *Global Ocean Ecosystem Dynamics* (GLOBEC) project (with IGBP and IOC), the *Integrated Marine Biogeochemistry and Ecosystem Research* (IMBER) project (with IGBP), and the *Surface Ocean – Lower Atmosphere Study* (SOLAS) (with IGBP, WCRP, and CACGP). The scientific steering committees for GEOHAB, GLOBEC, IMBER, and SOLAS continue to implement project activities. The *GEOTRACES Science Plan* will soon be published, and a Scientific Steering Committee for GEOTRACES is being formed.

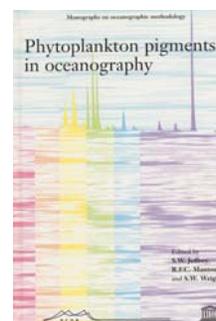
OTHER ACTIVITIES

Second Symposium on The Ocean in a High-CO₂ World—SCOR has obtained partial funding from the U.S. National Science Foundation for a second symposium on The Ocean in a High-

CO₂ World. A planning committee will be formed with IOC, IGBP, and perhaps other sponsors in the near future and planning will begin for the next symposium. SCOR is still seeking additional funding for this activity.

International Ocean Carbon Coordination Project (IOCCP)—This IOC/SCOR group has a full slate of activities underway, thanks to excellent work by the IOCCP Scientific Steering Group and IOC staff, and to financial support from IOC and the U.S. National Science Foundation. IOCCP’s present activities include observing programs (hydrography, underway measurements, time-series stations, ocean color, ocean climate observing system), standards and methods, data and products, synthesis activities, pilot projects (Friends of Oxygen on Argo and Digital Object Identifiers for Datasets), sensors, and technical coordination for research programs. The latter relates to the technical and logistical support that IOCCP provides to SOLAS, IMBER, CLIVAR, and other projects. A full update on IOCCP activities can be found at http://ioc.unesco.org/ioccp/Docs/ProgRptMay2006_Public.pdf.

Second Volume of *Phytoplankton Pigments in Oceanography*—A scoping meeting was held on 7-12 April to plan for a second volume of the book that originally resulted from the work of SCOR WG 78. The new volume will include sections on pigments discovered after Volume 1 was completed, new methods, selected applications in oceanography, a complete set of revised and new data sheets, and appendices (including updates of Volume 1). SCOR is now seeking funding to produce the new volume.



Past Marine Global Changes (IMAGES)—The IMAGES project, part of the



IGBP Past Global Changes (PAGES) project and an outcome of SCOR WG 100 on Sediment Coring for International Global Change Research, noted at the 2005 SCOR Executive Committee meeting that they are willing to provide paleoceanographic expertise to other projects. The purpose of IMAGES is to quantify the variability of climate and chemical properties of the ocean on the time scales of oceanic and cryospheric processes. IMAGES also seeks to determine the sensitivity of

the ocean to internal and external forcings, and to determine the role of the ocean in controlling atmospheric CO₂.

SCOR Annual Meetings

2006—The 2006 SCOR General Meeting will be held in Concepción, Chile on 23-26 October 2006. The University of Concepción is arranging a workshop on “Oxygen minimum systems in the ocean: distribution, diversity and dynamics” to coincide with the SCOR meeting (see workshop announcement on the following page). Nominations for SCOR officers (Secretary and Vice-Presidents) are due by **23 June**.

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

Acronyms:

CACGP	Commission on Atmospheric Chemistry and Global Pollution
CLIVAR	Climate Variability and Prediction project
GEOHAB	Global Ecology and Oceanography of Harmful Algal Blooms program
GLOBEC	Global Ocean Ecosystem Dynamics project
IGBP	International Geosphere-Biosphere Programme
IMAGES	International Marine Past Global Changes Study
IMBER	Integrated Marine Biogeochemistry and Ecosystem Research project
IOC	Intergovernmental Oceanographic Commission
IOCCP	International Ocean Carbon Coordination Project
PAGES	Past Global Changes Study
SOLAS	Surface Ocean – Lower Atmosphere Study
WCRP	World Climate Research Programme

Picture Credits:

Continuous Plankton Recorder Picture—Web site of the Sir Alistar Hardy Foundation (see <http://192.171.163.165/>)

R/V *Marion Dufresne*— <http://pubs.usgs.gov/of/2000/of00-306/>



OXYGEN MINIMUM SYSTEMS IN THE OCEAN: DISTRIBUTION, DIVERSITY AND DYNAMICS

OCTOBER 24 – 26, 2006
HOTEL EL ARAUCANO, CONCEPCION
CHILE

Faculty of Natural and Oceanographic Sciences, Department of Oceanography, Center for Oceanographic Research in the Eastern South Pacific (COPAS)

UNIVERSITY OF CONCEPCION

The Faculty of Natural and Oceanographic Sciences, the Department of Oceanography, and the Center for Oceanographic Research in the eastern South Pacific (FONDAP-COPAS) of the University of Concepción, are pleased to announce the Workshop on “**Oxygen minimum systems in the ocean: distribution, diversity and dynamics**”, to take place in Concepción, Chile, October 24-26, as an activity that will coincide with the 2006 SCOR (Scientific Committee on Oceanic Research) General Meeting.

For registration and other information, see <http://www.cona.cl/scor/oms.htm>.