

Cathedral in Senate Square, Helsinki
(c) Damon Hart-Davis

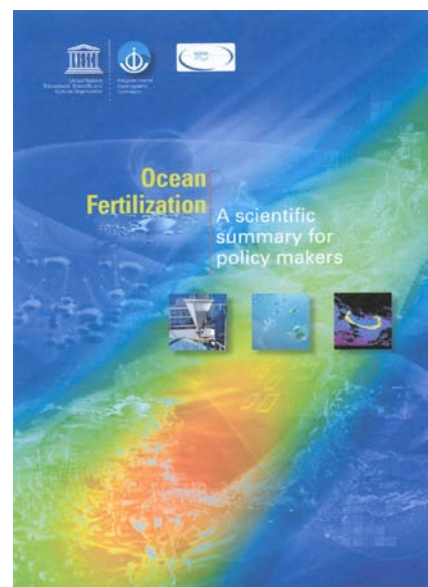
Publications

SCOR projects and working groups have produced several important publications since *SCOR Newsletter* #18 in January, including an article in *Nature* and a booklet supplemental to the journal *Science*. SCOR/WCRP/IAPSO WG 136 on Climatic Importance of the Greater Agulhas System published a paper in the 28 April issue of *Nature*. The article presented evidence for the influence of Agulhas leakage on the overturning circulation in the Atlantic Ocean that could counteract changes predicted in the North Atlantic Ocean due to climate change. SCOR WG 134 on The Microbial Carbon Pump in the Ocean put together a supplement to the journal *Science* issued on May 13 and available in [electronic form](#). The supplement brings together past articles published in *Science* with new review papers. SCOR appreciates the efforts of these working groups.

Other SCOR working groups also produced publications in the past few months. SCOR/IAPSO WG 129 on Deep Ocean Exchanges with the Shelf completed their [special issue](#) of the open-access journal *Ocean Science*. SCOR WG 137 on Patterns of Phytoplankton Dynamics in Coastal Ecosystems: Comparative Analysis of Time Series Observation announced its activities, following its first meeting, in an article in *EOS* (Paerl, H, K. Yin, and J. Cloern. 2011. Global patterns of phytoplankton dynamics in coastal ecosystems. *EOS* 92(10):85). SCOR encourages each working group to produce some kind of publication after each meeting, starting with an announcement of its work in a publication relevant to the group's work after its first meeting. Such publications increase the visibility of the group (and SCOR) and encourage interested individuals to make contact with the group.

SCOR communicates with the ocean science community through traditional approaches, such as scientific

publications, science meetings, the SCOR Web site, and this newsletter. Communication with the non-scientific public requires special expertise and different approaches, and SCOR is fortunate to be able to rely on assistance from partner organizations, funding agencies, and scientists involved in SCOR activities to reach the public and policymakers. The work of WGs 134 and 136 was communicated beyond the ocean science community because the publications appeared in high-profile scientific journals that reach beyond the ocean science community, and because the universities of involved scientists and the funding agency (NSF in the case of WG 136's paper) issued press releases. Another example of SCOR and partners working together is the assistance provided by the Surface Ocean–Lower Atmosphere Study in producing the Intergovernmental Oceanographic Commission (IOC) report [Ocean Fertilization: A Summary for Policy Makers](#).



Capacity Development

SCOR appointed four SCOR Visiting Scholars for 2011. Ali Pourmand (USA) will help teach a paleoceanography course in Iran, Alice Newton (Norway/Portugal) will work with colleagues in Morocco to teach a course on coastal lagoons, Kurt Hanselmann (Switzerland) will build on the results of his 2010 SCOR Visiting Scholar assignment in Namibia, and Scott Fowler (France/Monaco) will be teaching chemical oceanography in India. This program is providing in-depth teaching and mentoring in parts of the world where SCOR has not had much involvement in the past and complements capacity development activities of our partner organizations.

SCOR organized a meeting in Izmir, Turkey to bring together representatives of key international organizations and countries of the Middle East and North Africa to discuss the potential extension of ocean science capacity development in the region. The meeting was hosted by the Institute of Marine Sciences and Technology, Dokuz Eylül University and the Inter-Islamic Science and Technology Network on Oceanography. Meeting participants shared information about ocean science capacity building and endorsed the idea of creating a graduate network of oceanography for the region.



Around the time that WG 136 published its *Nature* paper, it co-sponsored the Second In-Region Capacity Building Workshop of the WMO/IOC Data Buoy Cooperation Panel (DBCP) and Partners in Mauritius. Working group members gave many of the presentations at the workshop and funding from SCOR and IUGG made it possible for several African scientists to attend the workshop.

The membership of the SCOR Committee on Capacity Building has been changed to create a greater overlap with the SCOR Executive Committee. This will make it possible to conduct some business of the committee in conjunction with SCOR annual meetings. The committee continues to be chaired by Venu Ittekkot (Germany).

IOC's International Oceanographic Data and Information Exchange (IODE) has set up an Ocean Summer Schools portal as a service to the global ocean science community. The idea for the site emerged from a 2010 meeting that brought together the major ocean science

organizations (see http://www.scor-int.org/CB_Summit.htm), where it became apparent that there was no existing portal to summer schools related to ocean science. This Web site is co-sponsored by IODE/IOC, SCOR, the Partnership for Observation of the Global Oceans (POGO), and the North Pacific Marine Sciences Organization (PICES).



For projects and organizations that frequently sponsor summer schools and want to be able to list their summer schools directly, please contact Aditya Kakodkar (kakodkar.aditya@atgmail.com) to set up a user account. For those projects that only occasionally conduct summer schools, please send your information to Ed Urban (Ed.Urban@scor-int.org) to post the information for you.

Summer schools are defined to include short courses in any season of the year, training cruises, and longer courses, but the events should be designed specifically for graduate students and/or early-career scientists.

Third Symposium on the Ocean in a High-CO₂ World

The [topics](#), [plenary speakers](#), and [parallel session chairs](#) for the Third Symposium on the Ocean in a High-CO₂ World have been confirmed. Registration for the symposium will open in September 2011. A subcommittee of the international planning committee for the event recently began developing the events at the symposium for early-career scientists. Networking and mentoring activities are being planned and will be announced in September. Planning is also underway for a Policy Day at the symposium. This event will follow the three-day symposium and will include a summary for the public and policymakers of the state of science on ocean

acidification, two panels of high-profile policymakers and representatives of the public, and a news conference.

Southern Ocean Observing System

SCOR and the Scientific Committee on Antarctic Research (SCAR) continued to work on developing ideas for a Southern Ocean Observing System (SOOS). A SOOS International Project Office (IPO) is being established in Australia, supported by the new Institute for Marine and Antarctic Studies at the University of Tasmania in Hobart. The SOOS IPO will be co-located with Australia's Integrated Marine Observing System (IMOS). An Executive Officer, Louise Newman, has been appointed and will take her post in August 2011. The SCAR/SCOR Expert Group on Oceanography will act as the Scientific Steering Committee for SOOS. The *Initial Science and Implementation Strategy* for SOOS is in the final stages of preparation for publication, after an open review by the community.

Working Group Proposals

Eight proposals were submitted for new SCOR working groups to start in 2012:

1. [Investigating Physical and Biological Determinants of Population Connectivity: Are Perceived Temperate-Tropical Differences Real?](#)
2. [Organic Ligands – A Key Control on Trace Metal Biogeochemistry in the Ocean](#)
3. [Deep-sea biodiversity Patterns of the South Atlantic Ocean](#)
4. [Common Challenges in Establishing Ocean Observatories](#)
5. [Subterranean Estuaries](#)
6. [Patterns of rocky shore dynamics in coastal ecosystems: Comparative analysis](#)
7. [Biogeochemical Exchange Processes at the Sea-Ice Interfaces \(BEPSII\)](#)
8. [Understanding the global impacts and implications of range-shifting species in marine systems](#)

It is likely that funding will be available to support two new groups. The review process is open and comments are requested by 1 August. Instructions for submitting comments can be found [here](#). Many SCOR working groups are co-funded by other international organizations or national institutions. SCOR decided in 2010 that decisions related to co-funding should not influence a proposal's chance of being approved, but co-funding may help to support more working groups. Any organizations having interests in any of the proposed groups should contact Ed Urban at the SCOR Secretariat.

Large-Scale Ocean Research Projects

The Scientific Steering Committees of the Integrated Marine Biogeochemistry and Ecosystem Research

(IMBER) project and Surface Ocean–Lower Atmosphere Study (SOLAS) met in the April and May, respectively. The project sponsors approved Ratana Chuenpagdee (Canada) as a new IMBER SSC member and Eric Saltzman (USA) as the new chair of the SOLAS SSC. SOLAS has announced that its 2012 Open Science Conference will be held in Washington State (USA) on 7-10 May 2012. IMBER recently issued a [request for bids](#) to host its Open Science Meeting (OSM) in 2014.

National GEOTRACES committees continue to carry out GEOTRACES cruises. The first leg (Australian) of a two-leg Australian-New Zealand cruise program was completed on 5 June, with the New Zealand leg about to begin. A [blog](#) was maintained for the first leg of the cruise. Planned cruises are listed on the [GEOTRACES Web site](#). SCOR funded the participation of a South African scientist on the Australian cruise in the South Pacific Ocean and a Brazilian scientist on a Netherlands cruise in the South Atlantic Ocean earlier this year, through a grant from the U.S. National Science Foundation to SCOR.

The [Third GEOTRACES Data-Model Synergy Workshop](#) will be held in Barcelona, Spain on 14-17 November 2011. The workshop will focus on ocean particles, with emphasis on their role in the biogeochemical cycle of trace elements and isotopes (TEIs). The exchange with particulate phases is recognized as an important process in the oceanic budget of a large number of substances present in trace amount in seawater, including that of key substances of relevance to GEOTRACES. GEOTRACES has made it a priority to bring modelers and scientists who collect TEI data together early in the project to ensure that the data being collected will be useful in global models of TEI cycles, as well as models related to GEOTRACES process studies.

SCOR/POGO International Quiet Ocean Experiment

[Speakers, chairs, and rapporteurs](#) are in place for the OSM for the International Quiet Ocean Experiment (IQOE). The OSM will be held on 30 August-1 September 2011 at UNESCO Headquarters in Paris, France. Early [registration](#) is available until 31 July. The purpose of the open science meeting is to develop a Science Plan for the IQOE, a focused international research effort that may last a decade or so. This plan will include background information to document the importance of the issue of sound in the ocean and its effects on marine organisms; identify information gaps; and describe research, observations, and modeling activities needed to fill these gaps. The plan will draw on background information and research priorities from previous documents, as well as from discussion papers submitted for the meeting and the results of the discussion sessions, which will be a major component of

the meeting. The plan will include specific details for implementing IQOE activities. A justification for the IQOE and a summary of the foundational workshop will be published in the June 2011 issue of [Oceanography magazine](#). A [flyer](#) is available for the OSM.

SCOR Annual Meetings

2011—The 2011 Executive Committee meeting will be hosted by the Finnish SCOR Committee in Helsinki, Finland on 12-15 September. Registration for the meeting is available [online](#) this year and detailed information about the meeting can be found on the [meeting Web site](#). The Finnish SCOR Committee will be hosting a special half-day session on “Baltic Sea, Our Sea” to highlight research being done in the Baltic Sea by the Finnish ocean science community and others.

2012—The 2012 SCOR General Meeting will be held in Halifax, Nova Scotia, Canada during the week of 22-26 October. The SCOR meeting will coincide with the 50th anniversary celebration of the Bedford Institute of Oceanography and a climate symposium.

2013—The location of the 2013 SCOR meeting has not yet been determined.

2014—SCOR has accepted an offer from the German SCOR Committee to hold its 2014 General Meeting in Bremen, Germany.

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

**SCOR Secretariat
College of Earth, Ocean, and Environment
Robinson Hall
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 (Ed.Urban@scor-int.org) or Lora Carter (Lora.Carter@scor-int.org).

Acronyms:

DBCP	Data Buoy Cooperation Panel
IGBP	International Geosphere – Biosphere Programme
IOC	Intergovernmental Oceanographic Commission of UNESCO
IODE	International Oceanographic Data and Information Exchange (IOC/UNESCO)
IPO	international project office
IQOE	International Quiet Ocean Experiment
LOICZ	Land-Ocean Interactions in the Coastal Zone project
MBL	Marine Biological Laboratory (Woods Hole, Massachusetts, USA)

OSM	open science meeting
PICES	North Pacific Marine Sciences Organization
POGO	Partnership for Observation of the Global Oceans
SCOR	Scientific Committee on Oceanic Research
SOLAS	Surface Ocean – Lower Atmosphere Study
TEIs	trace elements and isotopes
WG	working group
WMO	World Meteorological Organization

Acknowledgements of Figures:

Page 1— Cathedral in Senate Square, Helsinki (see <http://gallery.hd.org/c/places-and-sights/more2003/more08/Finland-Helsinki-Senate-Square-cathedral-singers-on-stage-to-left-chirpy-song-people-watching-1-DHD.jpg.html>) Damon Hart-Davis