



Scene from a beach in New Zealand, which will host SCOR's 2013 Executive Committee meeting.

SCOR General Meeting 2012

Representatives from national SCOR committees and international organizations met at Dalhousie University and the Bedford Institute of Oceanography in Halifax, Nova Scotia, Canada on 21-23 October 2012 for the 2012 SCOR General Meeting. New officers were announced and two new SCOR working groups were approved (see below). Halifax was an important location in SCOR's history, as the SCOR Secretariat was located at Dalhousie University from 1980 to 1992 and was the local host for the 1982 Joint Oceanographic Assembly in Halifax. One of the highlights of the meeting was the dinner at the [Maritime Museum of the Atlantic](#).

New SCOR Officers

SCOR is pleased to welcome two new SCOR Officers. Peter Burkill (UK) will be leading the SCOR Executive Committee as the new SCOR President and Corina Brussaard (Netherlands) will be joining as a new SCOR Vice-President.

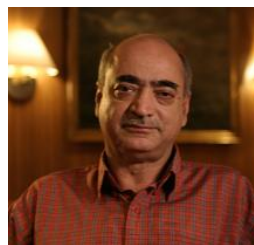


Peter Burkill is currently Professor of Ocean Science at the University of Plymouth (UK) and an expert on biological oceanography. He has recently retired from the Sir Alister Hardy Foundation for Ocean Science (SAHFOS). Burkill's involvement in SCOR has spanned several decades, beginning with the Arabian Sea project of the Joint Global Ocean Flux Study. Burkill also helped develop the Integrated Marine Biogeochemistry and Ecosystem Research (IMBER) project and served as a SCOR Vice-President from 2006 to 2010.

Corina Brussaard is a senior scientist at the Royal Netherlands Institute for Sea Research. Her research focuses on marine viral ecology. Brussaard was a Full Member of SCOR WG on the Role of Viruses in Marine Ecosystems, serves as the chair of the Netherlands SCOR Committee, and has been a member of the SCOR Finance Committee at several annual SCOR meetings.



Two Vice-Presidents were re-elected: Satoru Taguchi (Japan) and John Volkman (Australia). Wajih Naqvi (India) was selected by the SCOR Executive Committee as a Co-opted Member, to provide additional chemistry expertise on the Executive Committee and to represent southern Asia. Naqvi's research focuses on aquatic



biogeochemistry, covering cycles of carbon and nutrients (nitrogen, phosphorus and iron) in the oceanic environment. He specializes in anaerobic remineralization in the water column and sediments, including denitrification and nitrous oxide production.

SCOR thanks Bjørn Sundby (Canada), who completed his term as Past President; Ilana Wainer (Brazil), who completed a term as a SCOR Vice-President, and John Compton (South Africa), who completed four years as a Co-opted Member of the Executive Committee.

New SCOR Working Groups

Seven proposals were submitted for new working groups to be considered at the 2012 SCOR General Meeting.

Meeting participants selected two to start in 2013, based on funding available: (1) WG 141 on Sea-Surface Microlayers and (2) WG 142 on Quality Control Procedures for Oxygen and Other Biogeochemical Sensors on Floats and Gliders.

WG 141 on Sea-Surface Microlayers—The sea-surface microlayer (SML) is the interface between the atmosphere and ocean. The thickness of the SML typically ranges between 40 and 100 μm , and the properties of this layer are significantly different from the properties of the seawater beneath. The position of the SML at the air-sea interface implies that this layer is probably central to a range of global biogeochemical and climate-related processes mediated by transfer across this boundary. The working group plans to develop and disseminate a multidisciplinary definition of the microlayer (taking into account physical, chemical and biological factors). It will review sampling techniques and publish detailed sampling protocols to help make it possible to compare measurements made in different locations. The group will outline the SML's role in a changing ocean. This group is co-chaired by Michael Cunliffe (UK) and Oliver Wurl (Germany).



SML sampling with the glassplate technique

WG 142 on Quality Control Procedures for Oxygen and Other Biogeochemical Sensors on Floats and Gliders—Argo floats have revolutionized our understanding of the physical structure of the ocean and how heat and salinity are distributed through the upper 1000 meters of the water column. This achievement is possible because of the high-quality and comparable data from the worldwide network of sensors on the floats. More recently, oxygen, nitrate, and other sensors have been deployed on Argo floats, but data from these sensors has not yet achieved the same level of reliability as for physical parameters. Gliders are increasingly used to profile ocean properties, but share many of the same constraints to instrumentation as do floats. This working group is co-chaired by Arne Körtzinger (Germany) and

Ken Johnson (USA) and will help develop quality control metrics and procedures for oxygen and other biogeochemical sensors deployed on floats and gliders to make it possible to create a research-quality synthesis data product. The group will also document the readiness of the range of biogeochemical sensors that might be deployed on floats and gliders.

Ongoing SCOR Working Groups

SCOR WG 134 on The Microbial Carbon Pump (MCP)—The group met for the third time (their final full meeting with SCOR funding) at the Hanse Institute for Advanced Study, Delmenhorst, Germany, on 26-29 August 2012. This workshop aimed to summarize the progress of microbial and geochemical research in the context of the MCP in the recent past and the impact of the MCP concept in microbial oceanography research with respect to DOM cycling and diagenetic alterations. In addition, future research activities within the conceptual framework of the MCP were identified. Results of the workshop will be published in the final report of WG 134 to SCOR and made publicly available on the Web.

SCOR WG 137 on Patterns of Phytoplankton Dynamics in Coastal Ecosystems: Comparative Analysis of Time Series Observation— The third meeting of SCOR Working Group 137 was a joint workshop with PICES held on 12-14 October 2012 in Hiroshima, Japan, in conjunction with the PICES Annual Meeting. The workshop objectives were for participants to (1) present progress made on data synthesis and cross-system comparisons of anthropogenic and climatic impacts on coastal phytoplankton community structure and function since earlier WG137 meetings, (2) review and revise the group's research questions, (3) discuss the approaches (what data sets to use, what analysis to perform, etc.) needed to address questions and formulate the framework (outline) of papers related to the questions, and (4) determine take-home assignments for preparing publications. Following the workshop, one of WG137's co-chairs, Hans Paerl, made a plenary presentation at the opening of the PICES Science Conference (15 Oct.) on "Global pattern of phytoplankton dynamics in coastal ecosystems: utilizing long-term data to distinguish human from climatic drivers of ecological change."

News from the SCOR Committee on Capacity Building

The SCOR Committee on Capacity Building met on 20 October 2012 to discuss all SCOR capacity building activities. The committee made recommendations for several meetings for which to provide support for developing country scientists. The committee also discussed follow-up for the meeting on a regional graduate network on ocean science for the Middle

East/northern Africa region, and plans for a meeting focused on southern Africa (see following).

A meeting was sponsored by SCOR in Namibia on 5-6 November to discuss opportunities for SCOR and other international organizations to extend their work in the region and to provide an opportunity for representatives of countries in the region to discuss how they might cooperate in a regional network for graduate education. Participants from SCOR, the Intergovernmental Oceanographic Commission (IOC), the Partnership for Observation of the Global Oceans (POGO), the University of Namibia (UNAM), the University of Cape Town, the Namibian National Marine Information and Research Centre (NatMIRC), and the Namibian Dolphin Project met at the UNAM marine station at Henties Bay and developed a set of recommendations to work toward regional cooperation in ocean science education.

SCOR Visiting Scholar **René Swift** visited southern Africa (South Africa and Namibia) in February and March 2012. The purpose of his visit was to provide an introduction to passive acoustic surveys and data analysis to researchers and students in the two countries. The visit was split into four parts:

1. A 2-day training workshop in Cape Town, South Africa, focused on the Passive Acoustic Monitoring system PAMGUARD.
2. Three weeks in Luderitz, Namibia working with the Namibian Dolphin Project and the Namibian Ministry of Fisheries and Marine Resources to set up visual and acoustic surveys for marine mammals and other large marine vertebrates in the Namibian Island Marine Protected Area (NIMPA).



SCOR Visiting Scholar René Swift after deploying the 410 hydrophone array starting the first systematic visual and acoustic survey of marine mammals in Namibian waters.

3. Five days in Walvis Bay, Namibia working with Drs. Tess Gridley and Simon Elwen of the Namibian Dolphin Project recording Heaviside's dolphin to develop and improve automated click detectors for

this species.

4. A half-day visit to the University of Namibia (Windhoek) with Dr. Simon Elwen to give students studying Fisheries and Aquatic Sciences a brief introduction to the marine mammals of Namibia and to the use of passive acoustics as a tool to study the distribution, behaviour, and abundance of marine and terrestrial animals.

SCOR Visiting Scholar **Jacob Larsen** taught a course in harmful algal bloom identification at the University of Ghana on 8-19 October. The workshop began with a one-day open seminar. It continued with training on sampling methods, sample preparation, and microscopic identification of harmful species. Sixteen individuals participated in the training.

Ocean Carbon Activities

The SCOR/IGBP/IOC **Third Symposium on The Ocean in a High-CO₂ World** was a great success and attracted 529 registered participants. The symposium continued the evolution from the previous two events, with more oral presentations (and more of these by female scientists), more early-career scientists involved, and a greater number of presentations featuring research involving multiple stressors (beyond CO₂ alone), including temperature, oxygen, light, salinity, etc.

Thanks to the many volunteers from the international and local organizing committees, the mentors, the student volunteers, and volunteers from the Monterey Bay Aquarium who helped make the meeting a success.

Symposium participants were surveyed after the event and 94% of respondents were in favor of holding a fourth symposium in 2016.

We are pleased to announce that Dr. Maciej Telszewski was appointed as the new Director of the **International Ocean Carbon Coordination Project** (IOCCP) on 1 October 2012. Maciej has served as the IOCCP Deputy Director since January 2011, during which time he has been increasingly involved in coordinating the numerous IOCCP activities.

IOCCP continues to coordinate submission and quality control of the surface ocean pCO₂ data to SOCAT (Surface Ocean CO₂ Atlas, www.socat.info). The SOCAT team met twice during the past 4 months to discuss the latest achievements in its efforts toward automation of data submission and quality control and to quality control the data submitted since the release of the first version of the Atlas last September. The second version of the Atlas should be publicly available in spring 2013, with an almost 50% increase in the number of cruises and data points.

Finally, IOCCP's efforts to harmonize carbon data from time series will continue through a Time Series

workshop in Bermuda (see <http://www.whoi.edu/website/TS-workshop/home>).

Large-Scale Ocean Research Projects

The SCOR/IOC **Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB)** is planning a final Open Science Meeting for 25-27 April 2013 at UNESCO Headquarters in Paris, France. The SSC also is planning a series of synthesis documents to be completed in late 2013 or early 2014.

The SCOR/IGBP **Integrated Marine Biogeochemistry and Ecosystem Research (IMBER)** project is completing planning for its IMBIZO III, to be held in Goa, India (see <https://www.confmanager.com/main.cfm?cid=2614>). IMBER recently announced its first open science meeting, which will be held Bergen, Norway, in 2014.

The SCOR/IGBP/WCRP/CACGP **Surface Ocean-Lower Atmosphere Study (SOLAS)** has redesigned its Web site; it can be viewed at <http://www.solas-int.org/>. SOLAS has several events planned in the near future: <http://www.solas-int.org/solas-events.html>.

The SCOR **GEOTRACES** Scientific Steering Committee and Data Management Committee met in Goa, India in early November, in recognition of the increasing importance of GEOTRACES activities in India. GEOTRACES recently convened a workshop in Rio de Janeiro, Brazil to bring together scientists from Latin American to discuss potential project activities in the region. Finally, the Russian Academy of Sciences will host a meeting in late November on Russian involvement in GEOTRACES, particularly in future cruises and process studies in the Arctic Ocean.

The **SCAR/SCOR Southern Ocean Observing System (SOOS)** project will hold a Town Hall meeting at this year's AGU Fall Meeting in San Francisco (USA). SOOS, co-sponsored by SCOR and SCAR, has the goal of coordinating international data gathering to develop a sustained set of observations in the circumpolar Southern Ocean to address key scientific and societal challenges. SOOS Scientific Steering Committee members will discuss current activities and international coordination at the Town Hall session, and wish to receive ideas from the Southern Ocean community how to advance SOOS.

Forum on the Southern Ocean Observing System (SOOS)

AGU Town Hall
December 7, 2012
12.30 – 1.30 pm

Location: Room 2011 (Moscone West)

New Affiliated Project

The Global Alliance of Continuous Plankton Recorder Surveys (GACS) is an international scientific partnership that was established in September 2011. The goal of GACS is "to understand changes in plankton biodiversity at ocean basin scales through a global network of CPR surveys". SCOR agreed at its recent General Meeting to accept GACS as an affiliated project. Affiliation brings extra visibility to projects and helps keep the international SCOR community informed about the progress of important international ocean science activities. The GACS Web site can be found at <http://www.globalcpr.org/>.

Data Publication Project

The SCOR/IODE/MBLWHOI Library group on data publication met on 8-9 October in Woods Hole, Massachusetts, USA, to assess the status of the two pilot projects and determine next steps. The status of the project is described in a recent article in *Eos*:

Urban, E., A. Leadbetter, G. Moncoiffe, P. Pissierssens, L. Raymond, and L. Pikula. 2012. Pilot Projects for Publishing and Citing Ocean Data. *Eos* 93:425-426.

SCOR Annual Meetings

2013—The 2013 SCOR Executive Committee meeting will be held on 25-28 November in New Zealand. The location has not yet been determined, but will be announced in the near future.

2014—SCOR will hold its 2014 General Meeting in Bremen, Germany.

2015—SCOR will hold its 2015 Executive Committee Meeting in Goa, India.

2016—SCOR will hold its 2016 General Meeting in Sopot, Poland.

For additional information about SCOR activities, please see the SCOR Web site: <http://www.scor-int.org>. To reach Secretariat staff, please send an email to Ed Urban (Ed.Urban@scor-int.org) or Lora Carter (Lora.Carter@scor-int.org).

Acronyms:	
CACGP	Commission on Atmospheric Chemistry and Global Pollution
CNC-SCOR	Canadian National Committee for SCOR
GEOHAB	Global Ecology and Oceanography of Harmful Algal Blooms project
IAPSO	International Association for the Physical Sciences of the Oceans
IGBP	International Geosphere-Biosphere Programme
IMBER	Integrated Marine Biogeochemistry and Ecosystem Research project
IOC	Intergovernmental Oceanographic Commission
IOCCP	International Ocean Carbon Coordination Project
POGO	Partnership for Observation of the Global Ocean
SCAR	Scientific Committee on Antarctic Research
SCOR	Scientific Committee on Oceanic Research
SOLAS	Surface Ocean – Lower Atmosphere Study
WCRP	World Climate Research Programme
WG	working group