International Council for Science

Scientific Committee on Oceanic Research

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SCOR Secretariat Moving to University of Delaware



SCOR signed an agreement in May 2007 to move its international Secretariat from The Johns Hopkins University to the University of Delaware campus in Newark, Delaware. The Secretariat will be hosted by the university's College of Marine and Earth Studies (CMES) (see http://www.ocean.udel.edu/). CMES scientists conduct research across all areas of ocean science and policy, and the relocation of the SCOR Secretariat offers many opportunities for SCOR and CMES to develop synergistic activities.

The move is scheduled for October 1, 2007. Until that time, the SCOR Executive Director, Dr. Ed Urban, will split his time between the two locations. The new address for the SCOR Secretariat will be

SCOR Secretariat College of Marine and Earth Studies University of Delaware Robinson Hall Newark, DE 19716, USA

The Secretariat phone and fax numbers will be available after the move is complete.

As part of the Secretariat move, new email addresses have been established for the SCOR staff and Secretariat and are active now:

Ed Urban: <u>Ed.Urban@scor-int.org</u> Liz Gross: <u>egross@scor-int.org</u>

General Secretariat email: secretariat@scor-int.org

SCOR Capacity-building Activities

SCOR continues to develop its capacity-building activities. The SCOR Executive Committee has approved the SCOR Committee on Capacity Building. The committee is chaired by Prof. Venu Ittekkot of the University of Bremen (Germany). Other members include Alfonse Dubi (Tanzania), John Farrington (USA), Wajih Naqvi (India), Shubha Sathyendranath (Canada), Jilan Su (China-Beijing), and Tatsuki Toda (Japan). Other members will be added in the near future.

Murray Brown, training consultant for UNESCO/<u>IOC/IODE</u> at its <u>Project Office</u> in Ostend, Belgium, has developed a Web-based catalog of the capacity-building activities of ocean

research projects and organizations, which is being reviewed now.

A questionnaire was sent to all SCOR nations about their support for and participation in capacitybuilding activities for ocean sciences. The results will be compiled and made available on the SCOR Web site. The Committee on Capacity Building will use this information to help guide its activities.

Finally, the committee is making preliminary inquiries toward holding a regional planning meeting for the Latin America/Caribbean region.

Working Groups

SCOR sets up working groups to advance new areas of ocean science and to overcome technical problems related to oceanographic observations and 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 125 on Global Comparisons of Zooplankton Time Series—Working Group 125 held a one-day opportunistic meeting in May in Hiroshima, Japan, in conjunction with the Fourth International Zooplankton Production Symposium. There were two main discussion topics during the meeting. The first was development and testing of "tool kit" software and statistical methodologies for calculating seasonal climatologies (and anomalies relative to these) for the group's variety of spatial and temporal sampling designs (single location time series vs. line transects vs. irregular grids within statistical regions). The second topic was where and how to present and publish the group's final results. The results will be presented in May 2008 in Gijon, Spain, to coincide with the Symposium on Effects of Climate Change on the World's Oceans.



SCOR WG 126 on Role of Viruses in Marine Ecosystems—Working Group 126 had a very

productive meeting in Bergen, Norway in May. The major outcome of the Bergen meeting was a multi-lab comparison of techniques. The group established mesocosms at the Bergen facility and used them as samples (one with nutrients added, one without) to produce communities of differing trophic status. Different counting techniques, different virus production techniques, and different molecular tools were compared. The group's book, tentatively entitled *Methods in Aquatic Viral Ecology*, is expected to be ready for publication in 2009. WG 126 and a related group from EurOCEANS have been asked to write a perspective for *Nature Reviews Microbiology*, which will be submitted soon.

SCOR/IAPSO Working Group 127 on Thermodynamics and Equation of State of Seawater—Working Group 127 met in May in Reggio Calabria, Italy. The group is making good progress in fulfilling its terms of reference. The properties of seawater will be defined relative to those of fresh water described by IAPWS-95. This new description of sea water will be in the form of a single thermodynamic potential function (Gibbs function) as a primary standard, rather than by a set of equations like the current EOS-80 formulation. From this primary standard, practical approximate equations for specific quantities or purposes will be derived, for example, equations that are valid in restricted parameter ranges or are designed for improved computational speed.

Large-Scale Ocean Research Projects

SCOR sponsors five large-scale ocean research projects: GEOHAB, GEOTRACES, GLOBEC, IMBER, and SOLAS.

GEOHAB (with IOC)—The GEOHAB program continues to work on implementing the activities described in its *Science Plan* and *Implementation Plan*, particularly in relation to its four Core Research Projects and modeling of harmful algal blooms. Planning for an Asian GEOHAB activity was initiated in March and will be developed further in Vietnam in January 2008. The new GEOHAB

Web site can be reviewed at http://www.obs-vlfr.fr/LOV/OMT/GEOHAB/.

GEOTRACES—The open planning meeting for GEOTRACES activities in the Pacific Ocean was held in June and resulted in a set of proposed cruises and process studies by the nations involved in GEOTRACES. Meeting participants are preparing a report for consideration by the GEOTRACES SSC in November. Planning is ongoing for Atlantic and Indian Ocean basin planning meetings, and a meeting on data-model synthesis (see www.geotraces.org).

GLOBEC (with IGBP and IOC)—GLOBEC's major focus currently is on integration and synthesis, which will take place largely through symposia and a final synthesis book. GLOBEC is conducting its synthesis at various levels, including along the regional scale that was so successfully used in the implementation phase of GLOBEC.

IMBER (with IGBP)—The IMBER Data Management Committee met in June and made significant progress on defining the international IMBER data management system. The IMBER SSC has decided to use a novel format for its 2008 Open Science Meeting. Rather than holding one general meeting for the full range of IMBER science topics, the "IMBER IMBIZO" will involve three concurrent, focused, open science meetings, with an opportunity for crosscutting discussions at the end of the meeting. The location and exact dates of the IMBIZO are still under discussion.

SOLAS (with IGBP, WCRP, and CACGP)—SOLAS held a successful open science meeting in Xiamen, China in March and is preparing for its 2007 SOLAS Summer School, to be held later this year. The sponsors of SOLAS have approved new SSC members, including approval of Doug Wallace (Germany) as the new SSC chair.

Other Activities

Second Symposium on The Ocean in a High-CO₂ World—This symposium is now scheduled for 6-8 October 2008 in Monte Carlo, Monaco. The period

for registration and abstract submission will open on 31 March 2008. Information about the symposium is available at http://ocean-acidification.net/. The symposium is co-sponsored by SCOR, IOC, IAEA, and IGBP.

Surface Ocean CO₂ Variability and Vulnerability Workshop—The IOC/SCOR International Ocean Carbon Coordination Project,



SOLAS, IMBER, and the Global Carbon Project convened a workshop in Paris in April to review the current knowledge base

and enhance international cooperation to resolve the magnitude, variability and processes governing ocean sources and sinks of carbon: from observations, process-based models and atmospheric and oceanic inversions.

SCAR/SCOR Expert Group on Oceanography Southern Ocean Observing System Workshop—SCAR and SCOR will convene a workshop in Bremen, Germany on 1-3 October 2007 to help plan a Southern Ocean Observing System, to contribute to the International Polar Year, but also to extend beyond it. The meeting Web site is (http://www.clivar.org/organization/southern/expert group/SOOS_workshop.htm).

Publications

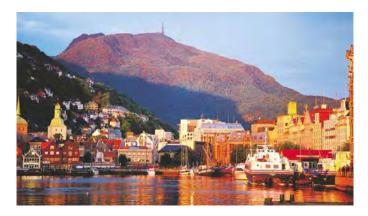
J. Lynch-Stieglitz et al. 2007. Atlantic Meridional Overturning Circulation During the Last Glacial Maximum *Science* 316:66-69.

M.A. van Leeuwe et al. 2007. *Phaeocystis*, major link in the biogeochemical cycling of climate-relevant elements. *Biogeochemistry* 83(1-3), March, 2007 – Online publication available at http://www.springerlink.com/content/g12x20148815/?p=1d1789a4d9e24f9aa783b65b5dbea74e&pi=3 Hard copy publication expected in summer 2007.

Buesseler, K.O. et al. 2007. An assessment of the use of sediment traps for estimating upper ocean particle fluxes. *Journal of Marine Research* 65:345-416. in press.

SCOR Annual Meetings

2007—The 2007 SCOR Executive Committee Meeting will be held in Bergen, Norway on **26-28 August 2007**. It will precede a conference on "Polar Dynamics: Monitoring, Understanding, and Prediction" on 29-31 August 2007 (see http://www.gfi.uib.no/conference2007/info.htm).



2008—The 2008 SCOR General Meeting and 50th Anniversary Symposium will be held in Woods Hole, Massachusetts, USA on 20-24 September 2008. The organizing committee for the symposium is chaired by Laurent Labeyrie.

Other Upcoming Meetings

- GEOTRACES Atlantic Basin Planning Meeting, 10-13 September 2007, Oxford, UK (see http://www.geotraces.org/)
- IMBER/LOICZ Continental Margins Open Science Meeting, 17-21 September 2007, Shanghai, China (see https://www.confmanager.com/main.cfm?cid=792)
- GEOTRACES Indian Ocean Planning Meeting, 24-26 October 2007, Goa, India (see http://www.geotraces.org/)
- First GLOBEC CLIOTOP Symposium, 3-7 December 2007, La Paz, Mexico (see

https://www.confmanager.com/main.cfm?ci d=722)

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

Acronyms:

CACGP Commission on Atmospheric Chemistry and

Global Pollution

CLIOTOP CLimate Impacts on Oceanic TOp Predators

CMES College of Marine and Earth Studies,

University of Delaware

GEOHAB Global Ecology and Oceanography of

Harmful Algal Blooms program

GEOTRACES an international study of the global marine

biogeochemical cycles of trace elements and

their isotopes (SCOR)

GLOBEC Global Ocean Ecosystem Dynamics project
IAEA International Atomic Energy Agency
IGBP International Geosphere-Biosphere

Programme

IMBER Integrated Marine Biogeochemistry and

Ecosystem Research project

IOC Intergovernmental Oceanographic

Commission

IODE International Oceanographic Data and

Information Exchange

IAPWS International Association for the Properties

of Water and Steam

LOICZ Land-Ocean Interactions in the Coastal Zone

project

SCAR Scientific Committee on Antarctic Research
SCOR Scientific Committee on Oceanic Research
SOLAS Surface Ocean–Lower Atmosphere Study
WCRP World Climate Research Programme

Picture Credits:

Robinson Hall, University of Delaware: http://www.ocean.udel.edu/ships&facilities/newark.html

Underway pCO2. The Neill system on-board the *Toucan*. Photo courtesy Nathalie Lefevre. From IOCCP Image Gallery (http://ioc.unesco.org/ioccp/Images/UWGallery/index.htm)

Bergen, Norway:

http://www.ulriken.no/bilder/vaagen.jpg