



SCOR Newsletter June 2014 • #27



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2014 SCOR Working Group Proposals

Eight proposals were submitted to be considered for new SCOR working groups:

1. **Chemical Speciation Modelling in Seawater to Meet 21st Century Needs (MARCHEMSPEC)**
2. **Towards comparability of global oceanic nutrient data (COMPONUT)**
3. **International Network for the Study of How Organisms Respond to Environmental change (INSHORE)**
4. **Patterns in global plankton biogeography (MARBIOG)**
5. **Radioactivity in the Ocean, 5 decades later (RiO5)**
6. **Designing a biological observing system in the Southern Ocean to inform global ocean observing of marine ecosystems (SO-eEOV)**
7. **Optimized design of an ocean observing system for biogeochemistry in a changing climate**
8. **Rheology, nano/micro-Fluidics and bioFouling in the Oceans (RheFFO)**

Comments on proposals are due by 1 August 2014. The call for proposal review and instructions are available [here](#).

SCOR at 2014 Ocean Sciences Meeting

SCOR had a significant presence at the 2014 Ocean Sciences Meeting in Honolulu, Hawaii, USA, through special sessions, side meetings, Town Hall sessions, and a booth to highlight SCOR research projects.



SCOR booth at Ocean Sciences meeting

PHOTO COURTESY OF ELENA MASFERRER-DODAS

Many thanks to scientists and project staff from the GEOTRACES, IMBER, SOLAS, and SOOS projects who staffed the SCOR booth at various times through the meeting, and special thanks to Elena Masferrer-Dodas from the GEOTRACES International Project Office for coordinating the booth.

GEOTRACES sponsored a well-attended Town Hall session on 25 February to launch the first GEOTRACES Intermediate Data Product. Approximately 300 individuals attended the session to learn about the trace element and isotope data now available through the GEOTRACES Data Assembly Centre at the British Oceanographic Data Centre and to view the two- and three-dimensional graphics available at <http://www.geotraces.org/>. The Intermediate Data Product was featured in articles in *Science* and *Nature*.

SCOR WG 139 on Organic Ligands — A Key Control on Trace Metal Biogeochemistry in the Ocean hosted a Town Hall session on February 27. Forty-seven people attended. WG co-chairs Maeve Lohan, Sylvia Sander, and Kristen Buck provided an overview of WG 139's motivation and terms of reference, major achievements so far, and plans for the final year of the group. Results from the recently completed intercomparison of interpretation techniques were presented by Sylvia Sander. She also demonstrated how to use the two recommended interpretation software programs for multiple analytical windows from the intercomparison: MCC, created by Dario Omanovic, and KMS, created by Robert Hudson. Both of these programs are available via the [SCOR WG 139 Web page](#) free of charge.

Highlighting opportunities for community participation in WG 139 activities was an important component of this Town Hall. Opportunities for involvement include the following:

1. Join the WG email list to keep up to date on activities and progress.
2. Contribute data to WG databases.
3. Participate in upcoming field intercalibration activities for seawater analyses.
4. Publish a manuscript on ligand-related studies in an upcoming special issue in *Marine Chemistry*, submission due May 2014.
5. Join the final WG 139 research symposium and hands-on training workshop in Croatia in 2015.
6. Serve as a reviewer of WG special issue submissions, and the best practices manual.

Interested individuals are encouraged to contact any of the co-chairs for further information. 184 people are now on the WG email list, and there are 30 proposed submissions to the *Marine Chemistry* special issue.

Several SCOR working groups met in conjunction with the Ocean Sciences Meeting, including the following.

The third meeting of **WG 139 on Organic Ligands — A Key Control on Trace Metal Biogeochemistry in the Ocean** was held at the University of Hawaii, Manoa on February 23. Fourteen members and four guests attended, and new Associate Member Parthasarathi Chakraborty (India) was welcomed to the group. Action items from previous meetings and progress toward the group's terms of reference were reviewed. The results of the intercalibration effort for interpretation techniques of speciation data were presented. A field intercalibration effort is currently being planned, and a database for speciation data is being assembled for Fe, Cu, Co and Zn; interested individuals should contact any of the WG 139 co-chairs. A series of invited presentations covered recent advances in ligand research, and the meeting finished with discussions of upcoming WG events.

On 21 February, the inaugural meeting of **SCOR WG 143 on Dissolved N₂O and CH₄ Measurements: Working Towards a Global Network of Ocean Time Series Measurements of N₂O and CH₄** was held. The venue was the Center for Microbial Ecology (C-MORE) on the University of Hawaii campus. As it was the first time many members of the group had met, time was included in the agenda for introductions and networking. The key discussion points and highlights of the day were (1) how to achieve the group's objectives over the 3-4 year lifetime of the group, (2) information about spectroscopic gas analyzers, and (3) an update of the intercalibration exercise that is currently underway. The intercalibration exercise is one of WG143's key objectives and at the time of the meeting, five of the fourteen participating laboratories had analyzed the samples as part of the intercalibration exercise. After the other laboratories contribute their values, the data will be compiled and exchanged among group members.

Most of the Full Members of **WG 144 on Microbial Community Responses to Ocean Deoxygenation** met in Hawaii to begin planning the group's work. Planning is well underway for a workshop in Saanich Inlet, a seasonally anoxic fjord off the coast of Vancouver Island, British Columbia, Canada, to ground truth common standards for process rate and molecular measurements and to identify model ecosystems for future cross-scale comparative analyses.

News from Working Groups

SCOR/IGBP WG 138 on Modern Planktic Foraminifera and Ocean Changes will co-sponsor a workshop on Foraminiferal Geochemistry on 26 June at The Micropalaeontological Society's joint Foraminifera and Nannofossil Spring Meeting 2014 in Texel, The Netherlands. The goal of this workshop is "integrating recent element and isotope signatures of planktonic and benthic foraminifera, as well as discussing the development of a physiological basis for foraminiferal calcification" (see <http://www.tmsoc.org/foram-nanno2014.html>).

WG 140 on Biogeochemical Exchange Processes at the Sea-Ice Interfaces (BEPsII) met in conjunction with the International Symposium on Sea Ice in a Changing Environment in Hobart, Australia in March. The group met together on March 16 and subgroups met at various points during the symposium. The group's review on sea-ice methodologies has been submitted to the journal *Elementa*. A list of 9 reviews on specific sea-ice parameters and processes (of which 7 have confirmed authors) was drafted for a special issue of an open-access journal. The collection of chlorophyll a data from the Arctic is taking shape. The 1-D model intercomparison exercise also is well underway, with 8 groups contributing. The goal is to evaluate outcomes on biomass and primary production over a seasonal cycle, both in the Arctic and the Antarctic. Several other model inter-comparisons are being discussed (e.g., upper-ocean circulation in the Arctic and impact of sea ice, in collaboration with the

Forum for Arctic Modeling and Observational Synthesis). The group continued its discussion of a joint field campaign for method intercomparison and will seek financial support to organise this activity. Two different campaigns are envisioned: one in Japan (Saroma-Ko lagoon) concerning intercomparison of ice-melt procedures and potentially gas-exchange measurements; and one in Finland (Baltic, Tvarminne) on various primary production methods. Finally, there was discussion about an interactive Web site for the group.

2014 SCOR Visiting Scholars

Congratulations to three new SCOR Visiting Scholars appointed for 2014: Halima Kiwango, Prasanna Kumar, and Marcia Moreno-Baez. **Halima Kiwango** is a Ph.D. student at the Nelson Mandela African Institute for Science and Technology in Tanzania. She was invited to contribute to a workshop and/or seminar series on the eco-hydrology and bio-hydrodynamics of coastal ecosystems for a one-month period at the University of Kwazulu Natal. One focus of the visit will be to initiate research and educational collaborations for the future. **Prasanna Kumar** is Chief Scientist at the National Institute of Oceanography (India) in Goa. He will share his expertise in physical oceanography for two months (in two visits) at the University of Dhaka in Bangladesh. **Marcia Moreno-Baez** is a post-doctoral fellow at the Scripps Institution of Oceanography in La Jolla, California, USA. She will teach and mentor for two weeks at the Centro Nacional Patagónico in Puerto Madryn, Argentina, on the topic of participatory geographic information systems and the application of geospatial technology to collect local knowledge from fishers.

First Research Discovery Camp

The first Research Discovery Camp has been held at the Sam Nujoma Marine & Coastal Resources Research Centre (SANUMARC) of the University of Namibia, in Henties Bay. The camp ran from March 4 to 26 and provided an opportunity for graduate students from Namibia and South Africa to pursue research-based education in cooperation with students from Denmark, Poland, and the United States. Instructors came from Germany, Namibia, Switzerland, and the United States. Scientists from both the University of Namibia and the National Marine Information and Research Centre (NatMIRC) in Swakomund, Namibia participated in the research camp. NatMIRC also provided time on its research vessel, the R/V *Mirabilis*, to help train the students.

SCOR extends thanks to the organizers of the camp—Elsabe Julies, Sam Mafwila, Edosa Omoregie, Kurt Hanselmann, Martha Hausiku, Kaspar Shimooshili, Gadaffi Liswaniso, Carmen Swartz, and Martin Dominicus—and to the Agouron Institute, which provided funding for the activity. This is the first of four annual research camps to be held at SANUMARC.

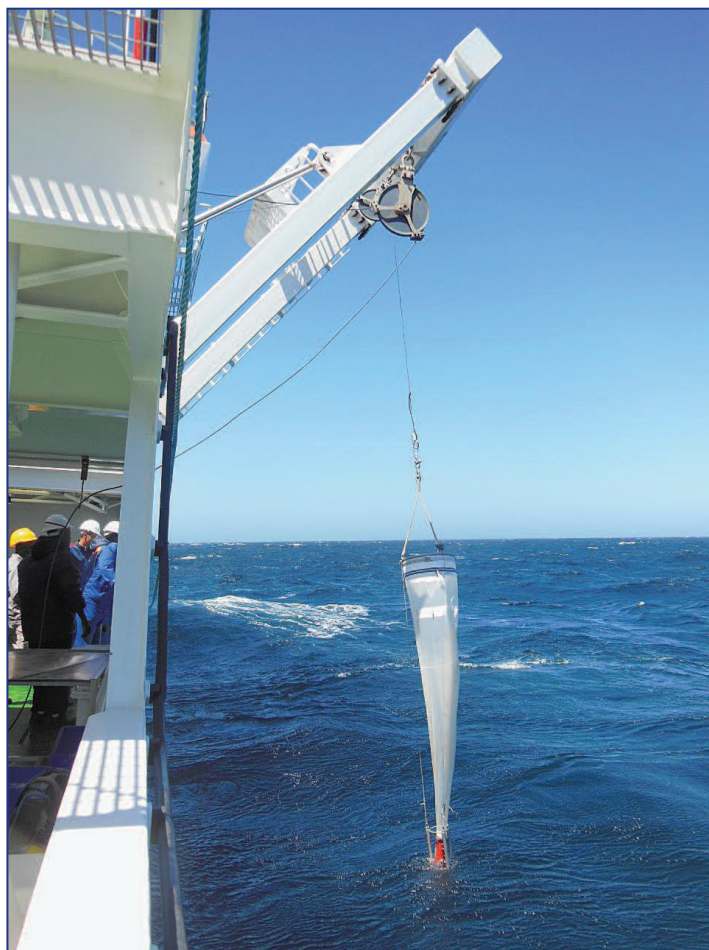


PHOTO COURTESY OF KATHERINE FRENCH, MIT

Plankton tow from R/V Mirabilis



PHOTO COURTESY OF MARION JAUSSE, AARHUS UNIVERSITY

Some of the students and instructors from the First Research Discovery Camp in Namibia

Large-Scale Ocean Projects

The Southern Ocean Observing System (SOOS) led planning for the Workshop on Ecosystem Essential Ocean Variables in the Southern Ocean on 18-21 March at Rutgers University in New Brunswick, New Jersey. The workshop brought together about 30 individuals from North America, Europe, Oceania, and Asia to begin the process of identifying ecosystem Essential Ocean Variables (eEOVs) for the Southern Ocean. Meeting participants agreed to an overall objective of ecological observing in the Southern Ocean and to specific questions for which eEOVs could be developed. A proposal for a SCOR working group was produced based on the meeting and several publications are being developed.

The SCOR/IGBP **Integrated Marine Biogeochemistry and Ecosystem Research (IMBER)** project had more than 700 abstracts submitted for its first Open Science Conference (OSC) in Bergen, Norway in June. The attendance is expected to be around 400-450 participants. Workshops on IMBER-related topics will occur before the OSC and the IMBER Scientific Steering Committee will meet afterward.

The SCOR/IGBP/WCRP/iCACGP Surface Ocean – Lower Atmosphere Study (SOLAS) is preparing a proposal for a 10-year project extension for consideration by SOLAS co-sponsors. At the same time, SOLAS continues implementation of the elements of its mid-term strategy. (Several SCOR working groups are contributing to elements of the mid-term strategy.) SOLAS also is preparing for its next OSC, in September 2015 in Kiel, Germany.



Publications

The special issue of *Biogeosciences* from the Third Symposium on The Ocean in a High-CO₂ World has recently been completed. The special issue, which includes 21 papers based on presentations from the symposium in Monterey, California, USA in September 2012, can be found at http://www.biogeosciences.net/special_issue129.html.

The Core Research Project on Harmful Algal Blooms in Stratified Systems of the **Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB)** project published a special issue of *Deep-Sea Research II*:

Raine, R., E. Berdalet, M. McManus, and H. Yamazaki (eds.). 2014. Harmful algal blooms in stratified systems. *Deep-Sea Research Part II: Topical Studies in Oceanography* 101:1-254.

Future SCOR Annual Meetings

2014—SCOR will hold its 2014 General Meeting in Bremen, Germany on 15-17 September, with a special day of presentations on German ocean science following on 18 September. SCOR will sponsor a workshop on planning for the International Indian Ocean Expedition-2 on 12-13 September, also in Bremen.

2015—SCOR will hold its 2015 Executive Committee Meeting in Goa, India on 7-9 December.

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).

ACRONYMS

iCACGP	Commission on Atmospheric Chemistry and Global Pollution
eEOV	ecosystem Essential Ocean Variable
GEOHAB	Global Ecology and Oceanography of Harmful Algal Blooms project
IGBP	International Geosphere-Biosphere Programme
IIOE	International Indian Ocean Expedition
IMBER	Integrated Marine Biogeochemistry and Ecosystem Research project (co-sponsored by SCOR and IGBP)
IOC	Intergovernmental Oceanographic Commission
IOCCP	International Ocean Carbon Coordination Project
NatMIRC	National Marine Information and Research Centre (Namibia)
OSC	open science conference
SANUMARC	Sam Nujoma Marine & Coastal Resources Research Centre (Namibia)
SCAR	Scientific Committee on Antarctic Research
SCOR	Scientific Committee on Oceanic Research
SOLAS	Surface Ocean – Lower Atmosphere Study (Co-sponsored by SCOR, IGBP, WCRP, and iCACGP)
SOOS	Southern Ocean Observing System
WCRP	World Climate Research Programme
WG	working group