



SCOR Newsletter

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2019 SCOR Annual Meeting in Toyama International Conference Center (licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license; 663highland)

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Search for Next SCOR Executive Director

After 19 years as SCOR Executive Director, Ed Urban plans to retire on 31 October 2019. The SCOR Executive Committee is seeking the next SCOR Executive Director and has issued a [call for applications](#). The deadline for applications is 1 April 2019.

2019 SCOR Working Group Proposals

The application period is open for new SCOR working group proposals to be reviewed in 2019, for groups starting in 2020. The deadline for submission of proposals is 15 April 2019 (see <https://scor-int.org/2019/02/18/call-for-2019-working-group-proposals/>). It is likely that SCOR will be able to support two new groups.

OceanObs'19

OceanObs'19 will be held on 16–20 September 2019 in Honolulu, Hawaii, USA. The OceanObs meetings are held once every 10 years and are highly influential in setting directions for the Global Ocean Observing System and other ocean observations in the decade following each conference. For OceanObs'19, community white papers (CWPs) were solicited for publication in the journal *Frontiers in Marine Science*. Many SCOR research projects and working groups are contributing to OceanObs'19 through submission of CWPs:

- **GEOTRACES:** [Developing autonomous observing systems for micronutrient trace metals](#)
- **IQOE:** contributed to CWP: “Observing the Oceans Acoustically”
- **SOOS:** CWPs on (1) Delivering sustained, coordinated and integrated observations of the Southern Ocean for global impact and (2) Constraining Southern Ocean air-sea-ice fluxes through enhanced observations
- **WG 143:** [A harmonized nitrous oxide \(N₂O\) ocean observation network for the 21st Century.](#)
- **WG 148:** The group's work is mentioned in several papers.
- **WGs 150 and 154:** A paper entitled “Globally consistent quantitative observations of planktonic ecosystems”
- **WG 153:** A CWP on marine litter observations, modelling and remote sensing

SCOR-InterRidge Workshop

SCOR and the InterRidge project co-sponsored a workshop on Indian Ocean geological processes on 15–16 November 2018, at the National Institute of Oceanography in Goa, India ([see program](#)). The workshop was attended by 128 participants. Thirty oral presentations were organized in 7 thematic sessions and 42 posters were presented in a special poster session.

IIOE-2

The third meeting of the Steering Committee of the Second International Indian Ocean Expedition (IIOE-2) was held at the Nelson Mandela University in Port Elizabeth, South Africa on 12–13 March 2019. The IIOE-2 Steering Committee met in conjunction with a variety of other organizations that are interested in research in the Indian Ocean.

Open Science Conferences

Two SCOR-supported research projects are holding open science conferences (OSC) in the next few months:

- The Surface Ocean – Lower Atmosphere Study (SOLAS) will hold its OSC in Sapporo, Japan on 21–25 April 2019. The Website for the conference can found [here](#).
- The Integrated Marine Biosphere Research (IMBeR) project will hold its OSC in Brest, France on 17–21 June 2019. The Website for the conference can be found [here](#).

Capacity Building

2018 SCOR Visiting Scholars—SCOR approved 7 Visiting Scholars in 2018. Reports have been received from several of the Visiting Scholars.



Group photo on collecting trip conducted by SCOR Visiting Scholar Manuel Malaquias

Manuel Malaquias (Norway) visited the Universidade Lurio (Mozambique) for his Visiting Scholarship. He taught a course on “Curation, management, and databasing of marine biodiversity collections: a teaching and scientific tool” in September 2018. The course was attended by 15 participants (8 students and 7 professors/technical staff) and included lectures, sampling trips to the intertidal zone to collect marine invertebrates, and laboratory sessions (4 hours each) to identify the samples and go through all the necessary curatorial steps to ensure proper preservation for long-term storage of the collection (relaxation, fixation, preservation, DNA samples, registration, labeling).

Julia Diaz (USA) visited Mohammed VI Polytechnic University (UM6P) in Ben Guerir, Morocco for her SCOR Visiting Scholarship in November 2018. Diaz taught graduate students on the topic of the global marine phosphorus cycle. She also gave a research seminar on “Marine polyphosphate: a key player in geologic phosphorus sequestration.” She worked with student presenters at the first International Conference for Research on Phosphate and Derivatives. Finally, Diaz took part in strategic planning meetings with two colleagues from the university geology department, as well as two colleagues from partner institutions, in order to map out future research proposals and student exchanges.

2019 SCOR Visiting Scholars—Twenty-three applications were received for the 2019 SCOR Visiting Scholars program. The following individuals were selected as Visiting Scholars:



Teresa Cerveira Borges from the University of Algarve, Faro, (Portugal) will be visiting the Academia de Pescas e Ciências do Mar do Namibe – (Academy of Fisheries and Marine Sciences of Namibe) in Angola. She will be teaching and mentoring on diversity of marine resources, major ocean issues, and what is being done to minimize the impacts of human activities. Borges will

be visiting Angola in summer 2019 and will be the first SCOR Visiting Scholar to serve there.

Brian Helmuth from the Northeastern University Marine Science Center (USA) will be travelling to the Museo Argentino de Ciencias Naturales Bernardino Rivadavia-CONICET, in Argentina in late 2019. He will be teaching on the impacts of climate change and other anthropogenic stressors on coastal ecosystems, methods for monitoring and forecasting and, when possible, preventing these impacts, and on communication to stakeholders within as well as outside of the academic community.



Jorma Kuparinen (Finland), retired from the Finnish Inst. of Marine Science and University of Helsinki, will teach and mentor at the Instituto Oceanográfico de la Armada (INOCAR) in Ecuador. The focus of his teaching will be on planktonic ecosystems, and studies of planktonic carbon sinks and sources on different

temporal and spatial scales adapted to local environment and habitats. The timing of Kuparinen's visit is under discussion.



Adina Paytan from the University of California, Santa Cruz (USA) will be travelling to the University of Paraná, Brazil to teach and mentor on applications of isotopes in Earth and environmental science. The main topic of this class is learning about various applications of different isotope systems in geological, oceanographic and environmental studies at low temperature, including

the use of isotopes as tracers for weathering rate, biogeochemical cycling, food-web structure, ecology, paleo-chemistry, provenance, circulation, and anthropogenic and extraterrestrial inputs. The timing of Paytan's visit is under discussion.

Pere Masqué from Edith Cowan University, the University of Western Australia, and the Universitat Autònoma de Barcelona (Spain) will teach at the Instituto de Geociências, Universidade Federal da Bahia, Salvador (Brazil). Masqué will conduct training activities focused on the topic of "Applications of Radioisotopes in Marine Sciences". Masqué's visit will be made in June/July 2019.



Mridula Srinivasan is Chief of the Protected Species Science Branch, Office of Science and Technology, National Marine Fisheries Service, NOAA (USA). Her interest is teaching the fundamentals of marine ecology with an emphasis on practical and sustainable solutions for studying and managing living marine resources. SCOR is in discussions with a potential host institution from the Indian Ocean region.



Funds for the scholarships will be provided by the U.S. National Science Foundation, national SCOR Committees, and through a crowdfunding campaign.

Training Course on Marine Radioactivity—WG 146 on Radioactivity in the Ocean, 5 decades later (RiO5) held its third training course, in Puerto Rico on 20–22 February 2019 (see https://mel.xmu.edu.cn/conference/marrad_2019/).

eLectures on Marine Radioactivity—The Association for the Sciences of Limnology and Oceanography (ASLO) recently published four eLectures from SCOR WG 146 (see Publications section below). Many thanks to Claudia Benitez-Nelson, Full Member of WG 146 and chair of the SCOR Committee on Capacity Building, for leading the effort to produce these lectures and get them published!

SCOR Working Groups

SCOR WG 143 on Dissolved N₂O and CH₄ Measurements contributed to a [Workshop on Oceanic Methane and Nitrous Oxide](#) at Lake Arrowhead, California on 2–31 October 2018, sponsored by the U.S. Ocean Carbon and Biogeochemistry (OCB) program. The purpose of this workshop was to guide the future directions of methane and nitrous oxide measurements in the global ocean. A video was produced to explain the purpose and significance of the meeting. A [video](#) was produced to explain the purpose and significance of the meeting.

SCOR WG 148 on International Quality Controlled Ocean Database: Subsurface temperature profiles (IQuOD) (in conjunction with IODE) will meet for the third time, in Brest, France on 17–21 June 2019.

SCOR WG 152 on Measuring Essential Climate Variables in Sea Ice (ECV-Ice) will meet on 16–18 August 2019 in Winnipeg, Canada.

SCOR WG 153 on Floating Litter and its Oceanic Transport Analysis and Modelling (FLOTSAM) will meet for the second time on 7–9 May 2019 in Utrecht, The Netherlands.

WG 154 on Integration of Plankton-Observing Sensor Systems to Existing Global Sampling Programs (P-OBS) held an editorial meeting in Villefrance-sur-Mer on 7–9 November 2018. The full working group will meet on 15 September 2019 in Honolulu, Hawaii, USA, just before the OceanObs'19 conference.

SCOR WG 156 on Active Chlorophyll Fluorescence for Autonomous Measurements of Global Marine Primary Productivity will meet for the first time in Vancouver, B.C., Canada on 3–7 June 2019.

SCOR WG 157: The symposium [Rediscovering pelagic biodiversity: Progress, promise, and challenges of metabarcoding of microbes to mammals](#) will be held on 13 September 2019 in Gothenburg, Sweden in conjunction with the 2019 Annual Science Conference of the International Council for the Exploration of the Sea (ICES).

Publications

Benitez-Nelson, C.R., K. Buesseler, M. Dai, M. Aoyama, N. Casacuberta, S. Charmasson, J.M. Godoy, A. Johnson, V. Maderich, P. Masqué, W. Moore, P.J. Morris, and J.N. Smith. 2018. [Radioactivity in the Marine Environment: Cosmogenic and Anthropogenic Radionuclides](#). L&O eLectures. – WG 146

Benitez-Nelson, C.R., K. Buesseler, M. Dai, M. Aoyama, N. Casacuberta, S. Charmasson, A. Johnson, J.M. Godoy, V. Maderich, P. Masqué, W. Moore, P.J. Morris, and J.N. Smith. 2018. [Radioactivity in the Marine Environment: Understanding the Basics of Radioactivity](#). L&O eLectures. – WG 146

Benitez-Nelson, C.R., K. Buesseler, M. Dai, M. Aoyama, N. Casacuberta, S. Charmasson, A. Johnson, J.M. Godoy, V. Maderich, P. Masqué, W. Moore, P.J. Morris, M.R. van der Loeff, and J.N. Smith. 2018. [Radioactivity in the Marine Environment: Uranium-Thorium Decay Series](#). L&O eLectures. – WG 146

Benitez-Nelson, C.R., S. Charmasson, K. Buesseler, M. Dai, M. Aoyama, N. Casacuberta, J.M. Godoy, A. Johnson, V. Maderich, P. Masqué, M. Metian, W. Moore, P.J. Morris, and J.N. Smith. 2018. [Radioactivity in the Marine Environment: Understanding the Basics of Radioecology](#). L&O eLectures. – WG 146

Bittig, H.C., A. Körtzinger, C. Neill, E. van Ooijen, J.N. Plant, J. Hahn, K.S. Johnson, B. Yang, and S.R. Emerson. 2018. Oxygen Optode Sensors: Principle, Characterization, Calibration and Application in the Ocean. *Frontiers in Marine Science* 4, 429, doi: [10.3389/fmars.2017.00429](#). – WG 142

Le Bris, N., M. Yucel, A. Das, S.M. Sievert, Lokabharathi Ponnappakkam, and P.R. Girguis. 2019. Hydrothermal energy transfer and organic carbon production at the deep seafloor. *Frontiers in Marine Science* <https://www.frontiersin.org/articles/10.3389/fmars.2018.00531/full>. – WG 135

Ward, B., N. Ramaiah, V. Edgcomb, and S. Crowe (eds.). 2018. [Ecosystem Response to Ocean Deoxygenation. Deep-Sea Research Part II: Topical Studies in Oceanography 156:1-168](#). – Special issue from SCOR WG 144

SCOR and Social Media

If you received this newsletter directly from SCOR, you are on the email list. Anyone not yet on the list can join by clicking the link below.

Future SCOR Annual Meetings

Join SCOR Email List

2019—The 2019 SCOR Annual Meeting will be held in Toyama, Japan on 23–25 September 2019. The meeting will be preceded by a public lecture and followed by the annual meeting of the Japan Oceanography Society. The Website for the meeting can be found at <https://scor-int.org/events/scor-annual-meeting-2019/> and the program at [https://scor-int.org/Annual%20Meetings/2019 SCOR Meeting/SCOR Program.pdf](https://scor-int.org/Annual%20Meetings/2019%20SCOR%20Meeting/SCOR%20Program.pdf).

2020—The SCOR Executive Committee has accepted an offer from the Ecuadorian SCOR Committee to hold the 2020 SCOR Annual Meeting in Ecuador.

2021—The 2021 SCOR Annual Meeting will be held in Busan, Korea.

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

ASLO	Association for the Sciences of Limnology and Oceanography
CWP	Community White Paper (OceanObs'19)
iCACGP	International Commission on Atmospheric Chemistry and Global Pollution
ICES	International Council for the Exploration of the Sea
IMBeR	Integrated Marine Biosphere Research project (co-sponsored by SCOR and Future Earth)
IOC	Intergovernmental Oceanographic Commission of UNESCO
IODE	International Oceanographic Data and Information Exchange (IOC)
NOAA	National Oceanographic and Atmospheric Administration (U.S.)
SCOR	Scientific Committee on Oceanic Research
SOLAS	Surface Ocean – Lower Atmosphere Study (co-sponsored by SCOR, Future Earth, WCRP, and iCACGP)
WCRP	World Climate Research Programme
WG	working group