San Diego Convention Center (https://visitsandiego.com/)

——— Ocean Sciences 2020 Edition ———

SCOR will be at Booth #341 at the Ocean Sciences 2020 meeting on 18–20 February 2020 in San Diego, California (USA). Please come visit us at the SCOR Booth and talk to the recently retired SCOR Executive Director (Ed Urban), the new SCOR Executive Director (Patricia Miloslavich), and members of various SCOR working groups and project committees.

Several SCOR working groups and projects will be on hand to demonstrate software that has been developed (or is in beta testing) related to their project terms of reference.

Twitter: @SCOR_Int

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Project Software Demonstrations at SCOR Booth (#341)

SCOR WG 145 on Modelling Chemical Speciation in Seawater to Meet 21st Century Needs (MarChemSpec) (see https://scor-int.org/Working_Groups/WG145_at_OS2020.pdf**):** Attendees will be provided a guided hands-on experience with running our draft speciation modeling software and an opportunity to ask questions and provide feedback to the authors. The software demonstrates some of the key capabilities of the modelling approach, using these examples:

1. Calculate the change in pH of a seawater Tris/TrisH+ buffer when the composition is altered by adding or removing different salts (web-based application)
2. Calculate how the three stoichiometric equilibrium constants for the carbonate system (K0, K1, and K2) vary in response to composition changes of the seawater medium (Web-based application)
3. A Python environment in which some of these types of calculations can be done interactively will also be demonstrated.

Members of the MarChemSpec team will be available in the SCOR booth to demonstrate the models at the times listed on the schedule below. Contact Simon Clegg (S.Clegg@uea.ac.uk) with any questions about the demonstrations.

WG 148: International Quality Controlled Ocean Database: Subsurface temperature profiles (IQuOD): Guilherme Castelão will explain the tools being used by SCOR WG 148 (IQuOD) to automate quality control of temperature profile observations, the concepts behind the tools, and give a live demonstration of the tool. See poster abstract at https://agu.confex.com/agu/osm20/meetingapp.cgi/Paper/655672

WG 157: Toward a new global view of marine zooplankton biodiversity based on DNA metabarcoding and reference DNA sequence databases (MetaZooGene): One of the Terms of Reference for this working group is to create an open-access Web portal to mitochondrial cytochrome oxidase I (COI) DNA barcode data and metadata for marine zooplankton. This demo will present current capabilities of this in-development WG157 product that cross-links molecular data from the GenBank and BOLD databases with distribution information from the COPEPOD and OBIS databases, that will provide new search and summary capabilities. For example, a user can search for

all public COI barcodes for a particular species or taxonomic group from a target region (e.g. "North Atlantic euphausiids"), and generate a summary of species reported in collections from the target area and species with barcode data. Those available barcode data can then be downloaded in a variety of file formats. A primary objective of this effort is to facilitate creation of COI barcode reference databases that are specific to taxonomic groups and/or geographic regions.

Changing Ocean Biological Systems (COBS): The group will give 30-minute presentations of the Decision Support Tool developed by the group (see https://scor149-ocean.com/decision-support-tool).

Southern Ocean Observing System (SOOS): Representatives from SOOS will demonstrate the SOOS DueSouth and SOOSMap systems.

GEOTRACES Project: You can get help registering your GEOTRACES data sets for inclusion in the next Intermediate Date Product (IDP2021) at the SCOR booth at the 2020 Ocean Sciences Meeting. GEOTRACES committee members and Mohamed Adjou, the leader of the GEOTRACES Data Assembly Centre (GDAC) will be at the SCOR booth Tuesday through Thursday. Stop by to get started registering your data sets! Read IDP2021 announcement

Time	Tuesday (2/18)	Wednesday (2/19)	Thursday (2/20)
10:00–11:00		GEOTRACES SOOS	GEOTRACES WG 145
11:00–12:00	GEOTRACES SOOS	GEOTRACES WG145	GEOTRACES
12:00–13:00	GEOTRACES	GEOTRACES	WG 148
13:00–14:00	GEOTRACES	WG145 GEOTRACES	WG148
14:00–15:00	WG157	WG157	WG145 WG 157
15:00–16:00	GEOTRACES	GEOTRACES	GEOTRACES WG145
16:00–17:00	GEOTRACES WG145	GEOTRACES	GEOTRACES
17:00–18:00	GEOTRACES	GEOTRACES	GEOTRACES

Note: times of COBS and SOOS demonstrations will be available at the SCOR Booth

SCOR Working Group Meetings

The following SCOR-sponsored groups will be meeting before Ocean Sciences 2020 begins:

- WG 145 on Chemical Speciation Modelling in Seawater to Meet 21st Century Needs (MARCHEMSPEC)
- WG 151: Iron Model Intercomparison Project (FeMIP)
- WG 156: Active Chlorophyll Fluorescence for Autonomous Measurements of Global Marine Primary Productivity
- WG 157: Toward a new global view of marine zooplankton biodiversity based on DNA metabarcoding and reference DNA sequence databases (MetaZooGene)

Sessions Related to SCOR WGs and Projects

There is not enough space in this newsletter to list all the individual presentations given by individual working group and project participants related to their work, so we have focused on full sessions related to SCOR-supported groups.

- CT12A - Revealing Biogeochemical Processes on Basin Scales through Ocean Transects I (Mon., 17 Feb., 10:30-12:30, SDCC - 5B, UL) - GEOTRACES
- CT13A - Revealing Biogeochemical Processes on Basin Scales through Ocean Transects II (Mon., 17 Feb., 14:00-16:00, SDCC - 5B, UL) - GEOTRACES
- IS14A. Active optics to sense productivity throughout the world's coast and oceans (Mon. 17 Feb., 16:00-18:00,

SDCC - Poster Hall C-D) – WG 156

- IS24A Autonomous Observing Systems for Macronutrients and Bioactive Trace Metals in Coastal and Open-Ocean Settings: Present Status, Challenges, and Emerging Technologies I Posters (Tues., 18 Feb., 16:00-18:00, SDCC - Poster Hall C-D) – GEOTRACES
- CT24E Understanding Rare Earth Element (REE) Distributions and Isotopic Ratios and the Mechanisms Behind Their Use As Tracers of (Paleo)Oceanic Processes Posters (Tues., 18 Feb., 16:00-18:00, SDCC - Poster Hall C-D) - GEOTRACES
- CT24D The Role of Micronutrient Cycles in Global-Scale Dynamics II Posters (Tues., 18 Feb., 16:00-18:00, SDCC - Poster Hall C-D) - GEOTRACES
- ME31A - Using Satellite Remote Sensing and in Situ Data to Evaluate Marine Biodiversity and Ecosystems (Wed., 19 Feb., 8:00-10:00, SDCC - 7A, UL) - IMBeR
- PS31A - Physical Processes Governing the Distribution and Transport of Dispersed Particles in the Ocean I (Wed., 19 Feb., 8:00-10:00, SDCC - 15B, Mezzanine) – WG 153
- PS33A - Physical Processes Governing the Distribution and Transport of Dispersed Particles in the Ocean II (Wed., 19 Feb., 14:00-16:00, SDCC - 15B, Mezzanine) – WG 153
- PS34D - Physical Processes Governing the Distribution and Transport of Dispersed Particles in the Ocean III Posters (Wed., 19 Feb., 16:00-18:00, SDCC - Poster Hall C-D) – WG 153
- CT34B Controls on Trace Metal Biogeochemistry and Physicochemical Speciation in Seawater IV Posters (Wed., 19 Feb., 16:00-18:00, SDCC - Poster Hall C-D) - GEOTRACES
- OB34E - Linking the Biology, Geochemistry, and Circulation of the Gulf of Mexico V Posters (Wed., 19 Feb., 16:00-18:00, SDCC - Poster Hall C-D) - GEOTRACES
- PL41B - Climate Variability, Ocean Dynamics, and Biogeochemical Cycles in the Indian Ocean (Thurs., 20 Feb., 8:00-10:00, SDCC - 14B, Mezzanine) - IMBeR
- OM41A - Lagrangian Methods for Understanding Ocean Circulation and Tracer Transport I eLightning (Thurs., 20 Feb., 8:00-10:00, SDCC - Poster Hall C-D; eLightning Theater) – WG 153
- OM42A - Lagrangian Methods for Understanding Ocean Circulation and Tracer Transport II eLightning (Thurs., 20 Feb., 10:30 - 12:30, SDCC - Poster Hall C-D; eLightning Theater) – WG 153
- OB43A - Complexity, Connectivity, and Change in Southern Ocean Food Webs (Thurs., 20 Feb., 14:00-16:00, SDCC - 4, UL) – IMBeR
- OM44A - Lagrangian Methods for Understanding Ocean Circulation and Tracer Transport III Posters (Thurs., 20 Feb., 16:00 - 18:00, SDCC - Poster Hall C-D) – WG 153
- PS44C - Physical Processes Governing the Distribution and Transport of Dispersed Particles in the Ocean IV Posters (Thurs., 20 Feb., 16:00-18:00, SDCC - Poster Hall C-D) – WG 153
- OB44J - Toward BioGeoSCAPES: Exploring Molecular Drivers of Ocean Metabolism and Biogeochemistry III

Posters (Thurs., 20 Feb., 16:00-18:00, SDCC - Poster Hall C-D) - GEOTRACES
- CT44A - Biogeochemical Cycles in Oxygen Minimum Zones: Mechanisms, Drivers, and Change II Posters (Thurs., 20 Feb., 16:00-18:00, SDCC - Poster Hall C-D) - GEOTRACES
- OB51A - Beyond Just Discovery in the Ocean's Midwater: Novel and Mechanistic Approaches to Understanding Mesopelagic and Bathypelagic Ecosystems (Fri., 21 Feb., 8:00-10:00, SDCC - 3, UL) - IMBeR
- PS51A - Defining the New Frontiers of Ocean Mixing Research (Fri., 21 Feb., 8:00-10:00, SDCC - 15B, Mezzanine) – WG 153
- OC53A - Chemical and Biological Impacts of Ocean Acidification in the Pacific Ocean (Fri., 21 Feb. 14:00-16:00, SDCC - 11B, UL) - IOCCP

Town Halls Related to SCOR Projects and WGs

- TH33C - Update on the Second International Indian Ocean Expedition (IIOE-2) (Wed., 19 Feb., 12:45-13:45, SDCC - 5B, UL)
- Chemical Speciation Modelling in Seawater to Meet 21st Century Needs (Thurs., 20 Feb., 12:45-13:45, SDCC - 1A, UL)

Tutorials Related to SCOR Projects

- TT33A - Biogeochemical and Ecological Impacts of Boundary Currents in the Indian Ocean – Raleigh Hood (Wed., 19 Feb 2020, 14:00 - 14:30, SDCC - 1B, UL) – IIOE-2
- TT43C An Online Best Practices Guide for Conducting Ocean Global Change Biology Multiple-Driver Experiments - David A. Hutchins and Sinead Collins

Credit: jmacdono (pixabay.com) (https://www.needpix.com/photo/874240/balboa-park-dome-park-san-diego-california-architecture-landmark-baroque-historic)

(Thurs., 20 Feb., 15:00 - 15:30, SDCC - 1B, UL) – COBS
- [TT53A - Plankton Measurements Now](#) - Emmanuel Boss, Anya M. Waite, and Fabien Lombard (Fri., 21 Feb. 2020, 14:00 - 14:30, SDCC - 1B, UL) – WG 154
- [TT53C - Establishing Active Fluorescence as a Primary Productivity Metric for the World's Coasts and Oceans](#) - David J. Suggett and Philippe Daniel Tortell (Fri., 21 Feb. 2020, 15:00 - 15:30, SDCC - 1B, UL) – WG 156

Schedule for SCOR Booth: Individuals from the SCOR office, working groups, and projects will be at the SCOR Booth to answer your questions about SCOR and its activities. The preliminary schedule for the booth follows. This schedule is subject to change.

Time	Tuesday (2/18)	Wednesday (2/19)	Thursday (2/20)
10:00–11:00	Phoebe Lam Patricia Miloslavich Ed Urban	Eileen Hofmann Catherine Jeandel Ed Urban	Nadine Johnston Al Tagliabue Ed Urban
11:00–12:00	Patricia Miloslavich Ed Urban	Eileen Hofmann Catherine Jeandel Ed Urban	Andy Bowie David Turner Ed Urban
12:00–13:00	Abhishek Savita Ed Urban	Jessica Gier David Turner	Patricia Miloslavich Ed Urban
13:00–14:00	Andy Bowie Bill Landing	Rob Middag	Catherine Jeandel Ed Urban
14:00–15:00	Jessica Gier Nadine Johnston Ed Urban	Greg Cutter Eugene Murphy Ed Urban	Greg Cutter Patricia Miloslavich Ed Urban
15:00–16:00	Jessica Gier Eileen Hofmann Ed Urban	Jessica Gier Raleigh Hood Ed Urban	Jessica Gier Catherine Jeandel Ed Urban
16:00–17:00	David Suggett Philippe Tortell	Raleigh Hood Alessandro Tagliabue Ed Urban	Patricia Miloslavich Ed Urban
17:00–18:00	David Suggett Philippe Tortell	Raleigh Hood Ed Urban	Jessica Gier Patricia Miloslavich Ed Urban

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 Patricia Miloslavich (patricia. miloslavich@scor-int.org).

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