



# **The Scientific Committee on Oceanic Research (SCOR)**

## ***2023 Executive Director's Report***

**Emily Twigg**  
***Executive Director***



**International  
Science Council**

# Emily Twigg, new SCOR Executive Director



First representation of SCOR - SOOS Symposium recorded remarks



First in person meeting – GEOTRACES SSC

## The Scientific Committee on Oceanic Research - mission

- Address **global and multidisciplinary ocean issues**
- Plan and conduct **research** – working groups and projects
- Solve **methodological and conceptual problems**
- **Develop capacity** - visiting scholars, fellowships, travel support
- Promote **equity, diversity, inclusion** in oceans sciences
- Encourage and support involvement of **students** and **early career** scientists



Photo: Emma Bone



Photo: Hubert Bataille

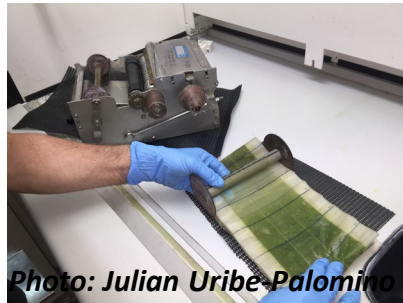


Photo: Julian Uribe-Palomino



Photo: Nancy Williams



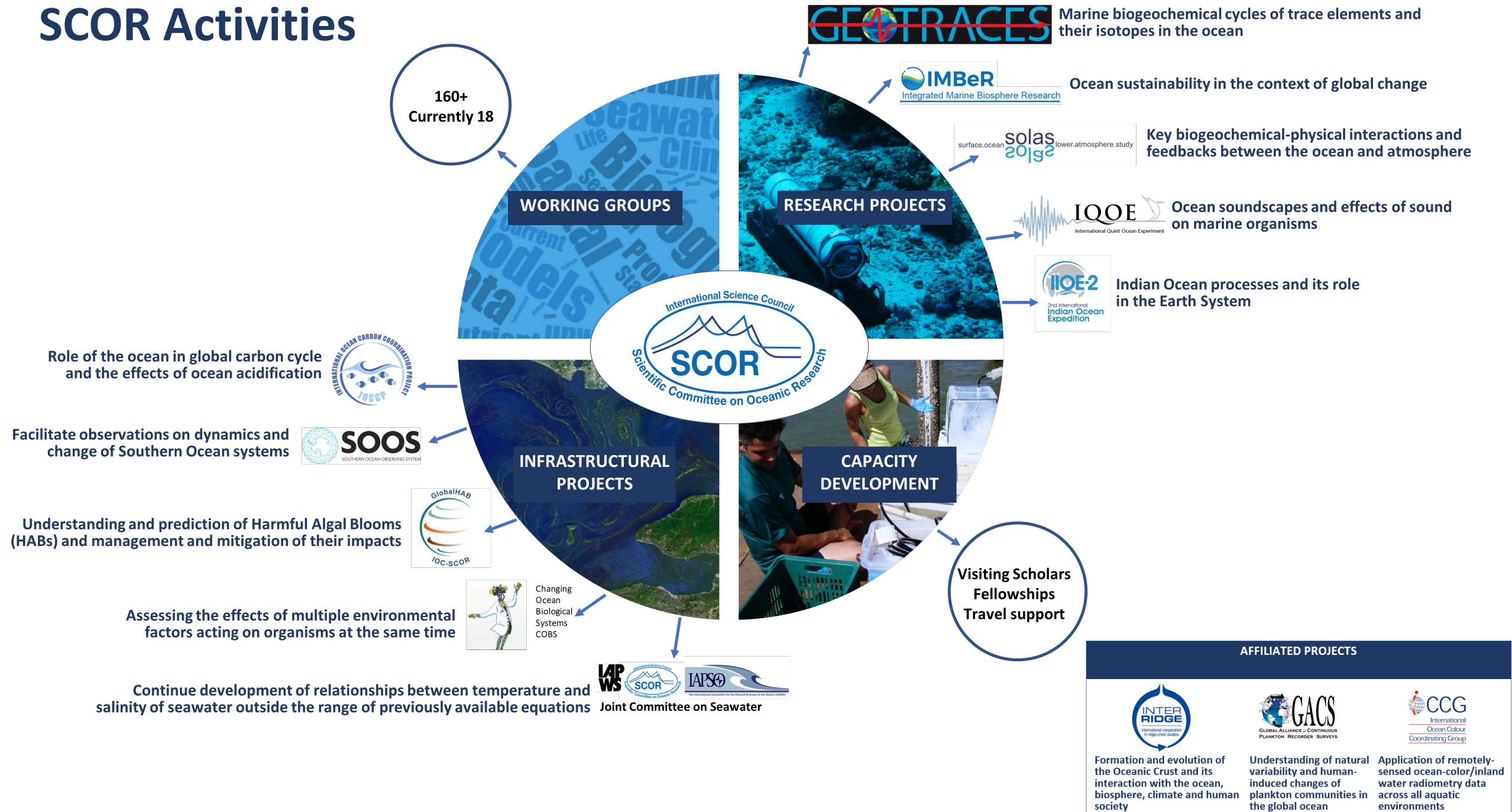
Photo: SOLAS



Photo: C-GRASS

*From the field to the lab, from data analysis to global synthesis – building capacity at every step of the way*

# SCOR Activities



# SCOR Working Groups

## Physical oceanography



### **WG-148: IQuOD (2015)**

International Quality Controlled Ocean Database: Subsurface temperature profiles

### **WG-150: TOMCAT (2015)**

Translation of Optical Measurements into particle Content, Aggregation & Transfer

### **WG-153: FLOTSAM (2017)**

Floating Litter and its Oceanic TranSport Analysis and Modelling

### **WG-160: ATOMIX (2020)**

Analysing ocean turbulence observations to quantify mixing

## Chemical oceanography



### **WG-151: FeMIP (2016)**

Iron Model Intercomparison Project

### **WG-167: RUSTED (2022)**

Reducing Uncertainty in Soluble aerosol Trace Element Deposition

## Biological oceanography



### **WG-155: EBUS (2017)**

Eastern boundary upwelling systems: diversity, coupled dynamics and sensitivity to climate change

### **WG-156: Chlorophyll (2018)**

Active Chlorophyll fluorescence for autonomous measurements of global marine primary productivity

### **WG-157: MetaZooGene (2018)**

Toward a new global view of marine zooplankton biodiversity based on DNA metabarcoding and reference DNA sequence databases

### **WG-158: C-GRASS (2019)**

Coordinated Global Research Assessment of Seagrass System

### **WG-159: DeepSeaDecade (2019)**

Roadmap for a Standardised Global Approach to Deep-Sea Biology for the Decade of Ocean Science for Sustainable Development

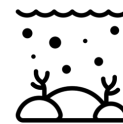
### **WG-164: CoNCENSUS (2021)**

Advancing standardisation of COastal and Nearshore demersal fish visual CENSUS techniques

### **WG-165: MixONET (2021)**

Mixotrophy in the Oceans – Novel Experimental designs and Tools for a new trophic paradigm

## Biogeochemical oceanography



### **WG-152: ECV-Ice (2016)**

Measuring Essential Climate Variables in Sea Ice

### **WG-161: ReMO (2020)**

Respiration in the Mesopelagic Ocean: Reconciling ecological, biogeochemical and model estimates

### **WG-162: OASIS (2020)**

Developing an Observing Air-Sea Interactions State

### **WG-163: Clce2Clouds (2021)**

Coupling of ocean-ice-atmosphere processes: from sea-ice biogeochemistry to aerosols and Clouds

### **WG-166: DMS-PRO (2022)**

Developing resources for the study of Methylated Sulfur compound cycling PROCesses in the ocean

**2023 WGs:**

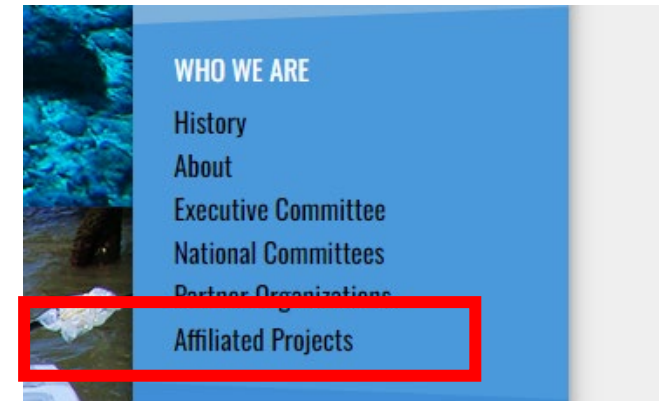
**To be decided at the 2023 SCOR Annual Meeting**



# Process for applying for SCOR affiliation – updated May 2023

Full procedures: <https://scor-int.org/scor/affiliated-projects/>

- **“Affiliation”:**
  - Not sponsored
  - Benefit from advice, visibility, SCOR network
- **Process:**
  - A 2-5 page proposal describing the program's science plan, the terms of reference, current steering committee membership, and rotation procedures and schedule
  - Annual reporting and renewal
- **Qualities:**
  - aligns with SCOR’s mission
  - scientifically well-integrated theme
  - truly international, with a scientific steering committee membership that rotates regularly





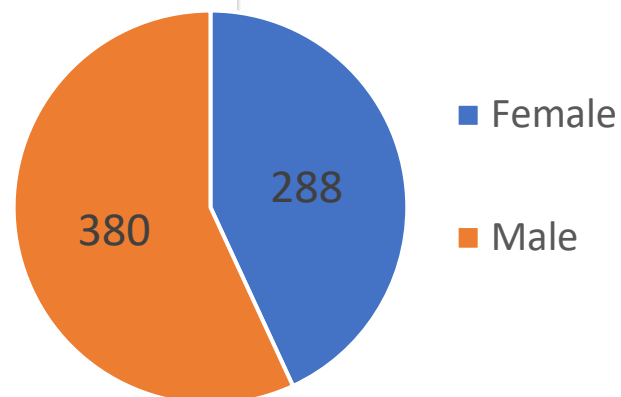
# The SCOR community - updates



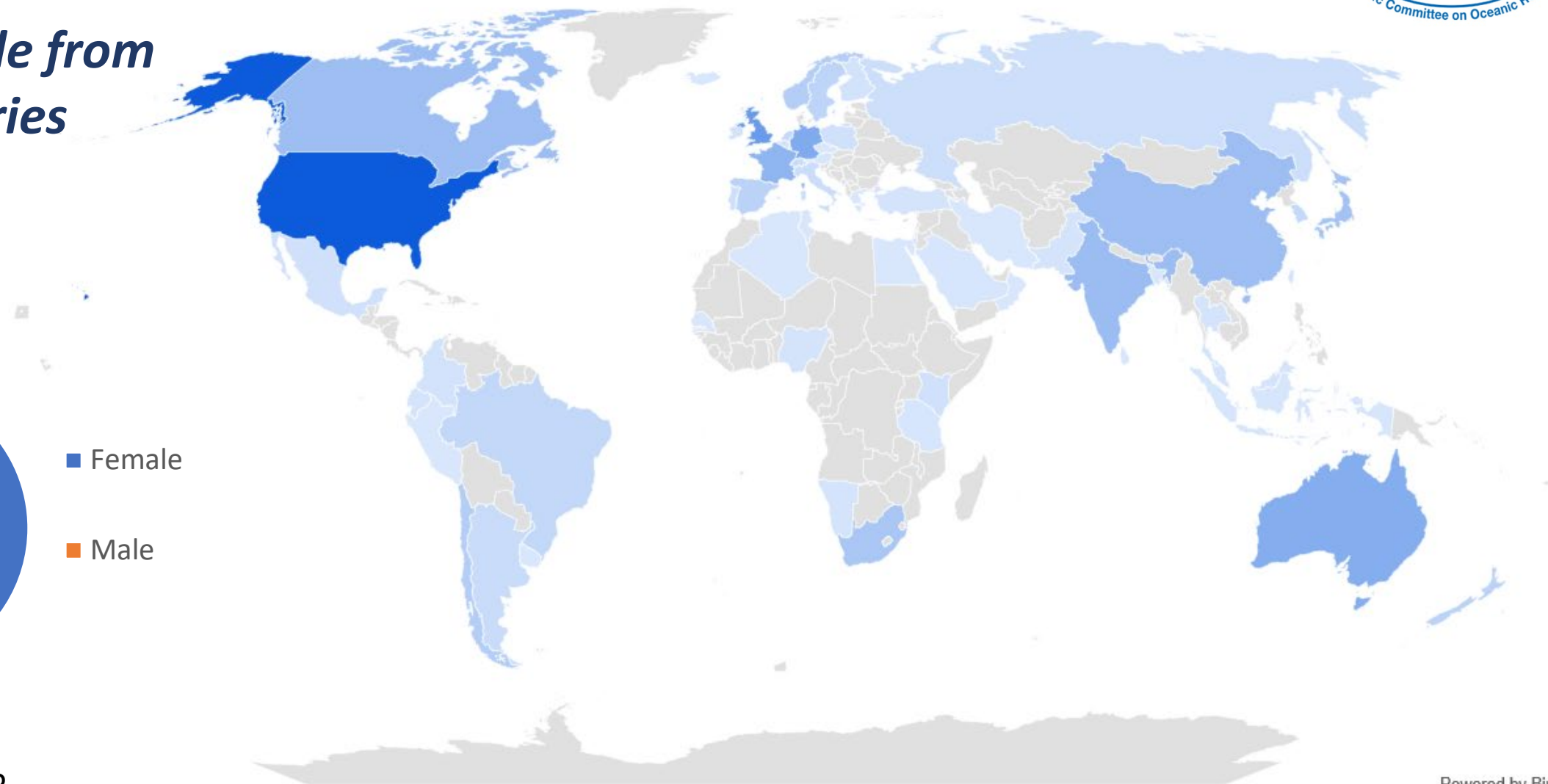
*Photo: E. Klein*

# SCOR **active** community: 2023

*668 People from  
61 Countries*



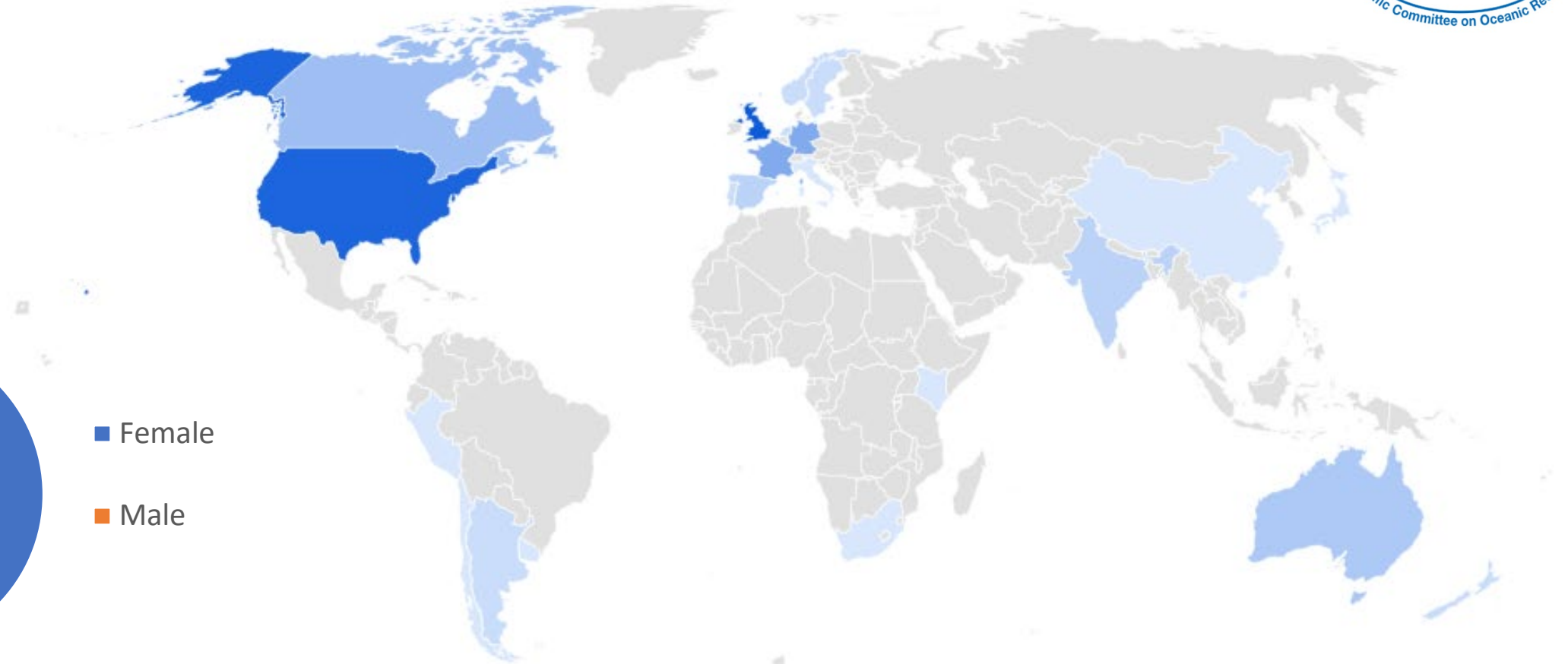
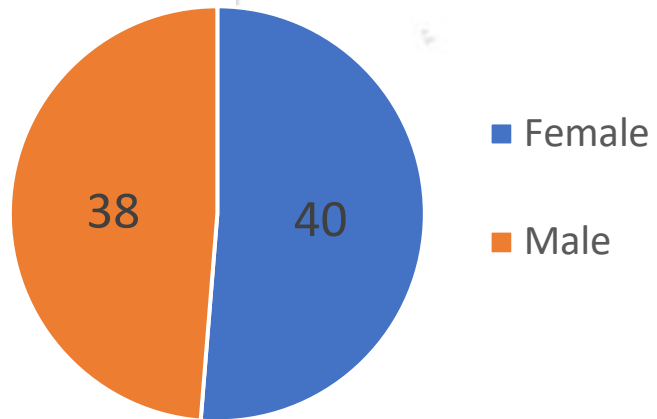
Bargraph?



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# SCOR leadership community: 2023



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# Executive Committee 2022-2024

## President



Sinjae Yoo  
Korea

## Past-President



Marie-A. Sicre  
France

## Secretary



Peter Croot  
Ireland

## The Vice-Presidents



Stefano Aliani  
Italy



Ilka Peeken  
Germany



Brad Moran  
USA

## The scientific organizations – Ex-officio



Judith Gobin  
Trinidad and Tobago, IABO



Andrea Flossmann  
France, IAMAS



Hans van Haren  
The Netherlands, IAPSO

## The co-opted members



Wee Cheah  
Malaysia



Jacqueline Uku  
Kenya

## Secretariat:

- **Executive Director (2023-):** Emily Twigg
- **Executive Director (2020-2023):** Patricia Miloslavich
- **Financial Consultant:** Ed Urban

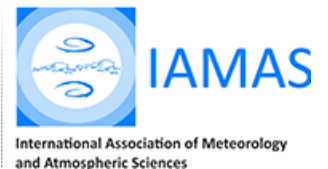


## Capacity Development Committee



**Chair:** Rebecca Zitoun (Germany)

- Sanae Chiba (Canada)
- Mauro Cirano (Brazil)
- Ntahondi Nyandwi (Tanzania)
- Moagabo Ragoasha (South Africa)
- Viena Puigcorbé (Spain)
- Rui Seabra (Portugal)
- Paula Sierra (Colombia)
- Jennifer Verduin (Australia)
- Sun Xiaoxia (China-Beijing)



# New National Committee Nominated Members



Currently 32 member countries.

Role of nominated members:

- Liaisons between International SCOR and national committees
- Liaisons between International SCOR and dues-paying agencies/organizations
- Lead working group proposal review
- Seek national funding to attend annual SCOR meeting

National Committee	Updates
Chile	Teniente Matías Sifón Andalaft replaced Harald Urbina Córdova
Italy	Jacopo Chiggiato was appointed to fill the position left by Annalisa Griffa
Switzerland	Charlotte Laufkötter replaces Kurt Hanselman

# International recognition and awards



Prof. Trevor McDougall receives the 2022 Prime Minister's Prize for Science from Australian Prime Minister Anthony Albanese

**Trevor McDougall (Australia)**  
**Prime Minister's Prize for Science**  
**Former Executive Committee**



**Marie-Alexandrine Sicre (France)**  
**2022 Fellow of the International Science Council**  
**Former SCOR President**  
**Current SCOR Past President**  
**SCOR Nominated Member France**



**Shubha Sathyendranath (UK)**  
**Appointed Member of the Order**  
**of the British Empire**  
**Chair of Affiliated Project IOCCG**

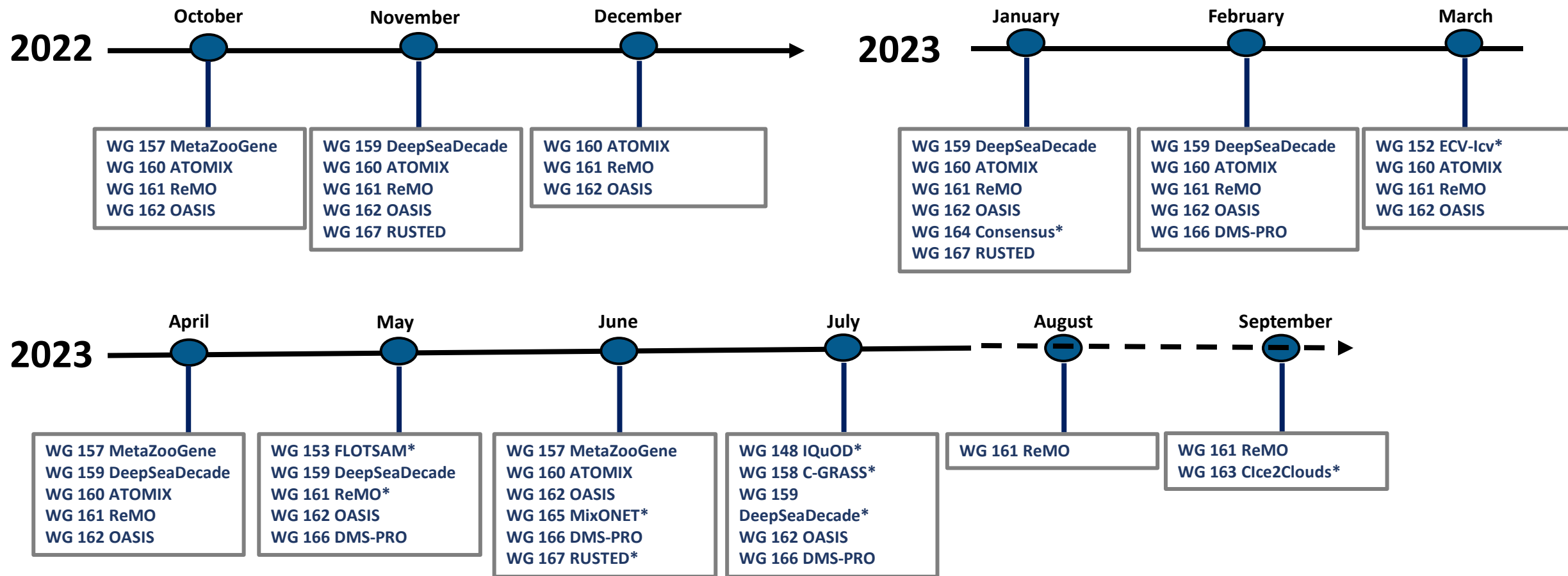


# Updates from the SCOR Working Groups and Projects



*Photo: P. Miloslavich*

# Working Group meetings



## In summary: 18 WGs

- At least 41 online WG meetings (reported)
- 9 in person WG meetings (\*)
- All In-Person Meetings included Associate Members
- 6 In-Person Meetings included Early Career Scientists

# Working Groups

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Working groups are formed of not more than 10 Full Members and 10 Associate Members, to deliberate on a narrowly focused topic and develop a peer-reviewed publication and/or some other product that will advance the topic on which the working group is focused. The group's work is intended to be completed in 4 years or less.

SCOR Ocean Carbon Working Groups

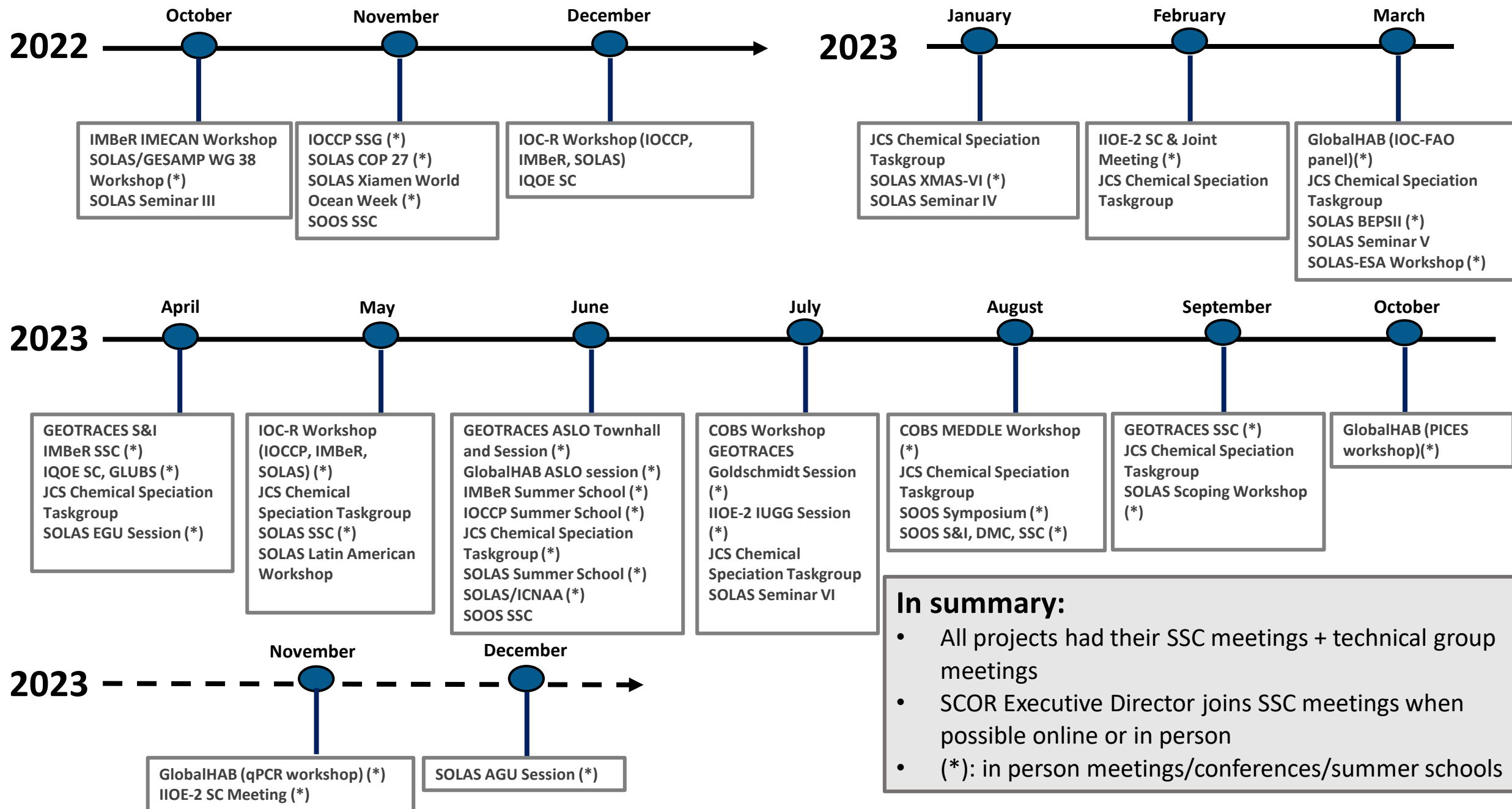
WG Proposal Instructions

Meeting Planning Instructions

Travel Instructions

- ✓ Meeting organizers should provide SCOR with a budget and meeting documentation (agenda, summary, photo)
- ✓ Travel funds can be used for Associate members

# Project meetings



# SCOR scientific publications (2021-2022)



Class	Publications Acknowledging SCOR
Working Groups	18 (9 included ECS)
GEOTRACES	7
IMBeR	5
SOLAS	1
COBS	2
IQOE	1
IIOE-2	8
IOCCP	2
SOOS	1
GlobalHAB	2
JCS	3

## SOLAS

THE LINKS between marine plastic litter and the air-sea flux of greenhouse gases

Lonneke Goddijn-Murphy<sup>1\*</sup>, David K. Woolf<sup>2</sup>, Ryan Pereira<sup>3</sup>, Christa A. Marandino<sup>4</sup>, Adrian H. Callaghan<sup>5</sup> and Jacek Piskozub<sup>6</sup>

<sup>1</sup>Environment  
Thurso, U  
Infrastruc  
Heriot-W.  
GEOMAR  
Environme  
Oceanolog

## WG 157 MetaZooGene

Check for updates

Climate  
challeng  
We focu  
greenh  
and redi  
well unc  
affectin

### AUTHORS:

Jenny A. Huggett<sup>1,2</sup>   
Johan C. Groeneveld<sup>3,4</sup>   
Sohana P. Singh<sup>5</sup>   
Sandi Willows-Munro<sup>6</sup>   
Ashree Govender<sup>4</sup>   
Riaan Cedras<sup>5</sup>   
Shaun H.P. Deyzel<sup>6,7</sup>

### AFFILIATIONS:

<sup>1</sup>Oceans and Coastal Research,  
Department of Forestry, Fisheries and  
the Environment (DFFE), Cape Town,  
South Africa  
<sup>2</sup>Department of Biological Sciences,  
University of Cape Town, Cape Town,  
South Africa

Islands,  
Geoscience,  
ell Centre,

metabarcoding of zooplankton to derive indicators  
of pelagic ecosystem status

## WG 162 OASIS

DOI: 10.1002/icesjms.154149  
Advance access publication date: 27 September 2022  
Food for Thought

Developing an Observing Air–Sea Interactions Strategy  
(OASIS) for the global ocean

M. F. Cronin<sup>1,\*</sup>, S. Swart<sup>2,3</sup>, C. A. Marandino<sup>4</sup>, C. Anderson<sup>5</sup>, P. Browne<sup>6,†</sup>, S. Chen<sup>7,†</sup>,  
W. R. Joubert<sup>8,†</sup>, U. Schuster<sup>9</sup>, R. Venkatesan<sup>10,11</sup>, C. I. Addey<sup>12,13,†</sup>, O. Alves<sup>14</sup>, F. Ardhuin<sup>15</sup>,  
S. Battle<sup>1,16</sup>, M. A. Bourassa<sup>17</sup>, Z. Chen<sup>18</sup>, M. Chory<sup>19,†</sup>, C. Clayson<sup>20</sup>, R. B. de Souza<sup>21</sup>, M. du  
Plessis<sup>2,†</sup>, M. Edmondson<sup>19,†</sup>, J. B. Edson<sup>20</sup>, S. T. Gille<sup>5</sup>, J. Hermes<sup>22</sup>, V. Hormann<sup>23</sup>, S.  
A. Josey<sup>23</sup>, M. Kurz<sup>24,†</sup>, T. Lee<sup>25</sup>, F. Maicu<sup>26,†</sup>, E. H. Moustahfid<sup>27,28</sup>, S.-A. Nicholson<sup>29,†</sup>, E.  
S. Nvadiro<sup>30,31</sup>, J. Palter<sup>32</sup>, R. G. Patterson<sup>33,†</sup>, S. G. Penny<sup>34,35</sup>, L. P. Pezzi<sup>36</sup>, N. Pinardi<sup>26</sup>, J.



## JCS



Article

Thermodynamics of Evaporation from the Ocean Surface

Rainer Feistel<sup>1,\*</sup> and Olaf Hellmuth<sup>2</sup>



C. Stienbarger<sup>40,†</sup>, T. Steinhoff<sup>4,41</sup>, A.  
L. Yu<sup>20</sup>  
stration, 7600 Sandpoint Way NE, Seattle, WA 98115,  
n  
South Africa  
iel, Germany  
2093, USA  
9AX, UK  
ceanography, Ministry of Natural Resources,

# Educational materials

## WG 161 ReMO Training Course Materials

SCOR WG 161  
Respiration in the Mesopelagic Ocean



[Home](#) | [Membership](#) | [Training course](#) | [Mentoring scheme](#) | [ReMO Webinars](#)

### International training course on Mesopelagic Respiration

Canary Islands, Spain – 21-27 May 2023


#### Recordings

[Lecture 1 – International training course on Respiration in the Mesopelagic Ocean - Introduction \(Carol Robinson\)](#)

[Lecture 2 – Oxygen consumption \(Dominique Lefèvre, Matthieu Bressac\)](#)


[Lecture 3 – Enzymatic approaches to estimate respiration: ETS activity, Enzyme Kinetic Model \(EKM\), in vivo INT \(Javier Arístegui, María F. Monteiro, Natalia Osma, Isabel Seguro\)](#)

[Lecture 4a – Aggregate respiration \(Morten Iversen\)](#)

1  **Understanding the Oceans - The GEOTRACES International Programme**  
(subtitles in 10 languages)


GEOTRACES IPO • 783 views • 1 year ago

2:23

2  **Isotopes, tracers of origins & chronometers (Subtitles in 8 languages)**  
**#isotopes**


GEOTRACES IPO • 503 views • 7 months ago

3:18

3  **Lead, Humans & Oceans (Subtitles in 6 languages)**


GEOTRACES IPO • 328 views • 7 months ago

2:45

4  **Neodymium, the element that attracts us (Subtitles in 6 languages)**

GEOTRACES IPO • 311 views • 6 months ago

2:28

 **Iron, essential for life in the ocean (Subtitles in 4 languages)**

GEOTRACES Education Channel

# Projects



Project	SSC renovations / other
<b>RESEARCH PROJECTS</b>	
GEOTRACES	Reappointment of Vineet Goswami (India) and Rodrigo Torres (Chile) to SSC. Reappointment of Karen Casciotti as SSC co-chair Extension for one additional year (2023) of SSC members Antonio Tovar (Spain), Rob Middag (The Netherlands), Yeala Shaked (Israel), Jay Cullen (Canada) and Marina Kravichishina (Russia).
SOLAS	New appointees to the SSC for 2023: Lennart Bach (Australia), Joan Lloret (Spain), Andreas Raspotnik (Norway), Nadja Steiner (Canada), Lisan Yu (USA) Formation of Early Career Scientist Committee January 2023: 16 members
IMBeR	Appointment of Wen-Chen Chou, Jess Melbourne Thomas, Marta Ballesteros, Ron Vave, and Rowan Trebilco to SSC Call for new chair
IQOE	IQOE Task Team on Low-Cost Hydrophones for Research, Education, and Citizen Science: Xavier Mouy, Artash Nath Sophie Nedelec, Tess Gridley, Walter Zimmer, Mihai Burca
IIOE-2	No revisions
<b>INFRASTRUCTURAL PROJECTS</b>	
COBS	Sam Dupont (Sweden) replaced Phil Boyd (Australia) as co-chair.
GlobalHAB	Appointment of Clarissa Anderson as Chair (USA) New appointees to SSC: Aifeng Li (China-Beijing), Luisa Mangialajo (Italy), Jorge Mardones (Chile), Silvia M. Nascimento (Brazil)
IOCCP	No revisions
SOOS	ExComm revision In progress Appointment of Nicole Hill (Australia) and Mohamed Adjou (France) to SSC
JCS	Vice chair position remains vacant

# SCOR-UN Ocean Decade: endorsed projects and contributions



- **SCOR WG 162 OASIS – UN Ocean Decade *Endorsed Project***

Aimed at developing an Observing Air-Sea Interactions Strategy

- **SCOR Research Project GEOTRACES – UN Ocean Decade *Contribution***

Focused on marine biogeochemical cycles and distribution of trace elements and their isotopes

- **SCOR WG 159 DeepSeaDecade**

Aimed at developing a global plan for survey/sampling deep-sea ecosystems to underpin deep-sea research is a key contributor to the UN Ocean Decade endorsed programme Challenger 150 – A Decade to Study Deep-Sea Life

- **SCOR Infrastructural Project IOCCP – International Ocean Carbon Coordination Project**

Key contributor to five UN Ocean Decade endorsed programmes related to ocean observations, oxygen and acidification (e.g. Global Ocean Oxygen Decade, Ocean Acidification Research for Sustainability)

- **Southern Ocean Action Plan for the Decade**

An initial roadmap to strengthen links between science, industry and policy, and encourage internationally collaborative activities to address existing knowledge and data gaps.

- **IMBeR ClimEco 7 (2021) – UN Ocean Decade *endorsed activity***

IMBeR Climate and Ecosystems Summer School

- **SCOR WG #157 MetaZooGene – an endorsed action attached to the Marine Life 2030 UN Ocean Decade project**

Metabarcoding zooplankton diversity

- **SCOR projects IMBeR and SOLAS – contributing to Ocean Negative Carbon Emissions (ONCE) UN Ocean Decade Project**

Co-chaired by Carol Robinson. Other lead partners with IMBeR and SOLAS are ICES, PICES and WCRP.



**2021  
2030** United Nations Decade  
of Ocean Science  
for Sustainable Development

# SCOR-UN Ocean Decade: endorsed projects and contributions



To be proposed or seeking endorsement:

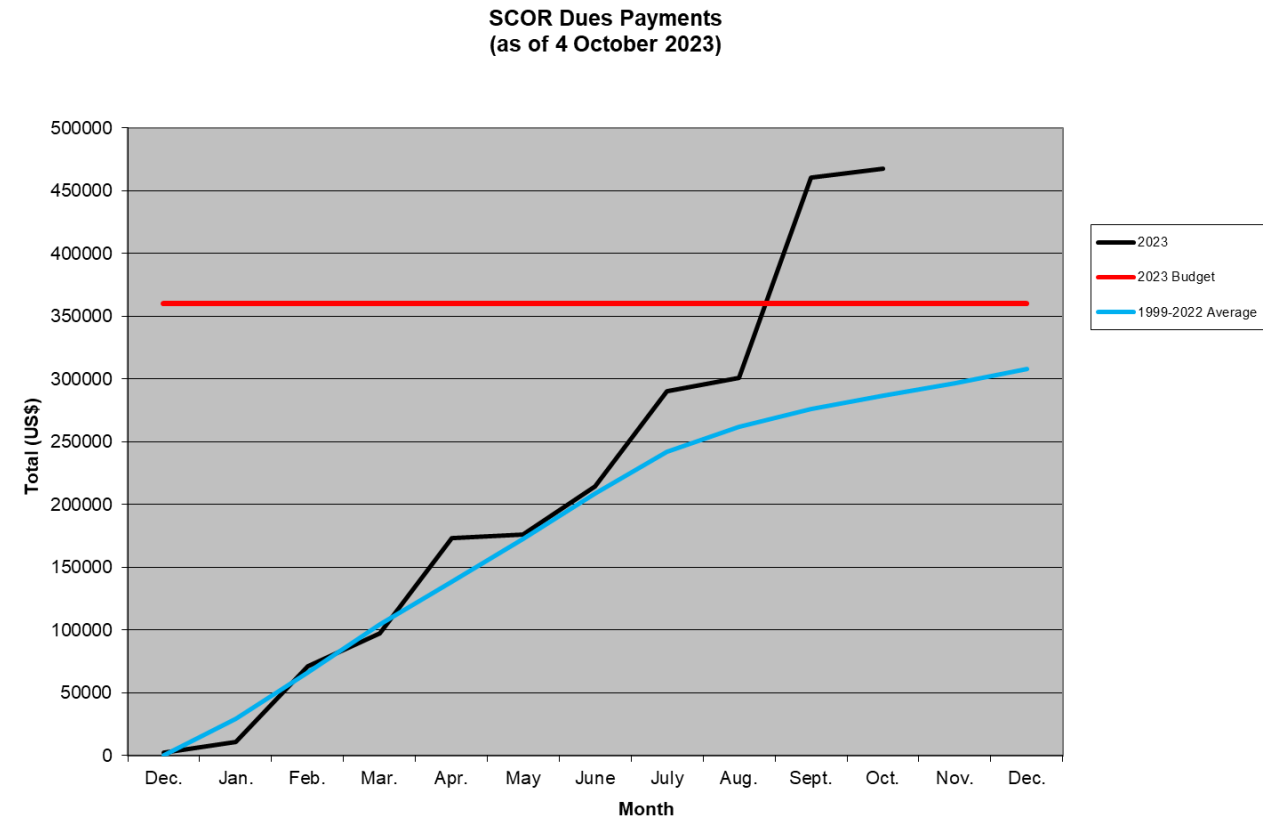
- **SCOR WG 153 FLOTSAM on floating litter** - working together with GOOS, Copernicus and other organisations toward a global observing system for debris (IMDOS) – to be proposed as a UN Ocean Decade programme
- **International Indian Ocean Expedition II – *seeking endorsement***
- **GlobalHAB is a contributing partner to the proposed UN Decade Action, the Harmful Algal Bloom Solutions (HAB-S) Programme**

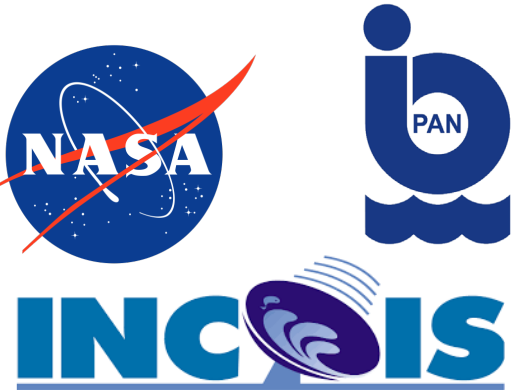
# SCOR funding



# SCOR Finances - Highlights

- **Dues income** from memberships has surpassed expected budget based on back dues payments – membership fees cover the costs of the Secretariat, annual SCOR meetings, some WG activities, and some projects and capacity development.
- **NSF Science Grant:** SCOR depends on grant funding for large-scale research projects, ocean carbon activities, and some working groups.
- SCOR currently has 2 overlapping Science grants from NSF—one on a second year “no cost extension” in order to spend unspent travel funds from COVID restrictions , and the other in its final year.
- **NSF Capacity Development Grant:** SCOR is in a “no cost extension” year for the Capacity Development grant from NSF. A new proposal has been submitted with an expected start of 1 January 2024.
- **2022 audit** – found no issues





National Science Foundation



UNIVERSITY OF GALWAY





## SCOR visibility



# SCOR outreach resources



## SCOR Videos

**Full:** [https://www.youtube.com/watch?v=pRVM0x\\_d0tA](https://www.youtube.com/watch?v=pRVM0x_d0tA)

**Short:** <https://www.youtube.com/watch?v=HxCzYjP6AuQ>

### The Scientific Committee on Oceanic Research (SCOR)

Advancing ocean sciences across disciplines and through international cooperation since 1957

The Scientific Committee on Oceanic Research (SCOR) is an international non-governmental and non-profit organization promoting international cooperation in ocean science. The mission of SCOR is to address global and multidisciplinary ocean issues, plan and conduct oceanographic research, solve methodological and conceptual problems, and conduct several different activities to build capacity for ocean science. SCOR promotes equity, diversity, inclusion in ocean sciences, and encourages and supports involvement of students and early career scientists.

In more than 60 years, SCOR has significantly contributed to shape modern oceanography by establishing and supporting several large-scale projects such as the International Indian Ocean Expedition (IIOE), the World Ocean Circulation Experiment (WOCE), the Tropical Ocean-Global Atmosphere Study (TOGA), the Global Ocean Ecosystem Dynamics (GLOBEC), the Joint Global Ocean Flux Study (JGOFS), and the Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB). More than 2400 scientists have been involved in SCOR activities representing all five continents.

#### SCOR activities

In addition, Interdecadal, the Global Alliance of Continuous Plankton Recorders (GACRS), and the International Ocean Color Coordinating Group (IOCCG) are projects affiliated to SCOR.

### SCOR active Working Groups

**Chemical oceanography**

- WG-144: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series
- WG-145: **MANOCHORDS** (2012) - Marine Observing Network of Oceanic Hydrographic Data in the Southern Ocean
- WG-146: **NOBODINE** (2012) - Marine Observing Network of Oceanic Hydrographic Data in the Southern Ocean
- WG-147: **NOBODINE** (2012) - Marine Observing Network of Oceanic Hydrographic Data in the Southern Ocean

**Physical oceanography**

- WG-148: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series
- WG-149: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series
- WG-150: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series

**Biological oceanography**

- WG-151: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series
- WG-152: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series
- WG-153: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series

**Biogeochemical oceanography**

- WG-154: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series
- WG-155: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series
- WG-156: **NOBODINE** (2012) - Development of NOBODINE measurements towards a global network of oceanic time series

### From the field to the lab, from data analysis to global synthesis – SCOR develops capacity in ocean science at every step of the way

From left to right: (1) Sea-glider deployment from South African Agulhas II on voyage to the Southern Ocean, image by Emma Bone; (2) Deployment of CTD Rosette System from South African vessel Agulhas II in the Southern Ocean, image by Seb Swart; (3) Retrieving the Continuous Plankton Recorder (CPR) from the Aurora Australis in Eastern Antarctica, image by the Australian Antarctic Division; (4) The Southern Ocean Carbon and Climate Observations (SOCCO) scientists at work, image by Sandy Tomlin; (5) Vertical Multiple-opening Plankton Sampler (VMPS) collecting plankton for metabarcoding up to 1000 m depth for Working Group 157 MetaZooDee, image by Jumpy Hiri.

From left to right: (1) Getting ready to deploy a GO-FLO-CTD for trace metal sampling in the Southern Ocean, onboard SA Agulhas II, image by Raymond Renel; (2) Glider deployment from South African vessel Agulhas II in the Southern Ocean, image by Seb Swart; (3) IOCCG 2019 Training Course in Kristineberg, Sweden, image by Nancy Williams; (4) SOCCO Summer School 2018 in Corsica, France, image by SOCCO.

SCOR is a Thematic Organization of the International Science Council and a contributor to the UN Decade of Ocean Science for Sustainable Development

<https://scor-int.org/> @SCOR\_Int Public Group secretariat@scor-int.org



**SCOR Photo Gallery:** <https://scor-int.org/wp-content/uploads/2022/02/SCOR-Photo-Gallery.pdf>

# Social presence: Share SCOR Opportunities and Amplify News from WGs, Projects, Partners, Members

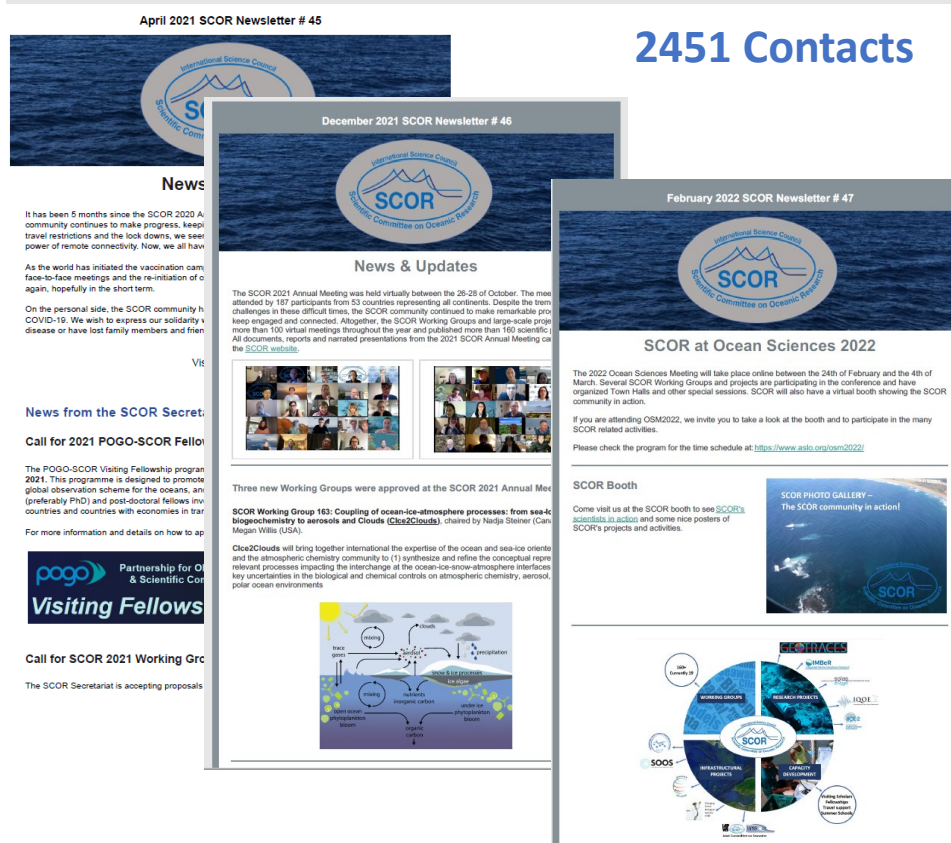
**Email: 3 Newsletters/year + news**

**2451 Contacts**

**Website: +2000 visits and +4000 views / month**

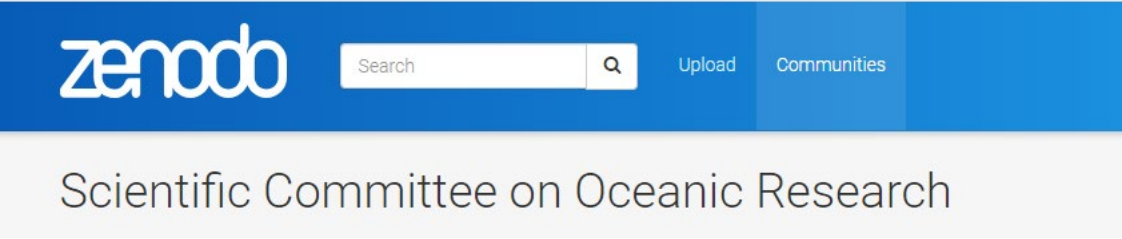
**<https://scor-int.org/>**

**X (Twitter): @SCOR\_Int ~1,150 followers**

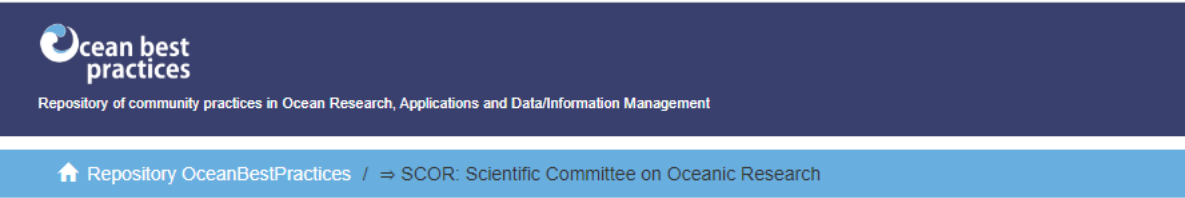


# NEW:

## SCOR Community in Zenodo



## SCOR Community in Ocean Best Practices Repository



=> SCOR: Scientific Committee on Oceanic Research

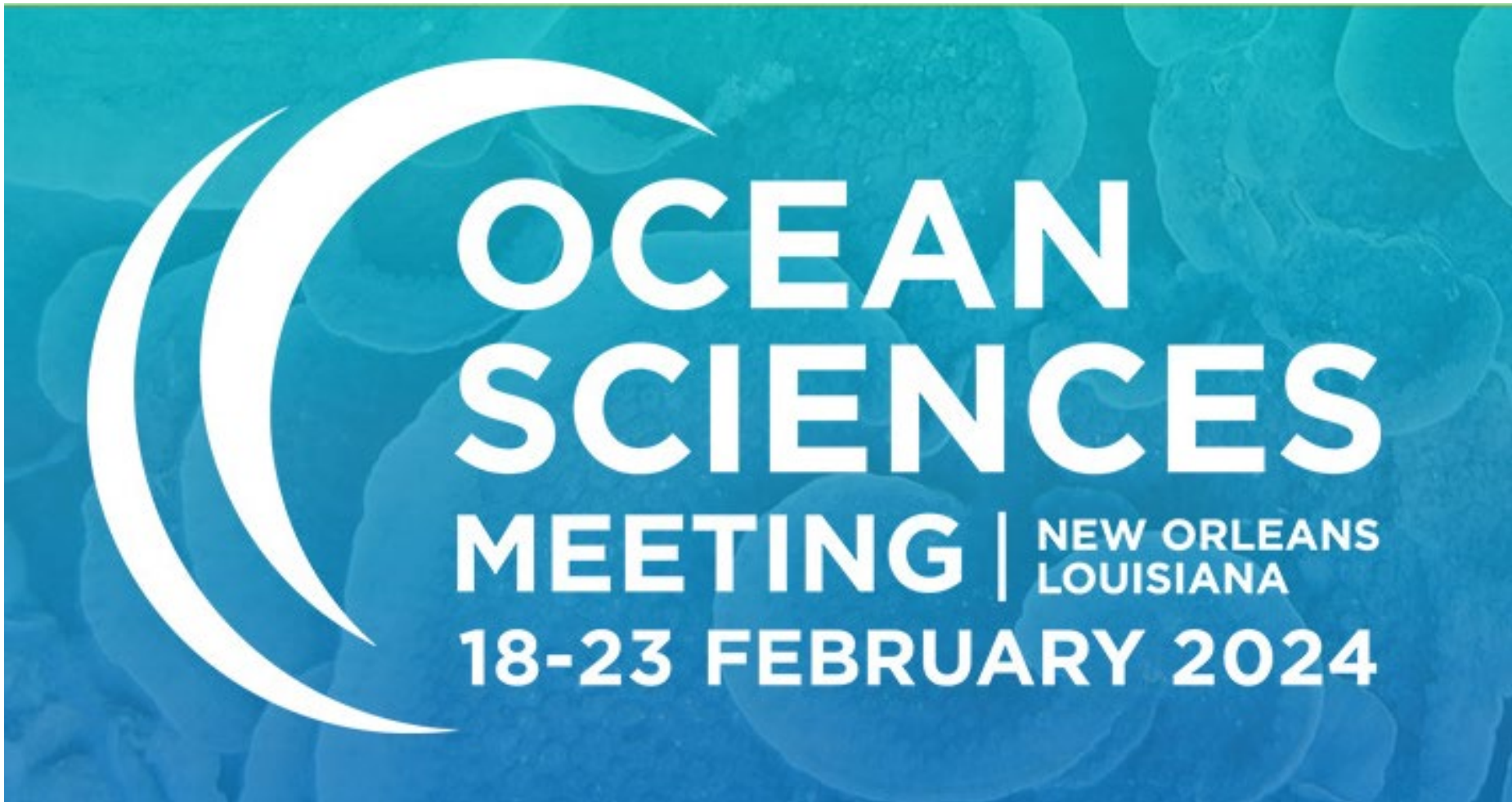
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By Issue DateAuthorsTitlesSubjects



## SCOR Proceedings in AquaDocs

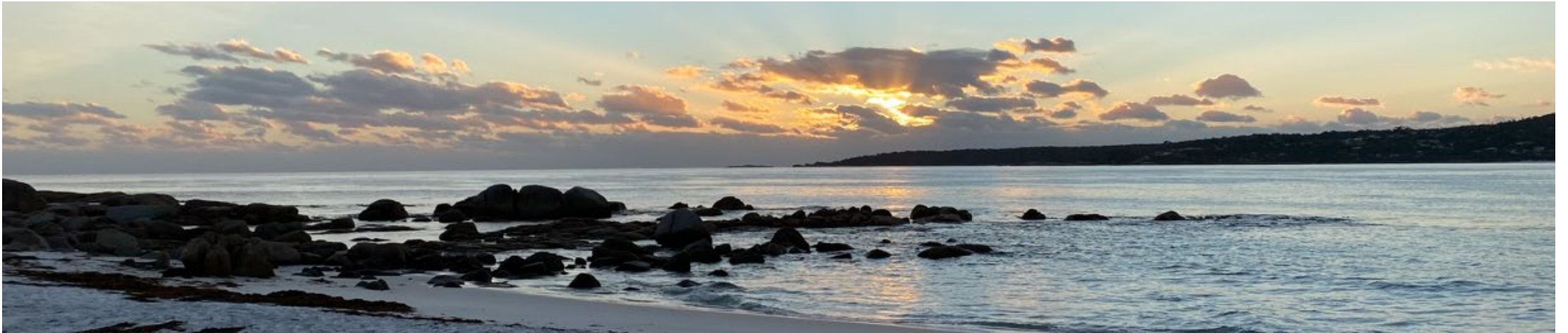




**Use of SCOR Booth by WGs and Projects**

**Advertise your presence at OSM in SCOR newsletter**

**Thanks!**



**<https://scor-int.org/>**

