

CANADIAN OCEAN SCIENCE NEWSLETTER
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Table of Contents

OCEAN SCIENCE NEWS.....	2
Two BIG ships.....	2
ArcticNet Marine Systems Research.....	8
MEETINGS.....	12
58e Congrès de la SCMO.....	12
CMOS 58th Congress.....	13
MedGU-24.....	14
Workshop on Improving Modelling of the AMOC.....	14
POSITIONS AVAILABLE.....	15
Tenured Professor, Marine Ecosystems and Global Change.....	15
Doctorat en océanographie Océanographie / Hydrogéologie / Chimie.....	15
PhD position "Arctic phytoplankton".....	16
Postdoc, Ocean, Atmosphere, and Climate Dynamics.....	16
GENERAL.....	17
News from SCOR International.....	17
IGAC seeking members for Scientific Steering Committee.....	19
Unveiling Horizons:.....	19
Canadian Ocean Science Newsletter Le Bulletin Canadien des Sciences de l'Océan.....	20
CNC-SCOR.....	20



Two BIG ships

With thanks to **Ron Macnab** (Retired, Bedford Institute of Oceanography) for pointing these out.

The Longest Ship Ever Built

Excerpts from the [original article](#) found at [All That's Interesting](#)

Authors: [Austin Harvey](#) and [John Kuroski](#)

In the 1980s, a massive supertanker called the Seawise Giant took to the seas. The biggest ship in the world, it measured more than 1,500 feet in length — making it even longer than the Empire State Building is tall.



But the vessel, which changed names and owners several times over the course of its lifetime, wasn't famous only for its enormous size. Its history is an epic story rivaling that of more well-known ships like the Titanic.

From its impressive construction to being sunk by Saddam Hussein's missiles to its subsequent retrieval and revival, the Seawise Giant certainly earned its place among history's great ships.

Creating The Seawise Giant

The initial idea for the Seawise Giant came from a Greek business mogul, who contracted Japan's Sumitomo Heavy Industries to create a gigantic supertanker. However, the South China Morning

Post reports that the mogul wound up not buying the completed ship. Accounts vary, but it's likely that they either went bankrupt or simply changed their mind about the purchase.

This naturally presented a problem for Sumitomo Heavy Industries, who now had one of the largest ships ever constructed just waiting around in the shipyard without a prospective buyer. Thankfully, it didn't take long for another interested party to come along.

In 1981, two years after construction was finished, a man by the name of Tung Chao-yung signed a deal to purchase the vessel. But Tung, the founder of Hong Kong's Orient Overseas Container Line (OOCL), wasn't satisfied with the ship's impressive size. He wanted it to be even larger.

Tung oversaw the addition of several feet to the ship's length, which also increased its capacity by more than 140,000 tons. In total, the mammoth ship soon measured 1,504 feet in length by 225 feet in width. It would be the biggest and longest ship in the world.

Naturally, the Seawise Giant wasn't a ship meant for tight passages. Its turning circle had a diameter of 1.86 miles, and if the captain wanted to slow the ship to a complete stop from its maximum speed of 16.5 knots, it would take a full 5.6 miles to slow down.

That was fine, because the Seawise Giant wasn't meant for speed. It mostly transported crude oil between the United States and the Middle East. Unfortunately, it was doing so at a time when Iraq and Iran were at war — and it soon became an unwitting victim of that conflict.

The Sinking Of The Seawise Giant

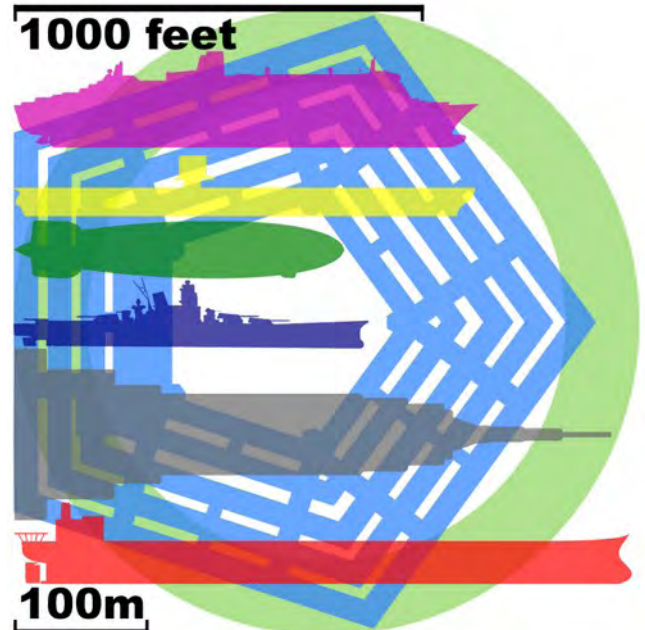
Disaster struck the Seawise Giant in May 1988, when it was moored off of Larak Island in Iran. Per the Telegraph the ship was loaded with Iranian oil when it was bombed by Saddam Hussein's Iraqi forces.

Fire and oil are a notoriously bad combination, and the Seawise Giant immediately went up in flames. It didn't take long for the vessel to become completely engulfed and, ultimately, sink into the shallow water.

For most ships, this would have been the end. But the Seawise Giant, the largest ship in the world, wasn't like most other ships.

There were those who still saw value in the wreckage of the world's largest vessels. One such party was a Norwegian group called Norman International. When the Iran-Iraq War came to an end shortly after the Seawise Giant's sinking, Norman International lifted the massive vessel from the seabed and had it towed to Singapore for repairs.

By October 1991, more than 3,700 tons of new steel had been used to repair the Seawise Giant, which was once again seaworthy. It also had a new name: Happy Giant.



A diagram comparing the Seawise Giant (in red at the bottom) with other ships, buildings, and large structures, including the Empire State Building (gray) and the Pentagon (blue).



The Seawise Giant's Second Life

The Happy Giant was eventually purchased by another Norwegian shipping magnate, Jørgen Jahre, for \$30 million (roughly \$45 million today). Once again, the colossal ship was given a new name, Jahre Viking.

The Jahre Viking was manned by a small crew of just 40 people, but it managed to operate for another 10 years. Once again, the ship carried oil across the seas.

That said, the Jahre Viking had some major issues that became more and more apparent as time went on. For starters, it required a tremendous amount of fuel to operate such a large vessel. Beyond that, the ship's size was proving to be a problem. It was simply far too big to enter many important ports across the world, including the English Channel, the Suez Canal, and the Panama Canal.

Eventually, the Jahre Viking was sold again, this time to Norway's First Olsen Tankers. But First Olsen wasn't interested in sending their newly acquired ship, renamed now to the Knock Nevis, out to sea. Instead, they used it as a stationary storage facility for tanks at the Al Shaheen oil field in Qatar.

The Demise Of The Largest Ship Ever Built

The newly renamed Knock Nevis remained in Qatar for another six years, before ultimately being sold for scrap to a breaking yard in Gujarat, India. There, it took tens of thousands of workers more than a year to completely break the former Seawise Giant down and sell off its parts.



And thus, the tale of the world's largest ship reached its conclusion. The Seawise Giant may be gone, but at least one part of its impressive heft remains: the vessel's 36-ton anchor was put on display at the [Hong Kong Maritime Museum](#), a testament to the astonishing size of what was once the biggest ship in the world.

*Seawise Giant anchor at
The Hong Kong Maritime
Museum*

[Original article](#) in [All That's Interesting](#)



World's Largest Cruise Ship

Excerpts from the [article](#) found in [Wikipedia](#)

Icon of the Seas is a cruise ship built for [Royal Caribbean International](#) and is the lead ship of the Icon class. She entered service on 27 January 2024 out of the Port of Miami in the US. At 248,663 gross tonnage, Icon of the Seas is the largest cruise ship in the world.

History

In October 2016, Royal Caribbean and Finnish shipbuilder Meyer Turku announced an order to build two ships under the project name "Icon". The ships were expected to be delivered in the third quarter of 2023 and in 2025.

Steel-cutting for Icon of the Seas began in June 2021. In October 2021, Royal Caribbean announced that the first LNG tank for the ship was installed at the Neptun Werft in Rostock, Germany. In December 2021, the floating engine room unit, including the LNG tanks, was towed to Turku in Finland by tug. The keel was laid in April 2022. In May 2022, Royal Caribbean confirmed that Icon of the Seas would be bigger than the Oasis class.



On 19 June 2023, Icon of the Seas sailed for the first of her sea trials. She returned to the Meyer Turku shipyard on 22 June for adjustments to her systems, and to have interior spaces completed and furnished.

On 27 November 2023, the ship was officially handed over to Royal Caribbean, just two months ahead of the official debut from Miami in January 2024.

On 1 December 2023, Icon of the Seas passed under the Great Belt Bridge in Denmark. The ship docked at the Navantia Shipyard in Cádiz, Spain, for final outfitting work.

The ship departed Cadiz on 23 December 2023 for Puerto Rico and on 10 January 2024 arrived at her home port, PortMiami. On 23 January, the naming ceremony was held and Icon of the Seas was christened by footballer Lionel Messi. Her official maiden voyage began on 27 January out of



Port of Miami in the US.

Design

Icon of the Seas can be powered by liquefied natural gas. The ship has six multi-fuel Wärtsilä engines; these can be powered with both LNG and distillate fuel. Environmental groups have said that LNG is a more damaging fuel as it releases more harmful greenhouse gas emissions. Nick Rose, a vice-president of Royal Caribbean, said "We consider LNG a transitional fuel that helps builds flexibility into our ship design ... LNG is one part of our alternative fuel strategy, along with biofuels, methanol and other energy sources like shore power". Icon of the Seas is the first Royal Caribbean vessel to use such technology.

The ship has a crew of 2,350, and a capacity of 5,610 passengers at double occupancy, or 7,600 passengers at maximum capacity. Icon of the Seas has 20 decks with seven swimming pools and six water slides. The company claims the ship has the tallest waterfall, the tallest water slide, and the largest waterpark of any cruise ship.

The ship was designed by a team of architects and designers, including Wilson Butler Architects, 3Deluxe, RTKL, and Skylab Architecture. The designers introduced new concepts including:

- A diving and performance venue under a glass dome on the top of the ship
- A structural feature designed as a dynamic art installation on the Royal Promenade
- Ice skating rink and entertainment venue
- Beach club featuring first suspended infinity pool of any ship
- The largest waterpark at sea, featuring six different water slides
- Largest swim up bar at sea



This image and the above from [Royal Caribbean](https://www.royalcaribbean.com) website

General characteristics



<u>Class and type</u>	Icon-class cruise ship
<u>Tonnage</u>	248,663 GT, 307,895 NT
<u>Length</u>	364.75 metres (1,196.7 ft)
<u>Beam</u>	48.47 m (159.0 ft)
<u>Draught</u>	9.25 metres (30.3 ft)
<u>Decks</u>	20
<u>Installed power</u>	3 × Wärtsilä 14V46DF, 16,030 kW (21,790 hp) each 3 × Wärtsilä 12V46DF, 13,740 kW (18,680 hp) each
<u>Propulsion</u>	Diesel-electric; 3 × 20 MW (27,000 hp) ABB Azipod, all azimuthing 5 × 4.8 MW (6,400 hp) Wärtsilä WTT-45 CP bow thrusters
<u>Speed</u>	22 knots (41 km/h)
<u>Capacity</u>	5,610 passengers (double occupancy) 7,600 passengers (maximum capacity) 2,350 Crew

Full [article](#) in [Wikipedia](#)

ArcticNet Marine Systems Research



[ArcticNet](#) has a very wide focus covering [Research](#), [Training](#), [Conferences](#) and a [Student Association](#). The Research component includes [Marine Systems](#), [Terrestrial Systems](#), [Inuit Health, Education and Adaptation](#), [Northern Policy and Development](#), [Knowledge Transfer](#) and [North-by-North](#) (Research by the North, for the North, in the North).



The [Marine Systems](#) page outlines 24 projects covering many aspects of physical, chemical, biological and geological oceanography, delving into everything from nearshore marine mammals to climate change.



Some examples include:

Glacier ice volume, iceberg discharge and shipping risk in the Canadian Arctic and beyond [[Link](#)]

Lead [Luke Copland](#) (University of Ottawa)

This project will use the rich datasets collected by ArcticNet projects and others over the past 20+ years to publish papers and data products focused on: (1) The first estimate of iceberg discharge for the entire northern hemisphere, separated into components due to terminus retreat and steady state ice flow. To produce this, ice thickness information at glacier termini will be combined with pan-Arctic satellite-derived measurements of glacier surface velocity and change in glacier frontal position for every marine terminating glacier over the period 2000-2020; (2) Determination of iceberg risks for shipping in Canadian northern waters ...



Water sampling to establish environmental baseline conditions for rivers supporting Arctic char near Naujaat [\[Link\]](#)

Lead [Johnny Tagornak](#) (Arviq Hunters and Trappers Organization)

Naujaat fishers have observed that when Arctic char travel down the river systems from the lakes where they overwinter, to the coastal marine waters for the summer, the timing of their run is unique to each river. The locations that char gather along the coast also vary. To have a better understanding of why this happens, we will investigate the environmental conditions in the rivers, lakes, and coastal environment in relation to the migration patterns of anadromous Arctic char throughout the winter, spring, and summer.

Over the next two years, Naujaat research coordinator and lead field technician Johnny Tagornak, will work with the Arviq HTO (Dolly Mablik, Manager), other community field assistants (particularly Laurent Kringayark), and scientists from the University of Manitoba will study the physical and chemical properties of the rivers that drain into Repulse Bay. They will also study the coastal marine environment to better understand the relationship between char and their winter and summer habitats.



Arctic Seafloor Mapping Data Processing and Dissemination [\[Link\]](#)

Leads [Ian Church](#) (University of New Brunswick) and [Jean-Carlos Montero-Serrano](#) (Université du Québec à Rimouski)

The reduction in Arctic summer sea-ice cover observed over the last decades allows for new shipping routes, new fishing grounds and cruise tourism opportunities. Thus, as part of the Arctic Blue Economy strategy, the shipping, oil and gas exploration, mining, fisheries and tourism sectors have been identified as areas of important potential economic growth in the Canadian Arctic. The integration of multiple spatial datasets from the marine environment is therefore needed for a sustainable management of offshore resources in the Canadian Arctic.



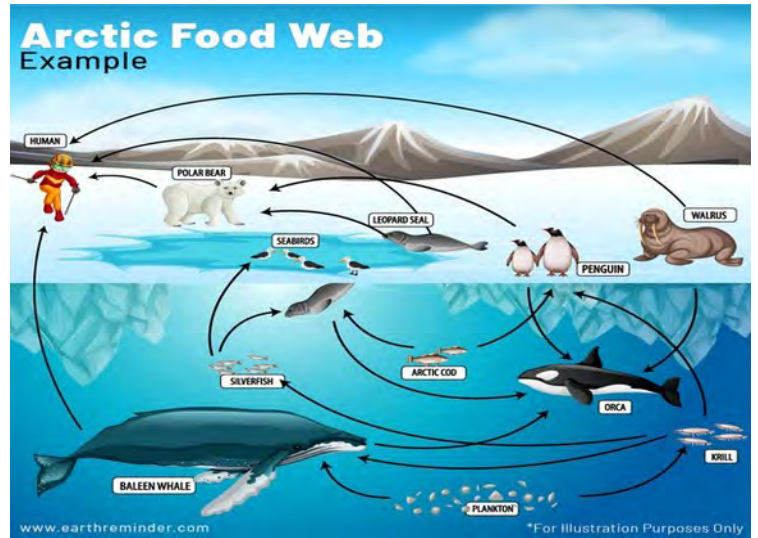
Combining acoustic mapping of the seabed relief, surface sediment composition and subsurface sediment records can provide invaluable information to understand the geological processes shaping the seafloor, to assess natural hazards and coastal habitats and to document the evolution of sea surface conditions, as well as aid the development of the Arctic Blue Economy. In this context, the overall objectives of this cutting-edge Arctic research program are to

1) perform detailed mapping of the Arctic Canada seafloor and adjacent coastal areas as an aid in understanding potential marine geohazards, minimize potential hazards to navigation, establish seafloor habitat characteristics, and improve the bottom boundary of Arctic Ocean modelling, 2) better document the age and origin of Canada's Arctic seafloor using a multidisciplinary approach that contributes to the development of a robust geological and paleoenvironmental framework, and 3) develop data dissemination tools to link the acoustic data products with the Arctic seafloor mapping user communities. ...

Nutrient fluxes and living marine resources in the Inuit Nunangat [[Link](#)]

Lead [Jean-Éric Tremblay](#) (Université Laval)

Marine wildlife is an integral part of food security and culture in the Inuit Nunangat and the abundance, visual appeal and nutritional value of this wildlife are sensitive to climate-driven changes in ocean properties and nutrient availability in particular. Using light as an energy source, phytoplankton and sea-ice algae assimilate carbon and nutrients to grow and produce the organic matter that sustains the food web and synthesize vital molecules (e.g., essential omega-3) that promote animal fitness and human well-being. The ocean currents that connect the Canadian Arctic (CA) with the Pacific and Atlantic Oceans bring variable quantities of nutrients and these quantities can be impacted positively or negatively by environmental change, with repercussions on the entire food web and Inuit food security.



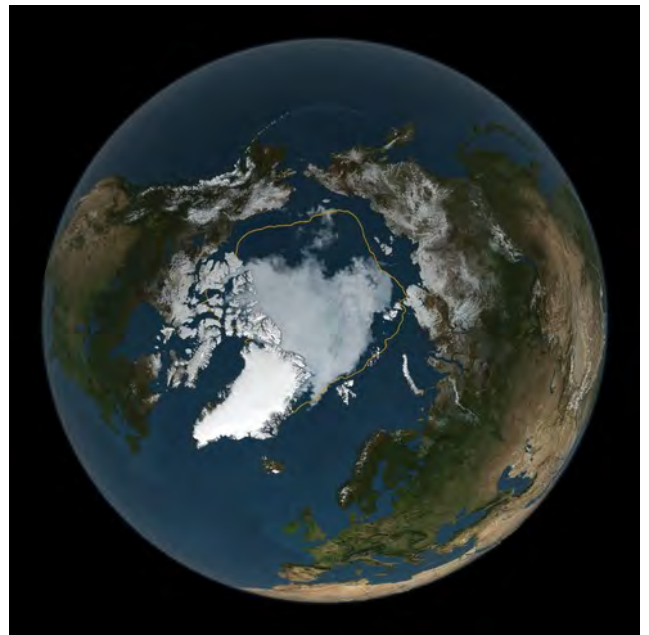
While nutrient inputs and outputs should balance for the whole Arctic Ocean, recent attempts at balancing nutrient budgets produced equivocal answers and raised several questions that will be addressed here. We will evaluate how components of the Arctic nutrient distribution network connect and respond to the changing physical environment and how this affects the magnitude and nutritional quality of organic matter production within the CA. ...

Downscaling future oceanography projections in the Canadian Arctic and Subarctic [[Link](#)]

Lead [Eric Oliver](#) (Dalhousie University)

The Arctic and Subarctic regions of Canada are experiencing rapid climate change. In particular, temperatures are rising and sea ice cover is declining at unprecedented rates. These changes are having impacts on the ocean environment with changes in marine ecosystems as well as human interactions with the environment. For example, Nunatsiavut in northern Labrador has seen a loss of nearly 75% sea ice cover since 1968 - with significant implications on winter travel routes and the ability to fish and harvest marine mammals. Therefore there is great need to understand how the marine environment may change in the future, which is critical for ensuring food security and the preservation of culture across northern Canada.

This project will perform simulations of the future ocean using numerical ocean models. Our ocean modelling system will include three levels. First, a large-scale model covering the Arctic Ocean and the north Atlantic Ocean will be used. This model has been used previously to simulate historical conditions and will be used in this project, along with climate model future projections, to simulate the ocean to the mid-21st century. This model will include the physical ocean, sea-ice and marine biogeochemistry.



Ecosystem Shift in Hudson Bay and James Bay: Causes, Consequences, and Prospects for the Future [\[Link\]](#)

Lead [Zou-zou Kuzyk](#) (University of Manitoba)

Cree and Inuit, in low Arctic areas like Hudson Bay and James Bay, describe how noticeable climate change “started” in the late 1990s. Communities experienced unusual ice conditions, witnessed arrival of new species, and noted changes in the diets of seals and other wildlife, while Cree in east James Bay saw abrupt and drastic declines in eelgrass. Scientists documented numerous ecological changes over the same period including slower growth of seabird chicks, changes in fish communities, and poor body condition in ringed seals and polar bears. Although the late 1990s broke heat records across Canada, the suite of ecological changes in Hudson Bay and James Bay is striking and raises the questions of why so much change occurred and so abruptly? Does it signal that an oceanographic regime shift occurred? If so, was the strong response due to changes to the seasonal ice cover and river discharge, or perhaps their inland character and position downstream of the changing Arctic Ocean? The answers to these questions are critical to predict the likely impacts and ecosystem stability in the face of future climate change both within the HBMR and more broadly across the Canadian Arctic. We will prepare three high-impact scientific publications i) synthesizing documented ecological changes from across Hudson Bay and James Bay, ii) combining oceanographic observations and modelling results from past and ongoing programs to characterize the timing of change, the mechanisms, and the associated marine environmental conditions; and iii) describing likely future impacts and ecosystem stability based on the past and present system states, and our understanding of mechanism(s) of past change. The main findings will be shared with northerners via videos shared over the web and at regional meetings. The observations of ecological change will be catalogued in a user-friendly, geo-database that can be linked to the various web platforms already used to share information in various regions (e.g., SIKU, Cree Nation Government geoportal, CEOS’ CanWIN, and CCADI).



This section of your newsletter provides an opportunity to highlight your research programs to the Ocean Science Community.

*Your are invited to send contributions to
David Greenberg,
davidgreenberg@alumni.uwaterloo.ca*

Mettez en valeur vos programmes de recherche en publiant un article dans cette première section de votre bulletin.

*Faites parvenir vos contributions à
David Greenberg,
davidgreenberg@alumni.uwaterloo.ca*

MEETINGS

58e Congrès de la SCMO



Nous ne sommes plus qu'à quelques jours du 58e Congrès de la SCMO qui se tiendra virtuellement du 3 au 6 juin 2024. Nous vous proposons les informations importantes suivantes, afin de vous garantir la meilleure expérience possible lors de cet événement virtuel.

Tous les participants ont reçu une invitation à rejoindre l'espace d'événement virtuel Eventmobi pour le Congrès à partir de cette adresse e-mail CMOS2024@event-emails.com. Si vous n'avez pas reçu ce courriel, veuillez vérifier votre dossier spam/junk. Si vous ne le voyez pas, veuillez nous contacter à l'adresse CMOS@agendamanagers.com.

L'application Eventmobi comprend le programme complet du congrès, y compris l'ordre du jour détaillé, les résumés, les affiches, les profils des sponsors, les listes principales de tous les participants, les responsables de session et les présentateurs, et bien d'autres choses encore.

N'hésitez pas à vous joindre à la conférence publique : Extreme Weather Events and their Future Changes, présentée par le Dr. L. Ruby Leung (Pacific Northwest National Laboratory)

Lundi 3 juin 2024, 18:00 - 19:30 EDT

Lien d'inscription à Zoom :

https://us02web.zoom.us/webinar/register/WN_UKa_BvUzRGaka2vILSHjkQ

Les directives pour les présentations orales et par affiches, ainsi que les instructions pour télécharger les présentations, sont disponibles sur le site Web du Congrès sous « [Directives de présentation](#) ». Le programme du Congrès est également désormais disponible sous « [Aperçu du Congrès](#) ».

Tous les posters ainsi que les présentations orales doivent être téléchargés en utilisant le formulaire à ce lien :

<https://script.google.com/macros/s/AKfycbygKyFsbuxuu5R2xns0RazZfVljZgBH6evW7F61dQE-HwYm6gesxu16mnF5qKdEdegB0Q/exec>



We are only days away from the CMOS 58th Congress being held virtually, June 3 - 6, 2024. We offer the following important information, to ensure the best experience at this virtual event.

All attendees have been sent an invitation to join the Eventmobi virtual event space for the Congress from this email address CMOS2024@event-emails.com. If you have not received this email, please check your spam/junk folder. If you don't see it there, please contact us at CMOS@agendamanagers.com.

The Eventmobi app includes the full Congress program including detailed agenda, abstracts, posters, sponsor profiles, master lists of all attendees, session leads and presenters and more.

Please plan to join the public lecture: Extreme Weather Events and their Future Changes, presented by Dr. L. Ruby Leung (Pacific Northwest National Laboratory)

Monday, June 3, 2024, 18:00 - 19:30 EDT

Zoom Registration link:

https://us02web.zoom.us/webinar/register/WN_UKa_BvUzRGaka2vILSHjkQ

Oral and poster presentation guidelines, as well as instructions for uploading presentations, are available on the Congress website under "[Presentation Guidelines](#)". Also the Congress schedule is now available under "[Congress at a Glance](#)".

All poster as well as oral presentations should be uploaded using the form at this link:

<https://script.google.com/macros/s/AKfycbygKyFsbuxuu5R2xns0RazZfVljZgBH6evW7F61dQE-HwYm6gesxu16mnF5qKdEdegB0Q/exec>

MedGU-24

Barcelona, Spain, in-person and online, 25 - 28 November 2024

The Mediterranean Geosciences Union organizes the 4TH MedGU Annual Meeting at the University of Barcelona (Spain) in collaboration with other universities in the Mediterranean region and with Springer Nature as publishing partner.

The MedGU Annual Meeting is one of the region's largest international geoscience meetings, with an average of 600 geoscientists attending in person and virtually each year. The MedGU Annual Meeting aims to provide a forum where geoscientists, especially early career researchers, can present and discuss their findings with experts in all fields of geosciences.



MedGU
25-28 NOV. 2024
BARCELONA, SPAIN

**MEDITERRANEAN
GEOSCIENCES UNION**
4TH ANNUAL MEETING

More information - [Website](#), [email](#).

[Abstract submission](#) **Deadline** 30 June 2024

Workshop on Improving Modelling of the AMOC

Met Office, Exeter, UK, 23-25 September 2024

The representation of the Atlantic Meridional Overturning Circulation (AMOC) in climate models is very varied, with different models having different strengths, different variability, and different magnitudes of responses to increasing greenhouse gases. This is a problem for climate projections and predictions, because the uncertainty in the AMOC response causes additional uncertainty in future changes of the climate. We know that the representation of the AMOC in models has deficiencies due to missing or poorly represented processes, but the pathway to future improvements is not clear.



To enable focused discussion, in person participation will be limited in numbers (~50). Applicants should have expertise and/or be currently working on research addressing how the AMOC, or processes relevant to the AMOC (such as convection, overflows, the Gulf Stream, etc.), are sensitive to different model formulation, resolution, parameterizations, etc. This could include research based on coupled climate models, ocean-only models, or high-resolution global or regional models.

The workshop is being organised by the CLIVAR AMOC Task Team and will take place at the Met Office, Exeter, UK on 23-25 September 2024. There will be no registration fee, however attendees will need to cover transport and accommodation themselves.

Applications should be received by 14 June 2024. We will send invitations based on the relevance of research and diversity of topics.

[Website](#), [Abstract submission](#)

*Please send meeting announcements to
David Greenberg,
davidgreenberg@alumni.uwaterloo.ca*

*SVP faites parvenir vos annonces de réunion à
David Greenberg,
davidgreenberg@alumni.uwaterloo.ca*

POSITIONS AVAILABLE

Tenured Professor, Marine Ecosystems and Global Change

Earth and Ocean Sciences and Department of Biology, University of Victoria

The School of Earth and Ocean Sciences (SEOS) and Department of Biology at the University of Victoria (UVic) are seeking applications for the endowed BC Leadership Chair in Marine Ecosystems and Global Change. Applicants should be top-tier, established researchers in the area of marine systems



and marine ecology in relation to the climate system whose accomplishments have made a major societal impact and who are acknowledged as world leaders in their fields. Applicants will propose an original, innovative research program of the highest quality that will advance the frontiers of research in the field on a global scale and benefit Canadians and others around the world. Applicants must also offer evidence of high-quality teaching, supervision, and mentorship, supporting diverse teams and establishing an equitable and inclusive research environment.

[Details](#)

Review of applications began May 20, 2024 and continue until the position is filled.

Doctorat en océanographie Océanographie / Hydrogéologie / Chimie

UQAR-ISMER, Rimouski, QC

L'Institut des sciences de la mer ([ISMER](#)) est toujours à la recherche d'étudiants pour poursuivre des études de maîtrise et de doctorat, mais aussi pour travailler sur divers projets de recherche l'été ou au cours de l'année.

Titre du projet : Hydrogéochimie côtière : impact des changements climatiques sur les eaux souterraines côtières.

Ce projet de recherche s'intéressera à la connectivité hydrologique et géochimique entre l'eau souterraine et l'océan avec un intérêt particulier pour l'utilisation de radio-traceurs tels que les isotopes du radon et du radium comme traceurs des échanges. Le projet bénéficiera d'une base de données acquise les dernières années le long des côtes du Québec maritime et de l'Arctique canadien. La personne aura aussi l'opportunité de participer à plusieurs campagnes de terrain au Québec et dans l'Arctique. Elle sera intégrée dans une équipe multidisciplinaire qui l'accompagnera tout le long de son cheminement.



Profil recherché :

- Titulaire d'une maîtrise en océanographie, géosciences, ou l'équivalent
- Intérêts et aptitudes pour le travail en laboratoire, en chimie marine ou géochimie
- Intérêts et aptitudes à travailler sur le terrain et en équipe
- Intérêts et aptitude pour travailler sur des bases de données

[Détails](#)

Début du projet : 2024 - 2025

PhD position “Arctic phytoplankton”

GEOMAR Helmholtz Centre for Ocean Research, Kiel Germany

The GEOMAR research unit Biological Oceanography of the research division 2, Marine Biogeochemistry, is offering a PhD position research unit Biological Oceanography of the research division 2, Marine Biogeochemistry, is offering a PhD position starting on September 1st, 2024, subject to project approval. The position offers the possibility to attain a doctoral degree in natural sciences.

As part of a collaborative project, we are looking for a PhD student to carry out experimental studies on Arctic phytoplankton and their parasites (especially mycoplankton) and their environmental tolerances in order to assess possible future impacts of climate-induced changes on marine communities. In particular, key biochemical indicators will be analysed to identify functional changes in primary producers in relation to climate change and the impact of parasitic organisms.



Qualification

Must have:

- M.Sc. in biological oceanography, limnology, environmental sciences or a comparable field.
- The willingness and ability to participate in sea expeditions lasting several weeks, e.g. in the Arctic
- Very good knowledge of plankton

Advantageous:

- Previous experience in experimental work with phytoplankton and phytoplankton cultures
- Knowledge in the field of mycoplankton

[Details](#)

Postdoc, Ocean, Atmosphere, and Climate Dynamics

Yale University, New Haven, CT USA

A postdoctoral position in Ocean, Atmosphere, and Climate Dynamics is available at Yale University to join Prof. Alexey Fedorov's group in the Department of Earth and Planetary Sciences (<http://people.earth.yale.edu/profile/alexey-fedorov/about>). General fields of research include ocean and atmosphere circulation, ocean-atmosphere interactions, the ocean's role in climate, climate variability and change. Particular focus will be on (1) ENSO and tropical climate, (2) climate links between different ocean basins, (3) stability, variability, and climate impacts of the Atlantic meridional overturning circulation (AMOC). The work will involve climate modeling, analyses of observational and GCM data, and analytical approaches. A PhD in physical oceanography, atmospheric sciences or related disciplines is required. Previous experience with climate GCMs is a big plus. Funding is currently available up to three years. Successful candidates can begin their program at Yale in the Fall of 2024; later or earlier starting dates are also possible. Review of applications will start on May 1, 2024, and will continue until the position is filled. Applicants should email their CV, a brief statement of research interests, a representative publication, and the contacts of three referees to Prof. Fedorov (alexey.fedorov@yale.edu; subject: postdoctoral search). Shortlisted candidates will be contacted.

Yale

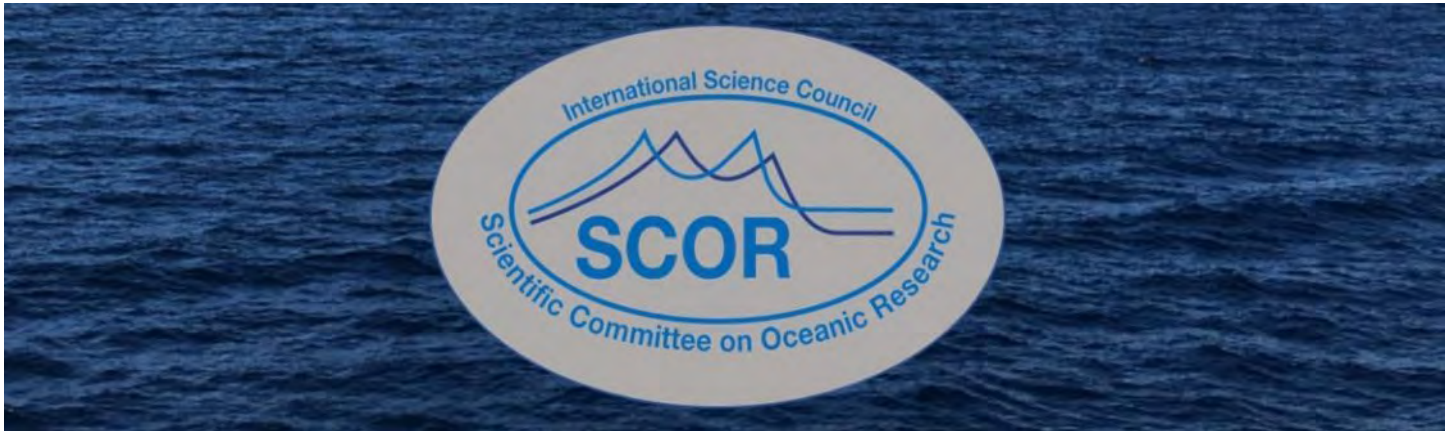
[Details](#)

Looking for work? Try the CMOS site ([click](#)).

Vous recherchez un emploi? Visitez le site SCMO ([click](#)).

GENERAL

News from SCOR International



The 2024 **call for applications for an Early-Career Scientist (ECS) to join the SCOR Executive Committee** is now open.

Position Description: The early-career scientist will have the same responsibilities as other SCOR Executive Committee members (see <https://scor-int.org/scor/about/officers/job-descriptions/>) with a term of appointment of two years to start in October 2024 at the SCOR annual meeting.

Requirements: Applicants should be no more than 10 years from PhD not counting time for family leaves, and should be affiliated to an ocean science organization, institution, or government agency. Applicants should have good communication skills in English, both speaking and writing. Candidates from developing countries are encouraged to apply; candidates do not need to be from SCOR member countries.

More information about the position and application instructions can be found [here](#).

Deadline for submission of applications: 28 June 2024.

Please email the completed application form and requested documents to the SCOR Secretariat (secretariat@scor-int.org). See [SCOR Website](#)

Registration is open for the 2024 SCOR Annual Meeting!

Dates: 16-18 October 2024 Meeting; 15 October 2024 Pre-Meeting Symposium

Location: Shangri-La Hotel Qingdao, China with option for virtual participation

Events

- **15 October 2024.** Symposium in recognition of the 40th anniversary of the China-Beijing SCOR National Committee
- **16 October 2024.** SCOR Annual Meeting Day 1: Opening, discussion of new WG proposals
- **17 October 2024.** SCOR Annual Meeting Day 2: Reports/updates from current SCOR Working Groups and research projects
- **18 October 2024.** SCOR Annual Meeting Day 3: Reports/updates partner organizations, closing of meeting.

The [website for the meeting](#) contains a [link for registering](#) and [logistical information](#), and will continue to be updated with reports of activities from the SCOR Working Groups and Projects.

The purpose of the SCOR Annual Meetings is to make it possible for national SCOR committees and partner organizations to learn of SCOR



accomplishments in the past year, to oversee the work of SCOR, and to approve new working groups and the SCOR budget for the coming year. SCOR meetings also provide an opportunity for international marine science projects and organizations to provide updates about their current work and plans for the future.

SCOR annual meetings are open to any participant and there is no registration fee. **Participants interested in attending in person are asked to register by 1 September** to assist with logistical planning.

Looking forward to your participation!

Building Capacity in Physical Chemistry Methods, Measurements and Modelling for Chemical Oceanography

Dear SCOR Community,

Please find at the following link a document providing information about an initiative to build capacity in the boundary area between physical chemistry and marine chemistry: [LINK](#).

This developing initiative is closely related to past SCOR WG 145 Modelling Chemical Speciation in Seawater to Meet 21st Century Needs (MARCHEMSPEC) and current SCOR project the Joint Committee on Seawater's (SCOR/IAPWS/IAPSO) taskgroup on chemical speciation.

To express your interest in a potential workshop and provide feedback on ideas summarised in the document, you can either answer the following survey (<https://forms.gle/ztqhatTZXLU8tW8p6>) or email: **Heather Benway** (Ocean Carbon & Biogeochemistry Project Office, Woods Hole Oceanographic Inst., hbenway@whoi.edu) or **Simon Clegg** (Joint Committee on the Properties of Seawater, Task Group on Chemical Speciation, Univ. East Anglia, s.clegg@uea.ac.uk).



Call for Papers! Contribute to the SOOS Symposium 2023 Special Issue!

The special issue with the title "*Understanding the Trajectory and Implication of a Changing Southern Ocean: The Need for an Integrated Observing System*" will be published as a feature collection in 'Elementa - Science of the Anthropocene'.

Submissions welcome until **31 August 2024**.

More information [here](#).



2024 Ocean Decade Conference Barcelona Statement

The 2024 Ocean Decade Conference, held in Barcelona from April 10 to 12 and co-organized by UNESCO's Intergovernmental Oceanographic Commission (IOC/UNESCO), rallied over 1,500 participants from 124 countries and over 3,000 online viewers, and was the culmination of Ocean Decade Week with 120 Satellite Events (April 8-12). The main outcome of this event was the Barcelona Statement which identifies priority areas for action for the Ocean Decade in the coming years. [Click here to read the full Barcelona Statement.](#) and [Read more about the statement.](#)



IGAC seeking members for Scientific Steering Committee

The International Global Atmospheric Chemistry (IGAC) project is currently seeking new members for the 2025 Scientific Steering Committee (SSC) from the international community. Serving on the IGAC SSC is ideal for well-established mid to senior career scientists. IGAC strives to have a gender and specialization balance as well as a geographic balance in its SSC members. For 2025, IGAC is primarily seeking new members from North and Central America, Oceania, and the



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Middle East. We are also interested in new members with broader sustainability backgrounds and modeling or satellite research. If you are not from those regions, but are interested in being more involved with IGAC's leadership in the future, please first write to info@igacproject.org about when we expect a need for new members from your region and other ways to contribute to IGAC.

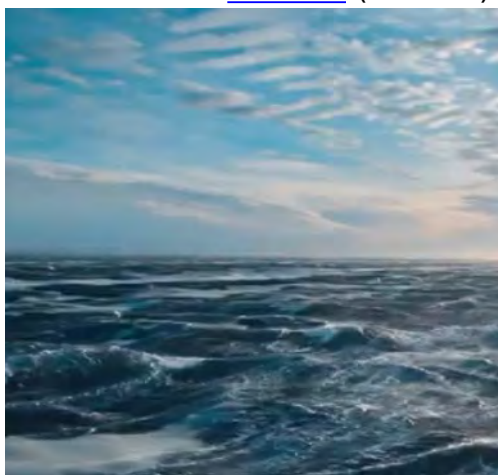
Nominations will be accepted until 30 June 2024. For information on serving on the IGAC SSC, please see [The Expectations and Role of IGAC SSC Members](#).

IGAC accepts both nominations and self-nominations. Please see below [this link](#) for requirements for each type of nomination.

Unveiling Horizons:

Inspiring Futures in Weather, Water, Ice and Climate Careers - 2024

CMOS recruitment video on [YouTube](#) (4.4 min)



Canadian Ocean Science Newsletter Le Bulletin Canadien des Sciences de l'Océan

Previous [newsletters](#) may be found on the [CNC-SCOR](#) web site. The CNC-SCOR website is hosted by [CMOS](#).

Newsletter #137 will be distributed in **July 2024**.

Please send contributions to David Greenberg
davidgreenberg@alumni.uwaterloo.ca

Subscribing and Unsubscribing

If you wish to subscribe to this newsletter or cancel your subscription, please visit the website:

<http://www.mailman.srv.ualberta.ca/mailman/listinfo/cnc-scor>

Les [bulletins](#) antérieurs se retrouvent sur le site web du [CNC-SCOR](#). Le site du CNC-SCOR est hébergé par le [SCMO](#).

Le Bulletin #137 sera distribué en **juillet 2024**.

Veuillez faire parvenir vos contributions à David Greenberg, davidgreenberg@alumni.uwaterloo.ca

Abonnement et désabonnement

Si vous souhaitez vous abonner à cette newsletter ou annuler votre inscription, veuillez visiter le site web:

<http://www.mailman.srv.ualberta.ca/mailman/listinfo/cnc-scor>

CNC-SCOR

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Le Comité national canadien du Comité scientifique de la recherche océanographique (SCOR) favorise et facilite la coopération internationale. Il reflète la nature multidisciplinaire de la science océanique et de la technologie marine.

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The Canadian National Committee of the Scientific Committee for Oceanic Research (CNC-SCOR) fosters and facilitates international cooperation. It is a non-governmental body that reflects the multi-disciplinary nature of ocean science and marine technology.



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