Scientific Committee on Oceanic Research

CANADIAN OCEAN SCIENCE NEWSLETTER LE BULLETIN CANADIEN DES SCIENCES DE L'OCÉAN

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OCEAN SCIENCE NEWS

Rare black iceberg spotted off Labrador coast

<u>Article</u> from <u>CBC News</u> Writen by <u>John Gaudi</u>. John reports from Happy Valley-Goose Bay for <u>CBC's Labrador Morning</u>.



This black iceberg was spotted more than 100 kilometres off the coast of Labrador in mid-May. Fisher Hallur Antoniussen took a photo of it to show crewmates, but it quickly took off after being posted on social media. (Submitted by Hallur Antoniussen)

A rare black iceberg spotted off the coast of Labrador is making a splash on social media after a fish harvester living in Carbonear, N.L., took a photo of it while fishing for shrimp last month.

Originally from the Faroe Islands, Hallur Antoniussen was working with a crew on board the Saputi factory freezer trawler off the coast of Labrador in mid-May. He'd never seen an iceberg like this one before. "I have seen icebergs that are rolled, what they say have rolled in the beach with some rocks in it. This one here is completely different. It's not only that he is all black. He is almost ... in a diamond shape," Antoniussen said in an interview with CBC Radio's Labrador Morning.

He spotted the berg after going up the ship's crane when they were more than 100 kilometres offshore in the Hopedale channel, located between Nain and Hopedale. A crew member had counted 47 icebergs in the area just the day before.

Antoniussen doesn't think it's a berg that tipped over — or rolled on the beach — picking up dirt and rocks after getting grounded. He's seen a lot of icebergs over his 50 years of fishing off of Greenland, and more recently off the Labrador coast since 1989.

The 64-year-old said it was hard to estimate the size of the iceberg at sea but figured it was at



Memorial University professor Lev Tarasov says ice from all over Greenland is converging toward its coastline, and then breaks off to form icebergs after reaching the water. Pictured here is the Kangerlussuaq Fjord outlet in Greenland. (Submitted by Lev Tarasov)

least three times the size of a regular bungalow.

He took a picture from roughly six kilometres away.

"It's something you don't see very often, and a camera is not something I run around [with] when I'm working. So, I just ran to my room and took my phone and snapped this picture," he said.

Antoniussen said the bera looked like a rock with lots of really dark greys and black veins in it, and guickly ruled out that a shadow was being cast on it. He took the photo to show other crew members on the fishing boat. Then Antoniussen posted it on Facebook, and it soon took off, garnering hundreds of comments after being shared

around.

Commenters have mused about everything from aliens to precious metals, and even dinosaurs being hidden in the ice. "It's an Oil Berg," said one poster. "Looks like a giant [woolly] mammoth!" exclaimed another. Antoniessen is clear: this is a real photo. Other people wondered if the iceberg has volcanic ash in it, a result of some ancient eruption.

Lev Tarasov, a Memorial University physicist and glacial earth systems modeller, doesn't rule that last theory out completely. Tarasov says there are volcanoes beneath the ice caps of Iceland, and while he's not exactly sure about volcanoes in Greenland, he added that scientists have measured hotspots in the landmass's central region.

Like Antoniussen, he hasn't seen an iceberg quite like this one before. Tarasov observed smaller versions of the black iceberg during his fieldwork on the Kangerlussuaq Fjord in Greenland last summer — just not as impressive, he said.

He guesses the ice in the berg is at least 1,000 years old, but could also be exponentially more ancient — even formed as many as 100,000 years ago.

Tarasov said ice from all over Greenland is slowly converging toward its coastline, and when it gets there, it breaks off to form icebergs. Those icebergs can take one to three years before reaching the Newfoundland and Labrador coastline.

Tarasov says it's a reminder just how dynamic ice can be.

Ice streams, also known as outlet glaciers, move much faster than other parts of the ice sheet; they carry ice from the interior, traveling through deep valleys or channels out to the coast. They pick up rocks and dirt along the way.

"There's parts of the ice that are actually flowing up to 20 kilometres per year, which would

mean that ... the ice is moving maybe a few metres every hour," Tarasov said. The bottom of the ice grinds against the earth's crust, he explained. There's a whole lot of churning, turning all that rock and sediment into a powder that then spreads up through columns of ice. It would take a long time for that ground-up rock to spread so uniformly throughout the ice, Tarasov said.

Tarasov theorizes that the black berg was probably part of a much larger chunk of ice before it broke off into the water. "Over time, as it travels around



"Over time, as it travels around Tarasov is shown here conducting fieldwork in Greenland last summer. The Baffin Bay and down the coast professor says the black iceberg might contain ice that's more than 100,000 of Labrador, it's melting away. years old. (Submitted by Lev Tarasov)

So I think a lot of that ice is melted away. Maybe the part that's clean is underneath, right? Again, 90 per cent of the ice is underneath the water. So we're only seeing the tip of the iceberg on top," he said.

Tarasov thinks the iceberg rolled over at some point, and is now showing its underbelly.

He also offers another possible explanation for the iceberg's intriguing colour. There is some evidence showing that an asteroid struck the northwest corner of Greenland at some point in the distant past, he said. The iceberg could have some dust from that meteorite strike if it came from the area.

No matter what, the ice likely isn't new: it's quite possible the dirt on the iceberg may not have seen the "light of day for hundreds of thousands of years," Tarasov said.



Tarasov conducted fieldwork on the Kangerlussuaq Fjord in Greenland last summer, here showing the magnitude of the landscape and ice on a human scale. Note the size of human subjects in the middle of the photo. (Submitted by Lev Tarasov)

Full Article at CBC News

Le climat et la Lune

Mathieu Perreault, La Presse

Chaque semaine, <u>Mathieu Perreault</u> répond aux questions scientifiques de lecteurs.

" Est-ce que l'augmentation du niveau de la mer va influencer les marées et changer l'orbite de la Lune ?"

- Hugo Recine

L'orbite de la Lune sera très légèrement affectée par l'impact des changements climatiques sur les océans. Mais il n'est pas clair, selon un spécialiste canadien de la question, si les marées vont être plus ou moins fortes avec la hausse du niveau des océans créée par la fonte des glaciers arctiques et antarctiques et par l'expansion de l'eau de mer qui se réchauffe.



Les formations rocheuses du cap Hopewell, au fond de la baie de Fundy, à marée basse. Photo Andrew Vaughan, ARCHIVES LA PRESSE CANADIENNE

« Le niveau de la mer va augmenter, mais la différence entre la marée basse et la marée haute ne sera pas nécessairement plus grande partout sur la planète », explique David Greenberg, océanographe à l'Institut d'océanographie de Bedford, en Nouvelle-Écosse. Il a notamment étudié les marées futures dans la baie de Fundy, qui détient le record mondial du contraste entre les marées.

« On ne sait pas encore si la somme des marées mondiales aura une amplitude plus forte ou plus faible à l'avenir. » En d'autres mots, à certains endroits l'amplitude de la marée sera plus forte, à d'autres, plus faible, et on ne sait pas si les endroits avec une amplitude plus forte seront plus nombreux.

Bye bye, la Lune

La Lune s'éloigne de la Terre de 3,8 centimètres par année. Si les marées sont plus fortes dans l'avenir, la Lune va s'éloigner plus lentement. Si elles ont une amplitude plus faible, elle va s'éloigner plus rapidement. La modification de l'orbite lunaire sera probablement de quelques points de pourcentage, donc cela ajoutera ou retranchera un ou deux millimètres par année au mouvement d'éloignement de la Lune, selon M. Greenberg.

COSN July 2025

La guestion de l'impact des changements climatiques sur les mouvements des marées ne dépendra pas seulement de la hausse du niveau de la mer, mais aussi de la « stratification » des océans et de la « subsidence tectonique ». La stratification des océans est l'ampleur des échanges d'eau entre les différentes profondeurs ; la subsidence tectonique est le mouvement vers le haut ou vers le bas des continents.

Un réchauffement à la surface de l'eau augmente la stratification des océans, et réduit donc les échanges entre les différentes profondeurs. Cette stratification amplifie l'énergie des « vagues sous-marines » et diminue celle des vagues en surface, donc l'énergie des marées. Les modèles océanographiques prédisent donc qu'une stratification plus importante due au réchauffement de la planète va diminuer l'amplitude des marées.

La hausse du niveau de la mer va augmenter le seuil maximal des marées, mais pas nécessairement leur amplitude.

C'est que cette amplitude dépend aussi de la topographie des fonds marins côtiers, dit David Greenberg. Si la côte est plus accidentée, elle ralentit le mouvement de l'eau, et donc des marées.

Pour compliquer le tout, les continents et les îles ont parfois un mouvement vers le haut, et parfois vers le bas. La direction de ce mouvement dépend notamment de la présence récente de glaciers, dont le poids renfonçait les terres. Leur disparition fait « rebondir » les terres autrefois recouvertes de alaciers.

Le Canada, par exemple, était recouvert par les glaces il y a 20 000 ans, et a encore généralement un mouvement vers le haut qui contrecarre en partie la hausse du niveau de la mer et change la topographie côtière. Dans d'autres cas, des terres ont un mouvement vers le bas si leurs nappes aquifères sont surexploitées.

Halifax et Boston

Halifax, par exemple, va probablement avoir des marées d'une amplitude moindre vers 2100, alors que Boston va avoir des marées d'une amplitude plus forte, selon M. Greenberg. Comme le reste du

golfe du Maine, la baie de Fundy verra aussi un Halls Harbour, Nouvelle-Écosse contraste plus marqué entre les marées basse et Ces photos ajoutées par BCSO. haute.

Ce domaine d'étude est très pointu et les aléas de la politique américaine compliquent les entrevues dans ce secteur. Deux chercheurs des États-Unis, sommités du domaine, ont refusé une entrevue avec La Presse pour éviter d'aborder les changements climatiques, de crainte de subir des représailles de l'administration Trump en ce qui concerne leurs demandes de subventions.

Article original dans La Presse

Canadian Deoxygenation Community Newsletter - Summer 2025

*** La version française suit

Opportunities

The Transforming Climate Action program is looking for an **Ocean Data Manager**. <u>https://dal.peopleadmin.ca/postings/19119</u>

Research highlights/publications

Here are some recent papers involving Canadian colleagues:

- Ruhl et al. (2025), Decadal change in deep-ocean dissolved oxygen in the North Atlantic Ocean and North Pacific Ocean, Deep See Res part I, https://doi.org/10.1016/j.dsr.2025.104534
- Ferrer et al. (2025), Why aquatic deoxygenation belongs in the planetary boundary framework, *PLOS Climate*, <u>https://doi.org/10.1371/journal.pclm.0000619</u>

Geoengineering solutions are getting more and more attention, both as a solution to coastal deoxygenation and for the impacts of marine carbon dioxide removal technologies on ocean oxygenation levels. Here are some interesting reads and watches on this topic:

 Watch Carolina Slomp's presentation at the last GO2NE webinar. Could Bubbling Oxygen Revitalize Dying Coastal Seas? The recording will soon be available on their youtube channel: <u>https://www.youtube.com/playlist?</u>

list=PLWuYED1WVJIMFSxMa7Y0rkKPZ_bZPDZuA

- Read the opinion piece by C. Slomp & A. Oschlies. Could Bubbling Oxygen Revitalize Dying Coastal Seas?, EOS <u>https://eos.org/features/could-bubbling-oxygen-revitalize-dyingcoastal-seas</u>
- Read this paper by A. Oschlies: Oschlies et al. (2025), Potential impacts of marine carbon dioxide removal on ocean oxygen, *Environmental Research Letters*, doi: 10.1088/1748-9326/ade0d
- -----

Call for updates from the Canadian deoxygenation community:

 Are you organizing a workshop, chairing a session, or giving a seminar on deoxygenation in the next months?



- Are you looking for a postdoc or graduate student to conduct research related to deoxygenation?
- Did you recently published a paper focused on deoxygenation?

Let us know, so we can share your news with the Canadian deoxygenation community! If you would like to be removed or added to this mailing list, please contact mathilde_jutras@uqar.ca.

Infolettre de la communauté canadienne sur la désoxygénation - Été 2025

Opportunités

Le programme Transformer l'action pour le climat recrute un *gestionnaire de données océanographiques*. <u>https://dal.peopleadmin.ca/postings/19119</u>

Publications récentes

Voici quelques publications récentes impliquant des collègues canadiens:

- Ruhl et al. (2025), Decadal change in deep-ocean dissolved oxygen in the North Atlantic Ocean and North Pacific Ocean, *Deep See Res part I*,
- <u>https://doi.org/10.1016/j.dsr.2025.104534</u>
- Ferrer et al. (2025), Why aquatic deoxygenation belongs in the planetary boundary framework, *PLOS Climate*, <u>https://doi.org/10.1371/journal.pclm.0000619</u>

La géoingénierie reçoit de plus en plus d'attention, à la fois comme une solution à la désoxygénation côtière mais aussi en lien avec les impacts potentiels des technologies de captage et stockage de carbone marin sur les taux d'oxygène océanique. Voici quelques lectures et conférences intéressantes à ce sujet:

- Regardez la présentation de Carolina Slomp au dernier webinaire GO2NE. Could Bubbling Oxygen Revitalize Dying Coastal Seas? L'enregistrement sera bientôt disponible sur leur canal youtube.
- https://www.youtube.com/playlist?list=PLWuYED1WVJIMFSxMa7Y0rkKPZ_bZPDZuA
- Lisez la lettre d'opinion par C. Slomp et A. Oschlies. Could Bubbling Oxygen Revitalize Dying Coastal Seas?, EOS <u>https://eos.org/features/could-bubbling-oxygen-revitalize-dying-coastal-seas</u>
- Lisez cet article par A. Oschlies: Oschlies et al. (2025), Potential impacts of marine carbon dioxide removal on ocean oxygen, *Environmental Research Letters*, doi: 10.1088/1748-9326/ade0d4

Appel à nouvelles de la communauté:

 Organisez-vous un atelier, une session à une conférence, ou donnez-vous une présentation sur la désoxygénation dans les prochains mois?



- Recrutez-vous des étudiants?
- Avez-vous publié récemment un article sur la désoxygénation?

Informez-nous en! Nous pourrons partager la nouvelle avec l'ensemble de la communauté.

<u>Si vous souhaitez être retiré ou ajouté à cette liste ou pour toute question, contactez</u> <u>mathilde_jutras@uqar.ca</u>.

This section of your newsletter provides an opportunity to highlight your research programs to the Ocean Science Community.	Mettez en valeur vos programmes de recherche en publiant un article dans cette première section de votre bulletin.
Your are invited to send contributions to	Faites parvenir vos contributions à
David Greenberg,	David Greenberg,
<u>davidgreenberg@alumni.uwaterloo.ca</u>	<u>davidgreenberg@alumni.uwaterloo.ca</u>

COSN July 2025

MEETINGS

ArcticNet ASM2025 Conference

December 15th-18th, 2025, Calgary, Alberta

<u>ArcticNet</u> is pleased to announce that the Annual Scientific Meeting 2025 will take place at the Calgary Telus Convention Centre (CTCC) in Calgary, Alberta, from December 15th-18th, 2025!

The call for sessions is now closed. Please note that the Call for Abstracts will launch the first week of July and remain open until mid-September. The announcement will be sent via our Newsletter (you can subscribe via the banner below) and on our social media channels.

The ASM2025 conference website will be running soon but in the interim, here are some important details to help plan your attendance:

REGISTRATION & ACCOMMODATIONS Early Bird Registration to Launch Early August 2025					ASM	
REGISTRATION RATES (GST excluded)				REGULAR UNTIL DECEMBER 14TH, 2025		ON SITE RATE AS OF DECEMBER 15TH, 2025
STUDENT, POST DOC		\$435.00			0.00	\$1,200.00
INDIGENOUS AND NORTHERNER	IER \$595.00			\$700.00		\$1,200.00
GENERAL	L \$855.00		\$1,000.00		\$1,200.00	
ACCOMODATIONS (GST & Appl. Taxes Excluded)	NIGHTLY RATE	CUT OFF DATE	ASM CODE	TEL.	EMAIL	LINK TO ASM BLOCK
FAIRMONT PALLISER	\$229.00	Nov 14, 2025	ARCTI1225_002	1 800 441-1414	N/A	https://book.passkey.com/event/50917458/owner/561 anding
HYATT REGENCY CALGARY	\$249.00	Nov 21, 2025	G-ASM1	1 403 7171-234	salescalrc@hyatt.com	https://www.hyatt.com/en-US/group-booking/CALRC/ ASM1
ALGARY MARRIOTT DOWNTOWN	\$205.00	Nov 16, 2025	To Come	To Come	To Come	To Come

Website General Program

Abstract deadline mid September (?)

2025 International Ocean Colour Science Meeting

1-4 December 2025, Darmstadt, Germany

The sixth International Ocean Colour Science (IOCS) meeting will be convened by the International Ocean Colour Coordinating Group (IOCCG) hosted by The European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), and the European Space Administration (ESA), with the support of the Copernicus Programme from the European Commission from 1-4

December 2025 at the Darmstadtium in Darmstadt, Germany. Associated short courses and side meetings will be held on 5 December 2025, at EUMETSAT Headquarters in Darmstadt.



International Ocean Colour Science Meeting 2025

The IOCS meeting covers optical radiometry of all water types, and serves as a venue for open communication between the scientific community and the space agencies. The meeting is structured around consensus recommendations to the agencies that will help to inform future missions, and drive forward science and application. It also provides a venue for the community to liaise directly with representatives from the respective agencies.

<u>Website</u>

Deadlines: <u>Poster Abstracts</u> and <u>Travel Support</u> 15 August 2025

Ocean Sciences Meeting

February 22-27, Glasgow, Scotland

Ocean Sciences Meeting (OSM) is the flagship conference for the ocean sciences and the larger ocean-connected community.

A Global Gathering: In 2024, nearly 6,000 attendees from 60 countries came together to advance ocean science.

- Cutting-Edge Research: Discover the latest findings across diverse fields, from marine ecosystems to climate change impacts.
- Collaboration & Networking: Connect with peers, leading experts, and organizations dedicated to ocean sustainability.
- Industry & Innovation: Engage with 100+ scientific organizations and ocean-focused companies through exhibitions, partnerships, and sponsorships.
- Abstract deadline 03:59 UTC on 20 August 2025. Details

Aquaculture Europe 2025

September 22 - 25, 2025, Valencia, Spain



With its diversity of species and production technologies, its diversity of market propositions and with its reverence for the environment and the way in which this is changing, Aguaculture is established as an essential sector in global food supply. There is therefore no doubt that aquaculture is and needs to be for everyone.

The AE2025 parallel sessions will cover the full scope of European aquaculture scientific disciplines and

species and will comprise submitted oral and poster presentations. AE2025 will also feature an international trade exhibition, industry forum, student sessions and activities, satellite workshops and updates on EU research.

Deadline Eposter Abstracts August 15th Student Spotlight Awards Website

2025 Summit on Drone Geophysics

27-30 October 2025, Virtual

The 2025 SEG Summit on Drone Geophysics will feature the latest science and innovation on the integration of drones into geophysical studies through a fourday, online international conference.

In recent years, drones (or small uncrewed aircraft systems, sUAS) have transitioned from a novel concept to an essential tool in the geosciences. The workshop will give attendees an overview of state-of-the-art sUAS evolving technology for realworld geophysical studies, offering insights into developments, SOCIETY OF EXPLORATION

trends, and challenges impacting this rapidly growing field. The ---- GEOPHYSICISTS summit provides a valuable and interactive learning and networking opportunity for geophysics professionals at all stages of their careers, whether you are currently using drone-deployed geophysical sensors or are just beginning to explore how these technologies can aid your scientific mission.

Host start Date and time Monday, 27 October 2025, at 10:00 AM Eastern U.S. time Website Deadline Abstracts 10 August 2025 Registration 30 October 2025

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





european

society

aquaculture



POSITIONS AVAILABLE

Doctoral researcher, geochemist

Carl von Ossietzky Universität, Oldenburg, Germany

The PhD project within subproject P4 "Trace elements and metal isotopes: Transformation and fractionation" will focus on the linked iron and sulfur cycle using iron and sulfur isotopes to

identify and trace biogeochemical processes and their spatio-temporal changes in the subterranean estuary. The successful candidate will carry out field work on Spiekeroog Island and at our validation sites in Belgium and France, and analyze the collected porewater and sediments for iron isotopes. Investigations of light isotopes at all sites will be done in close collaboration with our scientific partner at the Institute for Paltic Sea Por

collaboration with our scientific partner at the Institute for Baltic Sea Research Warnemünde (IOW). The successful candidate will work closely together with a postdoc in subproject P4, who focuses on trace metal dynamics.

The working group Marine Isotope Geochemistry uses stable and radiogenic isotope systems (Si, Fe, Nd, Sr, Pb) to investigate biogeochemical processes, element cycles and inputs to the ocean, and to reconstruct changes in the marine environment during past intervals of climate change.

<u>Website</u>

Deadline 15.08.2025

Postdoc Machine learning for detection of unexploded ordnance

EOAS, UBC, Vancouver BC

Applications are invited for a two-year postdoctoral fellowship in applied and environmental geophysics. The main project will focus on the use of electromagnetic data for detecting and classifying unexploded ordnance (UXO). Specifically, this project will look at combining physics-based and machine learning approaches to develop an automated way to identify regions with a high density of metallic objects where traditional classification methods fail.



Requirements

- Motivated to use geophysical data for solving applied problems
- PhD in geophysics, physics, mathematics, computer science or related quantitative field
- Proficiency with programming. Python preferred
- Experience with numerical modelling
- Familiarity with inverse theory
- Experience with machine learning
- · Familiarity with electromagnetic methods desired
- · Capacity to lead projects with collaborators

Details

Review of applications has begun. **Deadline**: Friday, August 1, 2025 - 00:00



Projets de maîtrise et de doctorat

ISMER-UQAR, Rimouski, Québec

L'Institut des sciences de la mer de l'UQAR (<u>ISMER-UQAR</u>) est toujours à la recherche d'étudiantes et d'étudiants pour poursuivre des études de maîtrise et de doctorat, mais aussi pour travailler sur <u>divers projets de recherche</u>.

Projets de maîtrise en océanographie

Géologie marine

- <u>Érosion des berges du Saint-Laurent par les vagues de batillage</u> (Professeur: <u>Urs</u> <u>Neumeier</u>)
- <u>Dynamique de la population et recrutement du homard</u> (Professeurs : David Drolet (MPO) et <u>Fanny Noisette</u>)
- Évolution de l'habitat « herbier » sous les effets cumulés des changements climatiques et des perturbations locales (Professeure : Fanny Noisette)

Projets de doctorat en océanographie

Océanographie chimique

 <u>Pollution plastique, aquaculture et ténébrions : un projet intégré de remédiation</u> (Professeur : <u>Youssouf Djibril</u>)

Océanographie physique

• Acoustique marine sur plateformes autonomes (Professeur : Pierre Cauchy)

Océanographie géologique

 <u>Caractérisation de la matière organique et bilan des contaminants dans les sédiments</u> <u>côtiers de l'estuaire du Saint-Laurent (Est du Canada) dans un contexte de pressions</u> <u>croissantes</u> (Professeurs : <u>Jean-Carlos Montero-Serrano</u> et <u>Nicolas Chevalier</u> (ULCO))



Université du Québec à Rimouski Institut des sciences de la mer de Rimouski

Canada Excellence Research Chair in Arctic Climate Action and Sustainability

Associate Professor or Professor, University of Manitoba, Winnipeg, MB

The University of Manitoba (UM) invites applications to the Canada Excellence Research Chairs (CERC) <u>program</u> for a CERC in Arctic Climate Action and Sustainability, awarded at \$500,000 OR \$1,000,000 per year, for a total of \$4,000,000 OR \$8,000,000 over eight years.

Applicants must be world-leading researchers in at least one of the broad fields that is key to Arctic climate action and sustainability. These fields may include Arctic (including sub-Arctic) climatology, hydrology, ecosystem health and services, or other relevant areas of Earth or

environmental sciences. Applicants must also have a proven record of leadership excellence in interdisciplinary, transdisciplinary, and action-oriented research and will contribute to UM's ongoing efforts to address environmental injustice and governance challenges related to climate change mitigation and adaptation.

A CERC nomination will be submitted soon after a successful candidate has been selected. Chairs are awarded by the Tri-agency Institutional Programs Secretariat after a rigorous evaluation. An award decision is expected in January 2027. The appointment will be conditional on a successful CERC nomination.

<u>Details</u>

Review of applications will begin on September 8, 2025.

Individuals or Teams: Remote-Sensing Water Quality with Satellites

In December 2024, we <u>launched</u> an Innovation Challenge aimed at developing remote sensing technology to help us cost-effectively scale our programming to improve the welfare of many

millions of fishes. We received 33 models from 10 different parties; unfortunately, <u>no models met</u> our minimum requirements. Despite this disappointment, we remain excited about this technology and believe the Innovation Challenge is worth one more try.

As before, we are seeking interested parties to either:

- 1. Develop new models allowing us to remotely monitor key water quality parameters at aquaculture farms in India through analysis of satellite data, or
- 2. Share existing models that can be utilised for our purposes.

This Innovation Challenge is open to anyone. We encourage submissions from technology companies, academic institutions, non-profit organisations, individuals/groups, or any party that has relevant experience that can be applied to this challenge. Interested parties are invited to notify FWI that they have a model or models ready for validation **by August 20th, 2025**. The submission process does not require the submission of any code, merely a brief description of the model/s.

<u>Details</u>

<i>Vous recherchez un emploi? Visitez le site SCMO (clic).</i>







GENERAL

Ocean Acidification Community of Practice

The Ocean Acidification Community of Practice is an interdisciplinary group dedicated to sharing information and resources related to ocean acidification. We strive to provide a space for discussion and co-production of ocean acidification knowledge across Canada. Our members consist of individuals from government, aquaculture, fisheries, academia, and Indigenous community leadership, as well as students and members of the public. *Everyone is welcome.*

What do we do?

Our goals are to:

- Connect and coordinate across all sectors, disciplines, and regions to share expertise, data, and resources
- Identify pressing needs for ocean acidification research and knowledge
- Create a collaborative and supportive environment for groups affected by ocean acidification



RECENT UPDATES

NSERC Scholarships and Fellowships

The <u>Natural Sciences and Engineering Research Council of Canada</u> (<u>NSERC</u>) offers <u>scholarships</u> and <u>fellowships</u> for every stage of study, from undergraduate to postdoctoral.



The program guides for students and fellows and <u>award holder's guides</u> contain information on application procedures and guidelines for award holders. These guides supersede all previous versions. NSERC may, without notice, alter the programs or the terms and conditions of the awards at any time. Any major changes will be announced immediately on NSERC's website, and the effective date will be the date indicated at the bottom of the relevant web page.

Undergraduate programs include NSERC Indigenous Student Ambassadors awards,

The NSERC Indigenous Student Ambassadors (NISA), Undergraduate Student Research Awards and supplements for these awards.

<u>Postgraduate programs</u> and <u>postdoctoral programs</u> have targeted and general scholarships, international opportunities and scholarship supplements.

Celebrating World Ocean Day



On World Ocean Day, SCOR expresses its appreciation for everyone who is working to improve our knowledge and stewardship of the ocean.

Blog Post

SCOR: Supporting the societal need for coordinated international ocean science

As the global community gathered for UNOC 3, the Scientific Committee on Oceanic Research (SCOR) highlights the vital role of internationally coordinated ocean science in

supporting SDG 14. For over six decades, SCOR has fostered global collaboration to advance knowledge, build capacity and connect science to policy for sustainable ocean management. SCOR invites all nations and scientists to join in strengthening ocean science to meet today's urgent challenges...

Read the full post by SCOR Executive Director, Emily Twigg





SCOR activities were well represented at the <u>One Ocean</u> <u>Science Congress</u>, 3-6 June 2025 in Nice, France to provide the 2025 UN Ocean Conference (UNOC3) with comprehensive scientific insights on the ocean's health and future trajectory.

The message from the Congress was clear: the need for science-based action for the ocean is urgent. SCOR joined the community of scientists carrying this message into the UNOC3.

SCOR-related events at UNOC3: Review the updated list of SCOR-related events here.





Call for papers - The Elements Collection in Global Biogeochemical Cycles

Global Biogechemistry Cycles - The Elements Collection Submission Open: 15 January 2022

Submission Deadline: 30 December 2025



Special collection Organizers: Isaac Santos - Editor-in-Chief, Katsumi Matsumoto - Editor, Zanna Chase - Editor

<u>Global Biogeochemical Cycles</u> invites submissions for a new collection of authoritative papers focusing on individual or small groups of elements and/or compounds. All papers will be published with the similar title "The Global Biogeochemical Cycle of ...".

Submissions should fit GBC's aims and scope: broad, interdisciplinary, novel, and large-scale. The papers should not only provide a state-of-the-

art review the existing literature, but also a forward-looking perspective, set a research discuss agenda. and how alobal biogeochemical cycles have changed and will continue changing. When relevant, papers should include all of Earth's spheres, discuss relationships to potential anthropogenic activities and climate change, cover time scales ranging from the geologic past into the future, and explain interactions with other global biogeochemical cycles.

We encourage authors to pitch paper ideas to GBC's Editor-in-Chief via email (isaac.santos@gu.se). Authors should send a <2-page outline including the title, team of authors, sub-headings, a tentative list of illustrations, and references to 5 relevant papers on the topic. GBC editors will provide initial feedback prior to formal submission and peer review.

In line with <u>AGU's strategic plan</u>, we encourage collaborative submissions by a diverse group of authors specializing on different spheres, scales or biogeochemical aspects of the chosen element or compound.

AGU ADVIANCING EARTH AND SMACE SCIENCES

Global Biogeochemical Cycles[®]

July 2025 · Volume 39 · Issue 7



All papers will be published immediately after acceptance and become open access within 2 years of publication. GBC editors will explore options for collating and repurposing the articles in the collection, possibly in book format, to ensure that they become a living and durable resource for the community.

A selection of published papers from The Elements Collection is available here - <u>The Elements</u> <u>Collection: Global Biogeochemical Cycles</u>

Online Training Courses, Free, Self-Paced

The Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (<u>IOC-UNESCO</u>) working through OceanTeacher Global Academy (<u>OTGA</u>), <u>MSPglobal</u> and Ocean Decade (<u>OD</u>) have created free online courses to advance maritime/marind spatioal planning and the objectives of the OD.

UNESCO-IOC MSPglobal (Self-paced online course)

25 September 2024 - 31 December 2025

This course explores marine/maritime spatial planning (MSP), its relationship with other integrated ocean governance approaches, the process for developing a marine spatial plan and how to use a marine spatial plan. It explores the definition and elements of an effective MSP from a theoretical perspective and then looks to present how these theoretical approaches get delivered through the MSP process. The importance of marine spatial planning (MSP) will be

explored and there will be learning activities to support the understanding of MSP, how to develop a marine spatial plan, and how to use MSP for good decision making.

The importance of setting the scene for plan development, inclusive stakeholder engagement and gender considerations, transboundary aspects, and robust data evidence as the base of MSP will be explored. This will include case studies from around the world of different approaches to MSP development and use of marine spatial plans.



<u>Website</u>

IOC/OTGA/OD Codesign for the Ocean Decade (Self-paced online course)

27 May 2024 - 15 December 2025

This course is designed to equip participants with a fundamental understanding and practical skills in Co-design methodologies, particularly in the context of the United Nations' Ocean Decade initiative. It aims to extend the reach of Co-design training to a global audience, enhancing the capacity of various ocean communities to effectively contribute to collaborative ocean research and policy-making.

Key Content:

1). Introduction to Co-Design and the Ocean Decade: Understanding the basic concepts of codesign and its significance in the Ocean Decade's framework.

2). Principles and Elements of Co-Design: Exploring the key elements and steps involved in codesign, including stakeholder identification and engagement strategies.

3). Vision Setting and Partnership Building: Learning how to set joint visions and establish effective, equitable partnerships in Co-design projects.

4). Stakeholder Involvement: Techniques for identifying, mapping, and engaging stakeholders in a Co-design process.

5). Equal Partnership and Collaboration: Insights into ensuring equal partnership and collaboration in Co-design initiatives.

6). Sustainability and Impact: Strategies for sustaining the impact of co-design projects, including funding avenues and impact pathways.

<u>Website</u>

SCOR Survey for Early-Career Scientists

Dear Early-Career Scientists in Oceanic Research,

SCOR is conducting an online questionnaire/survey for early career scientists (ECS), defined as students and those less than 10 years since their last degree. This survey aims to reach a broader range of ECS within and beyond the current SCOR network, gauge your familiarity with SCOR, and explore how we can better serve the oceanic research needs of the ECS community, such as promoting international cooperation in the planning and execution of oceanic research. This survey builds upon a similar one conducted in 2020.

Your participation is crucial, as you will help us prioritize our role in supporting the next generation of ocean scientists amongst the broader landscape of ECS opportunities and networks, and help identify the most effective channels for reaching and engaging with ECS. Your input is invaluable to both SCOR and your fellow ECS. We estimate the survey will take approximately five minutes to complete. We greatly appreciate you taking the time to share your perspectives.

Please feel free to forward this invitation to other early career colleagues in ocean science.

We wish you all the best and look forward to growing in our abilities to support you in your scientific careers!

Take the Survey

In case you missed it! View a recent episode of the ECOP Programme: "Episode 21: Capacity development opportunities for ECOPs with POGO and SCOR" <u>here</u>.



SCOR Survey for Early-Career Scientists

Provide your input:

Improve SCOR's reach to early-career ocean scientists.

Define SCOR's role in encouraging early-career scientist career development.



Kai Deng SCOR Executive Committee Early Career Member Emily Twigg SCOR Executive Director For updates on SCOR activities, see our Latest News section

Follow us and spread the news on X, <u>Facebook</u>, <u>LinkedIn</u>, or (NEW!) <u>Bluesky</u>

Saroma Sea Ice School 2026



Saroma Sea Ice School 2026

28 Feb. – 9 Mar. 2026, Saroma-ko Lagoon, Hokkaido, JAPAN by BEPSII-Clce2Clouds-CATCH

TARGET:

International Sea Ice School 2026 is designed for early-career scientists (preferably Ph.D students, but master students and early post-docs are also eligible to apply) interested in exploring the complex interactions between sea ice, snow, clouds, and aerosols in polar regions, and aerosol-cloud interactions, ice-atmosphere linkages, and cutting-edge observational techniques.

SCIENTIFIC PROGRAM:

Frontal lectures, field and lab work on topics such as:

- · Sea ice and snow physics and biogeochemical processes
- · Sea ice biogeochemical modelling
- · Gas fluxes at the ocean-ice-atmosphere interfaces
- · Primary and secondary aerosols in the sea ice environment
- Atmospheric observation and modelling
- · Clouds formation in polar marine boundary layer
- Interactions with underlying water



Scan or click here



INPORTANT DATE

Middle of June 2025: Application open **30 September 2025: Application deadline** End of November 2025: Result notice

FOR ADDITIONAL INFORMATION

Please get in touch with one of school organizers: Daiki Nomura (daiki.nomura@fish.hokudai.ac.jp) Bruno Delille (bruno.delille@uliege.be) Odile Crabeck (ocrabeck@uliege.be) Letizia Tedesco (letizia.tedesco@environment.fi) Jessie Creamean (jessie.creamean@colostate.edu)



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

Previous <u>newsletters</u> may be found on the <u>CNC-SCOR</u> web site. The CNC-SCOR website is hosted by <u>CMOS</u> . Newsletter 144 will be distributed in September 2025 . Please send contributions to David Greenberg <u>davidgreenberg@alumni.uwaterloo.ca</u>	Les <u>bulletins</u> antérieurs se retrouvent sur le site web du <u>CNC-SCOR</u> . Le site du CNC-SCOR est hébergé par la <u>SCMO</u> . Le Bulletin 144 sera distribué en septembre 2025 . Veuillez faire parvenir vos contributions à David Greenberg, <u>davidgreenberg@alumni.uwaterloo.ca</u>
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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. Members Ex-Officio/ Membres d'office

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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 multidisciplinary nature of ocean science and marine technology.



WWW.CNCSCOR.CA