ICES International Council for the Exploration of the Sea
CIEM Conseil International pour l'Exploration de la Mer

SIIECS Strategic Initiative on Integration of Early Career Scientists

SIIECS Iceberg

exploring underneath the waves

From WGORE report, 2023

FEBRUARY 2026 EDITION

An Introduction to SIIECS and your way in

Interesting research findings of our ECS at ICES

INTRODUCING

SIIECS Newsletter

SIIECS members at the ASC, 2025

Dear ECS,

Welcome to your SIIECS Newsletter!

In this last edition of the year, we are excited to share with you the most recent updates covering various topics relevant ECS within the SIIECS community. In this issue, you'll find a wealth of valuable information, ranging from interesting research findings of colleagues to upcoming events and opportunities.

February 2026

SIIECS Newsletter can also be viewed on SIIECS webpage here

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Welcome to the February 2026 edition of SIIECS newsletter, in this edition you will find:

WHO ARE WE?

ICES International Council for the Exploration of the Sea

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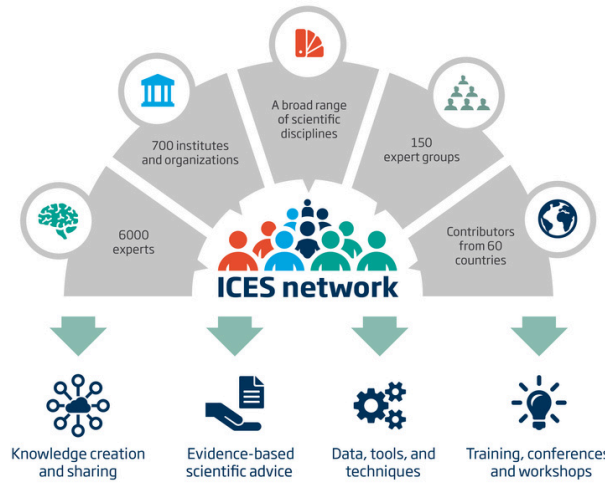


Welcome to the world of ICES—the International Council for the Exploration of the Sea! At the heart of global marine science collaboration, ICES brings together early career scientists and experts from diverse backgrounds under the Strategic Initiative on Integration of Early Career Scientists (SIIECS). As an intergovernmental organization, ICES focuses on advancing our scientific understanding of marine ecosystems. Its mission extends to providing essential advice on the sustainable use of our seas, ensuring that decisions affecting marine resources are grounded in robust scientific research. Through fostering interdisciplinary collaborations and promoting inclusivity, ICES stands as a beacon for scientists keen on navigating the depths of marine science and contributing to the shared goal of responsible ocean stewardship.

SIIECS Strategic Initiative on Integration of Early Career Scientists

SIIECS is for anyone who identifies as an early career scientist (ECS) and who wants to be involved in ICES activities. Join us!

SIIECS aims to make ICES more visible and accessible to early career scientists from various disciplines and backgrounds. The activities of SIIECS will improve the inclusion of ECS in ICES work and help ECS contribute to the overall goals of the organization. The initiative will also participate in ongoing efforts to enhance equity, diversity and inclusion in ICES.

THE BBNJ: WHAT YOU NEED TO KNOW.

In a first for this newsletter, this article will to summarise some relevant parts and give opinions on the recently published FAO guide on Fisheries and the BBNJ Agreement, if you find this interesting or want to know more, in particular on how it relates to fisheries management bodies such as ICES, please click here to read the full document.

On June 19th, 2023, at the UN headquarters in New York, the BBNJ Agreement (Biodiversity Beyond National Jurisdiction) was formally adopted. The agreement “aims to ensure conservation and sustainable use of marine resources” in areas outside of national jurisdiction. This fills a critical governance gap in ocean stewardship, as roughly two-thirds of the ocean lie beyond national jurisdiction, as an added bonus the agreement not only covers the high seas water column but also the seabed, a hotbed topic right now, with the ever-increasing likelihood of expansions to the fledgling deep sea mining industry.

The significance of the BBNJ should not be underestimated it is ‘the first cross-sectoral ocean treaty since the United Nations Convention on the Law of the Sea (UNCLOS)’. Whilst both these documents have their critics (some valid and some not), it is undeniable that UNCLOS has fundamentally shaped marine policy and conservation in its 43-year existence, thus its highly likely the BBNJ will do the same over the next half a century or so.

At its core the “BBNJ Agreement aims to ensure conservation and sustainable use of marine resources in Areas Beyond National Jurisdiction (ABNJ)”. For me at least that sounds like a simultaneously noble and very ambitious goal. To that end the BBNJ has four interconnected areas of focus that aim to “create a roadmap” towards achieving its key objectives:

1. The development of **Area-Based Management Tools (ABMTs)**, this will include Marine Protected Areas, as well as other spatial focused measures focusing on sustainable use of resources for example
2. **Requirement of Environmental Impact Assessment (EIAs) & Strategic Environmental Assessments (SEAs)** “for any activities causing significant adverse effects”.
3. **Capacity building** and creating a variety of frameworks to share data and technology.
4. Access to **Marine Genetic Resources (MGRs)** and equitable sharing of there benefits.

So now that we know what the BBNJ aims to do and how it will try to achieve that, what impact will that have on the fisheries scientists of tomorrow? As is already happening in fisheries scientists the BBNJ is likely to expedite the shift away from traditional stock assessments, necessitating a more interdisciplinary skill set focused on overall ecosystem health. This could include an understanding of cumulative impact analysis, habitat protection measures and improved genetic resource research within the field of fisheries. The report also highlighted that fisheries expertise were scarce in the BBNJ negotiations, Early career researchers in the fisheries space, may need to overcome barriers of entry into these policy spaces, learning the ropes of diplomacy and treaty-speak in order to rectify this in COP (the decision-making body for the BBNJ).

> *"The High Seas Treaty is a powerful testament to multilateralism – showing what the world can achieve when we come together for the common good of our ocean,"* Rebecca Hubbard

The treaty's timeline has been swift in recent years. Built on a 2004 UN resolution recognizing the need to protect biodiversity beyond national jurisdictions (*General Assembly Resolution 59/24*), formal talks began in 2018 and concluded with adoption on 19 June 2023. By late 2025 enough countries had ratified the agreement to trigger its entry into force on 17 January 2026. This rapid progress underscores the global urgency to address high seas biodiversity loss. For early career marine scientists, the BBNJ Agreement isn't a distant abstraction – it is coming into effect now, poised to reshape how we manage the ocean commons in the coming decades.

FAO. 2026. Fisheries and the BBNJ Agreement – A guide. The Agreement under the United Nations Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction (BBNJ Agreement). Rome.

INTERDIS 2025

Photograph by Debbi Pedreschi

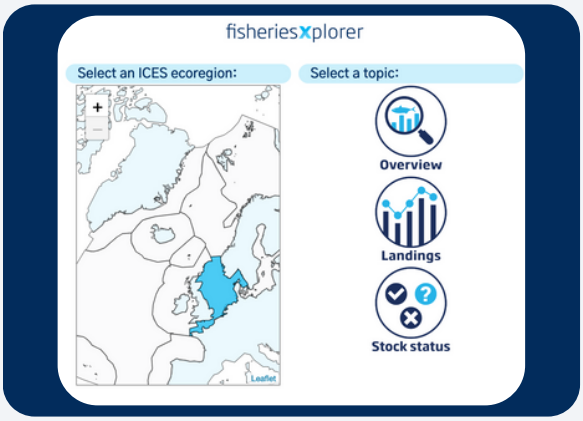
In the last newsletter we covered the successes of 2025 InterDis Summer school. In this latest edition we our proud to share there video showing the highlights of this events.

CLICK HERE FOR MORE OF THE LATEST FROM ICES

Navigate in fisheriesXplorer App

ICES has launched an open access app to visualised and interact with fisheries data.

Access the App: **Here**



Find the access to the full article here

READ MORE

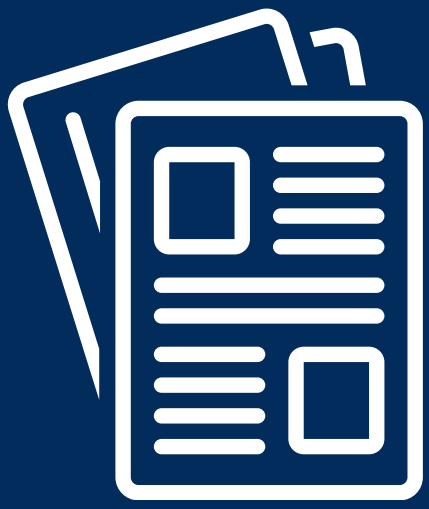
Find the access to the full article here

READ MORE

Reviewing advice and setting priorities for the year ahead

Bringing together advice requesters, stakeholders, and observers to review recent developments in ICES advice and to discuss priorities for the coming year.

HOT OFF THE PRESS



This month, we'll share four publications associated with ECR's in the marine sector

Looking for more publications?

Find them on ICES website here

Latest publications:

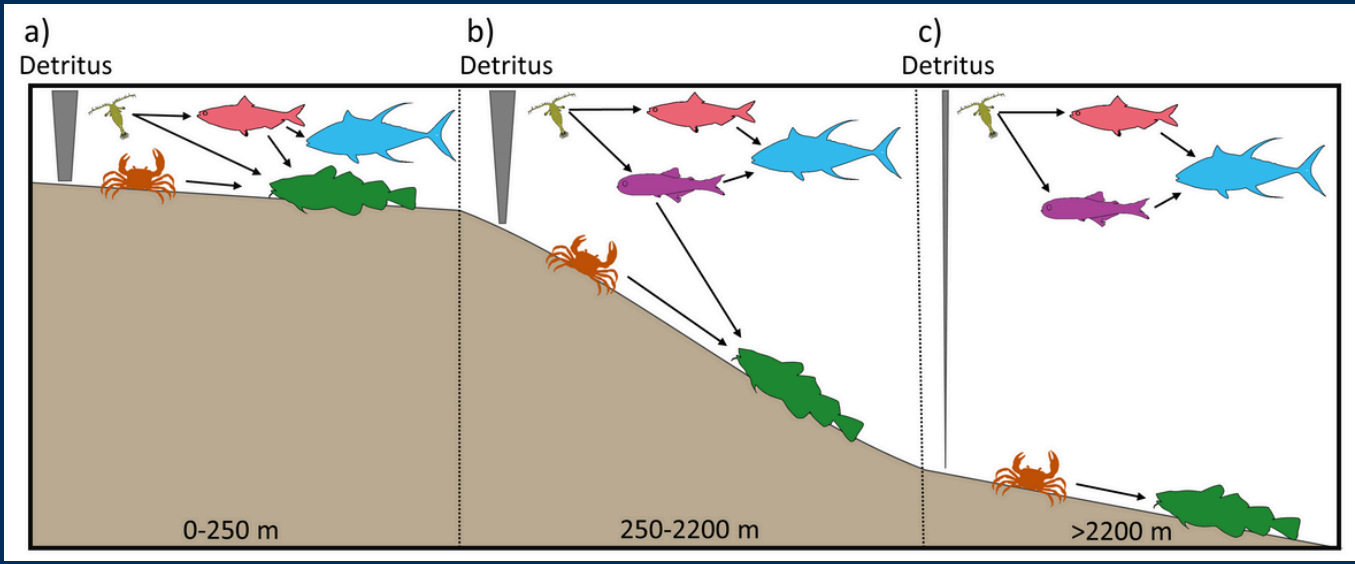
Active Transport of Carbon to Demersal Fish Communities in Shelf-Slope-Abyssal Systems of the North Atlantic Ocean
Ottmann et al. *Global Biogeochemical Cycles*, January 2026.

Mapping Mediterranean bentho-demersal communities to better inform marine conservation
López et al. *Conservation Science and Practice*, January 2026.

Spatiotemporal connections in the Ross Sea: A synthesis from the New Zealand Antarctic Science Platform Ocean Mechanics project
Fernandez et al. *Elementa: Science of the Anthropocene*, December 2025.

Seasonal and spatial variations of physicochemical parameters and heavy metals in surface water of interconnected Nigeria lagoons experiencing distinct anthropogenic disturbances
Jolaosho et al. Scientific report, November 2025.

Active Transport of Carbon to Demersal Fish Communities in Shelf-Slope-Abyssal Systems of the North Atlantic Ocean

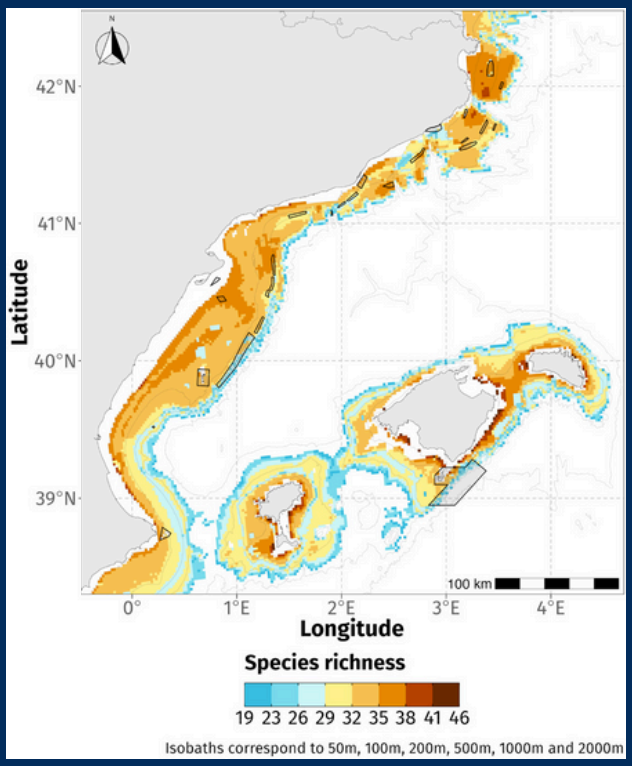


Schematic of (a) shelf, (b) slope, and (c) abyssal systems with respective fish food webs. Arrows indicate the flux of carbon between functional groups through predation.

Marine organisms move carbon from the atmosphere to the seafloor in different ways. Here, we model how biomass carbon flows from the sea surface the seafloor as big fish eat smaller fish while they migrate up and down in the water column. We found that this fish-mediated carbon flux is equivalent to approximately 5% of the carbon reaching the seafloor through sinking particles of organic matter from phytoplankton, microbes, or animals. In some areas, fishes dwelling in midwaters are a key stepping-stone in the carbon flowing to the seafloor. To validate our predictions, we compared the amount of groundfish that the model predicts with observed estimates from scientific bottom-trawl surveys off Western Ireland and the Mid-Atlantic Bight. The amount of fish in both cases is of the same order of magnitude and follows a similar trend with depth. We show that the vertical movement of carbon driven by fish as they move up and down in the water column is an important process fueling seafloor ecosystems and commercially valuable groundfishes.

Read more about this publication authored by Daniel Ottmann

Mapping Mediterranean bentho-demersal communities to better inform marine conservation



Distribution of the bentho-dermersal species richness in the NW Mediterranean Sea

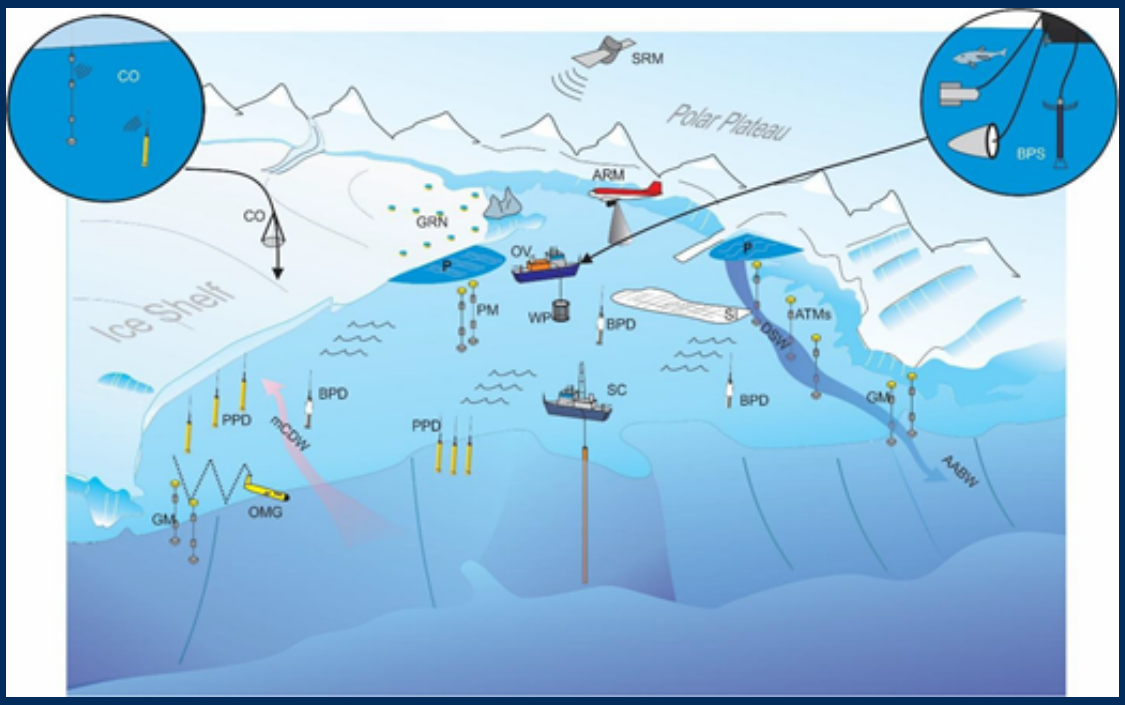
Marine conservation and spatial planning aim to balance biodiversity protection, sustainable fisheries, and growing uses of the marine environment. Marine protected areas (MPAs) are a widely used tool to achieve these goals, yet their design often overlooks the uneven distribution of bentho-demersal communities. This can lead to biased protection and overestimation of conservation coverage.

In this study, Lopez et al mapped bentho-demersal communities in the Balearic Sea (northwestern Mediterranean) using a joint species distribution model of 129 fish, crustacean, and cephalopod species. Three distinct bioregions were identified along a depth gradient: the continental shelf, upper slope, and middle slope. Existing no-take MPAs (1,089 km²) cover only 3.13% of the shelf, 2.96% of the upper slope, and 0.89% of the middle slope bioregions.

Community patterns were mainly driven by depth and bottom temperature, with species richness decreasing at greater depths and in areas more heavily impacted by bottom trawl fishing. The results show that current MPAs in the Balearic Sea provide limited and uneven protection, highlighting the need for expanded and better-designed networks to ensure representative biodiversity conservation in line with European and international targets.

Read more about this publication co-authored by Morane Clavel-Henry

Spatiotemporal connections in the Ross Sea: A synthesis from the New Zealand Antarctic Science Platform Ocean Mechanics project



Schematic of the Ross Sea observatory with contributions from the New Zealand Antarctic Science Platform.

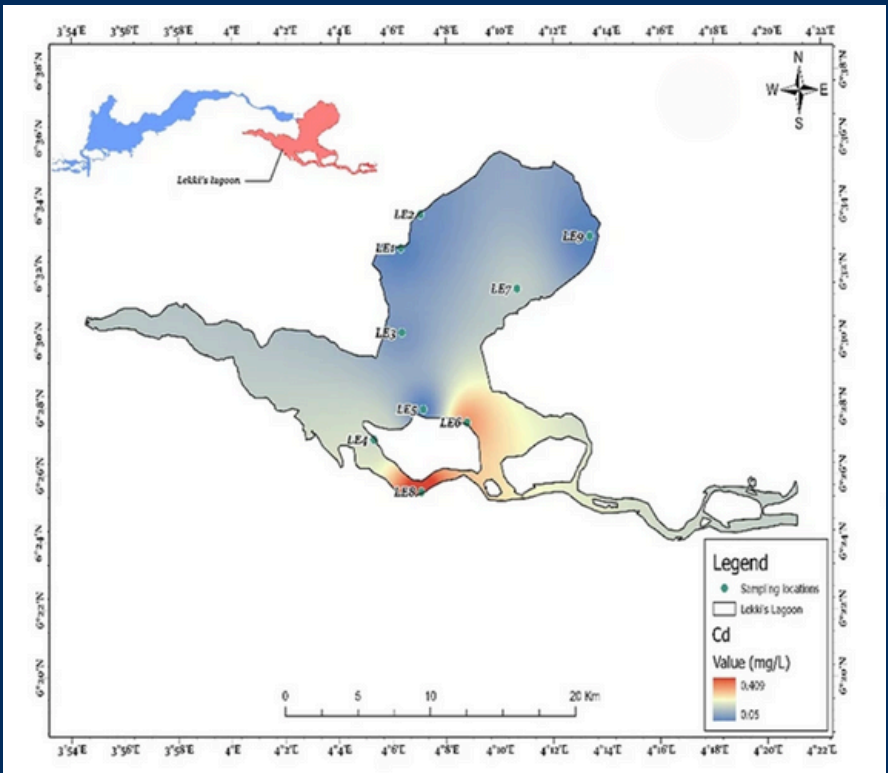
The Ross Sea, including its continental and ice shelf cavity areas, is a crucial part of the Southern Ocean known for its rich biodiversity as well as significant roles in deep water formation and sea-ice production. Over the past 5 decades, notable changes in sea ice, biology, biogeochemistry, and seawater composition have been observed, necessitating further research to understand the driving mechanisms and their ecological and climate impacts. Additionally, future warming in the Ross Sea is expected to influence global sea level rise, ocean circulation, and the regional carbon cycle, making the study of these processes imperative, especially given the recent and unprecedented low summer sea-ice extent in 2023.

The Aotearoa New Zealand Antarctic Science Platform “Project Two: Ocean Mechanics” was designed to provide a comprehensive understanding of the mechanics of the Ross Sea and its future response when mean global temperatures reach 2°C above pre-industrial levels.

Here, the authors synthesized the results of our 6-year project (2019–2025), highlighting the structure and contributions of this cross-disciplinary research on ocean-ice circulation, from the Ross Sea ice shelf cavity and polynyas to the Ross Sea slope and beyond from observations and model results as well as collaborative links. The study concludes with recommendations for a future Ross Sea observatory to address outstanding questions in this dynamic and critical region.

Read more about this publication co-authored by Alina Wieczorek

Seasonal and spatial variations of physicochemical parameters and heavy metals in surface water of interconnected Nigeria lagoons experiencing distinct anthropogenic disturbances



Spatial distibution of the Cadmium in Lekki's lagoon (Nigeria)

Lagoon systems in Nigeria are essential for fisheries and local livelihoods but are increasingly threatened by pollution from industrial, agricultural, and urban activities. This study assessed how different human pressures affect water quality, heavy metal contamination, and associated health risks in interconnected coastal lagoons in Nigeria.

Some physicochemical parameters were within recommended limits, except for total dissolved solids. Heavy metals were detected across all stations, with zinc, iron, and copper occurring at the highest concentrations. Metal levels were generally higher during the dry season and showed strong spatial variation linked to dominant human activities. In Lekki Lagoon, elevated concentrations of cadmium, lead, and arsenic were associated with agriculture, tourism, and dredging, while in Lagos Lagoon, higher levels of cadmium, chromium, and lead were linked to industrial discharges, oil-related activities, and shipping.

Pollution indices indicated that about 90% of sampling stations showed moderate to extreme contamination, making the water unsuitable for drinking and posing ecological risks. Health risk assessments revealed that cadmium, chromium, and arsenic present significant non-cancer and cancer risks, particularly for children. Overall, both lagoons were highly contaminated, highlighting the need for improved monitoring, targeted remediation, and integrated coastal management to protect ecosystem and human health.

Read more about this publication co-authored by Isa Olalekan Elegbede

ICES AND SIIECS ACTIVITES

Introduction to mapping and spatial analysis with R

Participants will acquire capacities to: Read vector and raster data in a variety of formats; Create spatial objects from scratch; Perform spatial operations in vector and raster data; Query and summarise spatial data; Prepare static and interactive maps for an array of data types; Jointly use R and open-source GIS sofware (i.e. QGIS).

DEADLINE for registration: Undisclosed

Fee: 950€ for ICES member country affiliated participants

Date: 25–29 May 2026

Location: Copenhagen, Denmark

REGISTER NOW

Workshop on Participatory Modelling (WKPartMod2)

The workshop's objective is to produce a practical guide on how to set up, conduct and review participatory modelling work within ICES.

In-Person meeting, with possibility of hybridation

DEADLINE for registration: February 15

Date: 17-19 March 2026

Location: Tromsø, Norway

REGISTER NOW

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JOB AND GRANT OPPORTUNITIES

Postdoc North Sea Ecosystem modelling

2-year position in the MONS project related to the relation between wind farms expansion and the marine ecosystem and fisheries.

Deadline for applications: 16 February 2026

Location: NIOZ, Texel, Netherlands

Take a look here

PhD position Ecophysiology and biology of lumpsucker

3-year position with the NOW-LUMP project, to generate new knowledge helping to understand the mechanisms behind the lumpsucker population decline and resilience to climate change in the North Atlantic.

Deadline for applications: 15 February 2026

Location: DTU Aqua, Denmark

Take a look here

PhD opportunity in Atlantic Salmon Ecology and Climate Change Impacts

Position with a scholarship for a maximum of four years to study the cumulative impacts of changing thermal and flow habitat conditions across Atlantic Salmon freshwater life stages.

Deadline for applications: 28 February 2026

Location: INRS, Québec, Canada

Take a look here

Aquaserv Visiting Grant

Open call for Transnational access for ECRs and researchers in 16 European countries and 60 facilities.

Fund a small research project to get access to one or more facilities for up to 3 months

Deadline for applications: Current call closing in March

The grant outlines research activities in four research areas: Aquaculture, Ecological Restoraton, fisheries and Blue Economy

Take a look here

TRAINING OPPORTUNITIES

Guardias Summer School

This program, themed on e-DNA and Invasive Species, is specifically designed for early-career researchers, practitioners, and professionals to strengthen their capacity in innovative tools for aquatic biodiversity monitoring and invasive species management.

DEADLINE for registration: Undisclosed

Date: 29 June - 3 July 2026

Location: Bodø, Norway

REGISTER NOW

Electron Microscopy Hands-On Course

Sample preparation and imaging of marine environmental samples

Prior documented experience in electron microscopy is not required

DEADLINE for application: February 12th

Fee: 300 €
Date: 8 - 11 April 2026

Location: Napoli, Italy

REGISTER NOW

AQUARIUS Floating university

Scientific Survey Methods: Monitoring of fish and benthic fauna on the RV Svea.

17 positions for European post-graduate students. More information here: Website

DEADLINE for application: March 22nd

Free of charge + Accomodation
Date: 29 June - 3 July 2026

Location: Lysekil, Sweden

REGISTER NOW

CALL FOR CONTRIBUTIONS

eDNA Expeditions

A 3-year project is looking for 25 ecologically significant marine sites to become part of the establishement of a global biomolecular observarory.

Experts to non-scientists welcome!

DEADLINE for application: 15 February

Information

LEARN MORE

European Ocean Observation Initiative

Call for feedback sought from stakeholders, experts, and citizens in order to improve EU ocean observation capacity and European autonomy in times of geopolitical change.

The feedback is sent through a EU portal. An account is needed.

DEADLINE for evidence: 27 February

LEARN MORE

Ocean Rising Alliance

Connecting culture and the ocean

This organisation has an open call for joining. Ocean scientist with an artist's heart are sought

LEARN MORE

EVENTS

ASC 2026

This event brings together marine scientists from around the world to present innovative research, share ideas and establish long-lasting collaborative partnerships. **Abstract submission until February 25**

15-18 September, 2026 | Brest, France | LEARN MORE | REGISTER NOW

ECSA 61 - Estuarine Coastal Conference

Bridging the gap between science and policy in estuarine and coastal marine biodiversity: the way forward.
Abstract submission open until 6 March 2026

24 - 27 August, 2026 | Brussels, Belgium | LEARN MORE | REGISTER NOW

Free Registration to online 3rd BBNJ Symposium

This Symposium brings together scientists, policymakers, practitioners, Indigenous Peoples and Local Communities (IPLCs), civil society, and other stakeholders to debate the role of science and knowledge in the implementation and governance of the BBNJ (Biodiversity Beyond National Jurisdiction) Agreement.

10-12 March 2026 | Brazil (Hybrid) | LEARN MORE | REGISTER NOW

7th World Conference on Marine Biodiversity

UN Ocean Decade Event with the overall theme of the Conference being “The marine biodiversity insights we need, for the ocean we want”. **Abstract submission until March 17**

17-20 November, 2026 | Bruges, Belgium | LEARN MORE | REGISTER NOW

9th International symposium on deep-sea corals

Plenary sessions covering Diversity and Distribution; Environmental settings; Biology and Ecology; Conservation. **Abstract submission until April 9**

2-5 November 2026 | Barcelona, Spain | LEARN MORE | REGISTER NOW

BRAIN-WAVES

Fusion of Food for ears with other formats.

We would like to let you know about some newly released podcasts and videos that we think will capture SIIECS members' interest – we think they are enriching experiences in the diverse and fascinating realms of the marine.

Resilient Depths

Posted on January, 2025

Episode 1:What is the Deep-Sea, by REDRESS and SER-Europe

Click here to listen

Oceanography podcast

Posted on October, 2025

Episode 15: OceanOmics: eDNA to Guide Marine Protection

Click here to listen

DAY OFF - SEA ON

A free day or in holidays? Keep a foot in the Sea world while away and visit temporary expositions

Ultimate Depth - A journey to the bottom of the sea

Australian National Maritime Museum, Sydney

Up to 30 June 2026

Sound of the Oceans

Check out the *venues* for upcoming 2026

Ocean Speak Experience

History Museum & Marine and Maritime Museum, Gothenburg

In Spring 2026

Ocean Future exhibition

Futurium, Berlin

Up to August 31 2026

ICES Newsletter
If you would like to stay up to date with the latest news from ICES (not just the early career scientist stuff!), please subscribe to their online newsletter by sending an email to **news@ices.dk** indicating your interest.

Know someone who might be interested in this?
Feel free to forward this mail to anyone who might be interested in SIIECS activities. They can also sign up for SIIECS via the link on this webpage.

Unsubscribe?
If you would no longer like to receive messages related to the Strategic Initiative on the Integration of Early Career Scientists then please reply to this email with the subject line “Unsubscribe” and we will remove you from the mailing list.

With best regards,
SIIECS (the Strategic Initiative on the Integration of Early Career Scientists)

Do you know of any exciting activities or opportunities for ECS? Please send any content you would like to share in the newsletter by emailing **siiecs@ices.dk.**

Entries will be included in the following edition.

This newsletter has been produced under the auspices of SIIECS. It is not an ICES product and has not undergone ICES editorial review. The contents do not necessarily represent the view of ICES or the Council