



ICYMARE

International Conference for
YOUNG Marine Researchers

BOOK OF ABSTRACTS

ICYMARE 2021 ONLINE EVENT

21–24 SEPTEMBER 2021



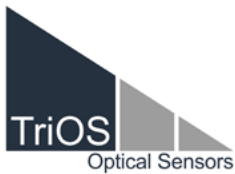
ICYMARE
International Conference for
YOUNG Marine Researchers

WVS
THE BREMEN SOCIETY FOR
NATURAL SCIENCES from 1864

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virtual ICYMARE 2021

21 - 24 September 2021

Book of Abstracts

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The Bremen Society for Natural Sciences

ICYMARE is an event of the Bremen Society for Natural Sciences ("Naturwissenschaftlicher Verein zu Bremen"). In the following, we would like to introduce this society to you. Although it has a pretty long history, this society acts modern and is open for any people interested in natural sciences to join.



History & Aims

At the end of the 18th and the beginning of the 19th century, citizens interested in natural sciences organized themselves in natural history societies. In Bremen, this was, e.g., the "Physical Society" which was later re-named into "Museum Society". This society organized scientific talks, the members purchased and read scientific books together, and established first museum collections. In these times, shared interest for natural history was already able to overcome class distinctions. As these societies were not stable and consistent enough, the "Bremen Society for Natural Sciences" was founded in 1864. Ever since, the overall aim of the society was and is "to spread scientific knowledge and to promote scientific research, especially in northern Germany".

This aim is central to the society until today and was defining the Sciences in Bremen for a long time. The connection between professional and laic research is central and helps to transfer the appreciation of science into the broader public. The most important tools to reach these aims are publicly accessible talks, excursions, and the scientific journal of the society "Abhandlungen des Naturwissenschaftlichen Vereins zu Bremen" ("Essays of the Bremen Society for Natural Sciences")

The society and the Übersee-Museum



The collections of the Museum Society and the Bremen Society for Natural Science grew constantly over the years. The latter society took care for these collections. Together with the Historical Society, a commission was founded with the aim to strategically grow the collections and to found a museum for presenting the collections. After some negotiations regarding care-taking costs, the City of Bremen took over the collections and the subsequent costs to care for them. The rooms at the time were not sufficient any more. At an industrial exhibition in 1890, the idea of a museum was raised. In 1896, the "City Museum of Natural History, Ethnology and Trade", today Übersee-Museum (directly translated: "Overseas Museum") was founded. The first director of the museum, Hugo Schauinsland, was also the Chairman of the Bremen Society for Natural Sciences for a short time. Still today, employees of the museum are also at the same time involved in the society. Furthermore, the society organized exhibits for the museum, e.g., a replica of a dinosaur skeleton or the skeleton of a Megaloceros (prehistoric giant deer). Scientifically more important are the zoological and botanical collections which have been and will be the basis of taxonomical, systematical, biogeographical, floristic, and faunistic research.

The Bremen Society for Natural Sciences today

Today, the activities of the Bremen Society for Natural Sciences are mostly organized in working groups. These working groups are dedicated to different groups of botanical or zoological organisms as well as geological sciences. During excursions, organisms may be systematically collected and examined. The results are then later presented in talks or in the scientific journal of the society. Since the 1980s, nature conservation plays an increasing role in such activities. For instance, mapping of organisms, together with the University of Bremen, is of importance as the society is also member of different organizations of environmental protection. Furthermore, the society organizes a public lecture series together with the University of Bremen in the rooms of the Übersee-Museum. The topics of this lecture series go beyond pure faunal and floral reflections into topics of organismic biology and ecology. The society is also involved in the Bremen Award for Local History Research, which supports professional and laic research with topical connection to the region of northwestern Germany.

Marine Sciences in the Bremen Society for Natural Sciences

The founding of the Bremen Society for Natural Sciences dates back to a time where there was not much professional or laic marine research in Bremen. Therefore, the society never had a marine focus. In April 2018, the Association of Marine Sciences was founded within the Bremen Society of Natural Sciences. One working group of this association is the working group ICYMARE, which is organizing the new conference series of the same name. With the aim to establish marine sciences as an inherent part of the society, to connect marine professionals and laics, and to raise awareness of marine knowledge into the public, the Association of Marine Sciences is open for everybody who is interested in the field.

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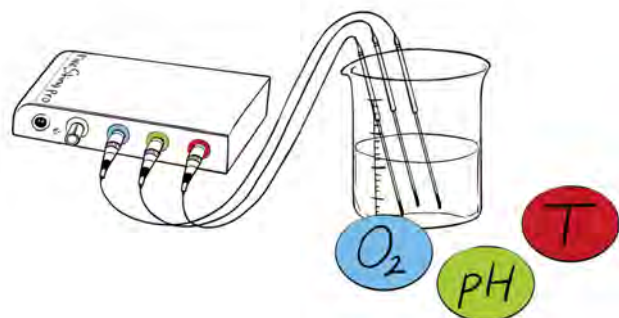
- O₂, pH, ultra fast O₂, optical temperature sensors
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Virtual ICYMARE 2021 - Program

Tuesday 21st September

8 ⁴⁵	ICEBREAKER <i>Join the ICYMARE Pub-Quiz and get to know the other participants while puzzling over marine fun facts!</i>	Social Events Room
10 ³⁰	Coffee break <i>Take the chance and check out our Welcome video at the main platform</i>	Main Platform <i>white box</i>
10 ⁴⁵	Session 11 Sustainable harvesting of seafood – How to explore, predict and evaluate the future of marine food production	Main Platform Session Room BLUE
11 ⁴⁵	Session 8 From physiology to ecology: what the holobiont concept can teach us about marine organisms and ecosystems	Main Platform Session Room GREEN
12 ⁰⁰	Lunch break	Main Platform Session room YELLOW
12 ³⁰	Session 5 Stressed out lives: organismal bottom-up responses to global changes	Main Platform Session Room BLUE
14 ⁴⁵	Session 7 Exceptions make the rule: insights from mixotrophy	Main Platform Session Room RED
15 ⁴⁵	Coffee break	Main Platform
16 ⁰⁰	Project talk Plastic Pirates - schoolchildren investigate plastic pollution of rivers	Main Platform Session Room GREEN
16 ¹⁵	Poster Session	
17 ¹⁵	Session 2 The impacts of climate change over human marine activities and their management	

Wednesday 22nd September

9 ⁰⁰	Session 1 (part 1) Interdisciplinary Approaches for Sustainable Coastal and Ocean Management	Main Platform Session Room BLUE
10 ³⁰	Coffee break	
10 ⁴⁵	Session 1 (part 2)	Main Platform
12 ⁰⁰	Lunch break	Session Room BLUE
12 ³⁰	Science Speed Dating <i>Try out the fastest way to find a new research partner and speed up your science!</i>	Social Events Room
13 ³⁰	Session 13 Tropical Marine Ecosystems in the Anthropocene	Main Platform Session Room GREEN
15 ⁰⁰	Session 3 Marine data science	Main Platform Session room YELLOW
15 ⁴⁵	Coffee break	
16 ⁰⁰	Session 18 (Micro)Plastic: environmental distribution, degradation and impact	Main Platform Session Room BLUE

Thursday 23rd September

8 ⁴⁵	Session 15 (part 1) Change in Polar Regions - Same same, but different?	Main Platform Session Room BLUE
10 ³⁰	Coffee break	
10 ⁴⁵	Session 15 (part 2) Change in Polar Regions - Same same, but different?	Main Platform Session Room BLUE
11 ³⁰	Session 16 In a stable relationship: Isotope analysis and marine science	Main Platform Session Room GREEN
11 ³⁰	Session 20 (part 1) Open Session	Main Platform Session room YELLOW
12 ⁰⁰	Lunch break	
12 ³⁰	ICYMARE Workshops	Workshop rooms
15 ⁴⁵	Coffee break	
16 ⁰⁰	Stories Share the story of your journey becoming a scientist with the ICYMARE family	Social Events Room
17 ⁰⁰	Session 9 Often overlooked: Understanding and meeting the current challenges of marine invertebrate conservation	Main Platform Session Room BLUE

Friday 24th September

8 ⁴⁵	Session 12 Coastal Wetlands – Muddy is the new trendy	Main Platform Session Room BLUE
9 ⁴⁵	Session 20 (part 2) Open Session	Main Platform Session Room GREEN
10 ³⁰	Coffee break	
10 ⁴⁵	Session 20 (part 3) Open Session	Main Platform Session Room GREEN
12 ⁰⁰	Lunch break	
12 ⁴⁵	Project talk GAME – Global approach by modular experiments	Main Platform Session Room RED
12 ⁴⁵	Session 20 (part 4) Open Session	Main Platform Session Room GREEN
13 ⁰⁰	Session 19 Marine Engineering	Main Platform Session Room YELLOW
13 ⁴⁵	Session 4 Ocean Literacy: linking marine science to education to promote action	Main Platform Session Room BLUE
15 ⁰⁰	Coffee break	
15 ¹⁵	Fireside talk Reflections on paths we can take and leading with intention	Main Platform <i>white box</i>
17 ⁰⁰	Open fireside chat <i>Let this event fade away with a drink and have a chat with the awesome early career researcher</i>	Main Platform <i>wherever you want</i>

Factors shaping microbial community structure and dissolved organic matter composition during austral spring in the San Jorge Gulf

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Keywords: Coastal processes, marine phytoplankton, Patagonia

Marine biological productivity depends on phytoplankton and heterotrophic bacterial interactions, influencing the energy and carbon transfer to higher trophic levels including fish, birds and marine mammals. The aim of this project was to study major factors governing the microbial food web and dissolved organic matter characterization in the San Jorge Gulf, the largest basin of the Patagonian Shelf. San José Gulf campaign was carried out during austral spring 2017. Surface water samples were collected for biological (chlorophyll a, microbial abundances) and chemical analyses (dissolved inorganic nutrients, colored dissolved organic matter (CDOM), humic substances). Moreover, the Simpson stability parameter was calculated to estimate water mixing condition based on CTD data. A clear district of the stratified waters observed mostly in the central part of the Gulf from the well-mixed coastal areas was observed. Stratified waters were characterized by higher small phytoplankton (pico- and nanophytoplankton), heterotrophic bacteria, nanoflagellates abundances and the relative contribution of protein-like (C1) compound. Lower temperature and higher wind speed observed in southern coastal area extending over the South Bank and southern edge of the Gulf contributed to well mixed water conditions likely supporting larger phytoplankton cells growth. Additionally, higher biological index (BIX), the relative contribution of humic-like (C4) compound and humic substance concentrations were recorded. Northern coastal waters were characterized by higher salinity, the relative contribution of humic-like (C2, C3) compounds and humification index (HIX).



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12 – 17 September 2022 | Hochschule Bremerhaven | Germany



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NATURWISSENSCHAFTLICHER
VEREIN ZU BREMEN von 1864



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