



“Heading to a sustainable and clean ocean.”

We are excited to announce this year’s conference from **5th – 7th of October 2021**.

Are you a young marine researcher or early career scientist?

Are you contributing to a better, sustainable future of our oceans with your idea or your work?

We are looking forward to hearing about you and your research, project, story, or idea at the YOUMARES12 conference.

Submit your abstract to one of our sessions or host a workshop on the conference.

Call for abstracts is open until 15th July 2021.

The **YOUMARES** is an **international conference for early career scientist** working in an any ocean related field. Since 2009, it has taken place each year with different scientific topics related to marine sciences. Bringing together 300 participants from all over the world, we provide the stage for an interdisciplinary community of young early career marine researchers - bachelor, master, and PhD students – and young ocean enthusiasts. The conference is a platform for presenting and discussing your ongoing research while building up a network with other young marine researchers. We invite you to share your ideas on how to solve the problems our oceans are facing today and become an active part in solving the challenges on the way to an intelligent preservation and a sustainable management of the oceans.

With the beginning of the **UN Decade of Ocean Science for Sustainable Development** the UN identified key societal outcomes which should be achieved until 2030. Those cover a variety of ocean related fields and simultaneously touch upon the **Sustainable Development Goals (SDGs)**. Therefore, the **goals of the Ocean Decade will be a guiding framework of this year conference** with the title: **“Heading to a sustainable and clean ocean”** and will be the guiding framework of this conference series over the next 10 years.

The YOUMARES 12 conference is organized in cooperation with **GEOMAR- Helmholtz-Zentrum für Ozeanforschung** and will take place from 05.-07. October 2021 **online and on board of the Cap San Diego Museumsschiff**, Überseebrücke in Hamburg. Besides the presentations in the nine sessions related to goal 1 “Clean Oceans”, the conference will host workshops and invited keynote speakers.

For the first time, four **summer and winter workshops** will frame the main event, as one day satellite events, and bring together ideas from a diverse field of research interests (locations and dates of the workshops will be announced shortly; separate registration for the workshop is necessary).

Considering the Covid-19 pandemic, the conference is based on a hybrid concept. Bringing together benefits from a digital world together with lively discussions in small groups, strictly complying with the respective current Covid-19 regulations.

YOUMARES 12 sessions

In the framework of the Decade of Ocean Science for Sustainable Development (2021-2030) of the United Nations, we invite young researchers, stakeholders, NGO's, policymakers, etc., from the different industry and academic sectors, to take part on the YOUMARES12 conference and share with us your investigations and/or projects related to goal 1 “clean oceans” of the decade.

Furthermore, we also warmly invite speakers to talk about other fields of marine research in our open interdisciplinary session.

Session 1: Ocean pollution and degradation - threats to human health?

Direct or indirect exposure to pollutants through the water body, sediments or aquatic biota can threaten human health in manifold ways. Examples are the bioaccumulation of mercury along the aquatic food chain or the dispersal of fecal contaminants through insufficient wastewater treatment. At the same time, the consequences for human health are varying upon contaminant, concentration, exposure duration and the persistence of the contaminants.

Moreover, the oceans provide a large variety of ecosystem services connected with the well-being and health. In this context, the degradation of the oceans has a detrimental effect on human health.

Thus, today and for all future generations, it is of key importance to obtain a better understanding of how ocean degradation and human health is connected. We invite speakers to present their research about the interaction of aquatic pollution and human health, without being restricted to topics such as contamination of seafood or other exposure routes to contaminants.

Session 2: Eutrophication, microbial pollution, and harmful algae blooms in coastal areas.

This session is about water pollution through microorganisms and harmful algae blooms. We invite speakers to present their research about the link between eutrophication, harmful algae blooms and related food borne diseases. It also includes research about possible methods to control high nutrient load and feces produced by aquaculture facilities but also the control or detection of toxic microalgae.

Session 3: Industrial and chemical pollution.

The exploitation of natural resources from both coastal- and open-ocean environments for the benefit of humans, has brought several discussions from different industry and academic fields. Habitat devastation, overfishing, noise pollution, ship traffic, oil spills, dredging and detonations are only examples on how the industrial exploitation is harming marine life.

At the same time, the input of various chemicals from the land to the ocean is one of the largest threats affecting water chemistry, sediments, marine life and biological cycles in the coastal ecosystems. Even if several industrial inputs have been stopped in the past and progress is made towards more sustainable, circular economy, large amounts of pollutants are still released or persist in the environment. The environmental impact of today's innovative products that are brought to the market is often unclear and they could become the emerging contaminants of the present and future. The necessity of bringing chemical pollution into public consciousness is crucial for past, present and future events.

In this broad session, we invite young marine researchers working in the industrial field, with marine contaminants and emerging pollutants, marine chemistry but also exploitation of fisheries and noise pollution.

Session 4: Plastics pollution.

Nowadays, plastic pollution in the ocean is a global emergency. The oceans are receiving several amounts of all manner of plastic debris every day, impacting marine environment and human health. Approximately, up to 80% of the waste accumulated on land, shorelines, the ocean surface, or seabed is plastic. Ocean plastic pollution is a contemporary challenge that has attracted increasing scientific concern, bringing together different initiatives and agreements on an international, national, regional, and local scale, all around the world, involving scientist, governments, and stakeholders.

In the framework of the Decade of Ocean Science for Sustainable Development (2021-2030) of the United Nations, we invite young scientist to share with us your investigations/projects/initiatives related to ocean plastic pollution, and its impacts on marine organisms, marine environments and human health.

Session 5: Return to healthy – restoration and resilience of polluted marine areas.

Healthy ecosystems and their functioning are of greatest importance for humans and marine life. They provide nursing areas, feeding grounds, habitats for marine life but also ecosystem services like coastal protection, recreational spaces and many other. The degradation of marine life, coastlines, and the open ocean, as well as the influx and accumulation have major impacts on local biodiversity and the functioning of these spaces. It is thus of major importance to prevent, halt and preserve the degradation of ecosystems and investigate suitable mitigation measures and how the resilience can be methods their resilience can be restored.

Related to the UN decade on ecosystem restoration, we invite speakers to present their research about restoration of coastal and maritime ecosystems as well as their resilience to different environmental threats. Furthermore, this session invites talks about the remediation of ocean habitats.

Session 6: Ocean invaders, the consequences of biological pollution.

The introduction of non-indigenous and invasive species in the aquatic environment can heavily alter marine ecosystems and have negative consequences for the functioning of local biodiversity. Biological invasion events are mostly associated with human activities, such as maritime traffic, tourism activities but also the intended transfer of species.

This session is about the direct and indirect impacts that these species can have on marine biodiversity. We invite speakers to present their research about the impact of NIS and invasive species, without being

restricted to topics such as their impact but also how consequences of these invasions could be approached in a local or global perspective.

Session 7: Go with the flow, how pollutants disperse in marine spaces.

Before implementing suitable conservation, restoration, and prevention methods, it is necessary to understand how pollutants are dispersing in marine ecosystems. Modelling is an excellent and state-of-the-art tool to obtain data about the influx, flow, and dispersal of various contaminants over space and time.

We invite speakers to present their research about the fate of pollutant through local and global modeling approaches, and the visualization and understanding of different pollutants in short and long-time scales from the past to the future.

Session 8: Socio – economic factors and sustainable, ecosystem Based Management.

Ecosystem Based Management (EBM) provides important tools for a sustainable use of marine resources, considering the interaction among ecosystem components and different management sectors, namely tourism, fisheries, civil society, marine scientist, social scientist, etc. EBM also considers human beings as an integral part of the ecosystem, due to the influence that we have on the oceans, and also the use of its goods and services. In the framework of the Decade of Ocean Science for Sustainable Development (2021-2030) of the United Nations, an effective Marine Ecosystem Management is crucial for marine conservation and resource management.

For this session, we invite young marine researchers who work in different marine/economic sectors, to share with us your investigations/projects/initiatives concerning marine Ecosystem Based Management and a sustainable use of marine resources.

Therefore, the sustainable management of marine resources and establishing policies is one of the most important aims of the global agenda.

Session 9: Open interdisciplinary sessions: if the topic you want to present does not fit into one of the sessions above.

If the topic you want to present does not fit into one of the other sessions, we are very happy to receive your abstract for our open session!

More information, contact us: info@youmares.org

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