

Missions for sustainability: New approaches for science and society

Session abstract

Template for session organizers

The session abstracts should provide a brief overview of the session scope and design and a **synthesis of the key discussion points and results** of each session. They should always position the issues addressed in **relation to the main themes** of the conference.

The session abstracts will serve to prepare a **conference documentation** for dissemination to the interested general public (PDF). They may equally be used as a basis for producing a summary in other formats (multimedia). In addition, these abstracts will inform a **position paper** on mission-oriented research and innovation, prepared by the Leibniz research network after the event.

Please do not attribute statements to individual participants (results-oriented abstract)

Please use accessible language / English only

Total length: ~1500 words

Session organizer(s)

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Session discussants:

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Björn Stockhausen, Referent Fischerei und Ozeane, Die Grünen/EFA in Europäischen Parlament

Prof. Kimberley Peters, Professorin für Marine Governance, Helmholtz-Institut für Funktionale Marine Biodiversität an der Universität Oldenburg

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Session title

The Old Man* and the Sea: Ocean missions between conquest and saving the oceans

Session description (~500 words)

This session applies economic and social science perspectives to examine human-nature interactions and relations, with a focus on how scientific ocean missions in practice, straddle the spectrum of conquest and ocean protection. The session consists of four presentations. The questions raised in this session include:

1. What direction is the blue economy taking and what is the role of the public sector in steering this direction? How can mission approaches to the blue economy be characterized – are they business-as-usual in terms of conquest of space or do they offer genuinely novel ways of addressing societal needs while addressing the protection and sustainable utilization of ocean resources?
2. Have ocean economy narratives changed or are they essentially the same narratives couched in different terms? How do narratives shape our interactions and relations with oceans? What are the key trends in the intensification of ocean use and ocean protection?
3. How do ocean missions fit into the choice of economic instruments for shaping the ocean economy?
4. What are the key challenges to achieving a balance in the use and protection of marine species, particularly in relation to Green politics?

Through these interrelated topics, the session creates space for collective discussion and reflection on the current status of ocean missions and how they can be further developed to address sustainability challenges through partnership of science and society. The topics will be addressed in four presentations of about 5-10 minutes each. A discussion between the presenters and the audience will be facilitated following the presentations.

Main discussion points and reflections (~500 words)

- Are ocean missions business-as-usual or are they a new approach? This remains an open question.
- Missions are most effective when they are localized, sector-specific, and avoid duplication of efforts. Missions can be counterproductive if they are too directive from the top.

- Governments are funders of science, performers of science, policy-setters, and regulators. They play an important role and will continue too. At the same time, funding from philanthropy is also increasing.
- History, legacy, power, and reflexivity are important in ocean missions. History helps us understand how modes of governing and tools of governance came to be. Understanding the past helps make sense of current conditions and predict the future. But there is historical blindness in some governance work. In discussing the science we need for the ocean we want, we need to ask wanted by who? Whose science? Whose oceans?
- Blue economy has the potential to contribute to addressing climate change but it requires deep transition. A public purpose needs to be defined that is centered around environmental sustainability. Blue carbon management requires systems thinking. Risks of greenwashing and expropriation must be avoided. Blue economy as interconnection in a fragmented world. It could be a twin to the green recovery and green deal.
- Need funding support and to establish a stronger science and a stronger capacity for ocean missions. In many cases, there is a lack among national governments to provide needed data and this needs to be addressed.

Main results and conclusions (~500 words)

Analysis and/or assessments of mission-oriented R&I

- Ocean missions in the contemporary senses are relatively new and assessments are too early to be made. But it depends on the angle one looks at. If in relation to funding, there has been an increase in the funding for ocean missions, but this remains low relative to funding for other sectors. There is substantial funding from developed countries but many of these are also driven by economic interests. Funding from private sources such as donations are channeled to education and training, but it might be ad hoc.

Recommendations for future mission-oriented R&I

- It is important that mission-oriented R&I pay attention to histories of ocean governance and ocean utilization which provide the basis of the legacy we experience today. Understanding the past such as oceanic exploration helps see power relations. It is important to pay attention to power and geopolitics in strategizing and funding and to be alert in the way that power is used.

- Consider doughnut economy as a framework for balancing different interests such as environmental sustainability and societal needs

Open questions and unsolved issues

- Policy needs science and science needs to be strong. Yet, in an environment where many people do not listen to science, it is possible that science communicates facts clearly and still generate resistance. How can this be addressed?

- There is a need for inclusiveness in views, priorities, and design of mission. Co-design mechanisms are needed. How do we make sure that different voices are heard?
- How to be realistic about the role of lobbyists who are paid to work for specific interests that may be in contrast with sustainability and social justice principles?