



*Inaugural*

# Nordenskiöld Lecture

26 May 2014, 11:00-12:00

Hörsalen, Geovetarcentrum, Guldhedsgatan 5C, Gothenburg

## Mankind and the Sea: Our Common Future Ocean

Speaker: Dr. Martin Visbeck

### Abstract

The ocean is critical to the Earth's global systems, regulating weather and climate, the concentration of greenhouse gases in the atmosphere, the re-cycling of nutrients, and providing important food resources. Through evaporation to cloud formation to rain, the ocean rejuvenates the Earth's drinking water. There is a growing need and demand for more systematic ocean information at local, national, regional, and global scales to support stewardship and sustainable management of the Ocean and its resources. Kiel's research Cluster of Excellency "The Future Ocean" involves more than 250 scientists from the disciplines of ethics, economics, arts, political sciences, law, mathematics, informatics and natural marine sciences, with the mission to use the results of multidisciplinary scientific research on the past and present ocean to predict the future of the Earth's marine environment. This mission carries with it an obligation to develop and assess scientifically-based global and regional ocean governance options, including their legal, economic and ethical aspects.



The lecture will cover selected Kiel marine science topics. Some of the recent changes in the North Atlantic and Southern Ocean will be presented based on data from modern methods of sustained ocean observations that enable an assessment of the condition of the ocean today and in the future. A proposal for a dedicated Sustainable Development Goal (SDG) for the Ocean and Coasts will also be presented.



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## Short biography of the speaker

Professor Martin Visbeck is the speaker of the Future Ocean. He holds the chair in Physical Oceanography at the GEOMAR Helmholtz Centre for Ocean Research Kiel and University of Kiel, Germany. His research is concerned with ocean and climate variability and change with particular emphasis on water mass transformation and circulation of the Subpolar North Atlantic, Oxygen Minimum Zones in the Tropical Atlantic and sustained Atlantic Ocean Observations using an increased fleet of robotic platforms. More recently he is engaged in ocean sustainability at the global level.

He has served on several national and international advisory committees. He just finished the co-chair of the World Climate Research Project CLIVAR (Climate Variability and Predictability), which facilitates global climate research in the atmosphere and ocean. He was a member of the ICSU Future Earth Transition Team. Since 2013 he is the founding chairman of the German Committee Future Earth. He is also a member of the leadership council of the Sustainable Development Solutions Network (SDSN) – a global initiative for the United Nations.

### About Nordenskjöld Lecture

The Nordenskjöld Lecture is the high profile session of the Earth System Science seminar series at the University of Gothenburg, designed to bring the leading world researchers to share their thoughts and perspectives. The lecture honours the memory of Otto Nordenskjöld, the first August Röhss professor of Geography and Ethnography at our university, who organised and led the first Swedish Antarctic expedition 1901-1903.

[science.gu.se/english/research/nordenskjold](https://science.gu.se/english/research/nordenskjold)



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