

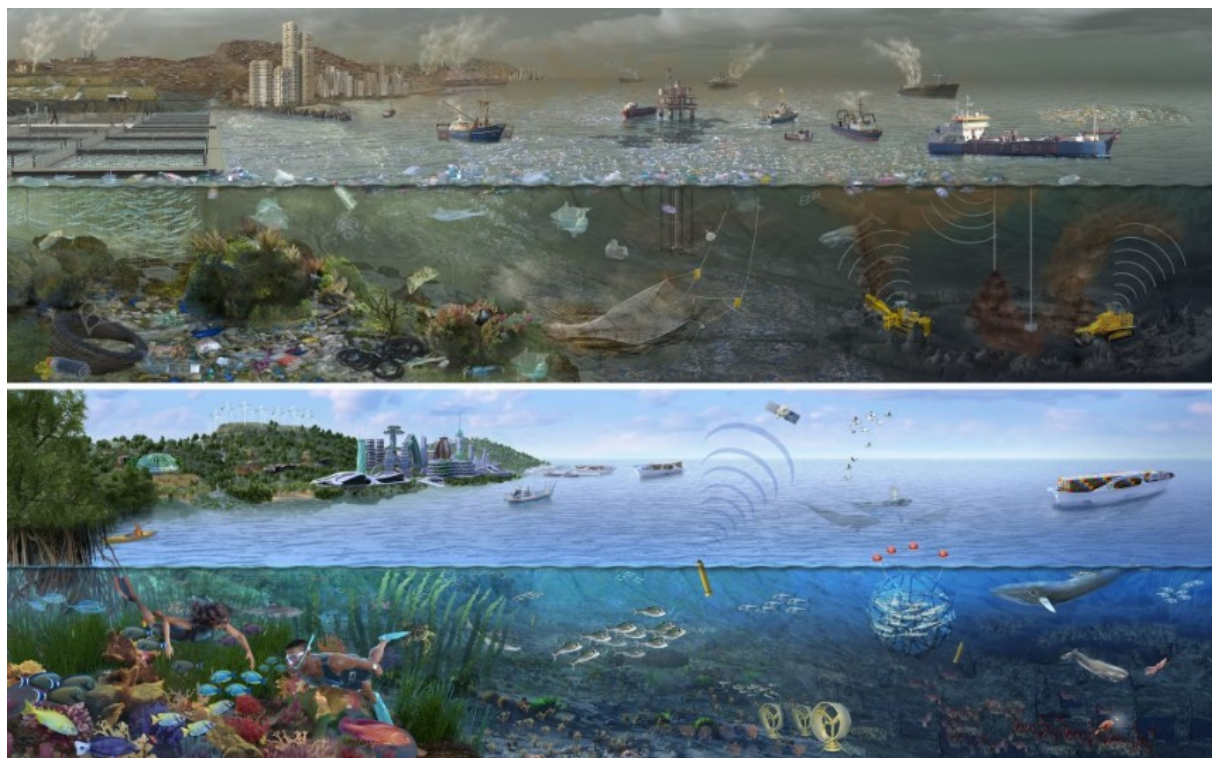
**Welcome to a new BIO Seminar**  
**VilVite, Nash Auditorium**  
**Thursday 28 April 2022**  
**12.15-13.00**  
**(coffee served from 12.00!)**

## **Global Environmental Change, Blue Foods, and Planetary Health in the Anthropocene**

**Science and Presentation by Michael S. Bank, Institute of Marine Research, Bergen, Norway**

### *Presentation Synopsis*

Food production systems and human diet choices have critical implications for climate change and environmental sustainability. Increasingly, the ocean and blue food resources are being recognized as a source to meet global nutritional demands and to address deepening problems from human hunger. Here, using complex systems analyses, contaminant and stable isotope tracer models, and Bayesian information theory I discuss new scientific findings and propose novel ideas regarding the relationships between global environmental change, and planetary boundaries and health in the context of blue food sustainable development. This research uses several simple and complex modeling strategies including big data information theory applications, Bayesian degrees of belief analytics, and risk and decision sciences. The presentation will be made in English and will run approximately 35 minutes with 10 minutes reserved for discussion.



Dr. Michael S. Bank works as a Senior Scientist in the Department of Contaminants and Biohazards at the Institute of Marine Research in Bergen, Norway. Michael also serves as an Adjunct Associate Professor of Contaminants and Complex Systems at University of Massachusetts, Amherst, MA in the USA. His research is highly interdisciplinary and has its theoretical basis in complex systems analyses, Bayesian mathematical modeling, contaminant biology, environmental toxicology, and environmental governance. Specifically, his interests are focused on three principal themes (a) How do contaminants affect organisms, including humans, (b) How can contaminants in ecosystem compartments be modeled using isotopic niches, Bayesian statistics and information theory, and (c) How can this information be used in a scientific translation and environmental governance context. Dr. Bank's work primarily deals with real data sets that tend to be large in nature and that consider broad spatial and temporal scales. Michael is an Associate Editor at the journal *Chemosphere* and serves on several expert committees and does advising on contaminants for several international and national environmental agencies.