



日本学術会議公開シンポジウム
地球環境変化研究の転換期における
人間的側面研究の強化と推進に向けて

futurearth
research for global sustainability

Ocean KAN—海洋研究ネットワークの現状と展望

植松光夫

東京大学大気海洋研究所
附属国際連携研究センター
特任連携会員

2017年 7月 3日
日本学術会議講堂

History of Future Earth



Future Earth のプロジェクト

Research Core Projects

旧3プログラム (IHDP, DIVERSITAS, IGBP) からの移行を中心に23

AIMES	eco SERVIC ES	GMBA	IMBER	PECS
bio DISCOV ERY	ESG	GWSP	IRG	SOLAS
bio GENESI S	GCP	IGAC	UGEC	LOICZ/ Future (Earth) Coast
CCAFS	GECHH	IHOPE	MAIRS	
eco HEALT H	GLP	ILEAPS	PAGES	

Fast Track Initiatives

分野統合が特に求められたり、至急の実施が必要な新規プロジェクト

Arctic STAR	Exploring Nitrogen	Extreme Events	Global Bio- diversity
MODELS (Earth System & Socio- economic	Liveable URBAN Futures	IPBES Science Support	Nexus Governance
Seeds of a good Anthropoc ene			

Future Earth Global Research Projects



ecoHEALTH



IHOPE
Integrated History and future Of People on Earth



New name:
Future (Earth) Coasts

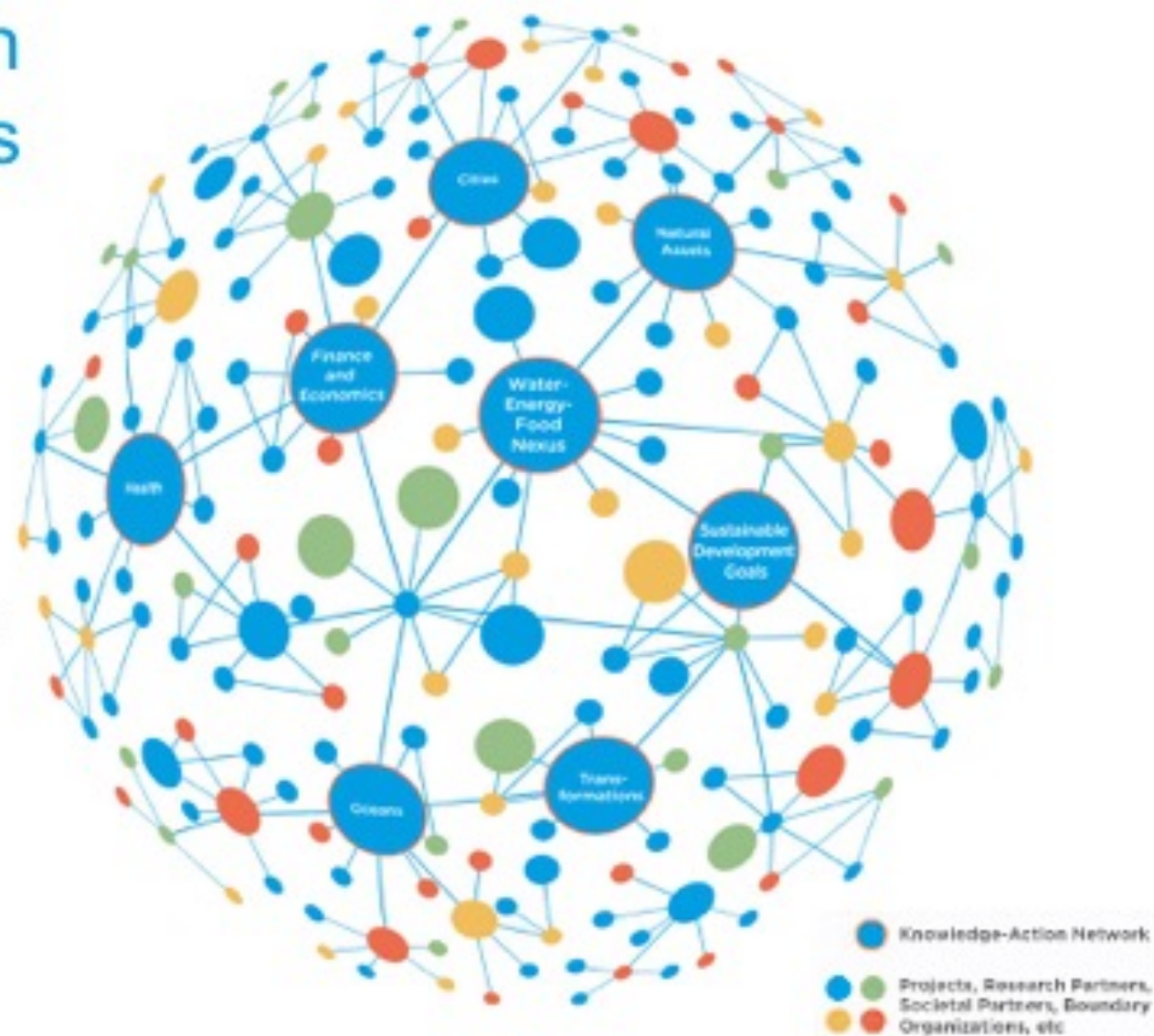


PAGES
PAST GLOBAL CHANGES



Focal areas for Future Earth Knowledge-Action Networks

- Water-Energy-Food Nexus
- **Oceans**
- Transformations
- Natural Assets
- Sustainable Development Goals
- Cities
- Health
- Finance & Economics
- Systems of Sustainable Consumption and Production



**Development of an Integrated Ocean Research Network
Future Earth's "Oceans – KAN"**
Workshop Summary Report
4th & 5th of December 2016, Kiel, Germany



アジアからの出席者は9名（インド3、日本2、フィリピン2、香港1、中国1）





Prof. Martin VISBECK

GEOMAR Helmholtz Centre for Ocean
Research Kiel and Kiel University



Thorsten KIEFER

Future Earth Secretariat, Global
Hub in Paris

- 1) 海洋の持続可能性を扱ういくつかの既存の学術および実践者コミュニティの代表者を集めて、優先研究活動をコデザインする
- 2) 最近の関連ワークショップの成果の統合を含め、統合的な海洋研究ネットワークのためのコアアイデア、実用性、および期待について議論する
- 3) 将来のパートナー（non-academic, action-oriented groupsを含む）および可能な資金調達機関を特定する
- 4) 海洋研究ネットワークの開発チーム（Development Team for the Ocean Research Network）の創設を支援し、その役割と責任を明確にすること。Belmont Forum Collaborative Research Action (CRA)への申請を目指す

World Cafés

#3 「統合された海洋科学における社会の関与」

#5 「ゲームとコミック：海洋科学の新しい形式」

#9 「統合された海洋科学の主要な利害関係者の特定、ステークホルダーの対話がどのようなすれば最も効果的か？」



<https://vimeo.com/98148909>

Break-out groups

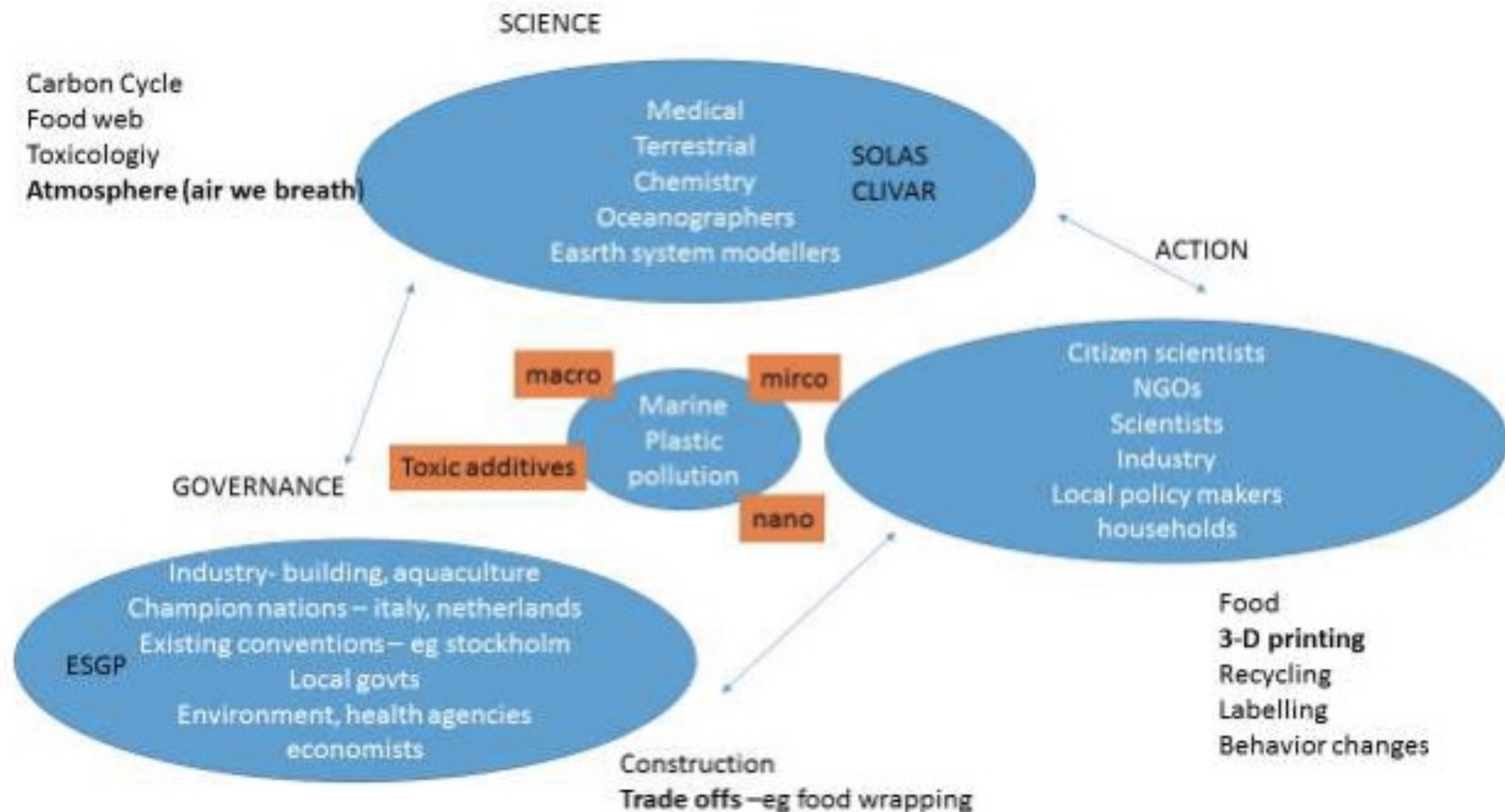
#2 「海洋ゴミ、プラスチック、および他の汚染物質が海洋の健康に及ぼす影響」 (CRA#3)

#4 「海洋災害を予測、緩和、対応してリスクを軽減する」 (CRA#4)

#8 「持続可能な未来を支援するSDG 14アジェンダのための海洋ソリューション」 (CRA#1)

#10 「沿岸の持続的利用研究」

Exploring and minimizing the impact of marine debris, plastics, and other pollutants on ocean health (Belmont CRA proposal topic #3)



Atmospheric and Hydrospheric Sciences(A)

Session Sub Category		Ocean Sciences & Ocean Environment
Session ID		A-OS20
Title		Research for a healthy ocean and a sustainable use of its resources and services
Short title		Healthy ocean and sustainable use
Main Convener	Name	Thorsten Kiefer
	Affiliation	Future Earth
Co-Convener 1	Name	Toshio Yamagata
	Affiliation	Japan Agency for Marine-Earth Science and Technology
Co-Convener 2	Name	Ken Furuya
	Affiliation	The University of Tokyo
Language		EJ
Scope		Oceans, including coastal and nearshore areas, provide services essential for life on earth and to the history, culture and livelihoods of people across the globe. However, they are also facing challenges from climate change, overfishing, acidification, de-oxygenation and pollution. Understanding these issues and developing solutions requires knowledge that integrates expertise across a wide range of disciplines and engages stakeholders in framing research questions and resolving the pressing issues. This session invites inter- and transdisciplinary contributions that address large-scale ocean problems, such as those addressed by Future Earth and its core projects.

SUSTAINABLE DEVELOPMENT GOALS

世界を変えるための17の目標



GOAL 14

CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT



THE
OCEAN
CONFERENCE
UNITED NATIONS, NEW YORK, 5-9 JUNE 2017



MONDAY, JUNE 5 OPENING DAY

3:15 pm – 4:00 pm

Science Express

Current developments in marine science and conservation

3:00 pm – 4:00 pm

Ocean Short Films and Coffee

BY INVITATION

5:15 pm – 6:45 pm | together with GSD

Global Sustainable Seafood Initiative

How multi-stakeholder partnerships and credible certification support SDG 14

8:00 pm – 10:00 pm | together with the Pacific Small Island Developing States

Opening reception of the German Ocean Pavilion

Celebrate the Ocean Week and the opening of the German Ocean Pavilion with us

TUESDAY, JUNE 6 REGIONAL OCEAN GOVERNANCE DAY

10:00 am – 1:00 pm

Ocean Start Films and Coffee

3:00 pm – 4:00 pm

Ocean Start Films and Coffee

BY INVITATION

9:00 am – 9:00 pm | together with Sweden, UN Environment, IAPF, IOC/Lead TMO

Oceans in the 2030 Agenda: The Role of Regional Governance

Innovative solutions to advance regional ocean governance and addressing sustainability issues for the oceans

• 9:00 am – 1:00 pm

Welcome address

Session 1: Advancing regional partnerships for SDG 14 implementation

Launch of the "Pioneering for a Sustainable Ocean" report

Session 2: Experiences of integrated regional ocean governance

• 1:00 pm – 2:00 pm

Lunch (see presentation of ongoing and new projects)

• 2:30 pm – 3:45 pm

Session 3: How to advance regional governance for SDG 14
Synthesis discussion and key messages for the UN Ocean Conference

11:30 am – 1:00 pm | together with Gabon and WCS

Combating Wildlife Trafficking

Reflections on key challenges in the implementation of commitments and discussions on the way forward

4:15 pm – 6:30 pm | together with WWF and GCN

Mangroves

Setting up initiatives to protect and restore a life-saving coastal ecosystem

WEDNESDAY, JUNE 7 MARINE SCIENCE DAY

10:00 am – 12:30 pm

Launch of the Ocean Knowledge for Action Network

Advancing solution-oriented and integrative ocean sustainability research globally within the Ocean KAN

10:00 am – 1:00 pm

Ocean Short Films and Coffee

1:15 pm – 2:45 pm

Science Express

Current developments in marine science and conservation

3:00 pm – 4:00 pm

Ocean Short Films and Coffee

BY INVITATION

9:00 am – 12:00 pm | UN Environment

Business Turning the Tide on Plastic

Private sector road to take on preventing and combating marine litter

1:15 pm – 2:45 pm | together with Sweden and RSM

Launch of the Blue Action Panel

Subsiding marine biodiversity

9:30 pm – 5:00 pm | IFF, Ocean

Multilateral Science-Policy Processes

Generating the evidence to guide a 100 implementation

4:30 pm – 8:00 pm | together with Norway

Evening Panel: Solutions to Combat Marine Litter

How a transition from theory to practice may be successful and how both can mutually support and complement each other

THURSDAY, JUNE 8 WORLD OCEANS DAY

10:00 am – 1:00 pm

Ocean Short Films and Coffee

3:00 pm – 4:00 pm

Ocean Short Films and Coffee

BY INVITATION

9:00 am – 10:00 am | DSD Foundation

The Ocean Atlas 2017

Understanding the Threats to Our Marine Ecosystems

10:00 am – 10:40 am | NOAA/CH2M Hill Solutions

Capacity Development for Sustainable Ocean Governance

Lessons Learned from Academic, Policy and Practice

1:15 pm – 2:45 pm | Blue Solutions

Blue Solutions Market Place

Learning from each other's experiences in marine and coastal management

3:00 pm – 4:00 pm | RARE

Fishing for Conservation

Bright spots of community-led, sustainable small-scale fishery & conservation solutions for food security and livelihoods

FRIDAY, JUNE 9 CLOSING DAY

10:00 am – 1:00 pm

Ocean Short Films and Coffee

10:00 am – 12:00 pm | World Wide Views on Oceans

Climate Participation and GSD14

Implementing GSD14 with and for the citizens through global public participation

1:30 pm – 3:30 pm | RARE

Five: Launch & Talk with Local Community Leaders

Scaling up innovative, community-based protection of coastal biodiversity in Indonesia, the Philippines and the Pacific

4:30 pm – 5:00 pm | RARE

Video Installation: A Fisherman and the Tree

Showing one day in the life of a fisherman in the Philippines



Future Earth OCEAN Knowledge-Action Network *Presentation*

Presentation of a new Ocean Knowledge-Action Network (Ocean KAN), a partnership between Future Earth, the Scientific Committee on Oceanic Research, the Intergovernmental Oceanographic Commission of UNESCO and the World Climate Research Programme — uniting researchers and stakeholders over making science more relevant and impactful.

7 June 2017

Wednesday

10:00 - 11:30

Venue:

German Ocean Pavilion

(Room: Mezzanine)

Permanent Mission of Germany

to the United Nations

871 United Nations Plaza

An introduction to the Ocean Knowledge Action Network - an innovative, multi-stakeholder platform to stimulate and accelerate new partnerships for knowledge generation and implementation in support of the Sustainable Development Goals.

There will be a short introduction from the organisers followed by a panel of stakeholders and scientific experts to discuss the knowledge needed from research to catalyse transformation to a sustainable ocean.

Following the panel discussion, there will be breakfast and networking opportunity for participants to meet each other and discuss partnerships for the Ocean KAN.



futurearth
research for global sustainability



INVITATION

Side Event: June 9, 2017 11:00 - 12:30 PM
Venue: Room B in the UN Conference Building

Combining Stakeholder Knowledge to Promote Innovation and Transformative Actions in Support of Sustainable Development Goal 14

What are the opportunities for innovation and transformative solutions when combining knowledge and expertise from academic science with the knowledge and experience from other stakeholders? The scientific community is developing a multi-stakeholder Ocean Knowledge-Action Network (**Ocean KAN**) to advance integrated ocean research globally, to chart a course from knowledge of ocean systems to changes in stakeholder behaviour via change in economic, social, environmental and governance pillars of the UN Sustainable Development 2030 Agenda.

From science to a whole of society interface and implementation!



THE
OCEAN
CONFERENCE
UNITED NATIONS, NEW YORK, 5-9 JUNE 2017

Data Visualizations Competition

Offering a unique opportunity to data visualizations specialists to showcase and present their skills to the international community by analyzing and visualizing data from the 1,380 voluntary commitments during The Ocean Conference, held on 5-9 June 2017 at United Nations Headquarters, New York.

<http://www.oceanmooc.org/en/index.php>