## Center for Integrated Underwater Observation Technology

## [Fusion of Ocean Cyber and Physical Systems]

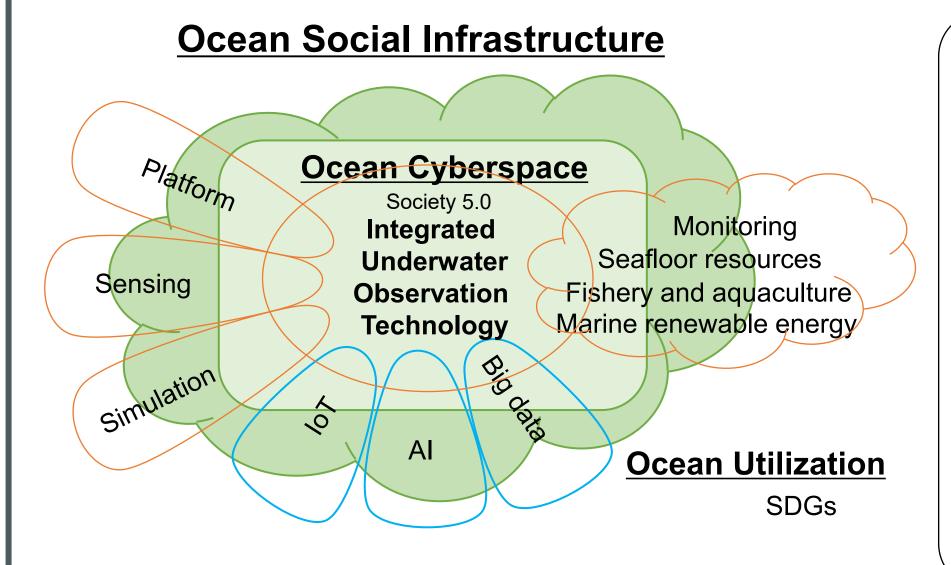
Graduate School of Frontier Sciences; Ocean Technology, Policy and Environment Graduate School of Engineering; Systems Innovation, Mechanical Engineering,

Electrical Engineering and Information Systems, Information and Communication Engineering

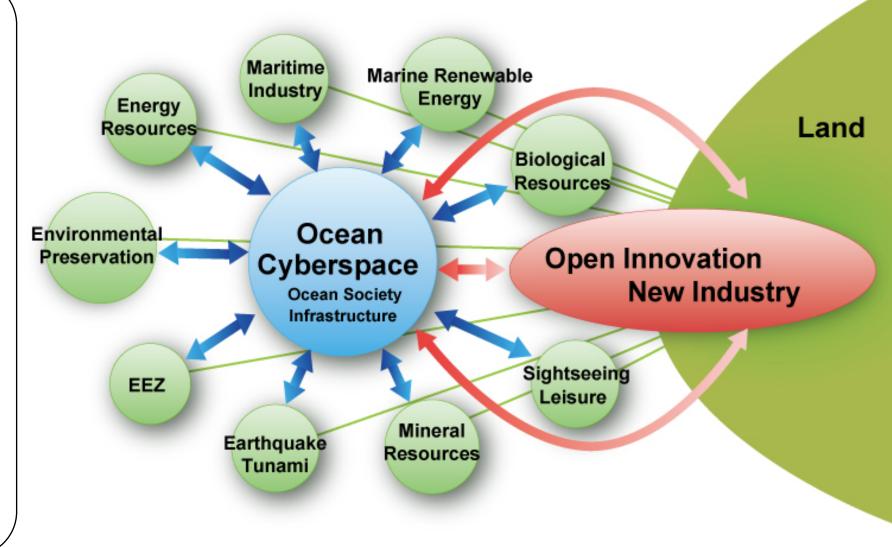
Graduate School of Interdisciplinary Information Studies; Interdisciplinary Information Studies

http://seasat.iis.u-tokyo.ac.jp/

## Toward the Construction of Ocean Social Infrastructure



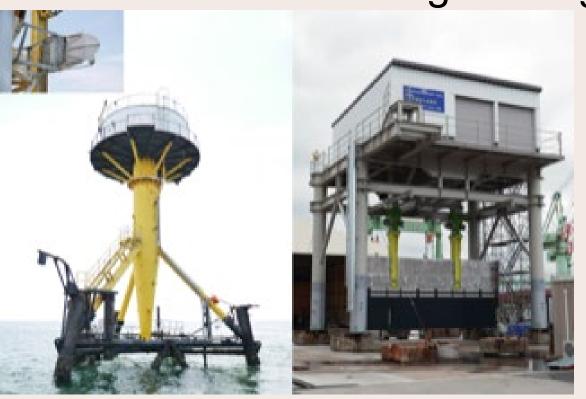
Based on integrated underwater observation technology, we aim to create an ocean cyberspace (virtual space) that is integrated with the physical space of the ocean (real space) and is free from the restrictions of access difficulties by incorporating IoT, artificial intelligence (AI), and big data technology.



Ocean Sensing System

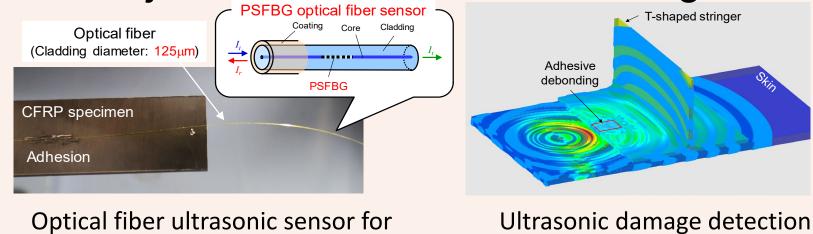
KAWAGUCHI Katsuyoshi Lab.

RHEEM Chang-Kyu Lab. Ocean Environmental Engineering Multidisciplinary Seafloor Observatory Engineering



Ocean Cyber-Physical System

OKABE Yoji Lab. Structural Health Diagnostics



Optical fiber ultrasonic sensor for structural health monitoring

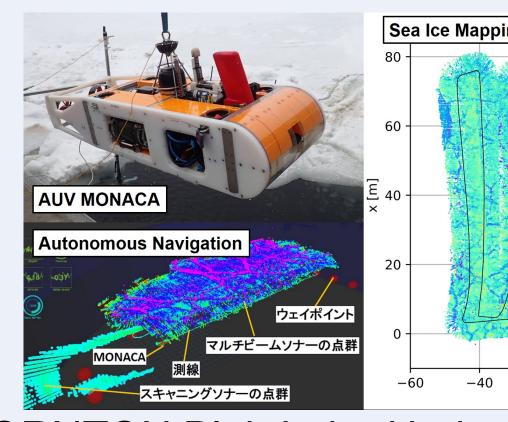
in composite structures

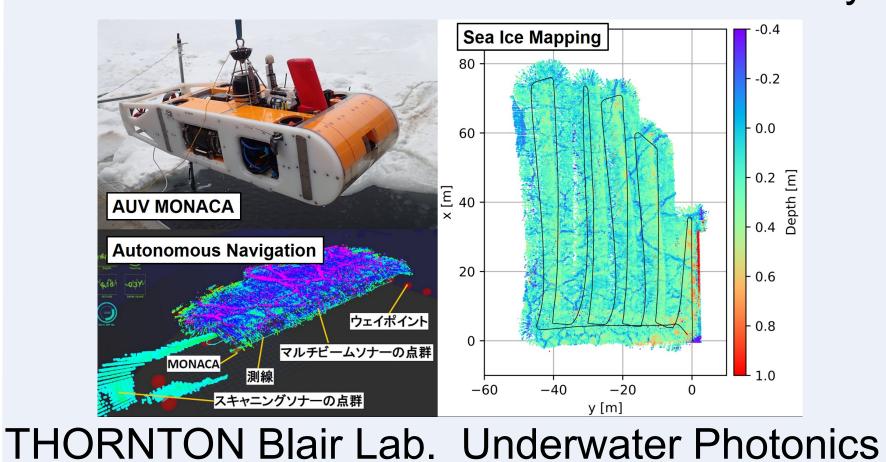
OISHI Takeshi Lab. Spatiotemporal Media Engineering



Tele-operation of Humanoid Robot

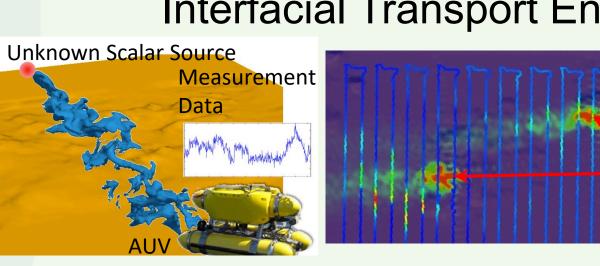
SUGIURA Shinya Lab. MAKI Toshihiro Lab. Underwater Platform Systems Wireless Communication Networks

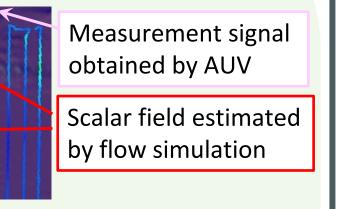




Delay-tolerant wireless relay networks YOKOTA Yusuke Lab. **Underwater Information System** 

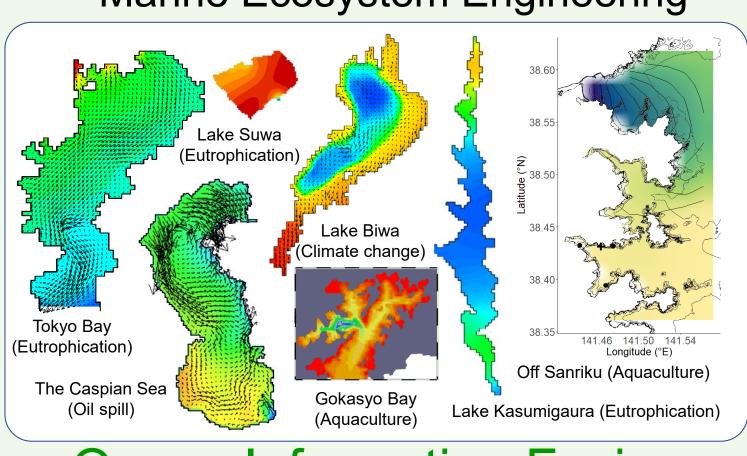
HASEGAWA Yosuke Lab. Interfacial Transport Engineering



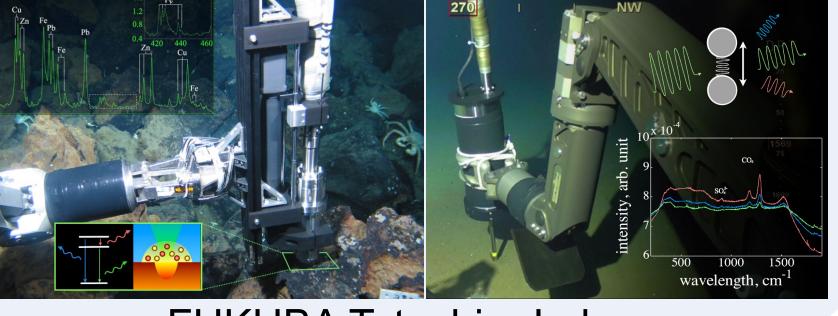


Estimation of Scalar Field through Integration of Measurement Data into Computational Fluid Dynamics

KITAZAWA Daisuke Lab. Marine Ecosystem Engineering



Ocean Information Fusion



FUKUBA Tatsuhiro Lab. Multi-modal Ocean Sensing Systems Microfluidics for

