THORNTON LAB.

[Seeing the Ocean in New Light]

Center for Integrated Underwater Observation Technology

Underwater Photonics

Graduate School of Frontier Sciences

Department of Ocean Technology, Policy and Environment

Underwater Photonics

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



University

of Southampton

The University

of Tokyo

Not in seeking new landscapes but in having new eyes ~ Marcel Proust

Underwater sensing is the raw material of how we perceive the ocean. We aim to improve how the ocean can be observed by investigating the interactions of photons in underwater environments, integrating advanced instrumentation on robotic platforms, and combining this with methods for automated data interpretation. Our group collaborates closely with institutes in the UK, Australia and the USA, and participates in international competitions such as the Xprize to maximise the global impact of our research and ensure our members can conduct research effectively in an international environment.





In situ analysis of molecules

Holography

Large volume microscopy

Automated interpretation

Classification and regression





Structured light



