

# Brown Bag Seminar

# No. 049

Recorded data will be uploaded

**Online**  
(Zoom)


2022 **5.18** (wed.) **12:10** - **12:50**

12:10-12:15

◆ Introduction

12:15-12:40

 ◆ Seminar  
(Presentation)

12:40-12:50

◆ Q&amp;A

Scan here for Registration

[https://temdec-med-kyushu-u-ac-jp.zoom.us/webinar/register/WN\\_nv088WygSfK79FgrUlaw3g](https://temdec-med-kyushu-u-ac-jp.zoom.us/webinar/register/WN_nv088WygSfK79FgrUlaw3g)

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## The interaction between the environment and humans as deciphered from reef corals

 Chair: **Assoc. Prof. Toshinori TANAKA** (Research Promotion Coordinator of Q-AOS)

### Assistant Professor **Yamazaki Atsuko**

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PhD. in Natural History Sciences, Graduate School of Science, Hokkaido University. My research focuses on coral reef formation, marine nutrient cycles, and climate change. I engaged in research and teaching at AORI, University of Tokyo, GEOMAR Helmholtz Centre for Marine Research Kiel, and Graduate School of Science, Hokkaido University. I have been appointed as Assistant Professor at the Department of Earth and Planetary Science, Graduate School of Science, Kyushu University, since 2018. In 2014, I established the KIKAI Institute for Coral Reef Sciences as a research base on my field, Kikaijima Island, and am practicing research in the fusion of the humanities and sciences industry-academia-government.

Reef corals live in the boundary between the land, sea, atmosphere, and humans, sensitively recording environmental changes on their skeletons. Reef corals grow their skeletons with annual rings. The chemical compositions in coral skeletons provide the changes in past water temperature, salinity, solar radiation, nutrients, etc., on a high-resolution time scale (weekly to monthly) during hundreds to thousands of years, the period of coral life. It is an important environmental archive in tropical and subtropical regions with few observations. Furthermore, using fossil corals makes it possible to read the environment in which prehistoric people lived. In this seminar, I would like to introduce changes in the global environment as revealed by the record of reef corals and the history of the interaction between the environment and humans, based on my fieldwork experience in tropical and subtropical regions.

### Key Words

"reef corals"

"global environmental changes"

"tropical-subtropical oceans"