

Cruise Summary

1. Cruise Information

- (1) **Cruise ID:** KM21-E04C Leg1
- (2) **Vessel:** R/V KAIMEI
- (3) **Cruise Title**
- (4) **Chief Scientist**
Yoshihiro Fujiwara (JAMSTEC)
- (5) **Representative of the Science Party**
JC21-01 Katsunori Fujikura (JAMSTEC)
- (6) **Research Titles**
JC21-01
- (7) **Cruise Period**
2021/10/12 - 2021/10/17
- (8) **Ports of departure/call/arrival**
Yokosuka -
- (9) **Research Area**
Nishi-Shichito Ridge

2. Overview of the Observation

A deep-sea research cruise was conducted at the Nishi-Shichito Ridge from October 12 to October 17, 2021 to develop novel monitoring methods for offshore seabed nature conservation areas and to acquire baseline data on the faunal diversity. Four ROV dives, one CTD water sampling cast, three baited camera casts, and one lander cast were conducted south off of Genroku Seamount and on Hoei Seamount. A newly developed deep-sea lander equipped with three water sampling bottles, a mass filtration system for water, one sediment corer, several physico-chemical sensors, and a video camera was deployed at a depth of 2065 m south off of Genroku Seamount and acquired 36-litter of seawater, four filters that filtered ca. 100 liters of seawater in total, a 23-min video footage, and environmental information such as current profiles, water temperature, salinity, pressure, turbidity, and dissolved oxygen concentration for 24 hours. About 150 biological samples, sediments, water sample, and hundreds of photographs were collected

during ROV dives to obtain baseline information.