

Report on the Deep Ocean Water Use Promotion Committee's 2019 Kagoshima Meeting

Katsuhisa Yamada (Chairman of the Promotion Committee)

This year's user's conference was held on the eve of the annual DOWAS conference at 15:15 on Wednesday, October 9th, with over 60 participants gathered at the Kagoshima University Learning Exchange Plaza 2F Hall.

Under the chair of Dr. Hiroyuki Arikawa of Kagoshima University, Professor Hiroyuki Maeda (Chairman of Kagoshima University's Industry-Academia Regional Co-Creation Center) opened the event with a welcoming speech. Originally assigned as a keynote, a kick-off lecture was given by the Society's Use Promotion Committee with the premise: "The Industrial Value of Deep Ocean Water, the last Resources left on Earth." Next, Mr. Nobuyuki Yamamoto, Chairman of the Kagoshima Deep Ocean Water Association, coordinated the discussion on a theme within the meeting "utilization in the field of fisheries," by three panelists who also presented.

First, Prof. Hiroyuki Maeda, mentioned above, gave a lecture on the study of Deep Ocean Water Utilization on Koshiki Island. As the only lab in Kyushu that demonstrates the advanced utilization of local products on Koshiki Island, which has Deep Ocean Water Intake Facility, it was said that experimental equipment for advanced complex aquaculture facilities utilizing Deep Ocean Water were set up as a project to promote regional revitalization through social implementation utilizing the Ministry of Education, Culture, Sports, Science, and Technology's National University Corporation Promotion Program to Enhance the Function of Research and Development that responds to regional issues in the southern Kyushu and Nansei Islands regions. In the aquaculture test at this facility, no other food was given, and abalone grew sufficiently with the attached algae grown in the nutrients contained in the DOW as feed, showing the potential of Deep Ocean Water.

Next, Mr. Hiroyuki Noda (Chief of Deep Ocean Water Department, Shizuoka Prefectural Fisheries Research Institute) gave a lecture entitled "Utilization of Deep Ocean Water at Shizuoka Prefectural Fisheries Research Institute," in which he talked about applied research on aquaculture. Especially in fisheries use, taking advantage of the characteristics of Suruga Bay Deep Ocean Water, with 'high nutrients,' which is rich in nutrients such as nitrogen and phosphorus, 'cleanliness,' with little bacteria, and 'low temperature stability,' with stable low temperature year round, as a measure against the disappearance of seaweed beds due to sea temperature rise phenomenon and the disappearance of useful algae-eating animals such as abalone, they are involved in the research of culturing large seaweeds of the family *Laminariaceae* such as *Ecklonia cava* and *Eisenia arborea*, and has contributed to the development of technology that efficiently produces seeds and seedlings. At present, the depth of the growing water is shallow, and the institute is working on the development of transplantation methods and aquaculture techniques that are suitable for *E. arborea* which is susceptible to damage by algae-eating fish.

Finally, Ms. Kyoko Washiashi (COO of GO Farm Co.) provided a very attractive lecture from a wide range of perspectives, from the background of the initiative, which as a group company of General Oyster Co. that has 28 oyster bars nationwide (as of September 2019), has been since 2012, working a challenge to create the world's first complete onshore aquaculture of oysters using Deep Ocean Water in Kumejima, Okinawa, to its social significance. In the future, they will continue to utilize Deep Ocean Water for the oyster business and further evolve and develop the current fisheries technology that have been inherited and continue to develop for the children who will lead the next generation as marine environmental pollution is becoming more serious every year with direct observation of the damage to oysters and other marine products.

In the panel discussion that followed, many opinions and questions were raised from the venue, and it was an extremely meaningful round-table discussion in which each participant at the venue equally provided the origin and significance of the conference.

Although this is only a short note, thank you very much to everyone at Kagoshima University and Kagoshima Deep Ocean Water Council, who set up a wonderful venue this time, and to the panelists who came to give lectures from long distances and participated in the round-table during their busy schedules.

(DOWAS Use Promotion Committee Katsuhisa Yamada)



Kagoshima Deep Ocean Water Council Chairman
Nobuyuki Yamato



Kick-off Lecture Author
DHC Co.



Panelists
From Left: Hiroiyuki Noda (Shizuoka pref.)
Kyoko Washiashi, (GO Farm), Coordinator
Nobuyuki Yamato (Kagoshima Deep Ocean
Water Council)



Director of Industry/Academia Regional
Co-Creation Center, Kagoshima University
Professor Hiroto Maeda



Participants interested in the lectures

