

“The 9th Asia–Pacific Marine Biotechnology Conference” has been held, and IMT was in charge of its special session.

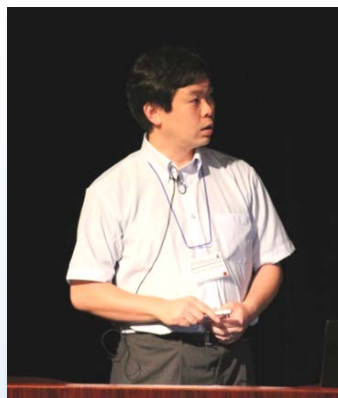
The 9th APMBC (Asia–Pacific Marine Biotechnology Conference) has been held at Culture–Plaza called CUL–PORT in Kochi on July 13~16, 2012.

The IMT was in charge of the special session on the second day at this international conference. Dana Ulanova Ph.D. and Kenichi Onodera Ph.D., Specially–Appointed Assistant Professor from IMT project, gave lectures as presenters in the special session. In addition, Maki Teramoto Ph.D., Specially–Appointed Lecturer, participated in session called “Marine Microbiology 2” on the third day as session chairman and presented her research result.

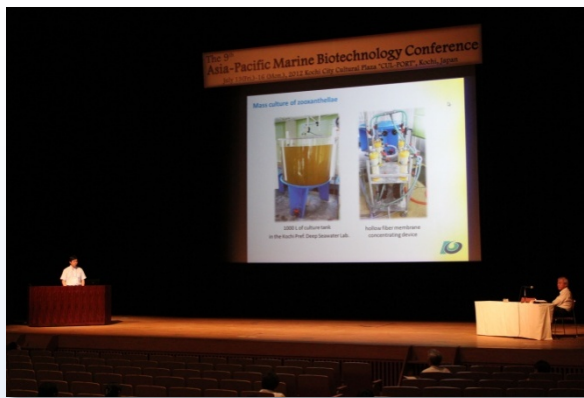
What is 「Asia–Pacific Marine Biotechnology Conference」?

It is the historical international conference in where marine biotechnology researchers of the Asia–Pacific region participate for the purpose to understand and utilize marine sciences in the perspective of biotechnology.

Dr. Onodera, Associate Professor, has presented his research, entitled “A Further Search for Bioactive Secondary Metabolites from Marine Dinoflagellates of the Genus *Symbiodinium*”.



Dr. Onodera
(Specially Appointed Assistant Professor)

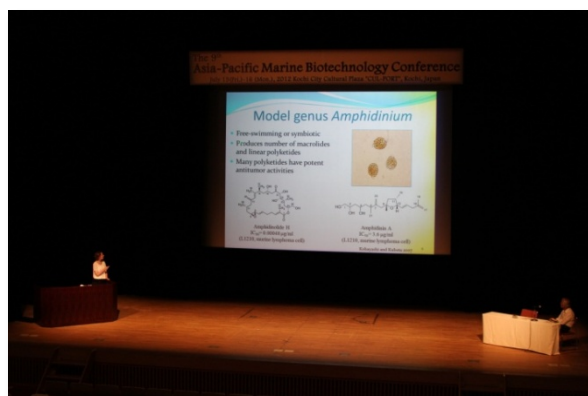


Marine Dinoflagellates are unicellular phytoplankton and also produce a number of bioactive metabolites. Especially, symbiotic dinoflagellates are engaged in helping each other in order to live together among marine animals. He searches for the useful metabolites with the biological activity from mature algae, which is isolated symbiotic dinoflagellates from animals and artificially cultured. Although the seawater media were generally used for cultivation, he succeeded in working on mass culture of 1000L at a time instead of the conventional method of flasks culture. This mass culture was the achievement in corporation with the Kochi Pref. Deep Seawater Lab. He currently culture symbiotic dinoflagellate isolated from giant clam with the application of the system. Also, he clarified that this symbiotic dinoflagellate contains a large molecule of m/z 2743. This chemical structure and biological activity are under analysis, and the metabolite is expected to lead to the development of drugs and cosmetics in the future.

Dr. Ulanova, Associate Professor, has presented her research, entitled “Searching for polyketide biosynthetic genes in marine microalgae”.

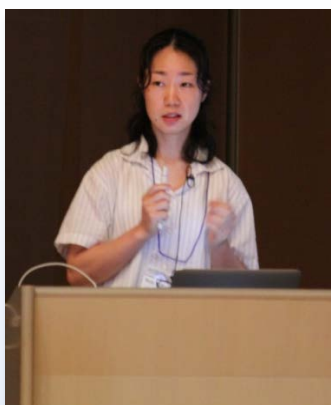


Dr. Ulanova
(Specially Appointed Assistant Professor)



Dr. Dana Ulanova from Oceanography Section, Science Research Center, Kochi University had a talk under the title `Searching for polyketide biosynthetic genes in marine microalgae`. In this study, she analyzed the biosynthesis of natural bioactive product in marine microalgae. She has found many genera of bacteria are associated with microalgae culture. This result is important first step in understanding of bacterial role in microalgal natural product synthesis.ial role in microalgal natural product synthesis.

Dr. Teramoto, Specially Appointed Lecturer, has presented his research, entitled “Bacterial community in the Strait of Malacca”.



Dr. Teramoto
(Specially Appointed Lecturer)



The Strait of Malacca is a narrow route of seawater, between the Malay Peninsula and the Indonesian island, and is a major route for crude oil shipments. Some part of the Strait has shallow water depth, which is prone to stranding of ships, and crude oil pollution. Crude oil accidentally discharged into the marine environment can be degraded and remediated by indigenous microbes such as oil-degrading bacteria, which have been indicated to be ubiquitous in marine environments. A wide variety of the oil-degrading bacteria are known to date. However, relatively few studies have been conducted on the bacteria in tropical marine environments. In this present report, we described the indigenous marine bacterial community found in the Strait of Malacca. Of which, some have been found to harbour oil-degrading ability, thereby suggesting their potential use for bioremediation in the region.