

## List of Dissertation Abstract

Name	Supervisor	Title	Abstract
Norihisa TANAKA	Yukira MOCHIDA	The characteristics and diversity of local flora in Kanagawa Prefecture through the application of the specimen database	The purpose of this study was to clarify the characteristics and diversity of local flora in Kanagawa Prefecture. To this end, I used the “Flora of Kanagawa 2001” voucher specimen database. I describe the phytogeographical divisions, “hotspots” for red data plant species, range expansion of naturalized plants, and phytogeographical floral elements of the flora in Kanagawa Prefecture. Moreover, I present the diversity of flora in Kanagawa Prefecture and compare this with the number of taxa in other Japanese prefectures.
Yuka SASAKI	Hiroki HONDO	The relationship between species diversity of zooplankton and ecosystem services :an examination of secondary and tertiary production of zooplankton and carbon transport of the large copepod <i>Eucalanus californicus</i> in Sagami Bay	This study analyzes the relationship between species diversity of zooplankton and ecosystem services by observing seasonal changes of secondary and tertiary production of zooplankton and estimating downward carbon transport of the large copepod <i>Eucalanus californicus</i> in Sagami Bay. The analysis reveals that the relationship between species diversity of zooplankton and its production is different depending on trophic levels because of species composition, and downward carbon transport of <i>E. californicus</i> varies from year to year. These findings suggest that marine ecosystem services is affected by species diversity of zooplankton.
Naoki OKADA	Motohiko MURAI	Study on the floating body shape for maximizing the wave energy absorption in waves	Wave power generation has been developed for various sizes so far. However, there is no implementation of the wave power generator yet all over the world. In this study, we investigated following contents: 1. About the validity of the evaluation methods for the wave power generator. 2. About the differences in shapes which are suitable for single hull and for multiple hulls under proper conditions. 3. About shapes of high performance in a wide range of period. The Suitable shape in each condition was determined by the genetic algorithm , and were multilaterally examined such as by comparing the shapes features.