

## Effect of nutrient load from land to the Beppu-bay

# Mitsuyo Saito[1]; Xinyu Guo[2]; Naoki Fujii[1]; Shinji Ohsawa[3]; Koji Omori[1]; Hidetaka Takeoka[4]

[1] CMES, Ehime Univ.; [2] CMES, Ehime University  
; [3] BGRL; [4] Center Mar. Environ. Studies, Ehime Univ

Nutrient load by the river and groundwater were estimated, and distribution of nutrient concentration in the seawater was confirmed in the Beppy-bay located on western Seto Inland Sea. The nutrient load from the two of first-class river (Oita and Ohta-river) was estimated to be more than 80% of the total nutrient load from land to the sea. The seawater in the Beppu-bay was characterized by higher molar ratios of phosphorus and silicon compared with the redfield ratio (N:P:Si =16:1:16). This result means that the seawater of the Beppu-bay is in the nitrogen-limited condition. It suggests the effect of the nutrient load from land to the Beppu-bay.