

## Estimation of the condition of denitrification process in the coastal groundwater

# Koichi Okada[1]; Mitsuyo Saito[2]; Shinichi Onodera[3]

[1] Integrated Sciences, Hiroshima Univ.; [2] Grad., Biosphere Sci., Hiroshima Univ.; [3] Integrated Sci., Hiroshima Univ

Nitrate contamination in groundwater is serious environmental problem in the several agricultural areas. To improve this problem, it is important to clarify about the natural function of nitrate attenuation such as denitrification process in groundwater.

The aim of this study is to confirm the denitrification process in the coastal groundwater and its driving force .

To evaluate the denitrification capacity in the groundwater of the coastal area, the authors conducted the simple in-situ injection experiment. The experiment was carried out at the two different study sites with three different depths of boreholes.

The results suggest that the velocity of groundwater and the content of organic carbon in the aquifer effect on the denitrification process.