

Development of sampling method of submarine spring for analysis of water chemistry, isotopes and dissolved gases (CFCs, SF₆)

Kazumi Asai[1]; Katsuro Mogi[2]; Kazuhiro Hasegawa[3]; Kazuyoshi Asai[4]

[1] Geo-Science Laboratory; [2] Geosystem Engineering, Tokyo Univ; [3] Geo Science Laboratory Inc.; [4] Geo science lab

<http://www.geolab.co.jp/>

Tracer methods using water chemistry, dissolved gases and environmental isotopes are one of the most effective tools in investigating the groundwater flow system. These tracers method becomes the powerful tool for the study of the submarine groundwater discharge, but the appropriate sampling method for various analyses is not established. In the present study, we developed the new sampling system of submarine spring suitable for the analyses of the water chemistry, isotopes (Tr, D, 18O) and dissolved gases (CFCs, SF₆, N₂, Ar).