

Hydrochemical distribution of cations and anions in groundwater

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Assessment of groundwater quality in Korea

In this study, we focused on evaluation of the quality of groundwater based on the comparison of the physiochemical characteristics and distribution of cations and anions in groundwater from rural areas.[1] In this point of view, major objectives of this study were grouped as following three categories; 1)quality assessment of groundwater as a special usage(agricultural, industrial) 2)determination of groundwater types 3)tracing of ion sources of groundwater.

Assessment of groundwater quality in Korea

The evaluation using the U.S. salinity Laboratory's Diagram also showed that most groundwater samples are C1S1(Excellent /Excellent) or C2S1(Good/Excellent). And, in source-rock deduction and the comparison of Gibbs and Chadah diagram, the chemical components in the groundwater are induced from the water-rock deduction such as followings; dolomite type weathering, gypsum type weathering, alkaline and alkaline earth type weathering.

[1] Hwang, J., Park, S., Kim, H., Kim, M., Jo, H., Kim, J., Lee, G., Shin, I. and Kim, T. (2017) Hydrochemistry for the Assessment of Groundwater Quality in Korea. *Journal of Agricultural Chemistry and Environment*, **6**, 1-29.