

Laboratory of Environmental Water Science

Makoto KAGABU

kagabu@nagasaki-u.ac.jp



Evaluation and Management of Water/Groundwater resources is a key issue

Although the subsurface hydrological environment is important for sustaining human life, issues affecting this environment have largely been ignored because of the difficulties associated with observing and evaluating this environment. Changes in the status of subsurface and surface water resources are currently occurring in numerous Japanese and Asian cities, depending on the stage of urban development. While the changes of the surface water are relatively easy to recognize, regional changes in groundwater storage are difficult to determine. Subsurface environmental problems, such as land subsidence due to excessive pumping and groundwater contamination, have occurred repeatedly in large cities with a time lag between either subsidence or contamination being affected by the characteristics of urban development.

We are trying to contribute to conserve the water environment using techniques such as field sampling, isotope analysis, water age dating, and chemical analysis. Also, human impacts must be considered for the sustainable water environmental management.

