

# Survey by the Water Group



Photo 1



Photo 2

We carried out the water-sampling survey used to analyze Krypton-85 in Jakarta (Photos 1 and 2). In March 2010 we sampled water at three locations: the recharge area of the Jakarta region, an intermediate region (just outside the urban region), and the urban region. Because only small amounts of  $^{85}\text{Kr}$  are contained in the groundwater, a large volume of groundwater was necessary. We stayed up all night to make the observations. We inserted lifting pumps into the groundwater observation wells to pump up the groundwater. We extracted the dissolved gas contained in the groundwater and put it into gas canisters, and separated out the components contained in the dissolved gas in a laboratory in Bandung. We brought the gas with the separated components back to Kyushu University and were able to measure the  $^{85}\text{Kr}$  there for the first time.  $^{85}\text{Kr}$  is attracting attention as a new groundwater age tracer and a method for its extraction, separation and measurement was established for the first time only recently, in this project.