

Chemical Substances and its components in rainwater

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Large amount of nitrogen oxide and sulfide oxide is emitted from factories and homes from winter to spring every year, and problems of air pollutant for example PM2.5, are taken up. We decided to study how much air pollutants is contained in rainwater by gathering rainwater and checking air pollutants dissolving in rainwater. It is still being researched now but we submit an interim report.

1 : Gather rainwater with "raingoround" ("raingoround" is a device developed by HORIBA factory which can gather rainwater by 5mm.

2 : Analyze rainwater with ion chromatograph system.

1 : Rainwater on Dec 11 had thick constituent concentration of the sea (Na or Cl).

→Rainwater brought by south wind have more sea water than that brought by north wind.

2 : Through four times experiments (Dec 11, 13, Jan 18, 29) as rain down, the concentration becomes low.

3 : We can find the tendency that the conductance becomes low steadily while pH doesn't have any clear tendency.

→The rain has a lot of air pollutants in the beginning.

*After this experiments we want to study continuously how weather condition affects substances in rainwater and each amount of them.

Keywords: meteorology, atmospheric pollution, acid rain

