

## Fe concentration measurement method in spring water

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This research is to develop and verify a method to measure iron concentration in spring water using citric acid. Spring water is called "sekisui" because it contains a large amount of iron and turns red by the oxidation of soluble iron and iron ions in water. Sekisui has had effects such as crop growth failure and deterioration of river water quality. We know that iron and citric acid contained Sekisui will temporarily turn yellow due to the reaction, and we have arrived at this study because it is possible to measure the iron concentration by applying this method. Mix citric acid with sekisui to make it yellow. Then mix a commercially available yellow liquid with citric acid and light it to measure the illuminance. There is a difference in illuminance by changing the ratio of sekisui and yellow liquid. It is possible to generate regularity by generating the data in a graph. It is the research which measures the concentration of iron using the difference.

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