

## Geochemistry and flow system of hot springs in the Tokyo Metropolis

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Major and minor chemical constituents in eighteen hot spring waters from the wells in the Tokyo Metropolis were analyzed. Based on the analytical data, we discussed flow system of the waters and water-rock interactions to make chemical properties of the waters. The hot spring waters are divided into Na-Cl and Na-HCO<sub>3</sub> types. As it is inclined that brine fraction in the Na-Cl type waters and its reservoir fluid temperature estimated by the new silica geothermometer (Yasumoro and Muramatsu,2007) decrease from the east to the west, the deep waters seem to be formed by mixing of the deep seated fossil brine with the meteoric water infiltrated from the Kanto mountainland. On the other hand, the Na-HCO<sub>3</sub> type deep waters in the western Chichibu belt are probably flowing upward along fractures developed in the Kanto mountainland.