Distribution of arsenic and uranium between lake waters and sediments in saline lakes in Southern Mongolia.

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The health risks associated with toxic chemicals in saline lake become environmental problems (Barber et al. 2009). In saline lakes, the dissolved matters are enriched in solutions because of the evaporation of lake water. The enrichments result in the formation of the contaminated lake water and salts deposits containing high levels of the toxic chemicals (Barber et al. 2009). The toxic elements distribution between the sediments and lake water are essential for the understandings of the enrichment processes and the mobility of toxic species in surrounding environments. In present study, we investigated the distribution processes of arsenic and uranium by analyzing the lake waters, suspended matters and sediments in saline lakes (Olgoi Lake, Boon Tsagaan Lake and Orog Lake) in Southern Mongolia.

Barber, L.M., Peterson, R.K.D., Montagne, C., Inskeep, W.P., Schleier III, J.J. (2009) A dietary risk assessment for indigenous consumption of natural salt deposits in the Darhad Valley, northern Mongolia. Human and Ecological Risk Assessment, 15 (5), pp. 907-922.

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