

Chemical characteristics of heavy metal concentration of riverbank sediment by river flow from the Hii river, Shimane prefecture, southwest Japan – a preliminary study.

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Heavy metal concentrations pattern of riverbank sediment by river flow of Hii river were measured at the small area (sand bank in the river water) (20m*35m in size), Izumo city, Shimane prefecture, southwest Japan. Sediment samples were collected at about 150 points at the small area. The interval of the samples were about 1-2m each.

Analyzed elements are mainly Ca, Ti, Mn, Fe, Co, Zn, and Cr by portable (handheld) XRF. We also check the mineral compositions and grading analysis of each samples.

The mineral and chemical concentration patterns on the river bank became clear by this preliminary study.

We are going to study these results in details further and to perform the environmental and geological assessment to the Hii river.

[1] Takayasu, K (2001): *Tatara-syobou (press)*, pp184. [2] Matsumoto, I (2009): *Laguna*, **16**, 53-62. [3] Matsumoto, Komatsu and Kamei et al. (2008): *Memories of Faculty of Education, Shimane Univ*, **42**, 97-105. [4] Matsumoto, I., Hoffman D., Wolfe J. and Ishiga H. (2010): *Texas Journal of science*, **62**, 223-236.