
[EE] Evening Poster | A (Atmospheric and Hydrospheric Sciences) | A-HW Hydrology & Water Environment

[A-HW22]Hydrological Cycle and Water Environment

convener:Seiya Nagao(Institute of Nature and Environmental Technology, Kanazawa University), Isao Machida(Geological Survey of Japan), Shin'ichi Iida(国立研究開発法人森林研究・整備機構森林総合研究所森林研究部門森林防災研究領域水保全研究室, 共同), Takeshi Hayashi(Faculty of Education and Human Studies, Akita University)

Thu. May 24, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

We focus on various issues of water cycle and environment and aim to answer questions of hydrological and earth system sciences including 1) surface, subsurface and evapotranspiration processes of water cycle; 2) natural and anthropogenic hydrothermal systems, 3) environments issues and studies on a watershed or global scale, 4) water-related issues with ecological, environmental, and geochemical aspects, and 5) other issues in hydrological sciences. This session welcomes presentations regarding various kinds of approaches and techniques such as field survey, remote sensing, isotope tracers, numerical simulation, and theoretical analysis.

[AHW22-P03]History of mercury contamination associated with Artisanal Small-scale Gold Mining activity observed in Lake Tilap Indonesia

*Osamu Nagafuchi¹, Hazumu Kinoshita², Koyomi Nakazawa¹, Tomonori Kawakami³, Takanobu Inoue⁴, Rosana Elvince⁵ (1.Fukuoka Institute of Technology, 2.Nippon Instruments, 3.Toyama Prefectural University, 4.Toyohashi University of Technology, 5.Palankaraya University)

Keywords:Mercury, Artisanal Small-scale Gold Mining Activity

Mercury is released to the environment from various processes associated with Artisanal Small-scale Gold Mining (ASGM) activity. In this presentation we focused on the Lake sediment core to clarify the mercury pollution history near ASGM site. Lake Tilap is located near Petuk Bukit Village, in the Rakumpit sub district of Central Kalimantan. The lake is one of the important fisheries for the local people. On the other hand, people in this area do a lot of small scale gold mining using gold-amalgam method in upper endorheic basin of Rungan River.

Therefore, mercury contamination and increasing of human or ecological risks has been a lot of concern, who live in this area in these days. In order to conserve ecosystem and reduce human health risk from the mercury pollution, it is important to learn the history of its pollution in this area.