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**ANALYZING VOLCANIC ERUPTION ACTIVITIES FROM THE
MAGNETIC PROPERTIES OF SUMATRAN GUANO DEPOSITS**

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HALAMAN PENGESAHAN

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ABSTRACT

Indonesia consists of many guano caves distributed on islands such as Sumatra Java, Sulawesi and Borneo. As a natural environmental proxy, guano deposits record Volcanic eruptions (Volcanic eruption disasters has highlighted the need for a comprehensive understanding of volcanic eruption cycles). However the study of long and complete palaeoeruption records in cave sediments (deposited Guano) have been doing. The study that aims to see events of volcanic eruption through variations of magnetic properties in guano. A part of the magnetic properties of Guano from Solak and Rantai cave West Sumatra have been collected and measured. They are magnetic concentrations (magnetic susceptibility), Curie points (Susceptibility depend temperatures), geochemical (XRF), structures (XRD). The selected samples also already analysed such as carbon isotope and radiocarbon in James Cook University Australia. The data have been analyzed for magnetic properties purpose. Based on the analysis, I and two students have been wrote the papers where it has been presented in PEDISGI 2018 UNPAD, ICRLP 2018 in UNP and ICEM in UPSI Malaysia. For this study, we still waiting for structure analysis by using Scanning Electron Microscopy (SEM) for Fly Ashes from Sinabung, Merapi and Mt. Agung from Nanyang Technological University (NTU) Singapore.

Right now, I am going prepare the articles for International journal and submitted it on early Desember.

Key-words: Volcanic eruption, magnetic properties, Solek and Rantai cave, Mt. Sinabung, Mt. Marapi