

Making volcanic edifice with edible lava

*Tatsuo Kanamaru¹, Akihiko Fujinawa²

1. Department of Earth and Environmental Sciences, College of Humanities & Sciences, Nihon University, 2. Department of Earth Sciences, Faculty of Science, Ibaraki University

Volcano is a window through which inside of the living earth can be seen, and also gives us a lot of grace and pleasure. On the other hand, volcanic disasters always hit human societies sitting on volcanic countries. In order to feel familiar with the volcano and get along well with the volcanoes, it is very important to know how the volcanoes have been formed. For this purpose, it is best to observe directly a volcanic eruption or perform a geological survey. However, it is difficult for non-experts to do the field survey. Therefore, efforts to make volcanoes understandable easily even by non-experts have to be made. In fact, the effort such as flow experiment of lava flow using miniature model, analog experiment of eruption using food, etc. have been conducted actively in recent years (e.g. Hayashi, 2006). In this presentation, we will introduce a lava flow experiment using pseudo-magma material prepared by mixing chocolate, gelatin, milk and heating it in a microwave oven. In addition, making pseudo-scoria formed by foaming of the same substance will be exhibited. In the lava flow experiment, it is possible to produce characteristic forms on the real lava flow surface, such as lava inflation, lava levee, ropy lava, etc. Pseudo-scoria produced by the experiment is optimum for observation of bubbling of lava.

Keywords: chocolate lava, gelatin, edible volcano