

[JJ] Evening Poster | O (Public) | Public

[O-05] Kitchen Earth Science: brain stimulation by hands-on experiments

convener: Ichiro Kumagai (School of Science and Engineering, Meisei University), Miwa Kuri (International Research Institute of Disaster Science, Tohoku University), Kei Kurita

Sun. May 20, 2018 5:15 PM - 6:30 PM Poster Hall (International Exhibition Hall7, Makuhari Messe)

Kitchen Earth Science aims at understanding a natural phenomenon in Earth and planetary sciences by analogue experiments using goods and tools in our daily life. Analogue experiments have a function to unveil the fundamental physics governing the phenomenon. At the same time, they essentially include uncertainties so that unexpected results are frequently obtained, which have a potential for surprising discoveries. These findings also provide a good opportunity for deeply thinking, and raise new questions to explore. Such experience is precious not only for young researchers in Earth and planetary sciences, but also non-expert people who need a scientific thinking to live wisely. In the session of this year, we again focus on "advantages of doing hands-on science experiments" and discuss the significance of analogue experiments with uncertainties, which cause unpredictable results: even if the experiment fails, we learn a lot of things from the failure which may lead to a great success. We are accepting a variety of experimental researches and case studies on scientific education such as introductory educational experiments for Earth and planetary sciences in elementary and junior/high schools, general science education and interdisciplinary researches in post-high schools, and new approaches to citizen science and outreach. We welcome all the participants who are interested in Kitchen Earth Science to stimulate your brain by hands-on science experiments.

[O05-P01] Activity report on Kitchen Earth Science: Workshop and Annual Open House at Earthquake Research Institute (Joint Usage 2017)

*Ichiro Kumagai¹, Mie Ichihara², Miwa Kuri³, Kei Kurita² (1.Meisei University, 2.The University of Tokyo, 3.Tohoku University)

Keywords: Kitchen Earth Science, Experiment, Outreach

On Aug 1st, 2017, a workshop entitled "Kitchen Earth Science" was held at the Earthquake Research Institute (ERI, the University Tokyo), which was supported by ERI Joint Usage 2017. We invited 13 speakers over a wide area (Science, Engineering, Scientific Education, Mass media, etc.) and had more than 60 participants in the workshop. The theme of the workshop was "brain stimulation by hands-on experiments". Some speakers demonstrated their experiments as a live show of "Kitchen Earth Science", which stimulated our brain and excited our discussion. We also had a collaboration with ERI at the Annual Open House on Aug 2nd. We invited 4 lecturers as "chefs of Kitchen Earth Science", and also the Kitchen experiments were demonstrated by students of Meisei University. In this presentation, we will briefly report our activity at ERI in 2017.