

---

[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 elementally 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-P04]Particle-driven Convection

Akiko Minakawa<sup>1</sup>, \*yusaku nagata<sup>1</sup>, Tetuya Kawamura<sup>1</sup> (1.Ochanomizu University)

Keywords:convection, Particle-driven Convection, Chlamydomonas

Particle-driven Convection