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[O-08] Kitchen Earth Science: its potential for producing diverse goals by hands-on experiments

convener:Ichiro Kumagai(School of Science and Engineering, Meisei University), Ayako I Suzuki(Toyo University), SHIMOKAWA MICHIKO(Nara Womens University), Kei Kurita(Earth-Life Science Institute, Tokyo Institute of Technology), Chairperson:Ichiro Kumagai(School of Science and Engineering, Meisei University), Ayako I Suzuki(Toyo University), SHIMOKAWA MICHIKO(Nara Womens University), Kei Kurita(Earth-Life Science Institute, Tokyo Institute of Technology)

Sun. May 25, 2025 10:45 AM - 12:15 PM International Conference Room (IC) (International Conference Hall, Makuhari Messe)

"Kitchen Earth Science" aims to understand a natural phenomenon in earth and planetary sciences through analogue experiments using goods and tools in our daily life. Analogue experiments have a function of revealing the fundamental physics governing the phenomenon. At the same time, they inherently contain uncertainties, so that unexpected results are often obtained, which have a potential for surprising discoveries. These findings also provide a good opportunity for deep thinking and raise new questions to be explored. Such experiences are valuable not only for young researchers in earth and planetary sciences, but also non-experts who need a scientific thinking to live wisely. In this session, we focus on "hands-on experiments that produce diverse goals" and discuss the importance of analogue experiments with uncertainties, which causes unpredictable results: even if the experiment fails, we learn a lot of things from the failure which can lead to a great success. This time, we will discuss the role of the "Kitchen Earth Science Experiment" featured in the NHK TV drama in 2024, "Sora Wataru Kyoshitsu," which is a story in a science club of a high school evening classes. We will invite a variety of speakers who will report experiments on "Kitchen Earth Science" in the TV drama, case studies on scientific education in elementally and junior/high schools, general science education and interdisciplinary research 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.

10:45 AM - 11:00 AM

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