
Oral | Symbol H (Human Geosciences) | H-CG Complex & General

[H-CG38_29AM2]Systems of life in closed-ecology on planets

Convener:*Kaori Tomita-Yokotani(Graduate School of Life and Environmental Sciences, University of Tsukuba), Hiroshi Kojima(none), Chair:Kaori Tomita-Yokotani(Graduate School of Life and Environmental Sciences, University of Tsukuba)

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Living creatures on the earth have been evolved since its origin a long time ago. They equip several important functions affecting each other. Knowledge on those functions and interaction of the ecology is essential for secure design of a closed-ecosystem with limited number of living species under the harsh environments, such as space and deep sea or desert.

12:30 PM - 12:45 PM

[HCG38-P03_PG]Useful utilization in closed bio-ecosystems of *Nostoc* sp. HK-01 having the tolerance of gamma-ray

3-min talk in an oral session

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Keywords:closed bio-system, cyanobacteria, gamma-ray tolerance, *Nostoc* sp. HK-01, photosynthetic organism

Photosynthetic organisms contribute to the circulation of oxygen or carbon dioxide and utilization of foods as a induced organism in closed bio-ecosystems. A terrestrial cyanobacterium, *Nostoc* sp HK-01, having a high drought tolerance, photosynthetic organism, is one of candidate organisms that can be introduced into the closed environment. It has a possibility that HK-01 has also a high gamma-ray tolerance in according to the results from several reports related to the interaction of drought tolerance and gamma-ray tolerance. Here, we will show the several influences on the growth of HK-01 after the exposure of gamma-ray in the dry colony.