

## The detection of newly found photosynthetic bacterium HLO8 in microbial mats at Nakafusa hot spring and Nakanoyu hot spring.

Katsumi Toda[1], # Masao Takano[2], Shin-ichi Kawakami[3]

[1] Earth and Planetary Sci., Nagoya Univ, [2] Dep. Earth and Planetary Sci., Nagoya Univ., [3] Fac. Educ. Gifu Univ.

<http://www.eps.nagoya-u.ac.jp/~masao/>

The newly found photosynthetic bacterium called HLO8 was discovered from red microbial mat at Nakafusa hot spring. The purpose of this study is to investigate the feature of inhabitation of HLO8 in the microbial mat structure. The survey was carried out at Nakafusa hot spring and at Nakanoyu hot spring. We measured spectral mixing ratios and water qualities. As a result, (1) we can identify HLO8 with a portable spectrometer (2) HLO8 exists in microbial mat at Nakanoyu hot spring, (3) HLO8 exists mainly in a lower layer of layered-mat. Further field research is necessary to clarify the existing areas and ecology of HLO8. We can recommend to use the portable spectrometer in such researches to detect HLO8.