

Geo-electrochemical metal production: Implications for the chemical evolution of life

*北台 紀夫¹

*Norio Kitadai¹

1. 東京工業大学 地球生命研究所

1. Earth-Life Science Institute, Tokyo Institute of Technology

Here, I show a possibility that the geo-electrochemical systems in the early-ocean hydrothermal vent environments worked as an effective means of precipitation and concentration of zero-valent forms of the transition metals (e.g., Ag⁰, Cu⁰, Fe⁰, Pb⁰), thereby provided catalytically favorable conditions for the chemical evolution of life.

キーワード：電気化学、深海熱水系、生命の起源

Keywords: electrochemistry, deep-sea hydrothermal system, origin of life