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砒素元素のバクテリア集積

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HONMA, H., OGAWA, M. and KODAMA, M.: Bacterial accumulation of arsenic element. Bull. Tokyo Gakugei Univ. Natur. Sci., **60**: 3-23. (2008) ISSN 1880-4330

Abstract

In the biological electric cells within arsenious and/or arsenic ions, the survived bacteria were certified in the electrolysis solutions. One or plural particles were formed in the survived bacteria cells. Based on the detail analyses of EDS equipped with electron-microscopy, arsenic element was certified to have been contained on the particles in the bacterial cell. The bacteria observed were identified to *Pseudomonas aeruginosa* for arsenious samples, *Burkholderia cepacia* for arsenic samples and *Stenotrophomonas maltophilia* and *Pseudomonas aeruginosa* for arsenious-arsenic mixed samples.

Key words: arsenic, bacterial accumulation, *Pseudomonas aeruginosa*, *Burkholderia cepacia*, *Stenotrophomonas maltophilia*

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