Es-P002

Relationship Between Magnetic Susceptibility Variation and Heavy Metal Contamination in Lagoon-bottom Sediments

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http://www.fortunecity.com/marina/christian/1121/EnvMagnetism.htm

Magnetic susceptibility and heavy metal mobility (solubility in 0.3% sodium cyanide solution leaching) are measured for the lagoon-bottom sediments collected from Lake Nakaumi, Shimane, Sea of Japan coast and Tunis South Lake, Tunisia, Mediterranean coast. Closed relationship can be recognized between magnetic susceptibility value and heavy metal mobility. It may be due to grain size effect, adsorption by clay minerals, and/or magnetotactic bacteria as a scavenger. The relationship between magnetic susceptibility and mobility may be applied for future environmental pollution screening in heavy metal contamination sites.