

Contribution of archaeomagnetism to archaeology and cultural property science

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Paleomagnetism is a section of the Earth sciences, to reveal the information of the ancient geomagnetic field recorded in the rocks and sediments, and it has been applied to the methods for other geoscientific informations as well as magnetic field. Also artificial materials burned by ancient people are able to be treated with the natural rocks in paleomagnetic procedures, so that the remanent magnetizations of the archaeological relics heated and fired have been measured (Archaeomagnetism).

Archaeomagnetism is used for the secular variation of the magnetic field, chronology, history of heating, and others. In Japan, especially, a lot of archaeodirection studies to the floors of old kilns and furnaces were conducted, so that the detailed models of the field variations have been produced. Here we introduce the studies on archaeomagnetism in Japan and discuss the potential for the application to the archaeological sciences.

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