X-ray tomographic microscopy study of ancient ceramics from Thailand archaeological site

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Archaeological studies for ceramics focus on some topics such as dating, provenance and technology seem to be an important information about the development of ceramics manufacturing throughout history [1-2]. In this paper presents the results of the X-ray tomographic scans of potsherd samples of ancient ceramics from Ban Muang Bua archaeological site in Roi Et province (northeastern Thailand), which dated around 1500 BC to 500 AD. These ceramics are one of the Thung Kula Ronghai cultural group which are produced as burial goods for funeral offerings or used as the burial jars, daily used ceramics, and low-fire earthenware [3]. The study is performed with an X-ray tomographic device (BL1.2W) at the Synchrotron Light Research Institute (SLRI), Thailand. The tomographic investigations revealed the internal configuration of the samples. Based on the X-rays images resulting from these scans, hints about the techniques used in the manufacturing of the artifacts were obtained, as well as some indications useful for conservation and restoration purposes.

References

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