

Analyses of Archeological Heritages, Celadon and Dancheong, using Mössbauer Spectroscopy

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Mössbauer spectroscopy using ^{57}Co as a source is able to apply analyses of reproducing chromaticity of Celadon and Dancheong which is traditional multicolored paintwork on wooden buildings. The greenish colored celadon is determined by the condition of kiln and valence state of iron in glaze. The traditional multicolor of Dancheong is also restored using mineral pigment. Its reddish base color results in the ocher soil in Ulleong-do, Korea. The valence state of iron and its ratio can be accurately analyzed using Mössbauer spectrometer. Recently, development of the potable Mössbauer spectrometer is also focused in our research to apply in-situ detection of heritages..

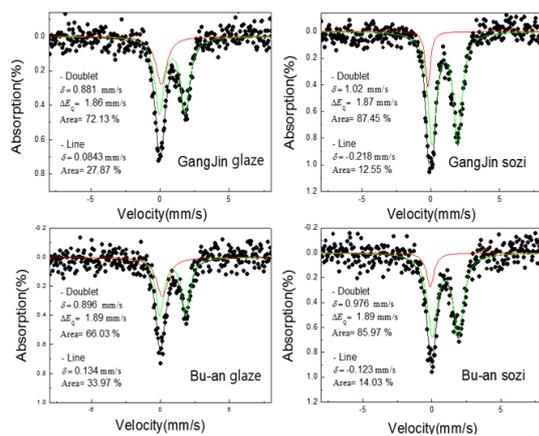


Fig. 1. Mössbauer spectrum of samples(GangJin glaze and sozi, Buan galze and sozi).¹