

Comparative Study of Five Mesosiderites.

Akiko Tomaru[1], Keizo Yanai[2], Hirokazu Fujimaki[3]

[1] Sci.,tohoku Univ., [2] Dept. Civil and Environ., Faculty of Engin., Iwate Univ., [3] Inst. Min. Pet. Econ. Geol., Tohoku Univ.

Mesosiderites form one of the types of stony-iron meteorites, and they are composed of metal mixed in silicate.

In this study, we tried to clarify the petrologic characteristics and mineral compositions.

Five polished thin sections, two Antarctic A-882023 and ALH-77219, American Estherville, Germany Hainholz and Chilean Vaca Muerta, are used for this study.

Although silicate part of each mesosiderite shows brecciation texture and similar chemical composition, the shape of crystal and mode of Metal-Silicate ratio is various.

While in this study, we compared the silicate part with Kapoeta (howardite achondrite) and metal part with Sikhote-Alin (Iron meteorite).