

HRTEM and single crystal X-ray diffraction study of modular structure of humite group

satoko ueda[1], Kazuki Komatsu[2], Takahiro Kuribayashi[1], Toshiro Nagase[3], Yasuhiro Kudoh[2]

[1] Tohoku Univ., [2] Tohoku Univ, [3] Tohoku Univ. Muse.

Humite group minerals from Sri-Lanka were examined with a high resolution transmission electron microscope(HRTEM) and by a single crystal oscillation camera with imaging plate and rotating anode X-ray generator.

Several modes of intergrowth of chondrodite were observed in the humite specimen by HRTEM.

A single crystal X-ray diffraction photograph of the humite showed weak spots which correspond to the periodicity of 28.2\AA parallel to c^* in addition to strong spots. It may indicate existence of the structure which is built of alternating stacking of humite module and chondrodite module.