



Title Determination of space group symmetry of  $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$   
using single crystal techniques.

Research Master of Science (Teaching Physics) Chiang Mai  
University 1979

Name Prateep Kaðlek

ABSTRACT

Magnesium sulfate was used as a sample for determination of the space group symmetry, using single crystal techniques. The well-formed faces of magnesium sulfate crystals were grown. Optical properties of these transparent crystals were examined. Observations of extinction directions and interference figures were carried out under the polarizing microscope and using various X-ray diffraction techniques, the Laue method for determining symmetry, the Oscillation method for determining unit cell dimensions and the Weissenberg method for indexing the reflecting planes. The results showed that the space group symmetry of magnesium sulfate is  $P_{2_1^2_1^2_1}$

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University

All rights reserved