PS-08.03.04 REFINEMENT OF SUOLNITE STRUCTURE BY NIcheng Shi*, LiBing LiaO, Zhenhe Bi, Mo, X-Ray Lab., China University of Geosciences, Beijing 100083, China.

Suolinite is a mineral discovered in China in 1895. It is the only naturally occurring sodium lead carbonate. The structure was first determined by Weisback in 1963. This study is to refine the structure and to find out as much hydrogen atoms as possible. The intensity data of suolinite was collected on a RAXIS-II eight-circle automated diffractometer. Monochromatic Cu Kα radiation was used, and the data were corrected for absorption. The final refinement was carried out using the full-matrix least-squares method with SHELXTL. The structure was refined to a R factor of 0.032 for all hydrogen and 0.05 for all nonhydrogen atoms. The bond lengths and bond angles showed that the structure is a mixture of the Si-O bond lengths.