increase of experiment temperature, biotization of glauconites is taking place which topotactically passes through intermediate montmorillonite and irregular mixed-layer formations. In this case, the ferro of biotite increases with the increase of temperature, and feldspar and amphibole are formed from Fe2Al3, Li and Mg. The fourth conclusion is that to some extent the following transformational rows can be picked out from the structural continuity of transformational phases: a) with a maximal structural continuity: glauconite - triplite of montmorillonite - disordered mixed-layer intermediate - biotite, glauconite - talc - serpentine. b) with partial destruction of structure: glauconite - feldspar, amphibole, cordierite. Finally, data which have been got from the experiment are the result of crystallochemical model transformation of glauconites on their natural metamorphic and hydrothermal change in the presence of mineralized Na-, Ca-, Mg-clay environment. Formation of expandable montmorillonite phase considerably raises the intercalation of cations in glauconites which needs to be taken into account in deciding the absolute age of glauconites according to the K-Ar method. In this case the most common mistake is in deciding the absolute age appear in more ferrignous glauconites in which the process of montmorillonitization is taking place more actively than in their Al-differences.

PS-08.04.42 PHASE TRANSITION AND CRYSTAL STRUCTURE OF A NEW COMPOUND, Sr2CrO6, BY Zhengmin Fu and Wen-xiu Li, Institute of Physics, Academia Sinica, Beijing 100080, P.R.China.

In this paper, the phase transition of Sr2CrO6 (Fu Zhengmin, Science in China (Series A), 1981, 34, 455-466) is studied. We have observed the phase transition of Sr2CrO6, which is a new compound, at room temperature. The crystal structure of Sr2CrO6 is monoclinic, with space group P21/n. The unit cell parameters are: a = 5.517 Å, b = 5.483 Å, and c = 7.704 Å. The density is 2.95 g/cm³, and each unit cell contains two formula weights. The low-temperature phase of Sr2CrO6 belongs to the cubic system, with space group Ia3d and lattice parameter a = 7.808 Å at 750°C, and a = 2.4. The crystal structures of Sr2CrO6 and Sr2CrO6+ have been determined by means of the X-ray powder-crystal method. The phase transition mechanism and temperature are investigated.

PS-08.04.44 SYNTHESIS AND PHYSICAL-CHEMICAL INVESTIGATIONS OF THIOCUPRATES WITH ThCr2Si2 STRUCTURE. By M. V. Savelieva, S. A. Glemilov, V. I. Alekseyev, Institute of Inorganic Chemistry, Russian Academy of Sciences, Siberian Branch, Novosibirsk, Russia.