

Sr isotope petrology of the Sori granodioritic body, Ashio Mountains

Yoshinobu Kawano[1], Naoko Nishi[2], Hiroo Kagami[3]

[1] Fac. Cul. Edu., Saga Univ., [2] Saga Univ, [3] Grad.Sch.Sci.Tech., Niigata Univ.

The Sori body indicating biotite K-Ar and Ar-Ar ages of 86 to 93 Ma consists of homogeneous biotite granodiorite. The body is divided into three parts based on Rb-Sr whole rock isochron ages. North and south parts of the body suggest the isochron ages of 92.6Ma and 116.4Ma, respectively. The rocks of middle part don't plot on both isochrons of the north and south parts and define no isochron. This result of Sr isotope analyses for the Sori body indicates following possibilities; 1) partly reequilibrium was happened by heat effect of other igneous rocks after emplacement of the body; 2) heterogeneity of Sr isotope was taken place by concentration of K-feldspar and/or biotite; 3) Sr isotope didn't result in homogeneous due to mixing or assimilation during magma process.