the shear fractures was bisected by the maximum principal stress axis  $\sigma_1$  and that the field suffered about NE—SW compression. The sense of movement with displacements of 1-2 m along the fracture surface of the first group, however, is left lateral judged from the some markers. The fact apparently is uncompatible with the above inference. There are many offsets of veinlets, which strike NNW, on the both sides of main veins and in the bridge areas. They are mainly responsible for the gold in the area and redgarded as a result of reativation of fractures. There is no evidence to show appreciable removement along the fracture surface of the second group. The reason for this probably is the change of the stress state. Since the  $\sigma_1$  switched to the Northwest, the ratio of normal and shear stresses on the fracture surface is favorable for the first group to slip and not for the second.

The fractures devoloped at very shallow levels (about 1 km) reckoned by the tensile strength of rocks, the angle between conjugate sets and the study of CO<sub>2</sub> enclosures in the quartz.

## 找 矿 信 息

## 我国晋北发现球粘土

最近我院刘长龄高级工程师对晋北曾于 1983 年所找到的一种高塑性粘土进行研究,发现是一种球粘土。这种粘土与国外的球粘土相比,具有基本相同的特点: (1)高可塑性。可塑性指数可达 4 以上,可塑水含量达 51 %,结合性能好;(2)分散性好。矿物结晶颗粒细,主要在 24 以下;(3)干燥强度高,干燥粘土坚硬度好;(4)高温性能好;(5)粘土主要由无序高岭石组成,有的为变埃洛石,还有少量如蒙脱石等其它粘土矿物。但我国产出时代为较老的二叠系,石英极少或无,蒙脱石也往往转变成蒙脱石~伊利石混层粘土矿物。化学成分分析结果,Fe,O,和 K,O 的含量稍高。初步估计矿床规模可达中型以上,且外围还有一定远景。

这一发现将有可能解决我国长期从国外进口球粘土这种耐火材料结合剂的问题,为我国 钢铁工业的发展,提供辅料基地,目前正进行深入的调查研究工作。

(一室刘长龄供稿)