

The effectiveness of the transmission of shear to the bulk sample was determined by measuring the angular displacement of 0.035 cm dia soft copper pins inserted in each of the samples parallel to their longitudinal axis and at various distances from center. Values were in terms of residual strain, but these are found to closely approximate the strain applied to the sample in the case of pyrophyllite. The measurements revealed that bulk strain increases uniformly with sample radius except at low confining stress where some surface slippage occurs, and close to the outer edge where frictional drag against the indium coating of the metal ring is experienced. Overall, coupling is close to complete over most of the specimen and drops to about 60 % only near the edge of the disk.

The hydraulic force upon the high pressure pistons was measured with a permanently positioned precalibrated load cell. Confining pressure upon the sample was based upon calibration against bismuth transitions taken as occurring at 25.4 and 78 kilobars. Torque forces were obtained from the averaged output of dual precalibrated transducers. Angular strain was measured with a geared potentiometer that was calibrated against an angular scale. Electronic equipments were powered by stabilized supplies. Experimental data were recorded directly with a 'XY' chart recorder.

Pressure values are considered accurate relative to standards used to $\pm 5\%$, shearing forces are believed accurate to $\pm 3\%$, and angular strains to ± 0.5 degree.