

$$(R_o/R_q)_{25^\circ C} = 0.564 \pm .001$$

for the monitored sample. Thus a measurement of the initial resistance of a specimen installed in the anvil apparatus is sufficient to determine  $R_o(25^\circ C)$  for that specimen.

(4) In order to determine the temperature and pressure coefficient of  $R_o$  for each sample, so that  $R_o(T_{\text{anneal}})$  can be calculated, the following measurements were performed:

First, the specific temperature coefficient of resistance of a quenched sample was measured. The sample was then highly ordered, and the coefficient remeasured. The ratio of these coefficients was found to be 0.76. The pressure coefficient of resistance at constant temperature of both a highly ordered and slightly ordered sample was measured to 20 kbar at  $100^\circ C$ , and found to be nearly linear continuous functions. The results were as follows:

$$\frac{1}{R_q} (dR_q/dP)_T = .03\%/kbar; \text{ slightly ordered}$$

$$\frac{1}{R_o} \left( \frac{dR_o}{dP} \right)_T = .8\%/kbar; \text{ highly ordered}$$

Since the resistance of both highly ordered and slightly ordered samples was found to be a continuous function of pressure and temperature, it was assumed that the specific temperature coefficient of resistance of each specimen in the quenched condition,  $1/R_q (dR_q/dT)_{P,S}$ , was related to the specific temperature coefficient