niobate from sample to sample, the hydrostatic piezoelectric constants of single samples from four additional suppliers, Alpha Co. (Japan), Harshaw, Isomet, and Union Carbide, were determined and compared to the original investigation[16] on five samples from Crystal Technology, Inc. All of the materials of the present investigation were transducer grade except for the material from Isomet which was optical grade. The original investigation of the hydrostatic piezoelectric constants and details of technique are reported in Ref. 16.

Hydrostatic piezoelectric polarization versus pressure data were fit by the relation $P_3^h = d_h p + \frac{1}{2} d_{hh} p^2$, where d_h is the second-order hydrostatic piezoelectric constant and d_{hh} is the third-order hydrostatic piezoelectric constant. The results of the measurements are shown in Table VIII. Although the investigation of materials from each new supplier is limited to single measurements on single samples, the constants determined from the measurements show excellent agreement among the various suppliers. The difference in mean values are well within the expected experimental errors.

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