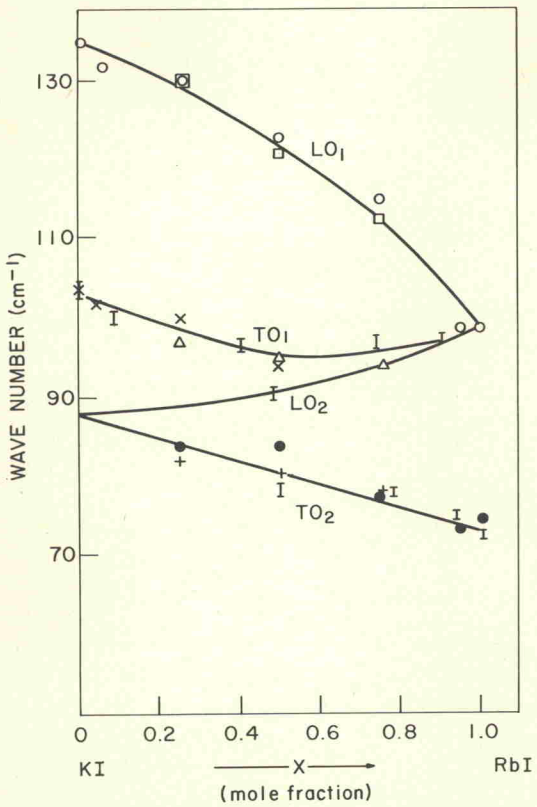

FIG. 5. Variation of long-wavelength LO and TO phonon frequencies of $K_{1-x}Rb_xI$ at STP with composition. Sources of experimental data are LO frequencies from Ref. 10 [○ (reflection), □ (thin film)] and TO frequencies from Ref. 10 [+, ● (reflection) and △, × (thin film): I [present study (Table II)]. Lines are expected results of MREI model (Ref. 19) assuming that the local-mode frequency is coincident with the LO frequency of RbI (103 cm^{-1}).

changes the force constants, affecting KI and RbI slightly differently, the system probably even becomes entirely a one-mode system. The present experimental data support this view. However, this conclusion may not entirely be true because of the ambiguity in the spectrum arising from the presence of bands corresponding to the high-pressure phase (CsCl structure) as well as the system. It is also not known whether the transition pressure is a linear function of composition for the mixed crystal.

ACKNOWLEDGMENTS

The authors wish to acknowledge the technical assistance of Miss Elaine Siwiec (Chemistry Department, Ohio State University, Columbus, Ohio). Thanks are also due to K. V. Namjoshi (Electrical Engineering Department, University of Rhode Island, Kingston, R. I.) and Dr. I. F. Chang (IBM) for helpful discussions.

*Based on work performed under the auspices of the U. S. Atomic Energy Commission.

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