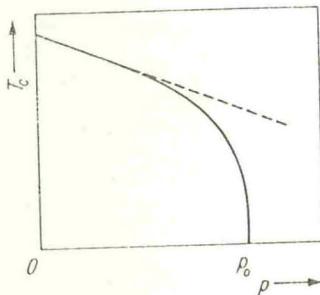


Fig. 6. Qualitative dependence of the transition temperature  $T_c$  on the pressure  $p$  according to (2). The deviation from the linear dependence (dashed line) at high pressures is caused by the proton tunneling motion



pletely at a certain pressure  $p_0$  at which  $-dT_c/dp$  tends to infinity. This is qualitatively shown in Fig. 6. Deviations from the linear dependence between  $T_c$  and  $p$  for the three ferroelectrics of Table 1 may be expected above 3 kbar according to our estimated  $\Omega$ - and  $J$ -data, and the  $p_0$ -values are to be expected in the range from 5 to 10 kbar. Experiments for investigating these predictions are under preparation.

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#### References

- [1] H. UMEBAYASHI, B. C. FRAZER, G. SHIRANE, and W. B. DANIELS, Solid State Commun. **5**, 591 (1967).
- [2] G. A. SAMARA, Phys. Rev. Letters **25A**, 664 (1967).
- [3] E. HEGENBARTH and S. ULLWER, Cryogenics **7**, 306 (1967).
- [4] R. BLINC, J. Phys. Chem. Solids **13**, 204 (1960).
- [5] P. G. DE GENNES, Solid State Commun. **1**, 132 (1963).
- [6] L. NOVAKOVIĆ, J. Phys. Chem. Solids **29**, 963 (1968).
- [7] R. BLINC and B. ŽEKŠ, Helv. phys. Acta **41**, 700 (1968).
- [8] R. BLINC and S. SVETINA, Phys. Rev. **147**, 430 (1966).
- [9] K. K. KOBAYASHI, J. Phys. Soc. Japan **24**, 497 (1968).
- [10] W. COCHRAN, Adv. Phys. **18**, 157 (1969).
- [11] E. HEGENBARTH and C. FRENZEL, Cryogenics **7**, 331 (1967).
- [12] R. BROUT, K. A. MÜLLER, and H. THOMAS, Solid State Commun. **4**, 507 (1966).
- [13] G. E. BACON and R. S. PEASE, Proc. Roy. Soc. **A230**, 359 (1955).
- [14] I. P. KAMINOW and T. C. DAMEN, Phys. Rev. Letters **20**, 1105 (1968).
- [15] E. R. LIPPINCOTT and R. SCHROEDER, J. chem. Phys. **23**, 1099 (1955).
- [16] S. HAUSSÜHL, Z. Krist. **120**, 401 (1964).

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