

EXTERNAL PRESSURE INFLUENCE  
ON FERROELECTRICS WITH HYDROGEN BONDS

*I.V.Stasyuk, R.R.Levitskii, A.P.Moina, B.M. Lisnii*

Institute for Condensed Matter Physics  
Nat. Acad. Sci. of Ukraine  
(1, *Sviientsitsky Str., Lviv 79001, Ukraine*)

S u m m a r y

We analyze major microscopic mechanisms of external pressure influence on interparticle (short- and long-range) interactions in hydrogen bonded ferroelectric crystals of the  $\text{KD}_2\text{PO}_4$  type. We show that pressures of different symmetries give rise to qualitatively different changes in the phase transition character in the system. It is illustrated that a quantitatively satisfactory description of available experimental data for the pressure dependences of the physical characteristics of the crystals can be obtained within the proton ordering model.