

TEMPERATURE BEHAVIOUR OF OPTICAL
BIREFRINGENCE OF CRYSTALS α -ZnP₂

O.S. Kushnir

Ivan Franko L'viv National University
(8, *Kyrylo and Mefody Str.*, 79005 Lviv, Ukraine)

S u m m a r y

Using the high-accuracy polarimetric techniques, the temperature dependences of optical birefringence (OBR) and dichroism of α -ZnP₂ crystals are studied in detail in the temperature range 290 – 460 K. The temperature oscillations of OBR originated from multiple light reflections are revealed. The dependence of OBR on the thermal prehistory of a sample and the temperature variation rate, together with a slight difference between the OBR curves under temperature reversal, are possibly associated with the manifestations of an incommensurately modulated superstructure in α -ZnP₂ crystals.