DIFFERENT POLYMORPHIC MODIFICATIONS OF PHENYL SALICYLATE

N.A. Davydova, V.I. Melnik, V.V. Nesprava, V.Ya. Reznichenko

Institute of Physics, Nat. Acad. of Sci. of Ukraine
(*46, Prosp. Nauky, Kyiv 03028, Ukraine*)

S u m m a r y

For the first time, the luminescence spectra of two polymorphic forms of phenyl salicylate (salol) have been obtained. Both spectra show the vibronic structure. The average spacing between vibronic components is 1250 cm^{-1}. Based on the infrared spectroscopy study, it is concluded that the interval between vibronic components in the luminescence spectra corresponds to the ν(C–OH) stretching vibration. The luminescence spectrum of the metastable phase is shifted by 760 cm^{-1} to the low-frequency side and is much wider relative to that in the stable phase. The presence of an OH group in the orto-position on the substituted ring results in the asymmetry of a molecule and the localization of an electronic excitation on this ring.