Vibrational study of the structural phase transition in bis(pyrrolidinium)-chloride-hexachloroantimonate(V) by infrared spectroscopy.

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Streszczenie

Infrared spectra of bis(pirrolidinium)-chloride-hexachloroantimonate(V) $\{(C_4H_8NH_2^+)_2SbCl_6^-\cdot Cl^-\}$ in the region of the internal vibrations of the pyrrolidinium cations (3500–400 cm^{-1}) around the phase transition at are presented and discussed. A detailed analysis has been performed for the bands assigned to the stretching and deformation vibrations of the C_4N ring as well as the NH_2^+ and CH_2 groups of the cation. It has been suggested that the mechanism of the phase transition is connected with a change in the dynamical state of the pyrrolidinium cation.

Słowa kluczowe

Hexachloroantimonates(V), IR and Raman spectra, Phase transition

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