

ABOUT NATURE OF NONCOINCIDENCE FOR FREQUEHCY AND LINE WIDTH OF STOKES AND ANTISTOKES COMPONENTS IN RAMAN SPECTRA

E. N. SHERMATOV, Samarkand State University, Univ. bulv 15, 703004 Samarkand, Uzbekistan.

Frequencies and widths ($\Delta y_{1/2}$) of isotropic and anisotropic (1) components of Raman lines was studied. In most cases are $y > y$ and $\Delta y_{1/2} > \Delta y_{1/2}$ (11). The study of stokes and antistokes components has been found the noncoincidence of line frequency at given temperature, in most cases $y_i^{ast} > y_i^{st}$ and $\Delta y_{1/2}(ast) > \Delta y_{1/2}(st)$.

Obtained results are explained in the context described by us author. Molecules in ground and excited vibration state are in different inner fields. There from natural frequencies of vibration in excited state is larger than those in ground state. This leads to relations $y_i^{ast} > y_i^{st}$ and $\Delta y_{1/2}(ast) > \Delta y_{1/2}(st)$.