STUDY OF STRUCTURAL FLUCTUATIONS IN AQUEOUS SOLUTIONS OF ACETIC ACID BY LIGHT SCATTERING METHODS

B.S. OSMANOV, Department of Physics, The Ohio State University, Columbus OH 43210; F.H. TUKHVATULLIN, A. JUMABOEV, U. N. TASHKENBAEV, Samarkand State University, 703004 Samarkand, Uzbekistan.

Two maxima of isotropic Rayleigh light scattering intensity for acetic acid-water solutions at 20°C are observed at 0.06 and 0.12 mole fraction contents of acid. These maxima with temperature increasing is decreased. C=O vibrations band in Raman spectrum at contents of acid below 0.06 mole fraction has simple shape, whereas at above contents this band is complicated and consists of several lines. These date indicate about the changes of aggregated formations in mixture with concentration.