

OBSERVATION AND ANALYSIS IR ABSORPTION SPECTRA OF MIXTURES HF AND HCL WITH CO₂

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The absolute intensities of fundamental and overtone bands in IR absorption spectra for HCl dissolved in liquid CO₂ were measured. The multiple growth of fundamental band integral intensity and some decrease (by 20%) of overtone band intensity for HCl under phase transition gas-liquid solution were discovered. The mechanisms of the intensity formation for studied spectra are discussing. It was carried out the nonempiric quantum chemical calculations of intermolecular interactions in HF-CO₂ and HCl-CO₂ complexes. Calculated and experimental data on electrooptic parameters and intensities of IR absorption spectra for studied systems are comparing and discussing.