

INFLUENCE  
OF A DEFORMATION OF NH<sub>3</sub> MOLECULE  
ON A DEVIATION OF THE CHEMICAL BOND N–H

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S u m m a r y

Additional information about the force matrix of an ammonia molecule within the framework of studying the influence of molecule's deformation on the chemical bond deviation is obtained. The elastic constants of the central forces between chemically unbound atoms of hydrogen, which are usually neglected in the valence force field model, are calculated. The deformation forces the deviation curve to become non-symmetric, changes the deviation angles, and shifts the equilibrium positions of other atoms. It is found that if the geometry of a molecule is unchanged, molecule's rotation leads to such change in the force matrix that its eigenvalues remain constant.