

A comparison of the activation energy of viscous flow for hen egg-white lysozyme obtained on the basis of different models of viscosity for glass-forming liquids.

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The paper presents the results of viscosity determinations on aqueous solutions of hen egg-white lysozyme at a wide range of concentrations and at temperatures ranging from 5°C to 55°C. On the basis of these measurements and different models of viscosity for glass-forming liquids, the activation energy of viscous flow for solutions and the studied protein, at different temperatures, was calculated. The analysis of the results obtained shows that the activation energy monotonically decreases with increasing temperature both for solutions and the studied protein. The numerical values of the activation energy for lysozyme, calculated on the basis of discussed models, are very similar in the range of temperatures from 5°C to 35°C.