Spatial Structure of Triglycine Determined by the Residual Dipolar Coupling Analysis

Klochkov V., Khairutdinov B., Klochkov A., Shtyrlin V., Shaykhutdinov R. *Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

Abstract

The possibility to determine the relatively small organic compound conformations by the approach on the basis of the analysis of the residual dipolar couplings 1H-13C in the molecules partially aligned in lyotropic liquid crystalline media has been considered. This approach has been used in the nuclear magnetic resonance investigation of the triglycine structure in lyotropic medium (cetylpyridinium bromide/n-hexanol). The conformation of triglycine in solution has been established as trans-trans on the basis of the experimental data of observed couplings.