

Conformational analysis of mono-and bis(dimethoxyphosphoryl)benzenes

Vereshchagina Y., Ishmaeva E., Gazizova A., Chachkov D., Katsyuba S., Tverdomed S., Dogadina A.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Conformational analysis of mono-and bis(dimethoxyphosphoryl)benzenes with substituents in the benzene ring was performed by the method of dipole moments, IR spectroscopy, and quantum-chemical calculations (DFT B3LYP/6-31G*). Comparison of all calculated and experimental data shows that the compounds studied exist as equilibrium mixtures of conformers with preferred gg orientation of the phosphoryl and methoxy groups. © Pleiades Publishing, Inc., 2006.

<http://dx.doi.org/10.1134/S1070363206030169>
