

Bulletin of the Academy of Sciences of the USSR Division of Chemical Science 1973 vol.22 N9,  
pages 1913-1916

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## Three-dimensional structure of phosphorus-containing heterocycles Communication 3. The gauche-orientation of the alkoxy group in 3-alkoxy-1-thia-3-phosphethanes

Arbuzov B., Arshinova R., Vereshchagin A., Vul'fson S.  
*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

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### Abstract

1. The dipole moments and Kerr constants of five 3-methoxy- and 3-phenoxy-1-thia-3-phosphethanes with a tetracoordinated phosphorus atom were determined. 2. On the basis of a graphical treatment of the data of these methods it was shown that the four-membered ring is bent, and the two-faced angle varies from 140 to 165°. The phosphoryl (or thiophosphoryl) group occupies a pseudoequatorial position; the methoxy and phenoxy radicals have a gauche-orientation. © 1974 Consultants Bureau.

<http://dx.doi.org/10.1007/BF00929374>

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