

Bulletin of the Academy of Sciences of the USSR Division of Chemical Science 1976 vol.25 N6,
pages 1202-1206

Steric structure of phosphorus-containing heterocycles - Communication 11. Aryl pyrocatechinphosphites

Arshinova R., Vul'fson S., Ibragimova S., Mukmenev E., Arbuzov B.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

1. Para-substituted phenyl pyrocatechinphosphites were synthesized and their dipole moments and Kerr constants were determined. 2. A nonplanar structure of the benzodioxaphospholene ring with a dihedral bend angle of 155° and an axial phenoxy substituent, gauche-oriented relative to the unshared pair of the phosphorus atom, was established from the joint examination of dipole moment data for the three p-X-aryl pyrocatechinphosphites. 3. Using the Kerr effect a change in orientation of the benzene ring was established upon going from pyrocatechin phenylphosphite to the o,o,p-tritert-butylphenyl derivative. © 1976 Plenum Publishing Corporation.

<http://dx.doi.org/10.1007/BF00928051>
