

Peculiarities of synthesis and photochromic properties of salt structures of spiropyrans

© Andrey N. Utenyshev, Tat'yana A. Kondrat'eva, Vyacheslav A. Smirnov,
Valeriy V. Tkachev, Konstantin V. Bozhenko,^{*+} and Sergey M. Aldoshin

Institute for Problems of Chemical Physics at RAS. Acad. N.N. Semenov Ave., 1.

Chernogolovka, 142432. Moscow Reg. Russia. Fax: +7 (496) 524-96-76.

^{*}Supervising author; ⁺Corresponding author

Keywords: *alkyl benzene, bromation, solvation, quantum-chemical calculation, single electron transition, reaction mechanism.*

Abstract

In synthesizing triethylaminosubstituted salts of spiropyrans 1',3',3'-trimethyl-6-nitrospiro[2H-1-benzopyran-2,2'-indolin] with substitution by the 8 position in pyrane part it has been shown that different charged forms may form, which differ in spectral and photochemical properties. Structure of intermediate substance in the synthesis of one of the forms of spiropyran has been investigated.