SYNTHESIS, ACID MEDIATED STRUCTURAL, RING OPENING AND NLO PROPERTIES OF SPIROPYRAZOLINES

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Abstract: The first experimental study of the imine-enamine tautomerism of the spiropyrazoline, 5'-(4-methoxyphenyl)-1,3,3-trimethyl-2'-phenyl-2',4'-dihydrospiro[indoline-2,3'-pyrazole], was performed. A combination of NMR, X-ray crystallography, laser, UV-Visible spectroscopy, and semi-empirical (AM1) studies were utilized in order to investigate the behavior of this compound. The synthesis, structural, UV-Visible, and NLO properties of the spiropyrazoline, inspired by its unusual behavior and reactivity, are described.

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