4TH BELGIAN ORGANIC SYNTHESIS SYMPOSIUM

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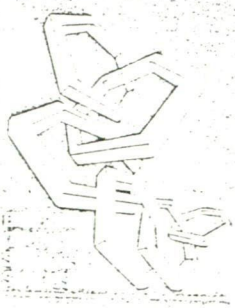
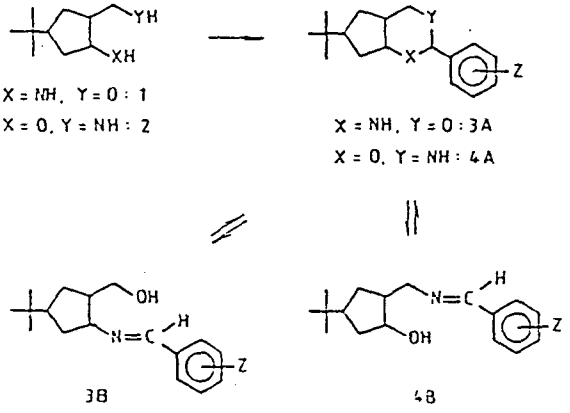


SYNTHESIS AND RING-CHAIN TAUTOMERISM OF STEREOISOMERIC 1,3-OXAZINES CONDENSED WITH A *t*-BUTYL-SUBSTITUTED CYCLOPENTANE RING

Gábor Bernáth, Ferenc Fülöp, Roland Spitzner, Jorma Mattinen+, Kalevi Pihlaja+

Institute of Pharmaceutical Chemistry, Albert Szent-Györgyi Medical University, Eötvös u. 6, H-6720 Szeged, Hungary; +Department of Chemistry, University of Turku, SF-20500 Turku, Finland

In a recent comparative study of alicyclic fused tetrahydro-1,3-oxazines[1], we have found that the 2-aryl substituent has a characteristic effect on the ring-chain tautomerism. Earlier results[2] were utilized to prepare new stereoisomeric *t*-butyl-cyclopentane 1,3-aminoalcohols 1 and 2.



Z = *p*NO$_2$, *m*Cl, H, *p*Me, *p*OMe, *p*NMe$_2$

Through the condensation of stereoisomeric 1,3-aminoalcohols 1 and 2 with aromatic aldehydes, tautomeric mixtures of 1,3-oxazines (3A and 4A) and Schiff bases (3B and 4B) were obtained.

The effects of regio- and stereoisomerism, aromatic substituents and the *t*-butyl substituent will be analysed.

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[1]F. Fülöp, K. Pihlaja, J. Mattinen, G. Bernáth, *J. Org. Chem.* 52, 3821 (1987); *Tetrahedron* 43, 1863 (1987).
[2]G. Bernáth, M. Svoboda, *Tetrahedron* 28, 3475 (1972).