NH), 5.58 (1H, double doublet, 5a-H, $^3J_{5,5a} = 2.9$, $^3J_{5a,8a} = 5.7$ Hz) and 6.9-8.6 ppm (4H, multiplet, protons of the pyridine ring).

Satisfactory data of the elemental analysis were obtained for the compounds II and III.

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SYNTHESIS OF 2,3-DIPHENYL-5,6-DIHYDRO-1,3-OXAZINIUM HEXACHLOROANTIMONATE FROM 2-PHENYL-1,3-DIOXANE

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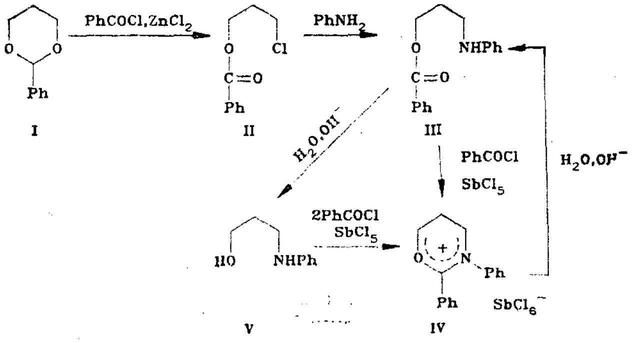
UDC 547.867.07'841'546.845

We have found a method for the synthesis of 1,3-oxazinium salts, taking as an example the previously unknown 2,3-diphenyl-5,6-dihydro-1,3-oxazinium hexachloroantimonate (IV). The main features of the proposed scheme are the acylation of 2-phenyl-1,3-dioxane (I) by benzoyl chloride, the exchange reaction of chlorine for the amino group in the resulting γ-chloroester IIa, and the subsequent acylation of compound III by benzoyl chloride in the presence of $SbCl_5$.

The secondary aminoalcohol V is formed on the alkaline hydrolysis of 1-phenylamino-3-benzoyloxypropane (III). Compound V also gives the salt IV by the action of benzoyl chloride and $SbCl_5$ in the ratio of 2:1.



The structure and composition of the salt IV were confirmed by the data of IR spectroscopy and elemental analysis, as well as by a chemical method. Hydrolysis of the salt IV leads to the opening of the ring with the formation of the γ-aminoester (III). The methods of [1] and [2] were employed to obtain 2-phenyl-1,3-dioxane I and 1-benzoyloxy-3-chloropropane (II) respectively.

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1-Phenylamino-3-benzoyloxypropane (III). The yield was 51%; the bp was 201-203°C (5 mm). The IR spectrum: 3400, 3030, 1710, 1610, and 1590 cm^{-1}.

3-Phenylaminopropanol (V). The yield was 72%; the bp was 151-153°C (8 mm). The IR spectrum: 3560, 3400, 3070, 3030, 1610, 1520, 1320, 1270, 1070, and 760 cm^{-1}.

2,3-Diphenyl-5,6-dihydro-1,3-oxazinium Hexachloroantimonate (IV). The yield was 62%; the mp was 108-109°C. The IR spectrum: 3030, 1670, 1600, 1550, 1490, and 1280 cm^{-1}.

The contents of C, H, and N in III, IV, and V correspond to their calculated values.

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ACIDIC TRANSFORMATION OF 2-(2-HYDROXYPHENYLAMINO)-1,4-NAPHTHOQUINONE-4-PHENYLIMINES INTO N-PHENYLBENZO[a]-PHENOXAZIMES

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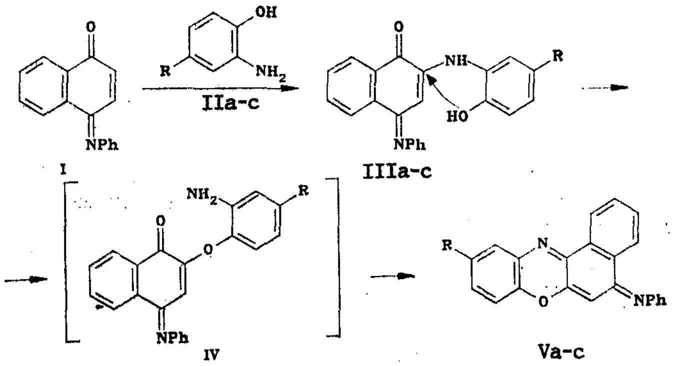
UDC 547.655.6'867.6.04

It is known that in reactions of 1,4-naphthoquinone derivatives with o-aminophenols, not only the usual amino derivatives are formed, but also 5-benzo[a]phenoxazinones [1, 2]. According to the data in [1], the formation of the latter occurs as the result of substitution of the nucleophilic residue in the primary amination product by excess of aminophenol. However, another mechanism has also been postulated, whereby the reaction proceeds via alternating phenoxyquinones [2, 3].

We found that 2-(2-hydroxyphenylamino)-1,4-naphthoquinone-4-phenylimines (IIIa-c) which are the sole products of the amination of 1,4-naphthoquinone-4-phenylimine (I) by o-aminophenols (IIa-c) in ethanol, on brief boiling in glacial acetic acid convert completely into N-phenylbenzo[a]phenoxazimes (Va-c).



II, III, V a R=H, b R=CH_3, c R=NO_2

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