

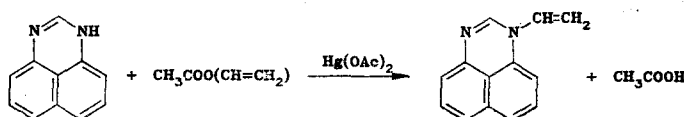
# SYNTHESIS OF 1-VINYLPERIMIDINE

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Perimidine and its derivatives recently have attracted increasing attention of research workers. From these compounds dyes, antistatics, and biologically active preparations were obtained [1]. There is practically no information on the vinyl derivatives of perimidine. Only recently, a report appeared on photosensitive oligomers based on 2-vinylperimidines which, in their electrophysical properties, are not inferior to polyvinylcarbazole [2]. N-vinylperimidines have not been described up to the present time.

We showed that in the reaction of perimidine with vinyl acetate in the presence of mercury acetate, the previously unknown 1-vinylperimidine is formed in a yield of 70%:



A 0.8-ml portion of sulfuric acid monohydrate is cautiously added, with stirring, to a solution of 0.5 g (1.5 mmoles) of mercuric acetate in 30 ml (400 mmoles) of vinyl acetate, and then 4.5 g (27 mmoles) of perimidine are added. The mixture is heated at 100°C for 30 h, then cooled, and 0.6 g of sodium acetate and 0.73 g of sodium carbonate are added. The precipitate is filtered and vinyl acetate is distilled at reduced pressure. The oily residue is distilled *in vacuo* (2 mm Hg) at 214–216°C. Orange-red crystals are obtained, mp 90–92°C, which are readily soluble in alcohols, acetone, dimethyl sulfoxide, and benzene. The course of the reaction and the purity of the product obtained were controlled by TLC on Silufol-254 planes (acetone–methanol, 1:1,  $R_f$  0.65). IR spectrum (in mineral oil): 1650, 960  $\text{cm}^{-1}$ . UV spectrum (in dioxane),  $\lambda_{\text{max}}$  (log  $\epsilon$ ): 350 (4.0), 336 (4.1), 238 nm (4.52). The structure and composition of 1-vinylperimidine were confirmed by PMR spectrum and elemental analysis.

## LITERATURE CITED

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2. A. B. Dzaraeva, V. A. Kataev, S. Sh. Khetagurova, and T. M. Chigorina, *Summaries of Lectures at the Third All-Union Conference on Chemistry of Heterocyclic Compounds (Nitrogen Heterocycles)* [in Russian], Rostov-on-Don (1983), p. 65.

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