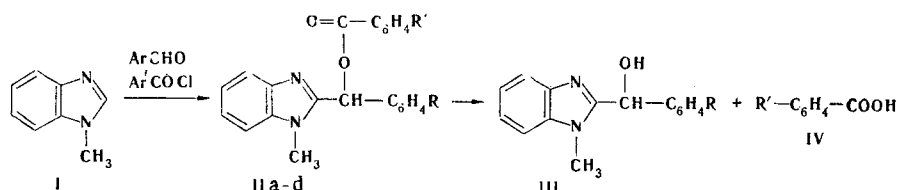


FORMATION OF α -(1-METHYL-2-BENZIMIDAZOLYL)BENZYL BENZOATES
BY THE COMBINED ACTION OF AROMATIC ALDEHYDES AND ACYL HALIDES
ON 1-METHYLBENZIMIDAZOLE

B. I. Khristich, A. M. Simonov,
and O. I. Roslyakova

UDC 547.785.5'581.2'26:542.951.1

In a study of the acylation of 1-methylbenzimidazole by the Regel method [1, 2] we observed that the formation of esters (II) of α -(1-methyl-2-benzimidazolyl)benzyl alcohol and benzoic acids rather than acylation in the 2 position occurs when excess amounts of the aromatic aldehydes are added. The resulting esters are colorless crystalline substances.



II a $\text{R}=\text{R}'=\text{H}$; b $\text{R}=\text{m-Cl}$, $\text{R}'=\text{H}$; c $\text{R}=\text{m-Br}$, $\text{R}'=\text{H}$; d $\text{R}=\text{m-Br}$, $\text{R}'=\text{p-Br}$

The following compounds were obtained (the melting points in degrees centigrade and the yields in percent are given): IIa, 143-145 (from methanol), 29; IIb, 119-121 (from methanol), 34; IIc, 146-147 (from ethanol), 28; IIId, 113-115 (from octane), 35. Their structures and compositions were proved by the IR spectra (1720 cm^{-1} , CO), the results of elementary analysis, and cleavage by means of alcoholic alkali to give the corresponding carbinol III [3] and carboxylic acid IV.

LITERATURE CITED

1. E. Regel and K.-H. Buechel, Chem. Ann., 1, 145 (1977).
2. E. Regel, Chem. Ann., 1, 159 (1977).
3. B. A. Tertov, A. V. Koblik, and N. I. Avdyumina, Khim. Geterotsikl. Soedin., No. 9, 1238 (1971).

Rostov State University, Rostov-on-Don 344006. Translated from Khimiya Geterotsiklicheskikh Soedinenii, No. 8, pp. 1136-1137, August, 1983. Original article submitted January 13, 1983.