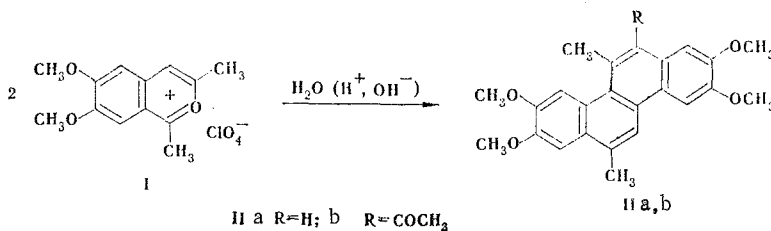


CONVERSION OF 1,3-DIMETHYL-2-BENZOPYRYLIUM PERCHLORATE TO CHRYSENE DERIVATIVES

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2-Benzopyrylium salts with a CH_2 group in the 1 position form α -naphthols when they are heated in an acidic medium [1]. In contrast to this, 1,3-dimethyl-2-benzopyrylium perchlorate (I) is converted as a result of intermolecular self condensation primarily to 6,11-dimethyl-2,3,8,9-tetramethoxychrysene (IIa), with mp 232°C (from benzene), in 22% yield. PMR spectrum (CDCl_3): 2.68 (s, CH_3), 3.03 (s, CH_3), 4.00 (s, four OCH_3), 7.00 (s, 1H), 7.23 (s, 1H), 7.45 (s, 1H), 7.80 (s, 1H), 8.10 (s, 1H), and 8.15 ppm (s, 1H).



Compound IIb, with mp 197°C (from alcohol), was isolated in 30% yield when salt I was treated with aqueous alcoholic alkali. PMR spectrum (CDCl_3): 2.60 (s, CH_3), 2.70 (s, CH_3), 2.85 (s, CH_3), 3.88 (s, OCH_3), 4.00 (s, two OCH_3), 4.10 (s, OCH_3), 6.90 (s, 1H), 7.27 (s, 1H), 7.85 (s, 1H), 7.95 (s, 1H), and 8.10 ppm (s, 1H).

The results of elementary analysis of C and H and the molecular masses (obtained by mass spectrometry) for IIa, b were in agreement with the calculated values.

In addition to the identified IIa, b, several other reaction products, the structures of which were established, were detected in the reaction mixture.

LITERATURE CITED

1. I. V. Korobka, I. V. Shcherbakova, and E. V. Kuznetsov, *Khim. Geterotsikl. Soedin.*, No. 9, 1184 (1982).