

THERMAL ISOMERIZATION OF α -ARYLIDENEISOCHROMENES INTO α -NAPHTHOLS

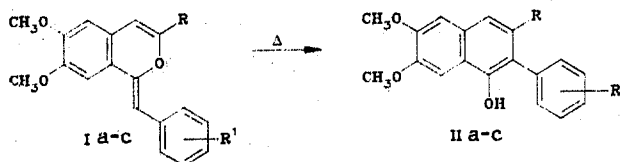
I. V. Korobka and E. V. Kuznetsov

UDC 547.814.1.5'615.07:543.422

It was shown previously that α -arylidenesochromenes (I) are converted in acid nucleophilic media into α -naphthols (II) [1].

It has been discovered that such conversions are intramolecularly feasible on heating melts of compound (Ia-c) at 220–250°C in a stream of argon for 40–60 min.

All the physicochemical characteristics of naphthols (IIa-c) were in accordance with those described in [1]. Their yields were reduced depending on the increase in size of substituents R and R'. Compounds, yield, T_{reac} , and reaction time were (IIa), 95%, 220°C, 40 min; (IIb), 75%, 220°C, 40 min; (IIc), 25%, 250°C, 60 min.



I, II a, b R = CH₃, c R = C₆H₅; a, c R' = H, b R' = 3,4-(OCH₃)₂

On thermolysis it is probable that fission of the O-C₍₃₎ bond in molecule (I), rotation about the C₍₁₎-nucleus bond, and formation of a new bond between C₍₃₎ and the β -carbon atom of the enol fragment occurs, i.e., similar to the scheme for the thermal isomerization of anhydro-bases of the pyridine series considered on the basis of the calculated data of [2].

LITERATURE CITED

1. I. V. Korobka, I. V. Sherbakov, and E. V. Kuznetsov, *Khim. Geterotsikl. Soedin.*, No. 9, 1184 (1982).
2. Yu. B. Vysotskii, B. P. Zemskii, T. V. Stupnikova, R. S. Sagitullin, A. N. Kost, and O. P. Shvaika, *Khim. Geterotsikl. Soedin.*, No. 11, 1496 (1979).

Scientific-Research Institute for Physical and Organic Chemistry, M. A. Suslov Rostov State University, Rostov-on-Don 344090. Translated from *Khimiya Geterotsiklicheskikh Soedinenii*, No. 2, pp. 276–277, February, 1986. Original article submitted April 15, 1985.