## CHEMISTRY OF HETEROCYCLIC COMPOUNDS

carbonyl group were prepared (mp, °C): semicarbazone of I (169–171), II (176, decomp.), III (177–179); thiosemicarbazones of I (169–171), II (178–181), III (168–169): 2, 4-dinitrophenylhydrazone of I (208– 209), 4-phenylsemicarbazone of I (187–188), 4-phenylthiosemicarbazone of I (164–166), guanylhydrazone of I  $\cdot$  HNO<sub>3</sub> (114–120), guanylhydrazone of I  $\cdot$  HCl (218–220), guanylhydrazone of I (~330, decomp.). The UV spectra of the semicarbazones and thiosemicarbazones are given.

9 February 1968

Institute of Organic Synthesis AS Latvian SSR, Riga

## SYNTHESIS AND REACTIONS OF FURAN DERIVATIVES

VIII. Derivatives of 6-Azauracil from Unsaturated  $\alpha$ -Oxocarboxylic Acids of the Furan Series

N. O. Saldabol

Khimiya Geterotsiklicheskikh Soedinenii, Vol. 5, No. 3, pp. 571-572, 1969

## UDC 547.725.873.07:543.422.6

Derivatives of 6-azauracil (I-VI) have been prepared by the cyclization of semicarbazones and thiosemicarbazones of 2-furfurylidenepyruvic acid,  $\beta$ -(2-furfurylidene)- $\alpha$ -oxoglutaric acid, and [3-(2-furyl)allylidene]pyruvic acid. The cyclization was carried out by heating the substances with an aqueous solution of NaOH for 5 min and the products were precipitated by acidification with hydrochloric or acetic acid; yields 87-99%. Compound VII was obtained with a yield of 24% by boiling 2-furfurylidenepyruvic acid and 4-phenylthiosemicarbazide in ethanol for 3 hr. The products were purified by recrystallization from CH<sub>3</sub>COOH (I, VII), aqueous dimethylformamide (II, III), aqueous dioxane (IV), or ethanol (V, VI).

p

The following information is listed: compound, n, R, R', X, empirical formula, mp, °C (decomp.),  $[\lambda_{\text{max}}$ , nm (log  $\varepsilon$ )]: I, o, H, H, O, C<sub>9</sub>H<sub>7</sub>N<sub>3</sub>O<sub>3</sub>, 285-286, [275, 325 (4.51, 4.05)]; II, o, H, H, S, C<sub>9</sub>H<sub>7</sub>N<sub>3</sub>O<sub>2</sub>S, 267-269, [253, 310, 365 (3.79, 4.18, 4.30)]; III, 1, H, H, O, C<sub>11</sub>H<sub>9</sub>N<sub>3</sub>O<sub>3</sub>, 280; [355 (4.44)]; IV, 1, H, H, S, C<sub>11</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub>S, 250, [277, 397 (4.00, 4.31)]; V, o, CH<sub>2</sub>COOH, H, O, C<sub>11</sub>H<sub>9</sub>N<sub>3</sub>O<sub>2</sub>S, 260-261, [220, 260, 299, 370 (3.81, 3.65, 3.90, 4.07)]; VII, o, H, C<sub>6</sub>H<sub>5</sub>, S, C<sub>15</sub>H<sub>11</sub>N<sub>3</sub>O<sub>2</sub>S, 264-265, [241, 309, 389 (3.48, 3.94, 4.13)]. The UV spectra were recorded for III and IV in 2 vol. % dimethylformamide and 98 vol. % ethanol solution and for I, II, and V-VII in ethanol.

9 February 1968

Institute of Organic Synthesis AS Latvian SSR, Riga

DERIVATIVES OF sym-OCTAHYDROACRIDINE

VI. Synthesis from 9-Chloro-sym-octahydroacridine N-Oxide

G. A. Klimov and M. N. Tilichenko

Khimiya Geterotsiklicheskikh Soedinenii, Vol. 5, No. 3, p. 572, 1969 UDC 547.835.07

The paper describes some reactions of 9-chloro-sym-octahydroacridine N-oxide (I). It is shown that under the action of acetic anhydride I undergoes a rearrangement and forms the acetate of 9-chloro-symoctahydroacridin-4-ol (II), giving 9-chloro-sym-octahydroacridin-4-ol (III) on hydrolysis. On treatment with thionyl chloride at room temperature, III gives 4,9-dichloro-sym-octahydroacridine, and on