ALDRICH. The benzoic acid ester of chloretone is prepared by heating molecular quantities of anhydrous chloretone and benzoyl chloride (slight excess) on the steam bath, until hydrochloric acid gas ceases to be given off. Any uncombined chloretone or benzoylchloride is eliminated and the resulting body recrystallized from alcohol. The ester is when pure a solid melting at 34°-35° and not a liquid as claimed by Willgerodt and Durr (J. f. praktische Chemie (Neue Folge), 39 and 40, p. 189). It may be distilled under reduced pressure without decomposition. Chlorine determinations (Carius) gave results which characterize the compound as the benzoic ester:

C₆H₅CO---OCC₃H₆Cl₃.

The compound is readily soluble in the organic solvents, and practically insoluble in water. It is not readily saponified, being much more stable than the other esters studied. Boiling with con. nitric acid does not decompose it as is the case with the aliphate esters of both chloretone and brometone. It is not volatile in the air, but is slightly volatile with steam. Pharmacological tests would indicate that it possesses less hypnotic and anesthetic properties and is less toxic than the esters studied thus far. Its relative stability is greater than that of any of the esters studied previously.

The utilization of waste silk fibroin: TREAT B. JOHNSON and P. G. DASCHAVSKY. A statistical study of the development of the waste silk industry in the United States. The behavior of fibroin on distillation is described, and an improved method of obtaining tyrosine from fibroin has been developed. It is shown experimentally that fibroin is a valuable source of the drug "tyramine," $HO \cdot C_0H_4 \cdot CH_2CH_2NH_2$.

The conversion of anilides of chloracetic acid into ketide-isothiocyanates: Treat B. Johnson, Arthur J. Hill and Erwin B. Kelsey. Isothiocyanates of the general formula

SCN . CH2 . CONHR

have hitherto never been synthesized. A method of preparation has now been developed which eliminates any possibility of the formation of isomeric rhodanides NCS · CH₂CONHR. The work is an extension of earlier researches on thiocyanates and isothiocyanates carried on in the Sheffield Chemical Laboratory, and has led to the development of a new method of entering the hydantoin series.

The condensation of formaldehyde with o-nitrophenol: TREAT B. JOHNSON and J. B. HISHMAN.

A repetition of the work of several previous investigators has revealed the fact that o-nitrophenol condenses with formaldehyde to form two isomeric compounds, viz.: 3-nitro-4-hydroxy- and 3-nitro-2-hydroxybenzylalcohols. Several new derivatives of these compounds have been prepared.

The alkylation of aromatic amines by heating with alcohols: ARTHUR J. HILL and J. J. DON-LEAVY. A study of the influence of catalysts on the general reactions

 $R \cdot NH_2 + R'CH_2OH \longrightarrow R \cdot NH \cdot R' + N_2O$

 $RNH_2 + 2R'CH_2OH \rightarrow R \cdot N(R')_2 \cdot + 2H_2O.$

The work so far has been confined to the study of aniline and the isomeric toluidines and the two alcohols ethyl and n-butyl. It has been found by experiment that these alkylation reactions are greatly stimulated by using certain inorganic salts as catalytic agents. The first contribution on this subject has already been accepted for publication in the Journal of Industrial and Engineering Chemistry.

The search for pressor substances in the pyrimidine series: TREAT B. JOHNSON and L. A. MIKESKA. A study of some new amidine condensations leading to the formation of new types of cyclic amine combinations in the pyrimidine series. The substances under examination will be submitted to a careful pharmacological investigation to determine their pressor or other specific action. The research will be extended to the hydantoin and purine series.

The oxidation of iso-propyl alcohol by means of alkaline potassium permanganate: WM. L. EVANS and LILY BELL SEFTON.

CHARLES L. PARSONS, (To be continued) Secretary

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