2,4-Di-n-propyloxyquinazoline, $C_8H_4N_2(OC_3H_7)_2$, crystallizes from water in long, colorless needles, m. p. 40–1°. It has a pleasant odor, and is rapidly hydrolyzed to benzoylene urea by heating with strong hydrochloric acid.

Found: N, 11.5. Calculated for $C_{14}H_{18}O_2N_2$: N, 11.38.

1,3-Dimethylbenzoylene urea, $C_6H_4\begin{cases}N(CH_3).CO\\ CO\text{——}N.CH_3\end{cases}$, from benzoylene urea, alcoholic sodium hydroxide and methyl iodide was first obtained by Abt.[1] It is not hydrolyzed by concentrated hydrochloric acid. Abt gives the melting-point as 151°. Our product crystallized in colorless needles and melted at 163–5°.

1,3-Diethylbenzoylene urea, $C_6H_4\begin{cases}N(C_2H_5).CO\\ CO\text{——}N.C_2H_5\end{cases}$, from benzoylene urea, alcoholic sodium hydroxide and ethyl iodide, was purified by boiling it for a few minutes with strong hydrochloric acid (to hydrolyze any oxygen ether), neutralizing, collecting the separated crystals, washing them with dilute sodium hydroxide solution (to remove any benzoylene urea), and recrystallizing from alcohol. Minute colorless needles resulted, m. p. 105°–106°.

Found: N, 12.98. Calculated for $C_{12}H_{14}O_2N_2$: N, 12.84.

1- (or *3-*)*n-Propylbenzoylene Urea*, $C_8H_5O_2N_2.C_3H_7$.—When benzoyleneurea was treated with alcoholic sodium hydroxide solution, *n*-propyl iodide added, and the mixture boiled under a return condenser, the monopropyl derivative resulted in every experiment, no matter how large the excess of propyl iodide present. On removal of the excess of alcohol and iodide, this propyl derivative tends to crystallize from the solution in needles. Distillation with steam, disclosed no oxygen ether. The crude propyl derivative was purified by dissolving it in sodium hydroxide solution and reprecipitating with carbon dioxide.

Found: N, 13.79. Calculated for $C_{11}H_{12}O_2N_2$: N, 13.73.

The pure substance forms minute, colorless, fluffy crystals, m. p. 171°. From 2 g. benzoylene urea 1.8 g. of the monopropyl derivative were obtained.

One gram of this monopropyl derivative was then dissolved in absolute propyl alcohol containing the calculated amount of sodium, *n*-propyl iodide was added, and the mixture boiled four hours under a return condenser, but no dipropyl derivative was found. 0.83 g. of the monopropyl compound was recovered unaltered (m. p. 171°).

This failure to get the dipropyl derivative is rather surprising, as the dimethyl and diethyl derivatives were prepared quite easily, and Abt[1] has shown that the former of these may be prepared from benzoylene urea, its 1- or 3-monomethyl derivatives, with alkali and methyl iodide.

ORGANIC LABORATORY, COLUMBIA UNIVERSITY.

NEW BOOKS.

Quantitative Analyse durch Elektrolyse. Von ALEXANDER CLASSEN. Fünfte Auflage in durchaus neuer Bearbeitung. Unter Mitwirkung von H. CLOEREN. Berlin: Julius Springer. 1908. pp. xi + 336. Leinwand, Preis, 10 Mk.

This well-known work has undergone a thorough revision and enlargement. The theoretical introduction of 106 pages has been markedly

[1] *Loc. cit.*

improved, and the various methods of stirring the electrolyte during the process of electrolysis so as to secure better and more rapid results have received special attention. The description of antequated measuring instruments has happily been omitted. The descriptive parts contain much new matter, the electrolytic deposition and separation of the metals being detailed in the light of recent researches, to which references are given in considerable detail. About thirty-five pages are devoted to the analysis of technical products. The book represents a great improvement over previous editions. It is the best treatise on electrochemical analysis extant, and will be welcomed by analysts. The volume is neatly bound and well printed. L. KAHLENBERG.

RECENT PUBLICATIONS.

ATKINS, EVAN A.: **Practical Sheet and Metal Plate Work.** New York: Macmillan Co. 491 pp. Over 100 ill., cl. Price, $2.00 net.

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GILL, A. HERMAN: **A Short Hand-book of Oil Analysis.** Phila.: J. B. Lippincott Co. 1909. 5th ed., rev. and enl., 179 pp., figs., tabs., cl. Price, $2.00 net.

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