

THE PHOTOCHEMICAL DEHYDROGENATION OF
7-DEHYDRO-CHOLESTEROL.
(Preliminary Note.)

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7-Dehydro-cholesterol $C_{27}H_{44}O$ prepared by the method of A. Windaus, H. Lettré, and F. Schenck⁽¹⁾ was dehydrogenated photochemically in alcoholic solution in the presence of eosin according to the directions of H. H. Inhoffen⁽²⁾ for the preparation of ergopinacone from ergosterol. The flocculent needles which separated out in the course of a week's irradiation with the sunlight were collected, boiled with 95% alcohol, and washed with alcohol and then with ether. The substance obtained in this way melts and decomposes sharply at 182–183° (corr.). For analysis the substance was dried in vacuum at 110° for 30 minutes (Found: C, 84.74; H, 11.14; molecular weight (Rast), 487. Calculated for $C_{54}H_{86}O_2$: C, 84.53; H, 11.31%; molecular weight, 767). If this substance is demonstrated to be the compound corresponding to ergopinacone, it may be called 7-dehydro-cholesteno-pinacone, and will be an important intermediate from cholesterol to its 10-desmethyl-derivatives analogous to those of ergosterol.

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(1) *Ann.*, **520** (1935), 98.

(2) *Ann.*, **497** (1932), 130.