$\Delta^{4,7}$-PREGNADIENE-3,20-DIONE, A CORRECTION

Oppenauer oxidation of $\Delta^{5,7}$-pregnadien-3β-ol-20-one was reported to yield $\Delta^{4,7}$-pregnadiene-3,20-dione (1) with m.p. 95–97° (uncorr.), $[\alpha]_D^{20}$ $+173.8°$, ultraviolet absorption maximum at 238 mμ (log ϵ 4.29). Subsequently Antonucci and co-workers (2) described the same reaction but reported m.p. 119–121°, $[\alpha]_D^{20}$ $+96.9°$ for the product. We have since repeated this preparation four times with pure $\Delta^{5,7}$-pregnadien-3β-ol-20-one and obtained each time in 56–60% yield $\Delta^{4,7}$-pregnadiene-3,20-dione with m.p. 106–108° (Kofler, corr.), $[\alpha]_D^{20}$ $+102°$, ultraviolet absorption maximum at 238 mμ (log ϵ 4.28), $\lambda_{\max}^{\mathrm{CS_2}}$ 1704 and 1682 cm.$^{-1}$ (20-ketone and α,β-unsaturated ketone). The melting point remained unchanged after chromatography. The infrared spectrum of the previously described sample (m.p. 95–97°) proved to be identical with that of the above described specimen but a repetition of the rotation now gave $[\alpha]_D^{20}$ $+104°$. It is clear, therefore, that the rotation ($[\alpha]_D^{20}$ $+173.8°$) reported earlier by us was due to a mistake. The differences in m.p. may be due to polymorphism.

(1) DJERASSI, ROMO, AND ROSENKRANZ, *J. Org. Chem.*, **16**, 754 (1951).

(3) ANTONUCCI, BERNSTEIN, GIANCOLA, AND SAX, *J. Org. Chem.*, **16**, 1453 (1951).

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