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High Molecular Weight Fatty Acid Derivatives and the Phenomenon of Homology

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Hoyt et al.: High Molecular Weight Fatty Acid Derivatives and the Phenomenon o

the possible intermediate formation of organoaluminum compounds.

DEPARTMENT OF CHEMISTRY,
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HIGH MOLECULAR WEIGHT FATTY ACID DERIVATIVES AND THE PHENOMENON OF HOMOLOGY

FRED W. HOYT, BYRON A. HUNTER AND HENRY GILMAN

The studies of compounds derived from lauric, myristic, palmitic and stearic acids have been advanced sufficiently to indicate that the generally accepted principles drawn from the phenomenon of homology apply to these *normal*, long-chained acid derivatives. It appears advisable not to compare all homologous acids, but to break up the series of acids (and their derivatives) so that comparisons are made of *normal* acids, of disubstituted acetic acids, and of trisubstituted acetic acids.

The present evidence is based on several classes of new compounds derived directly or indirectly from the acids: namely, primary, secondary and tertiary amines; ethanol amines; sulfides, sulfoxides and sulfones; (long-chained alkyl) (ethyl) malonates and their condensation products with urea; and organometallic compounds derived from the long-chained alkyl halides.

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MORPHINE ALKALOIDS AND SYNTHETIC DIBENZOFURAN DERIVATIVES

THOMAS H. COOK AND HENRY GILMAN

A continuation of studies patterning synthetic types after morphine alkaloids has now made possible the introduction of substituents into the critical 1-, 4-, 6- and 9-positions. The present report is concerned with methoxy and hydroxy groups in the 4- and 6-positions, and suitably substituted amino groups in the 1-position.

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