

FATTY ACIDS

Their Chemistry, Properties, Production and Uses

Edited by **KLARE S. MARKLEY**

PART 2

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FATTY ACIDS

*Their Chemistry, Properties,
Production, and Uses*

**Second Completely Revised
and Augmented Edition**

Edited by

KLARE S. MARKLEY

INTERSCIENCE PUBLISHERS, INC., NEW YORK

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PREFACE TO THE SECOND EDITION

This second edition of *Fatty Acids* follows the general outline and format of the first edition, but is considerably broader with respect to the subject matter covered, and the treatment of prior subjects is more comprehensive than was that of the earlier edition. This broader treatment has been necessitated, in part, by the marked advances that have occurred in this field since the publication of the first edition in 1947.

Considerable expansion of the present work resulted from the more comprehensive treatment of the lower members of the fatty acid series, the hydroxy-, keto-, branched-chain, and polycarboxylic acids and their derivatives. The industrial production and utilization of fatty acids, which were treated only superficially in the first edition, are stressed throughout the present work and also are the subjects of specific chapters.

With few exceptions the present work represents a complete rewriting and not merely a revision of the former edition. To some extent this has resulted from the development of certain specializations in the field which have made it impossible for a single author to treat all phases of the subject with equal degrees of adequacy. In order to provide the reader with the information he desires and needs, a number of outstanding specialists in various fields were invited to participate in the preparation of the present edition. This device introduces certain difficulties, such as variations in style, unevenness of emphasis, breadth of treatment, duplication of subject matter, and other problems. It has been the policy in the present work to allow the individual authors a maximum of freedom in preparing their respective contributions and to defer to the technical editor the responsibility of bringing the completed work into a unified treatise of maximum value to the prospective reader. The result has been, what is believed to be, the most comprehensive work devoted to this subject and is entirely in keeping with the other monographs of this series.

In this volume, as in the case of its predecessor, the editor wishes to gratefully acknowledge his debt to the contributing authors for their assistance in preparing this work. With reference to his own contributions, he once again expresses his appreciation to those individuals mentioned in Part 1 for their further aid on the manuscript for Part 2, and

adds acknowledgement to John Henry de la Fontaine who prepared the graphs in Chapter XII.

All of the authors of the present work join in thanking the editors of the many journals and the authors and publishers of various books for permission to reproduce certain illustrations; and also those firms and organizations which generously supplied illustrations, data, and technical information for these volumes.

KLARE S. MARKLEY

Rio de Janeiro, Brazil

April, 1961

Publisher's Note

The second edition of *Fatty Acids* was planned originally to contain two parts; the vastness of the subject, however, and the extensive illustrative material make it desirable to extend the size to several volumes. To facilitate using this comprehensive work, the pagination is consecutive from the first to the last volume. Although the last volume contains a cumulative subject and author index for the entire edition, each separate volume contains its own table of contents, list of contributors, and subject index.

CONTRIBUTORS TO PART 2

Klare S. Markley, Consultant, Foreign Research and Technical Programs Division, Agricultural Research Service, U. S. Department of Agriculture, Rio de Janeiro, Brazil. Chapter VIII, *Salts of Fatty Acids*. Chapter IX, *Esters and Esterification*. Chapter XII, *Hydrogenation*.

Norman O. V. Sonntag, Research and Development Division, National Dairy Products Corporation, Glenview Illinois. Chapter X, *Dehydration, Pyrolysis, and Polymerization*. Chapter XI, *Halogenation, Dehalogenation, and Dehydrohalogenation*.

Daniel Swern, Agricultural Research Service, Eastern Utilization Research and Development Division, U. S. Department of Agriculture, Philadelphia, Pennsylvania. Chapter XIII, *Chemical Oxidation*. Chapter XIV, *Oxidation by Atmospheric Oxygen (Autoxidation)*.

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