New Books

L.A. Witting, Book Review Editor

Developments in Hydrocarbon Biodegradation–1, Edited by R.J. Watkinson (Applied Science Publishers Ltd., Barking, Essex, England, 1978, 232 p., $34).

This book consists of seven chapters which review the degradation of hydrocarbons. The chapters are entitled: Degradation of Aliphatic Hydrocarbons, Microbial Degradation of Alicyclic Hydrocarbons, Microbial Degradation of Aromatic Hydrocarbons, Polycyclic Aromatic Hydrocarbons – Metabolism and Environmental Aspects, Microbial Genetics Relating to Hydrocarbon Degradation, Degradation of Oil in the Marine Environment, and Biodegradation of Hydrocarbon Based Products in Industrial Use.

Each chapter includes a summary and a bibliography. It is gratifying to note the presence of many citations from 1976 and 1977, which help to make this book relatively current in this rapidly moving field. The book reviews much of the metabolic information which is available concerning hydrocarbon degradation. I found it to be interesting and stimulating reading. The book should be available to interested persons; however, the rather high price for such a small book will probably keep it in the libraries and not in chemists' personal libraries where it would be most useful.

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Food Chemistry, Part I (Principles of Food Science Series), Edited by Owen R. Fennema (Marcel Dekker Inc., New York, 1976, 792 p., $49.50).

The appearance of this book represents a major contribution toward filling the need for an intermediate level reference work in food chemistry. It provides detailed coverage of all the major aspects of food chemistry, not available in any other single textbook. Individual chapters provide detailed information by scientists who are actively working in each area and who are also authorities in the area.

The book is divided into edited chapters as follows: Water and Ice, O. Fennema; Carbohydrates, J.E. Hodge and Elizabeth M. Osman; Lipids, LeRoy Dugan Jr.; Amino Acids, Peptides, Proteins, A.F. Anglemier and M.W. Montgomery; Enzymes, T. Richardson; Vitamins and Minerals, S.R. Tannenbaum; Pigments, F.M. Clydesdale and F.J. Francis; Flavors, Rose Marie Pangborn and G.F. Russel; Desirable Constituents in Food, R.C. Lindsay; Undesirable and Potentially Undesirable Constituents of Food, G.H. Wogan; Food Dispersions, by W.D. Powrie and Marvin A. Tung; Characteristics of Muscle Tissue, H.O. Hultin; Characteristics of Edible Fluids of Animal Origin: Milk, J.R. Brunner; Characteristics of Edible Fluids of Animal Origin: Eggs, William Powrie; Characteristics of Edible Plant Tissues, N.F. Haard; and Integration of Chemical and Biological Changes in Foods and Their Influence on Quality, S.R. Tannenbaum.

The chapter on lipids written by Prof. LeRoy Dugan Jr., presents a well-balanced view of this area considering the space available.

Each chapter in the book contains its own table of contents showing chapter content in detail. This book has been used for a two-semester course sequence in food chemistry. It was generally well received by the students. Their primary complaint was the lack of a detailed enough index. The index is rather general and made the book more difficult to use.

This book does represent a high quality reference work covering the broad field of food chemistry. It would be a worthwhile addition to the library of persons involved in these areas.

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New Publications

Proceedings, International Association of Seed Crushers Kuala Lumpur Congress, Jan. 31-Feb. 2, 1978, 124 p., 10 £, International Association of Seed Crushers, 8 Salisbury Sq., London EC4P 4AN, England.

"How To Get A European Patent," a guide for applicants seeking a patent under the new European Patent Office, 62 p., free, European Patent Office, Postfach 20 20 20, D 8000, Munich 2, West Germany.

the latest in Lipids

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Effects of Cold Stress on Rats Fed Docosenoic Acids
Effect of Lymphoma on Liver Lipid Composition of AKR Mice
Vasopressor Phospholipid in Crude Soybean Lecithin
Lipogenesis of Iron-deficient Adult Rats
Synthesis of 3-Sulfates of Bile Acids and Their Conjugates
Effects of Clofibrate on Fatty Acid Metabolism
Uropygial Gland Diesters in K^n Mutant Domestic Chickens
Phospholipid Artefacts from Developing Soybean Seeds
Lipid Synthesis in Soybean Cell Suspension Cultures

Communications

Volatiles from Decomposed Oleate Hydroperoxides by GC-MS
^{13}C Nuclear Magnetic Resonance Spectroscopy of Cyanolipids