

Recent Books, Late Fall 2002

Ultrahigh-Pressure Treatments of Foods

Edited by Marc E. G. Hendrickx and Dietrich Knorr

Kluwer Academic/Plenum: New York, 2002; 356 pp.

Discusses the fundamental aspects of treating foods with high pressure, the effects of high pressure on food attributes, and industrial processes for various product groups.

Methods of Analysis for Functional Foods and Nutraceuticals

Edited by W. Jeffrey Hurst

CRC Press: Boca Raton FL, 2002; 416 pp.

Covers the analysis of phytoestrogens, fatty acids, carotenoids and provitamin A, chlorophylls, anthocyanins, amino acids, water-soluble vitamins, carbohydrates, and flavonoids.

Chemical and Functional Properties of Food Lipids

By Zdzislaw E. Sikorski and Anna Kolakowska

CRC Press: Boca Raton, FL, 2003; 400 pp.

Reviews the chemical, physical, and biological properties of lipids and examines the effects of storage and food processing on lipid product quality. Chapters on lipids from plants, milk, fish, and eggs as well as lipid-protein and lipid-saccharide interactions and lipid analysis are included.

Introduction to Environmental Analysis

By Roger N. Reeve

Wiley: Chichester, U.K., 2002; 322 pp.

Provides information on transport of pollutants and approaches to their sampling and analysis; water quality measurement and pollutant analysis; analysis of land, solids, and waste; atmospheric analysis of gases and particles; and ultratrace analysis.

Scientific Advances in Animal Nutrition: Promise for the New Century

By the Committee on Animal Nutrition, Board on Agriculture and Natural Resources, National Research Council

National Academy Press: Washington, DC, 2002; 100 pp.

Proceedings of a symposium organized by the National Research Council's Committee on Animal Nutrition. Available online at <http://www.nap.edu/books/0309082765/html/>

Environmental Effects of Transgenic Plants: The Scope and Adequacy of Regulation

By the Committee on Environmental Impacts Associated with Commercialization of Transgenic Plants, Board on Agriculture and Natural Resources, National Research Council

National Academy Press: Washington, DC, 2002; 342 pp.

The Committee examines similarities and differences between conventional and transgenic crops, potential changes in agricultural and nonagricultural landscapes, and U.S. regulations for transgenic crops. Available online at <http://www.nap.edu/books/0309082633/html/>

Free Radicals in Food: Chemistry, Nutrition and Health Effects

Edited by Michael J. Morello, Fereidoon Shahidi, and Chi-Tang Ho

ACS Symposium Series 807; American Chemical Society: Washington, DC, 2002; 368 pp.

Presents 24 chapters on recent developments in free radical chemistry as it pertains to food systems, antioxidants, and nutritional biochemistry and health.

Advances in Flavors and Fragrances: From the Sensation to the Synthesis

Edited by K. A. D. Swift

Royal Society of Chemistry Special Publication 277; Royal Society of Chemistry: Cambridge, U.K., 2002; 237 pp.

Contains 16 papers presented at a symposium held in May 2001 at the University of Warwick, Coventry, U.K.

Bioactive Compounds in Foods: Effects of Processing and Storage

Edited by Tung-Ching Lee and Chi-Tang Ho

ACS Symposium Series 816; American Chemical Society: Washington, DC, 2002; 271 pp.

Examines bioactive compounds as food is processed; covers a wide range of products and examines the response of bioactive compounds to many different processing operations.

Environmental Organic Chemistry, 2nd ed.

By Rene P. Schwarzenbach, Philip M. Gschwend, and Dieter M. Imboden
Wiley: New York, 2002

This textbook covers phase equilibrium partitioning, transformation processes, modeling transport, and reactions in environmental systems and presents case studies. Includes problem sets and appendices containing physical, equilibrium, and kinetic constants and physicochemical properties.

Applied Mycology and Biotechnology: Agriculture and Food Production

Edited by George G. Khachatourians and Dilip K. Arora

Elsevier: Amsterdam, The Netherlands, 2002; 2 volumes

The first volume provides an overview of fungal physiology, metabolism, genetics, and biotechnology, highlighting applications to food production. The second volume examines fungi in food crop production and applications in foods and beverages.

Complete Book of Pesticide Management; Science, Regulation, Stewardship, and Communication

Edited by Fred Whitford

Wiley: New York, 2002; 811 pp.

Discusses the evolution of pesticide regulations and the risk assessment process in the United States; includes chapters regarding planning for emergencies and educating the community and workforce about hazardous chemicals.

Verocytotoxigenic *E. coli*

Edited by Geraldine Duffy, Patricia Garvey, and David A. McDowell
Food and Nutrition Press: Trumbull, CT, 2001; 457 pp.

Presents chapters on the emergence, detection methodology, epidemiology, pathogenic aspects, survival and growth, and control measures for verocytotoxigenic *E. coli*.

Open Dating of Foods

By Theodore P. Labuza

Food and Nutrition Press: Trumbull, CT, 2001; 239 pp.

Analyzes current open-dating practices and regulations in the United States and proposes an open-dating regulation.

Pesticides in Agriculture and the Environment

Edited by Willis B. Wheeler

Dekker: New York, 2002; 360 pp

Explores the agricultural, economic, environmental, and regulatory factors that affect pesticide use; examines crop and pest ecology, integrated pest management principles, and emerging analytical tools.

The Biocides Business: Regulation, Safety, and Applications

Edited by Derek J. Knight and Mel A. Cooke

Wiley-VCH: Weinheim, Germany, 2002; 404 pp.

Discusses the biocides market and regulatory controls in Europe, the United States, and other countries.

Chemistry of Taste: Mechanisms, Behaviors, and Mimics

Edited by Peter Given and Dulce Paredes

ACS Symposium Series 825; American Chemical Society: Washington, DC, 2002; 376 pp.

Explores the links between physiology and chemoreception mechanisms, genetic determination of taste ability, olfaction, psychophysics, integration of taste and smell, and human taste preferences.

Pesticide Environmental Fate: Bridging the Gap between Laboratory and Field Studies

Edited by Warner Phelps, Kim Winton, and William R. Effland

ACS Symposium Series 813; American Chemical Society: Washington, DC, 2002; 248 pp.

Examines studies currently performed to facilitate bridging between laboratory and field studies in support of pesticide registration. Includes discussions of modeling, variation in field sample profiles, bound versus available residues, bare ground versus cropped studies, the role of macropores in the field, pipe and hop plot studies, tracking material balance, and data interpretation.

Agrochemical Resistance: Extent, Mechanism, and Detection

Edited by J. Marshall Clark and Isamu Yamaguchi

ACS Symposium Series 808; American Chemical Society: Washington, DC, 2002; 304 pp.

Discusses the mechanisms, detection strategies, and management of insecticide, herbicide, and fungicide resistance.

Plant Biopolymer Science: Food and Non-Food Applications

Edited by D. Renard, G. Della Valle, and Y. Popineau

RSC Special Publication 276; Royal Society of Chemistry: Cambridge, U.K., 2002; 316 pp.

Proceedings of a workshop held in Nantes, France, during June 2001. Contains sections on biosynthesis, biopolymer design, biopolymer assemblies, interfaces, interphases, and multiphase systems

The Maillard Reaction

By S. E. Faile and J. A. Gerrard

Royal Society of Chemistry: Cambridge, U.K., 2002; 134 pp.

Discusses the Maillard reaction, its consequences in food, extraction of reaction products, and various separation and detection methods.

Common Fragrance and Flavor Materials: Preparation, Properties and Uses, 4th ed.

By Kurt Bauer, Dorothea Garbe, and Horst Surburg

Wiley-VCH: Weinheim, Germany, 2001; 306 pp.

Presents a survey of commercially available natural and synthetic fragrance and flavor materials. Provides information on their properties, manufacture, and applications.

Split and Splitless Injection for Quantitative Gas Chromatography, 4th ed.

By Konrad Grob

Wiley-VCH: Weinheim, Germany, 2001; 480 pp.

Discusses concepts, processes, and sources of error for split and splitless injection techniques; gives practical guidelines. Completely revised 4th edition, comes with a CD-ROM.

Handbook of GC/MS: Fundamentals and Applications

By Hans-Joachim Hübschmann

Wiley-VCH: Weinheim, Germany, 2001; 608 pp.

Fundamentals, techniques, and applications are described, with examples for GC/MS applications in environmental, food, pharmaceutical, and clinical analysis. Includes a glossary of terms.

Flavor, Fragrance, and Odor Analysis

Edited by Ray Marsili

Dekker: New York, 2002; 435 pp.

Describes advances in mass spectrometry, sample preparation, gas chromatography—olfactometry, and electronic nose technology for food, cosmetic, and pharmaceutical applications.

Alternative Sweeteners, 3rd ed.

Edited by Lyn O'Brien Nabors

Dekker: New York, 2001; 565 pp.

Surveys the field of sucrose alternatives, comparing each sweetener to sucrose and discussing its technical qualities, admixture potential, applications, availability, shelf life, cost, metabolic effects, and possible adverse health effects.

JF026051S