

Book review

Corn Chemistry and Technology, edited by Stanley A. Watson and Paul E. Ramstad (American Association of Cereal Chemists, 3340 Pilot Knob Rd., St. Paul, MN 55121, 605 pp., 1987, \$87 US, \$95.70 elsewhere).

The editors have extensively covered this massive subject under 20 chapter headings. The first seven chapters give an overall introduction. The first two cover cultural requirements and seed corn. Chapter 3, on structure and composition, is especially useful, and Chapter 5, "Measurement and Maintenance of Quality," is excellent. The seventh is a rather complete discussion of economics and marketing.

The next three chapters cover biochemistry in the areas of carbohydrates, proteins and lipids. The third includes the effects of agronomic practices on oil content and fatty acid composition of the germ and on lipids in the starch. In addition to triglycerides, it includes discussions of other lipids such as phosphoglycerides, glycosylglycerides and sterols. A one-page discussion points to new directions in this field.

The next three chapters cover processing: dry milling, wet milling and food uses of corn. The third of these includes corn-based cereals, alkaline-cooked products such as tortillas and corn snacks.

Of the remaining seven chapters, Chapter 15 on nutrition and Chapter 18 covering corn oil are especially worthwhile. The latter, written by two representatives of the corn oil industry, adds to the material on lipids covered in Chapter 10. It includes composition and characteristics of corn oil and emphasizes corn oil processing. This section is rounded out with a discussion on nutrition and corn oil's use in margarine and frying oils.

The editors are truly outstanding in this field; the first one wrote two chapters. The other 22 contributors range from highly competent

to superior in their respective specialties. Most chapters are extremely well-annotated. Chapter 9, for example, cites 146 references listed at the end of the chapter. The index is quite detailed and is 14 pages in length. For instance, an extensive discussion on high lysine corn is 15 pages long. The type is small but easy to read. The tables, graphs and pictures are more than adequate. Binding is good.

This book is a useful reference for *JAOCs* readers; AOCs members should have a desk copy.

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New books

Computer Control in the Process Industries, by Brian Roffel and Patrick Chin, Lewis Publishers Inc., 121 South Main St., PO Drawer 519, Chelsea, MI 48118, 257 pp., \$69.

Omega-3: The Fish Oil Factors, by G.G. Pique, Omega-3 Project Inc., 10615-G Tierrasanta Blvd., Suite 347, San Diego, CA 92124, 163 pp., \$9.95 plus \$2 handling.

Omega-6 Excess Polyunsaturate Folly, by G.G. Pique, Omega-3 Project Inc., 10615-G Tierrasanta Blvd., Suite 347, San Diego, CA 92124, 176 pp., \$11.95 plus \$2 handling.

Quality Assurance of Food: Ingredients, Processing and Distribution, by John E. Stauffer, Food and Nutrition Press Inc., 155 Post Rd. E., PO Box 71, Westport, CT 06881, 304 pp., \$50.

Oxidases and Related Redox Systems (Progress in Clinical and Biological Research, Vol. 274), edited by Tsou E. King, Howard S. Mason and Martin Morrison, Alan R. Liss Inc., 41 East 11th St., New York, NY 10003, 789 pp., \$140.

Liquid-Liquid Extraction, by Ruth Blumberg, Academic Press Inc., 1250 Sixth Ave., San Diego, CA 92101, or Academic Press Ltd., 24-28 Oval Rd., London NW1, England, 192 pp., \$25.

Carbohydrate Chemistry: Monosaccharides and Their Oligomers, by Hassan S. El Khadem, Academic Press Inc., 1250 Sixth Ave., San Diego, CA 92101, 1988, 256 pp., \$44.95.

Optimum Frying: Theory and Practice, 2nd Edition, by Michael M. Blumenthal, Optimum Frying Monograph, Libra Laboratories Inc., 44 Stelton Rd., Piscataway, NJ 08854, 1988, 76 pp., \$50.

Hazard Communication Manual, by Industrial Training Systems Corp., 20 W. Stow Rd., Marlton, NJ 08053, 1988, 2 vols., 343 pp., \$295.

Hazard Communications Guidelines, Alliance of American Insurers, 1501 Woodfield Rd., Suite 400 W., Schaumburg, IL 60173-4980, 1987, 53 pp., \$4 members, \$8 nonmembers.

Other publications

The Zymark Corp. has published the **Robotics Handbook**, a reference book for scientists interested in laboratory robotics technology. Topics such as sample preparation, flexible automation, applications, the robot and laboratory stations, justification, implementation and system integration are covered. Contact: Janet R. Strimaitis, Product Manager, Zymark Corp., Zymark Center, Hopkinton, MA 01748.

BioControl Systems Inc. has available an eight-page brochure on **Salmonella Testing**. Contact: BioControl Systems Inc., 19805 North Creek Pkwy., Bothell, WA 98011.