Publications

definition of a lipid: a material soluble in a lipid solvent. Here, for the first time to my knowledge, this definition is followed by a 20-page explanation of the thermodynamics, electrostatic interactions, dielectric constants and London forces involved. Chapters on the chemistry of lipids tend to emphasize physical chemistry. The first chapter on fatty acids, for instance, is largely concerned with dihedral angle, anti and gauche configurations, and cardinal conformations. The first chapter on complex lipids is entitled, "The Amphiphilic Lipids: Structure, Properties, and Conformation."

This text shows considerable strength in the two chapters on "Prostaglandins, Thromboxanes and Prostacyclin" and "Eicosanoids: Leukotrienes and Slow Reacting Substances of Anaphylaxis." Cholesterol biosynthesis is covered in great detail. If this text has a fault, it probably arises from the decision to cover the chemistry, biochemistry and nutrition of lipids within one volume. The nutrition chapters on a purely comparative basis tend to appear slightly weaker than other chapters.

In the preface the authors note that they have been teaching a course on lipids for a number of years to graduate and postdoctoral students in the health sciences at UCLA and have found that there is no current single text suitable for this purpose. This reviewer would concur that the time is right for an up-to-date, well-written, comprehensive text. This book appears to be printed well, clearly illustrated and, by present standards, reasonably priced.

Lloyd A.Witting

Supelco Inc. Supelco Park Bellefonte, PA 16823

New books

- Directory of Custom Food Processors and Formulators, Delphi Marketing Services, Inc., 400 E. 89 St., New York, NY 10128, 1986, \$180.
- Food Irradiation: New Perspectives on a Controversial Technology, by Rosanna Mentzer Morrison and Tanya Roberts, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22161, \$16.95, stock number PB86-1774-74/AS.
- Biomass Energy Development, edited by Wayne H. Smith, Plenum Press, 233 Spring St., New York, NY 10013, 1986, 667 pp., \$95.

New Products

BLOWDOWN SYSTEM

The Model 757 automatic boiler blowdown control system, introduced by the Uniloc Division of Rosemount Inc., provides on/off control for base-load boilers requiring intermittent blowdown. Bypass on/off blowdown trim control also can be provided for large base-load boilers where the main skimmer blowdown is continuous. Based upon sample-cycle control, the 757's dual range field adjustable solid state timer circuit determines the interval and duration of the blowdown/sample cycle. Contact: Rosemount Inc., 12001 W. 78th St., Eden Prairie, MN 55344.

BACTERIAL SUPPLEMENT

Solmar Corp. has designed a bacterial supplement for treating wastewaters containing a very high lipid content, particularly in systems such as lagoons, activated sludge systems, trickling filters and oxidation ditches. It is formulated for wastewaters with high loadings of animal fats, fish and vegetable oils, light weight mineral oils and many petrochemical products. Contact: R.B. Grubbs, Solmar Corp., 625 W. Katella Ave., Suite 5, Orange, CA 92667.

SPECTROMETER

A multi-element spectrometer from **Beckman Instruments Inc. features** electronics for precise real time data and peaking, and an IBM PC-XT personal computer to provide operator feedback and reports and documentation of all analytical and diagnostic information. It is designed to perform in both sequential and simultaneous modes. Usergenerated application software capability is built into the system. **Contact: Beckman Instruments** Inc., Spectroscopy Instruments Operations, 2500 Harbor Blvd., Fullerton, CA 92634-3100.

GAS CHROMATOGRAPH

A process gas chromatograph from the Foxboro Co. has an operator interface and the capability to network with IBM personal computers. Designed to continuously analyze, measure and report component concentrations in process streams, the Model 931C includes a control panel with a 4×40 character display; large tactile keyboard; menu-driven software; and modular design featuring EEPROM memory, automatic restart and customer-selectable options. Contact: D.L. Fowler, The Foxboro Co., Corporate Communications, Foxboro, MA 02035.



LIQUID LEVEL SWITCH

Granzow Inc. has introduced a range of liquid level switches that give a proportional, pneumatic signal. All switches are built out of three basic modules: switch, flange and float. Switches can be made of different materials, including 316 stainless steel or various plastic materials. The main input air pressure is 20 psi and output signal is 3-20 psi. Contact: Granzow Inc., 6033 Kenley Ln., Charlotte, NC 28210. New Products

ANALYTICAL BALANCES

Brinkmann Instruments Co. offers a line of Sartorius electronic and analytical precision balances with capacities up to 12,000 g, readabilities from 0.00001-0.1 g and fullrange electronic taring. Models feature bright LCD readout, electronic push-button calibration, digital filters, zero tracking and stainless steel pans. The built-in keyboard option extends balance capabilities to include counting, mass unit conversion, animal weighing and formulation functions. Contact: Brinkmann Instruments Co., Cantiague Road, Westbury, NY 11590.



FLATBED RECORDER

A 100-mm flatbed recorder called the 1100A is available from Linear Instruments Corp. It includes an override event marker, batteryoperated 12 VDC operation for portability, 0-5 V output for communication with peripheral equipment and 12 user-selected chart speeds. Contact: Linear Instruments Corp., PO Box 12610, Reno, NV 89510.

POLYDEXTROSE

A dry, buffered form of polydextrose, polydextrose K, is available from Pfizer Inc. for use in products sensitive to acidity and moisture. It is manufactured by blending polydextrose with sufficient potassium bicarbonate to produce a pH of 5.0 to 6.0 solution. According to Pfizer, it is more cost-efficient on a dry weight basis than the 70% solution and can be used in the same foods and for the same functions permitted for polydextrose by the Food and Drug Administration. Contact: Ted Blake, Pfizer Chemical Division, 235 E. 42nd St., New York, NY 10017.

PVC HOODS

Labconco Corp. has introduced a

line of PVC hoods designed specifically for use with perchloric acid and other extremely corrosive laboratory reagents. The Protector PVC perchloric acid hood is available in 4' and 6' widths. Its 34" depth accommodates large hot plates or other apparatus. Contact: Labconco, 8811 Prospect, Kansas City, MO 64132.



TANK GAUGING SYSTEM

TankExpert, a complete tank gauging system using hydrostatic techniques, is available from The Foxboro Co. Using externally mounted sensors, a field-mounted digital processor and an operator interface for remote display of data, it continuously measures mass as well as level, volume, temperature and density of liquids in storage tanks. Contact: D.L. Fowler, The Foxboro Co., Corporate Communications, Foxboro, MA 02035.



PNEUMATIC ACTUATORS

DynaQuip Controls offers a series of pneumatic actuators manufactured in four sizes ranging from 300 to 1700 inch-pounds of torque output. Both models, double-acting and spring-return, are designed for use with quarter-turn valves. The rack-and-pinion engineering provides constant output torque and speed during each cycle and allows for a small actuator envelope size. Contact: Ed Kent, DynaQuip Controls, 1645 Manufacturers Dr., Fenton, MO 63026.

pH PEN

The Nester pH pen from Chemtrix is designed for field or lab use. The pen automatically turns on when the probe's protective cap is removed. It has a liquid crystal display and a pH meter with pH electrode. Contact: Vickie Kugler, Whatman LabSales Inc., 5285 N.E. Elam Young Pkwy., Suite A-400, Hillsboro, OR 97124.

HUMIDITY INDICATOR

The "Humitemp" indicator, a relative humidity and temperature indicator from Phys-Chemical Research Corp., is designed to provide 0-100% relative humidity and 0-100 C temperature readouts simultaneously. It has automatic temperature compensation between -5 C and 75 C and is equipped with separate output jacks that provide linear signals of 0-100 volts or 4-20 mA DC. Contact: Michael McCabe, Phys-Chemical Research Corp., 36 W. 20th St., New York, NY 10011.

SCIENTIFIC SOFTWARE

Hewlett-Packard Co. has signed an agreement with Macmillan Software Co. to distribute Macmillan's ASYST scientific software for use on the HP Vectra personal computer. ASYST is an integrated software package offering graphics, statistics and data-analysis capabilities, plus full HP-IB interface control. It also runs on the IBM PC, PC/XT and PC/AT. Contact: Hewlett-Packard Co., Inquiries Manager, 1820 Embarcadero Rd., Palo Alto, CA 94303.

ENZYMATIC PROCESS

Amano International Enzyme Co. has developed an enzymatic production process for monoglycerides. According to Amano, the process uses lipase G and synthesizes specific monoglycerides by reacting glycerol and a fatty acid. The company says lipase G will produce monoglycerides substantially free from triglycerides and diglycerides. Contact: Amano International Enzyme Co., PO Box 1000, Troy, VA 22974.