

New Books



L.A. Witting, Book Review Editor

Instrumentation for High-Performance Liquid Chromatography, Journal of Chromatography Library, Vol. 13, Edited by J.F. Huber, (Elsevier Scientific Pub. Co., PO Box 330, 1000 AH Amsterdam, The Netherlands, 204 p.)

This volume contains 11 chapters by 10 contributors from Austria, the Netherlands, France and Switzerland. Separate chapters deal with pump systems, gradient systems, sample introduction systems, column design selection, components and accessories for preparative HPLC, and there are four chapters on various types of detectors. It is perhaps an indication of the pace of development in this area that the chapters vary from page to page in terms of being up to date or obsolescent. Any discussion of preparative HPLC that fails to mention the Waters Prep 500 unit is obviously in the latter category. Coverage in general tends toward the exhaustive, but occasionally the reader is left hanging. On page 72 it is noted without illustration that a bypass is present on certain sample injection valves to minimize deformation of the sample injection profile. In a later chapter such a bypass is illustrated, page 97, without explanation. Actually such a bypass has a rather significant role in extending column life. Some values which operate relatively slowly, i.e., 0.5 sec., permit loss of column pressure and a damaging pressure surge than occurs with each injection.

A rather interesting statement is also included to the effect that development of highly efficient columns has exceeded the capability of the existing commercial equipment to utilize this high efficiency. System losses of 10-20% of the theoretical plates available in such columns are indeed frequently observed. In the final chapter on specifications of commercially available equipment, there is a partial tabulation of dead volumes from injector to column and from column to detector. These volumes vary from $0.7\mu\text{l}$ to $110\mu\text{l}$ with the majority in the 20 to $50\mu\text{l}$ range. Frequent references in one section to Swagelok fittings which must be drilled out to provide low dead volume connections are in contrast to the statement in another section that Chrompak distributes low dead volume fittings for all columns.

This is an excellent and comprehensive book which can be recommended to anyone interested in HPLC. Through no fault of the authors or editor, it will have a limited lifespan of up-to-date usefulness in this fast moving field.

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● President's Club & Honor Roll

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Midland Co., 4666 Farries Parkway, Decatur, IL 62526. (Lloyd)

Chin Ah Yong, senior chemist, Pan Century Edible Oils SDN. BHD, Lot 240, Pasir Gudang Industrial Estate, Johore, Malaysia. (Soon)

Raphael A. Zoeller, graduate student, Department of Biochemistry & Biophysics, Texas A&M University, College Station, TX 77843. (Wood)

New Publications



Proceedings of the Conference on the Decline in Coronary Heart Disease Mortality; National Heart, Lung and Blood Institute, National Institutes of Health, HEW, Bethesda, MD; approx. 450 p., available through office of Dr. Richard Havlik, Medical Officer, Epidemiology Branch, Division of Heart and Vascular Diseases, National Heart, Lung and Blood Institute, Federal Building, Room 2C08, Bethesda, MD 20205 (tele: 301-496-2327). Proceedings of conference held Oct. 24-25, 1978.

Vegetable Protein Foods, tomorrow's food today, is an illustrated teaching pack designed as a study guide for the teacher of beginning nutritionists. It is contained in a two-piece card box and offers a full-color wall chart, two fact sheets, and worksheets. The teacher's background text on vegetable food proteins is a 32-page guide complete with teaching suggestions. This teaching pack is available for £2.50 from Forbes Publications, Ltd., Hartree House, Queensway, London W2 4SH, U.K. (tele: 01-229-9322.)

A technical bibliography is being offered by Perkin-Elmer as a service to the practicing chemist. Subscriptions at \$27/year provide access to newly published technical articles in several major categories: Natural Products/Agriculture, Biochemistry, Clinical Chemistry/Lab Medicine, Food/Beverage, Pesticides, Forensic Science, Pharmaceuticals/Cosmetics, and Polymers/Organic Coatings. A subscription includes three bibliography updates plus one special technology issue per year and is available by contacting Perkin-Elmer Corp., Instrument Division, Main Ave., Mail Station 12, Norwalk, CT 06856, (tele: 203-762-1000).

A series of lectures, *Science and Technology in America—An Assessment*, is available from the U.S. Government Printing Office. The lectures were given in 1976 to commemorate the 75th anniversary of the National Bureau of Standards (NBS). The first lecture in the 166-page publication is by Edward Teller, university professor emeritus of the University of California, and is entitled, "Science and Technology in America: A Chronicle and Some Predictions." The lectures may be purchased for \$2.50 (\$3.12 foreign postage) from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. (Order by SD Stock No. 003-003-01728-1).

ASTM has recently released *Part 31 of the Annual Book of ASTM Standards*, which contains 152 standards covering water. The book is soft cover and is available for \$38 from ASTM, 1916 Race St., Philadelphia, PA 19103 (tele: 251-299-5400). Ask for Publication code no. 01-031079-16.

Sadtler Research Laboratories has published nine new volumes supplementing their existing literature on Infrared and Carbon-13 NMR Spectr. Two of the volumes update standard infrared vapor phase spectra; one covers new infrared spectra of surface active agents; five contain recent advances in Carbon-13 NMR techniques; and one volume updates infrared spectra of monomers and polymers. For additional information, contact Sadtler Research Laboratories, Inc., 3316 Spring Garden St., Philadelphia, PA 19104 (tele: 215-382-7800).