• *New Literature*

QUICKFIT INC., Fairfield, N.J., has just released its 1969 Laboratory Equipment Catalog. Among the items included are: multi-membrane electrodecanter for protein separation, Quickfit peristaltic pumps, thin layer chromatography apparatus and the P.A.G.E. system of polyacrylamide gel equipment.

A 20 page booklet, "Principles and Procedures of Instant Thin Layer Chromatography" (PB 287 C) is free from GELMAN INSTRUMENT COMPANY, Information Department, P.O. Box 1448, Ann Arbor, Michigan 48106.

APPLIED SCIENCE LABORATORIES, INC. have issued a Newsletter describing the following new products: a packing that separates highly complex amine mixtures; the Chromatofile, an efficient method of storing GC chromatograms; new lipids, including phytanic acid and glyceryl ethers; ion exchange celluloses for column chromatography; and a new esterification reagent, BF_3-propanol. In addition, a simple technique for hydrogenating lipids is described and a short bibliography on the analysis of vitamins by gas chromatography is given.

ADAM DAVID COMPANY, Langhorne, Pa., announces a four page brochure, the first of a monthly series. Some of the products included in the brochure are centrifuges, oxygen analysers, hollow cathode tubes and a number of other items.

A new publication describing its complete line of gel permeation and liquid chromatographs, related accessories, and column packing materials has been released by WATERS ASSOCIATES, Framingham, Mass. The new Bulletin PL-1001, "Instrumentation for Liquid Chromatography," presents an introductory survey of developments in the field, from the inception of automated gel permeation chromatography in 1964 to the latest developments in high-speed fractionation.

The complete line of redesigned Sage Syringe Pumps and a new Unlimited Volume Pump are described in a brochure just issued by SAGE INSTRUMENTS, INC. New features of the syringe pumps include a top plate with overhang to prevent seepage of infusion fluid into pump, distinctive Sage green color, new driving carriage, labels and switches. The Model 220 Unlimited Volume Pump provides transient-free, uniform flow from a reservoir over extended periods of time.

Capabilities of the Corning LM-2 laboratory mixer are listed in a two page illustrated data sheet (LM-2) available from the Laboratory Products Department of CORNING GLASS WORKS, Corning, N.Y. The LM-2 mixer's vertical oscillating action mixes more efficiently than rotary equipment and virtually eliminates air entrainment and splashing. The various Teflon coated rods and paddles supplied allow mixing in containers as small as a 10 ml test tube or as large as a two liter beaker. Fragile substances, such as cells, can be mixed without damage, the sheet states. Mixing can be performed in inert or sterile atmospheres without the problems associated with rotating seals or heat buildup.

A short form catalog describing a number of digital systems used for data acquisition and/or control of scientific analytical instruments has been published by Datex Division of CONRAC CORPORATION. Included in the brochure are general descriptions of the Datex Model DIR-1 digital integrating recorder, Model DSR-1 digital spectrogram recorder, CDS-1 comparator data system, SDS-1 spectrophotometer data system, MSD-1 mass spectrum digitizer, XDC-II x-ray diffractometer control system and CNC-1 computer operated numerical rotary axis controller. The four page short form catalog is available free of charge from Publications Department, Datex Division of Conrac Corporation, 1600 S. Mountain Ave., Duarte, Calif. 91010.

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• *New Literature . . .*

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A new 16 page booklet of technical information of Alkyl Amines, and a new 12 page booklet on Ethylene Amines have been issued by UNION CARBIDE CORPORATION.

Alkyl Amines and Ethylene Amines are important agricultural chemical intermediates, key materials in the manufacture of agricultural pesticides. In addition, both the Alkyl and Ethylene Amines are strong organic bases that have many other applications as chemical intermediates. On reaction with aldehydes, ketones and alkyl halides, Alkyl Amines yield important petroleum additive derivatives, including corrosion inhibitors and crude oil emulsion breakers. Alkyl Amines also are intermediates for dry cleaning detergents, rubber accelerators, adhesives and sealants, textile chemicals, paper coatings, and pharmaceuticals.

An 8 page bulletin is now available from BECKMAN INSTRUMENTS, INC., describing the company's new Protein-Peptide Sequencer, the first commercial instrument capable of automatically degrading peptides as well as proteins with consistently good results. In discussing operating methodology of the new instrument, Bulletin SB-348 distinguishes the protein and peptide methods and reviews the values of gas chromatography in analyzing the phenylthiohydantoin amino acids. Reproductions of chromatograms, through the 24th residue of bovine thyrocalcitonin, are provided and are indicative of the excellent resolution, sensitivity and capabilities of this analytical technique. The bulletin also provides photos of the instrument and describes each of its individual modules: reaction chamber and cup, reagent and solvent reservoirs, fraction collector, vacuum pumps, and punched-tape programmer.

Another step in its fight against water pollution was taken by EASTMAN KODAK COMPANY this week with the publication of a book for dealers and customers on the disposal of photographic waste. Believed to be the first publication of its kind in the photographic industry, the book, "Disposal of Photographic Processing Wastes," contains information on the need for water pollution controls and the effective handling of chemical wastes. It contains suggestions on how to make the waste load flowing into sewers safe, and answers some of the questions most likely to be asked by engineers of a municipal waste treatment plant or pollution control agency. Almost 300 Kodak chemical products are listed along with their BOD_5 count.

By knowing the concentration of the chemical and the flow rate of an effluent, the book points out, a sanitary engineer can calculate the BOD per unit time which is usually expressed over a 5-day period. A BOD_5 of 400, for example, means that the waste will consume 400 mg of oxygen per liter of effluent in five days.

The greater the biochemical oxygen demand, the faster the dissolved oxygen will be removed from the stream, leaving little for aquatic life. Dissolved oxygen in a stream is essential to aquatic life. Without it, fish and other desirable marine life would die. The book examines some of the chemical substances considered by water pollution control agencies to be damaging to aquatic life. It also explains what happens to these chemicals when they are used in processing.

In a section on recommended practices for processing laboratories, it suggests that processing wastes should receive secondary treatment from a municipal treatment plant because this is the most practical method for reducing BOD_5 of the effluent from a processing laboratory.