prior to centrifuge separation of the foots. The directed rearranged lard is now ready for other processing such

as hydrogenation or deodorization.

A variation on the directed rearrangement process which has been patented (69) would crystallize the disaturate glycerides in a fat before adding the rearrangement catalyst. Then as the liquid phase begins to randomize, more disaturates are formed. If the crystallization driving force is maintained, these disaturates will crystallize before they are converted to trisaturates. Thus a fat suitable for use in margarine with a melting point near body temperature can be obtained. Similarly, directed rearrangement can be carried out in the presence of a free alcohol, such as glycerine, in the reaction mixture (70). As the higher melting-point monoglycerides form, they will crystallize out of the liquid phase just as trisaturates do in the lard process.

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New Literature

Applied Science Laboratories, Inc., have made available Catalogue No. 11, a 51-page indexed listing of their products for gas chromatography, thin-layer chromatography, lipids and calibration standards. They have also listed their custom syntheses and analytical services which now include lipid and nonlipid chemicals. (P.O. Box 440, State College, Pa. 16801.)

The 34-page "ASTM List of Publications" is now available upon request. It lists over 500 ASTM publications dealing with the knowledge of materials, materials evaluation, and the standardization of methods of test and specifications for materials. (Dept. HH, American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19103

The SOAP AND DETERGENT ASSOCIATION issues regularly its Periodical and Literature Digest, for Soap and Detergent Executives. Topics covered are Household and Genral, Industrial and Institutional, Research and Technical, Raw Materials and Processing, Glycerine, and General Business Management. This summary of current literature is sent as a service to Association members, and is available to nonmembers at \$12 per year. (Soap and Detergent Association, 485 Madison Ave., New York, N.Y. 10022.)

(Continued on page 466A)

New Gelman Instrument Courses

Gelman Instrument Company is sponsoring a new series of courses in October in Chicago, Los Angeles, and San Francisco.

The first, slated for October 13-14 in Chicago, provides one day of instruction in Basic Electrophoresis, and one day in Immunoelectrophoresis and Immunodiffusion. R. O. Briere, Johnston-Willis Hospital, Richmond, Va., teaches electrophoresis, and Curtis Williams, Rockefeller Foundation, New York, teaches immuno techniques. Tuition for the two-day session is \$65.

At a one-day session in Los Angeles on October 16, registrants will study under Dr. Williams, or practice TLC techniques under James Hamilton, Tulane University School of Medicine, New Orleans. Tuition for either class is \$35.

Dr. Williams and Dr. Hamilton will each instruct on October 18 in San Francisco. Tuition for the course on immuno techniques or for TLC is \$35.

Advance registration is mandatory and should be made through the Information Department, Gelman Instrument Company, P. O. Box 1448, Ann Arbor, Michigan 48106.

(Continued from page 456A)

H. Reeve Angen & Co., Inc., has announced the publication of the third issue of its newsletter, Matters of Fact. In this issue you will find information on: a chromatographic test system for the separation of free base, nucleosides, and nucleotides using a constant composition clution system; field evaluation results on the Whatman Advanced Ion Exchange Celluloses—a summary of CM separations, with brief descriptions of the procedures used; the complementary effects of ion-exchange cellulose chromatography; and an article on the characterization of collagen peptides. (Free subscriptions may be obtained by writing to H. Reeve Angel, 9 Bridewell Place, Clifton, N.J. 07014.)

A 16-page bulletin from Packard Instrument Company describes more than 20 gas chromatography systems for isothermal or programmed temperature operation they produce. Modular instrumentation comprising the systems, interchangeable plug-in detectors and accessories for radioactivity measurement are discussed. (Bulletin 1058P, from 2200 Warrenville Rd., Downers Grove, III.)

The detergent alcohol Neodol is the subject of several technical bulletins of the Shell Chemical Company. Properties, applications, sales specifications and toxicity are described. (50 West 50th St., New York, N. Y. 10020)

ABBOTT LABORATORIES has announced 10 new chemicals for evaluation as intermediates or aids in the preparation of a variety of products in the plastics, textile, paper, rubber, petroleum, detergent, chemical and pharmaceutical industries. Technical bulletins (numbers 11–15) detailing suggested uses, physical properties, chemical reactions, physiological properties, and comprehensive references are available from the Abbott Laboratories Development Division, North Chicago, III, 60064.

New literature on the chromatographic products available from the Barber-Colman Company describes the many 5000 Series Selecta-Systems for research applications. Also included is descriptive information on routine, quality control instruments as well as detector systems available for liquid chromatography. Bulletin 3010DB 8-2. (Rockford, Illinois 61101.)

E-C APPARATUS CORPORATION has data sheets available on their paper electrophoresis cell. Uniformity of conditions during migration in paper electrophoresis can be attained with as many as 12 paper strips with sample being run simultaneously. (222 South 40th St., Philadelphia, Pa., 19104.)

PACKARD INSTRUMENT Co. has aurounced the addition of Model 3310 to its line of Tri-Carb liquid scintillation counting systems. Priced at \$8,950, the 200-sample instrument features controlled temperature, three simultaneous channels of pulse height analysis, automatic external standardization, background subtraction, and optional gamma counting, continuous flow and data processing. Balletin 1102F. (2200 Warrenville Road, Downers Grove, III.)

The complete line of Parr bench scale pressure reactors, hydrogenation apparatus, general purpose bombs, and pressure vessels is presented in a new 24-page illustrated catalog issued by the Para Instrument Co. Replacement parts for all existing Parr pressure reactors are included in this new publication. (Cat. No. 67-2, 211 Fifty-third Street, Moline, Ill. 61265.)

New literature describing the 5000 Selecta-System Gas Chromatograph as used in Cryogenie applications is available. Component resolution increases remarkably with lower column temperatures. Many applications plus typical cryogenic chromatograms are included in the literature. Ask for 3010 AD 13.1 (BARBER-COLMAN COMPANY, Rockford, Illinois 61101.)

• AOCS Chicago Meeting . . .

(Continued from page 406A)

ELLIOTT COMPANY, Jeannette, Pa. (BOOTH 74). Exhibiting: Elliott "Swirl Jet" Serub Cooler for the recovery of vacuum system vapor by-products and the climination of cooling water contamination; One to six-stage steam jet ejector systems for process evacuation. Personnel: George Miller, Raymond Thayer, Richard O'Connor and Fred Hohenstein.

EMI-ENGINEERING MANAGEMENT, INC., Des Plaines, Ill. (BOOTH 41). Exhibiting photographs, flow-sheets, displays, samples, and bulletins describing their products and services—such as engineering, contracting, consulting, solvent extraction, oil processing, deodorizing, hydrogenation, fatty acid, protein products. EMI engineers will be on hand for detailed discussion. (See advertisement, page 425A.)

EXTRACTION DE SMET, S. A., Antweep, Belgium. (**BOOTH 50**). Pictures of processing equipment for the fat and oil field. Representative: Luis Spitz.

FEDERAL PACIFIC ELECTRIC CO., Newark, N. J. (BOOTH 55). Displaying: Roller Smith Precision Balances, a complete line of precision balances from 3 mg to 150 g, 3 grains to 375 grains, including standard balances. Featured will be the Rosano Surface Tensiometer. This instrument uses a wettable blade and requires no buoyancy correction. In attendance: Norman Stolack. (See advertisement, page 467A.)

HOFFMANN-LA ROCHE, INC., Nutley, N. J. (BOOTH 75). Exhibiting their vitamin and color line with particular emphasis on vitamin A, beta-carotene, apo-carotenal and blends of these ingredients for use in the food industry. Representatives: B. Borenstein, R. L. Bovit, R. C. Christiansen, J. C. Lamping and H. O. Stark. (See advertisement, page 429A.)

INDUSTRIAL FILTER & PUMP MFG. CO., Cicero, Ill. (BOOTH 43). Has in its booth all the latest literature and bulletins describing its products and recent installations. On hand to greet you and discuss your filtration problems will be Frank Passalaqua, Ted Sward, Jim Zievers, Chuck Novotny, Diek Crain and Ed King. (See advertisement, page 471A.)

INFOTRONICS CORP., Houston, Texas. (BOOTH 69). Exhibiting: CRS-160 digital readout system of mass spectrometry; CRS-100 automatic digital integrator for gas chromatography; CRS-12ABT digital integrator for amino acid analysis. Representatives: J. M. Cotton, M. C. Simmons, Fred Stevenson-Francis and Gene Salyer. (See advertisement, page 437A.)

LIQUID DYNAMICS, Chicago, Ill. (BOOTH 63). Manufactures and sells its extractors under its own extensive and continuous patent and patents-pending program in over 20 countries; and, under a "Royalty-Free License," on several Dresser-Podbielniak patents. A special modification or exchange offer replacing antiquated equipment is available upon request for a combination Quadronic Extractor and Separator. Representatives: C. M. Doyle, Mrs. Władzia G. Podbielniak Doyle and E. E. Rauch.

- H. S. MARTIN & SON, Evanston, III. (BOOTH 73). Exhibiting: General laboratory glassware, including precision dilatometers of both standard and special nature; oil diffusion pumps for high vacuum determinations; a new ball and socket O-ring joint which has been found ideal for oil analysis applications; a full line of Weeware and reaction vessels. Representatives: William Sales and Edward Sesterbenn.
- G. MAZZONI, S. p. A., Busto Arsizio, Italy. (BOOTH 51). Exhibiting: Pictures of processing equipment for the fat and oil, soap and detergent fields, as well as a tridimensional model of a physical refining plant. Representative: Luis Spitz. (See advertisement, page 393A.)