• Report on Fats and Oils

Turn in the Tide

The LAST year and a half has seen a dramatic change in the relationship of bean oil to coconut oil to peanut oil, see chart. The primary reasons were the sensational price rise of U.S.A. beans, spurred mostly by low availability of beans from Mainland China, plus an upsurge in production of African peanuts and Philippine copra. The question that faces the European buyer at this point is whether the conditions currently prevailing in the various producing areas will call for a reversal in the relationships or whether the differences will remain relatively static.

In the U.S.A., the bean crop is going in early and soil moisture conditions are at least average. There is now very little question in the minds of most observers that plantings will exceed the March intentions, perhaps exceed them greatly. This indicates some slack in the 1961– 62 bean situation, even if we have a moderate backing-off in per acre yield and even if China is not an aggressive seller. China is still having agricultural problems. However extreme, recent weakness in the Chinese yuan in Hong Kong will certainly mean pressure on China to sell as many beans as she can for hard currency. She must pay for big grain purchases in Canada, Australia, and France. This slack in the bean situation is not likely to



become really apparent and accepted however until fairly late in the summer or early in the fall. Not only do late season crop reports have a tendency to be better, but there is less that weather can do to reduce yields. There is no question but that the increase in the bean loan will be a sustaining force for bean oil prices both here and abroad. This year's experience indicates that it is difficult to force meal up to offset higher bean prices. In addition, any Federal Administration is much less likely to try to get meal prices up as the meal returns to the farm as mixed feed. High feed prices are never popular.

The Philippine copra situation over the next several months appears harder than usual to assess. Precipitation recently has been below average in the main producing areas. This does not bode well for production later this year, especially since we are entering the period of high seasonal rainfall. If this dry trend continues it will be exceedingly difficult to overcome later on in the year when normal amounts are smaller. Current arrivals at terminals have been good, reflecting the excellent moisture conditions prevailing last fall. There was almost certainly some copra held off the market by Philippine traders in expectation of a currency devaluation there. It now appears that the devaluation either will not take

6

place or will not take place for a while. This probably means that for the near future more copra will be coming to market than is actually being taken off in the interior. A partial offset to this latter item is a story that has cropped up lately that the Oct./Nov. rains last year were so heavy that they caused some damage to emerging buds which might mean some decrease in off-take over the intermediate term. This of course might be wishful thinking on the part of longs in cash copra. Taken all together, the signs indicate that copra exports will stay high over the short term, but might decline slightly over the intermediate term as stocks are cut and if there is some substance to the bud damage story. They might decline even more over the longer term if there is no change in the currently unfavorable moisture situation.

Current prospects are for another good crop of peanuts in the big African producing nation. This season's price experience indicates an increase in acreage and in fertilizer application this coming season particularly in Nigeria. Whether this will result in increased production depends on weather, which is currently a bit on the dry side. Since the new crop is just now planted in that part of the world it is too early to tell much on this score.

On the demand side the shift in the relative prices has resulted in a drop in demand for U.S.A. oils in the U.K. and Northern Europe. Soybean oil takings Oct.-Apr. by the U.K., Netherlands, and West Germany were 34,000,000 pounds this year versus 115,000,000 in the same period a year ago. Cottonseed oil exports to the same three nations Oct.-Apr. were 153,000,000 pounds versus 237,000,000 pounds in the comparable period a year earlier. This looks like inventory liquidation and substitution. We cannot afford to lose free dollar markets at this rate. True, there are technical problems involved in substitution but they are not that complicated. We would be inclined to guess that we are close to the turn in the tide in the price relationship of the three items.

> JAMES E. McHALE, Merrill Lynch, Pierce, Fenner and Smith Inc., Chicago, Ill.

• Fatty Acids

April production of fatty acids as classified under Categories No. 1 to No. 13 totalled 46.6 million pounds, down 0.2 million pounds from March, and down 0.8 million pounds from April 1960, according to the Fatty Acid Producers' Council, New York. Production of saturated fatty acids was 19.1 million pounds compared with 20.3 million pounds in March and 21.2 million pounds in April last year. Unsaturated fatty acid production, including the tall oil types, was 27.5 million pounds in April last year. Unsaturated fatty acid production, including the tall oil types, was 27.5 million pounds, versus 26.5 million pounds in March, and 26.2 million pounds in April 1960.

Disposition of all fatty acids amounted to 53.5 million pounds, down 2.9 million pounds from March, but up 6.8 million pounds from April last year.

Finished goods inventories totalled 50.5 million pounds on April 30th, down 3.6 million pounds from the March 31st figure. Work-in-process stocks totalled 18.1 million pounds, up 0.5 million pounds from the end of March.

Fair Announced

The 16th International Fair for Preserved Foods and Packing and the International Exhibition of Food Products Equipment will be held at Parma, Italy, September 20-30. The displays will comprise machinery and accessories, scientific instruments and apparatus, packing, containers and accessories, packed foods, and raw materials for the food industries.

Publishes Standards

Specifications for the maximum acceptable concentrations of toluene, benzene, and xylene in all places of employment are available in three revised American Standards from the American Standards Association, Dept. PR 220, 10 East 40th street, New York 16, N.Y. Was the chef's face red when the eggs turned blue!



Next time, he'll use a shortening that has NDGA[®] in it as an Anti-Oxidant. You see, NDGA, which can be supplied by Stange in solution with BHA, together with chelating agents affords great stability, and no undesirable colors develop. For example, a combination of NDGA and BHA will meet all AOM specifications for stability, and the carry-through in food preparation will be completely satisfactory.

For information on the use of NDGA in combination with other Anti-Oxidants for highly effective results, write

NOW FOR THE FIRST TIME NDGA SOLUTIONS AVAILABLE AT COMPETITIVE PRICES. SAMPLES ON REQUEST!

WM. J. STANGE CO.

342 N. Western Avenue Chicago 12, Illinois

INDGA is Stange brand name for Nordihydroguaiaretic Acid.



Vitamin A man

Eric McLean is our production manager. You might also call him chief officer in charge of assuring trouble-free vitamin A fortification of food products like margarine. This is easily accomplished with our $Myvax^{(h)}$ Vitamin A Acetate or Palmitate, or Myvax Dry Vitamin A Palmitate.

Mr. McLean also processes fats and oils. So do you. If you have any problems involving the incorporation of his products with yours, we might have the answers.

Distillation Products Industries, Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.



leaders in research and production of vitamin A

Distillation Products Industries

is a division of Eastman Kodak Company



A.O.C.S. National Meetings

- 1961—Chicago, Pick-Congress hotel, October 30-31, November 1
- 1962-New Orleans, Roosevelt hotel, May 7-9 Toronto, Royal York hotel, October 2-4
- 1963—Atlanta, Atlanta Biltmore Hotel, April 22–24 Minneapolis, Radisson hotel, September 30-October 2
- 1964-New Orleans, April 27-29
- Chicago, Oct. 12-14
- 1965-Houston
- Cincinnati, Oct. 11-13 1966—Los Angeles
- Philadelphia, Oct. 4-6
- 1967—New Orleans Chicago

A.O.C.S. Section Meetings

- North Central—bi-monthly at the Builders' club, Chicago, 6:30 p.m.
- Northeast—first Tuesday of February, April, and June, at Whyte's Restaurant, Fulton street, New York, 6 p.m.
- Northern California-May, September, and November at selected places
- Southwest—second Thursday of every other month, beginning January, at Rodger Young Auditorium, Los Angeles, 6:30 p.m.

Other Organizations

- July 27-Aug. 1—International Symposium on Macromolecular Chemistry, Montreal, Canada Aug. 13-18—International Symposium on Micro-chemical
- Aug. 13-18—International Symposium on Micro-chemical Techniques, The Pennsylvania State University, University Park, Pa.
- Aug. 14–18–Canisius College's Fifth Annual Infrared Spectroscopy Institute, Buffalo, N.Y.
- Sept. 6-8-Joint Nuclear Instrumentation Symposium, North Carolina State College, Raleigh, N.C.
- Oct. 31—Nov. 3—The Sound Effluent and Water Treatment Exhibition and Convention, Seymour hall, London, England
- Oct. 31-Nov. 4-39th Annual Meeting and 26th Industries' Show of the Federation of Societies for Paint Technology, Shoreham hotel, Washington, D.C.
- Nov. 27-Dec. 1-28th Exposition of Chemical Industries, New York Coliseum, New York, N.Y.

Affiliates with Dresser

In 1956, Podbielniak entered the fats and oils processing field, after almost 10 years of research and development. As a result of this extensive work, they introduced to the industry improved refining processes and equipment systems for continuous degumming, caustic refining, and water washing of fats and oils. These fully continuous, automatic systems utilize the most modern techniques, processes and machine designs. The recent association with Dresser Industries will expand and expedite future development and application of Podbielniak products and give world wide sales and services.

Myverol[®] Distilled Monoglycerides

· · · · · · · · · · · · · · · · · · ·	Туре 18-00	Туре 18-07	Туре 18-40	Туре 18-85
Source material	Fully hydrogenated Iard	Fully hydrogenated cottonseed oil	Prime steam lard	Refined cottonseed oil
Monoester content (min.)	90.0%	90.0%	90.0%	90.0%
Saponification value	155-165	155-165	155-165	155-165
lodine value	1	1.0 (max.)	50 (approx.)	85 (approx.)
Glyceroi content (max.)	1.0%	1.0%	1.0%	1.0%
F.F.A. (max.): as stearic as oleic	1.5%	1.5%	1.5%	1.5%
Specific gravity	0.91 at 80°C	0.91 at 80°C	0.92 at 80°C	0.93 at 80°C
Congeal point (approx.)	68°C	67°C	47°C	46°C
Clear point (approx.)	73°C	76°C	60°C	56°C
Form	Bead	Bead	Plastic homogenized fat	Plastic homogenized fat
Net shipping weight, lb.	250	250	400	400

For the engineering of food texture

Here are four fats for foods, typical of the broad variety of distilled monoglycerides you can get from DPi. Their high monoester content, the result of a unique segregation of fat molecules in the vapor phase, makes possible precise engineering control over the physical structure of foods which contain fats.

High mono content makes these emulsifiers more efficient, hence less expensive, than mixtures of mono- and diglycerides. Emulsions are easier to form and less emulsifier need be used.

Myverol Distilled Monoglycerides are bland, stable, and free from catalysts and soaps. There is nothing in them that might affect taste, color, or odor. To learn which of them might improve your control of food texture, write **Distillation Products Industries**, Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

distillers of monoglycerides made from natural fats and oils



<u>Also</u>... vitamin A in bulk for foods and pharmaceuticals

Distillation Products Industries is a division of Eastman Kodak Company

W & S CONTINUOUS DEODORIZER HAS BEEN PROVED IN OPERATION

In addition to the installation shown here (Lima, Peru), W & S deodorizers are now operating, or being installed in North, Central and South America; the West Indies; Philippines; Africa; and Europe.

Fifteen installations in the past two years and reorders of even larger capacity units indicate the industry's confidence and acceptance of this continuous deodorizer...the latest development in W & S engineered oil processing plants.

LOW OPERATING COSTS

Counter-current continuous processing makes possible savings in steam, water, electricity-saves oil usually lost by entrainment. Up to 60% savings in production cost compared to standard batch operation-25% savings in production cost compared to semicontinuous operation.

STANDARD UNITS AVAILABLE IN MANY SIZES.

One basic design for all your needs. Standard units for 1,500; 2,500; 5,000; 7,500 to 15,000 lbs. per hour. Larger units custom-designed to meet your needs. Compact, efficient layout minimizes space requirements. Outdoor installation is simple and economical, too.

COUNTER-CURRENT PROCESSING

Oil flows downward, vapors upward. The oil is processed in a series of steps within a column. All operations on the oil are conducted under full vacuum, viz.; deaerating, drying, prestripping, deodorizing and cooling; oil comes in contact only with stainless steel.

FULLY AUTOMATIC

Heating, cooling, oil and steam flows are under full control. Alarm system minimizes supervision—guards oil quality.

QUICK CHANGEOVER OF STOCKS

Quick and simple changeover of feed stocks without contamination problem. Saves you time, money and labor.

SPECIAL FEATURES

Unique W & S by-pass seals prevent leakage of air into deodorizer. Special heated bubble cap trays, an original W & S development, avoid overheating.



• Received in the Journal Office

"Oils and Fats," by J.G. Kane, reprinted from the Annual Review of Biochemical and Allied Research in India (Vol. XXX, 1959, pp. 103-130) has been received from the Department of Chemical Technology, University of Bombay.

The 1960 annual report for Arthur D. Little Research Institute, Edinburgh, Scotland, in a 43-page booklet, summarizes progress in biochemistry, organic and physical chemistry, and metallurgy.

"Service," Vol. 5, No. 3, 1961, a quarterly, has been sent by Ivon Watkins Ltd., New Plymouth, England.

No. 12, 1° semestre de 1960, of Agronomia Angolana has been sent by the Republica Portuguesa, Provincia de Angola, Direccao de Agricultura Florestas, Luanda.

A 65-page technical bulletin, "ScB-Bulletin (chemie)," 1961, was sent in by Bookimpex Gentsestraat 197, Scheveningen, Nederland.

Estudos Agronomicos, Vol. 1, October-December, 1960, has been received from Missao de Estudos Agronomicos do Ultramar, Rua Rodrigo da Fonseca 103, 4°, Lisboa 1, Portugal.

"The 1960 Report of the Grain Research Laboratory" of the Board of Grain Commissioners for Canada, Winnipeg, Manitoba, summarizes research and service activities.

A reprint from Acta Chemica Scandinavica 14 (1960), No. 9, "The Infrared Absorption Spectra of Some Monounsaturated and Saturated Fatty Acids and Esters," by Aage Jart, has been received from Copenhagen, Denmark.

Leaflets from the Commonwealth Scientific and Iudustrial Research Organization, Australia, treat these topics: "Growth of Penicillium Rocqueforti on a Whey Medium,"



by J. Czulak; "Liquid Exudate in Rindless Cheese," by A.J. Lawrence; and "Failure of a Blend of Mixed Starter Cultures in the Vat," by Barbara P. Keogh.

Two bulletins of "Estudos Agronomicos," Vol. 1, April-June and July-September 1960, were received from Rua Rodrigo da Fonseca 103, 4.0, Lisboa 1, Portugal.

A 102-page technical periodical entitled "La Rivista Italiana delle Sostanze Grasse, Vol. 38, Gennaio 1961 has been received from Via Giuseppe Colombo 79, Milano, Italy.

A collection of technical papers, Vol. 32 (1959), entitled "Revista de la Facultad de Ciencias Quimicas," has been given by the Universidad National de la Plata, Calle 47 y 115, Argentina.

A book on "The Pineapple," by J.L. Collins (1960), has been issued by Interscience Publishers Inc., 250 Fifth avenue, New York 1, N.Y., as a guide to the history, botany, cultivation, and uses of this fruit. It is a companion series to World Crops Books entitled "Plant Science Monographs," edited by Nicholas Polunin.

• New Literature

GBI 1961 PRICE LIST. A 122-page booklet listing special products for research. General Biochemicals, a Division of the North American Mogul Products Company, 680 Laboratory park, Chagrin Falls, O.

GLOSSARY OF NATIONAL ORGANIC CHEMICALS. Eleven pages giving 483 organic chemicals by code number, National Aniline name, chemical abstracts name, and common or trade name for each chemical. Dept. NA 60, National Aniline Division, 40 Rector street, New York 6, N.Y.

ALLIS-CHALMERS TYPE VC WATER-COOLED CENTRIFUGAL COMPRESSOR. Bulletin 16B9987. Four pages describing construction features and components of the compressor. Allis-Chalmers, Milwaukee 1, Wis.

AMSCO SOLVENTS. A folder presenting product specifications in comparative form. American Mineral Spirits Company, 200 South Michigan avenue, Chicago 4, Ill.

CATALOG NUMBER E-240. An 11-page catalog describing research metallographic equipment. Bausch and Lomb Inc., Rochester 2, N.Y.

CATALOG NO. 161. A 240-page multicolored catalog, illustrating and describing electric ovens, furnaces, baths, environmental cabinets, related temperature control equipment, and accessories for laboratory, pilot plant, and production. Blue M. Electric Company, 138th and Chatham streets, Blue Island, Ill.

WESTFALIA SANITARY AUTOMATIC DE-SLUDGERS (Series 5036). An 8-page leaflet giving clarification and separation operations. Centrico Inc., 75 West Forest avenue, Englewood, N.J.

SCIENCE TEACHER'S GUIDE TO LABORATORY GLASSWARE. A 12-page bulletin listing 27 laboratory glassware items for secondary school science courses. Corning Glass Works, Corning, N.Y. Also a brochure (B-83) "Properties of Selected Commercial Glasses," giving expanded data on corrosion resistance and thermal expansion of 32 commercial glasses.

PODBIELNIAK CENTRIFUGAL LIQUID-LIQUID CONTACTORS AND SEPARATORS (P-100). A 24-page brochure describing centrifugal contactors, solvent extractors, chemical reactors, separators, and clarifiers. Podbielniak Inc., Division of Dresser Industries Inc., 341 East Ohio street, Chicago 11, Ill. ROTH REGENERATIVE TURBINE PUMPS (Catalog Section 101). Up-to-date engineering information of Roth end-mounted industrial pumps. Roy E. Roth Comapny (Turbine Pump Division), Rock Island, Ill.

NEW VIBRATORY FEEDER CATALOG. A 46-page catalog section giving complete descriptions, data, and specifications for small, heavy, and extra-heavy-duty standard electromagnetically-vibrated feeders. Syntron Company, 295 Lexington avenue, Homer City, Pa.

LABORATORY (Vol. 29, No. 1). A 31-page booklet telling of new developments in instruments, apparatus, laboratory furniture, reagent chemicals, and methodology. Fisher Scientific Company, 306 Fisher bldg., Pittsburgh 19, Pa.

C14-LABELLED RADIOCHEMICALS. Four pages listing prices of 36 tracer compounds labelled with Carbon-14. Also a complete catalog listing 130 Carbon-14 compounds, ineluding amino acids, fatty acids and derivatives, purines and pyrimidines, hydrocarbons, and valuable intermediates. Research Specialties Company, 200 South Garrard blvd., Richmond, Calif.

MATERIALS FOR ADVANCED TECHNOLOGY. An 8-page data pamphlet on 12 new products in applications requiring resistance to abrasion, chemicals, corrosion, nuclear radiation, and high temperatures. The Carborundum Company, Box 337, Department BMD, Niagara Falls, N.Y.

THE REAL FLOW-BEHAVIOR OF PLASTIC SUBSTANCES. Five pages of technical discussion by A.G. Epprecht on viscous deformation of plastic substances. Drage Products Inc., 406 32nd street, Union City, N.J.

WATER DEMINERALIZERS (Bulletin No. 154). Describing five models of the disposable type of demineralizers. Barnstead Still and Sterilizer Company, 2 Lanesville terrace, Boston 31, Mass.

"DOUBLE-TOUGH" DRAINLINE. A 16-page catalog (Bulletin PE-30), giving property data and advantages of the corrosion-resistant glass system for disposal of chemical wastes. Plant Equipment Department, Corning Glass Works, Corning, N.Y.

MODEL 111. A data sheet on the Turner Model 111, selfbalancing Fluorometer, which provides both direct read-out and outputs for various types of recorders or controllers. G.K. Turner Associates, 2524 Pulgas avenue, Palo Alto, Calif.

RANGE FLOW TEST KITS. Four-page bulletin, offering information on four variable-area flowmeter kits, each containing meters of various sizes for a wide range of flow measurements. Bulletin 10A1010, Fisher and Porter Company, 794 Jacksonville road, Warminster, Pa.

MARVINOL VR-50. A 20-page illustrated booklet on formulating high-shear plastisol and organisol vinyl plastic compounds. Marvinol Sales Promotion Department, Naugatuck Chemical Division, United States Rubber Company, Naugatuck, Conn.

DAY CINCINNATUS MIXERS. An 8-page bulletin describing the double-arm mixers designed for the processing of viscous fluids and semi-solids. J.H. Day Company, 4932 Beech street, Cincinnati 12, O.

BANTAM-WARE (Catalog BW-2). A 32-page catalog listing the 150 new items in the line of small organic glass apparatus. Kontes Glass Company, Vineland, N.J.

NORELCO RAYPROOFED ISOTOPE CHAMBERS. A 6-page folder providing engineering data on 19 isotope chambers for gamma radiography. Philips Electronic Instruments, 750 South Fulton avenue, Mount Vernon, N.Y.

CHRONOFRAC MODEL VP-1 (Bulletin No. 619). Four pages defining construction details, usage, and degree of reliability of the gas chromatograph. Precision Scientific Company, 3737 West Cortland street, Chicago 47, Ill. ORIGINAL SWK HARD PORCELAIN FILTERS. Four-page catalog describing filters for use in chemical and pharmaceutical laboratory. Brinkmann Instruments Inc., 115 Cutter Mill road, Great Neck, L.I., N.Y.

AMINCO LABORATORY NEWS. Reporting latest developments quarterly in chromatography, spectrophosphorimetry, and spectrophotofluorometry, thermogravimetry, and other new concepts of scientific instrumentation. American Instrument Company Inc., 8030 Georgia avenue, Silver Spring, Md.

NYLAB CATALOG NO. 8. A 1,057-page illustrated volume giving detailed information for laboratory equipment used commercially. New York Laboratory Supply Company Inc., Catalog Dept. Q, 76 Varick street, New York 13, N.Y.

DEVINE MIXERS, BLENDERS, AGITATORS. Six pages describing mixing and blending equipment. J.P. Devine Manufacturing Company, 49th street and A.V.R.R., Pittsburgh, Pa.

BATCH-MASTER, BATCH-O-MATIC. A 20-page catalog (TC-16-17), giving details for fast-bottom discharge. Tolhurst Centrifugals Division, American Machine and Metals Inc., East Moline, Ill.

SIGHT FLOW INDICATORS. Four-page bulletin offering data on construction, dimensions, and operating limits for flapper and rotary types of sight flow indicators. Schutte and Koerting Company, Cornwells Heights, Bucks County, Pa.

WEIGHT SENSING. An 8-page reference manual for the application of automatic weight-sensing systems. The Exact Weight Scale Company, 538 East Town street, Columbus 15, O.



FRED STEIN LABORATORIES, INC. Atchison, Kansas

Question

October 7, 1959

We are writing to ask your help on a problem which relates to soybean-extracted meal. What special inherent qualities or specific treatment are required for soy meal to further its use, for example, "Special Nutrient" from Staley for processing antibiotics?

Answer

FROM ARGENTINA October 13, 1959

Our research laboratory has asked me to reply to your letter about the use of soybean meal for processing antibiotics.

The correspondent is correct in his statement that soybean meal is used in processing antibiotics. The Staley Company has for a number of years supplied Special Nutrient 4-S to the antibiotic industry for use as a source of soybean protein. This is a specially-processed soybean oil meal, in which the moisture, protein, and oil contents are carefully regulated. In cooperation with the leading antibiotic manufacturers in the United States very rigid specifications have been established on Special Nutrient 4-S, which has resulted in a sizable usage of the product. Typical analyses on Special Nutrient 4-S is as follows:

Moisture	% 10.0 Maximum
Protein (as is)	% 46.0
Amino nitrogen (as is)	% 0.5
Oil (DSB)	% 4.6

A.E. STALEY MANUFACTURING COMPANY DECATUR, ILL.

Extend Use of Acid

Ted Wishnetsky and Ben Stuckey of the laboratories of the Eastman Chemical Products Inc., a subsidiary of Eastman Kodak Company, Kingsport, Tenn., reported their findings at the recent New York convention of the Institute of Food Technologists. They concluded that gentisic acid and its sodium salt may well be the answer to stabilizing such food products as fish and certain meat products in which antioxidants must be dispersed in or through the aqueous phase.

Publishes Chemical Directory

The editors of Foster D. Snell Inc.'s Chemical Market Abstracts announce publication of the first directory of chemical companies in the European Common Market and Free Trade Association on May 30. The directory, called "The Common Chemical Market," is available only to sub-scribers and will list more than 6,000 chemical manufacturers and chemical dealers in the 13 nations comprising these two major world trade blocs.

In addition to an alphabetical listing of the companies by nations, it will classify European chemical companies by standard industrial classification numbers. It is expected the publication will become a standard reference source for those importing or exporting chemicals to Europe and between European countries.

Scientist to Speak

Louis A. Jordan will present the Joseph J. Mattiello Memorial lecture at the 39th annual meeting of the Federation of Societies for Paint Technology at Washington, D.C., November 2-4, 1961. Dr. Jordan has been professor of chemistry at the Royal Academy of Art, London, since 1958 and is an international authority on decorative and protective coatings technology. He is the founder director of the Paint Research Station, Teddington, England, and of the Research Association of British Paint, Colour, and Varnish Manufacturers.

Interested personal servicealways-when you buy from Eastman

Tenox®

Eastman food-grade antioxidants

Eastman manufactures the three basic antioxidants for edible fats and oils.

Tenox BHA butylated hydroxyanisole

Tenox BHT butylated hydroxytoluene

> **Tenox PG** propyl gallate

These antioxidants are supplied alone and in many different ratios and combinations to meet specific processing or service requirements, e.g., Tenox 2, Tenox 4, Tenox 6, Tenox R and Tenox S-1.

For more information on Tenox antioxidants and their use in fat- and oil-containing foods, send for catalog No. G-109, "Tenox, Eastman Food-Grade Antioxidants."

For properties and shipping information on these and other Eastman products, see Chemical Materials Catalog, page 363, or Chemical Week Buyers' Guide, page 107.





Case Tenox 2 arriving...

"It was late Friday afternoon, and I was anticipating the night game at Comiskey Park," related one of our Chicago representatives.

"I had completed my last call for the week, but on the way home stopped at a telephone booth to touch base with the office—to learn to my dismay that a good customer of ours out in Iowa had a sacrifice play working. Only, his sacrifice situation involved a kettleful of edible fat.

"As he had put it, 'The fat is in the fire.' Seems his rendering operation was well underway when he discovered that he was out of Tenox 2 (one of our food-grade antioxidants that protects edible fat against developing off-odors and flavors). Unless he could obtain the antioxidant right away, the whole batch would very shortly enter the inedible category.

"Well, I knew that to get a common carrier into our local warehouse for a weekend pickup was out of the question. I had tried this before without success, but I headed for the office anyway to check all the possibilities.

"As I parked the car and absentmindedly crossed the street, I had to circle around a bus waiting for the light. That did it. I recrossed, got in the car, drove to our warehouse, picked up the Tenox, and headed for the Greyhound bus depot.

"My luck held, for they had a scheduled stop. After seeing this unusual fare off, I wired the customer: CASE TENOX 2 ARRIVING GREYHOUND TERMINAL 11 P.M. TONIGHT.

"A wire on my desk Monday morning made the effort very worth while. It read simply: THANKS."

An usual delivery? Yes, but a typical example of Eastman service.

Eastman CHEMICAL PRODUCTS, INC., KINGSPORT, TENNESSEE, Subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, North Carolina; Houston; Kansas City, Missouri; New York City; Philadelphia; St. Louis. West Coast: Wilson & Geo. Meyer & Company, San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Ith time winner...



homas wins again Pyrex Achievement Award for outstanding sales of

PYREX LABORATORY GLASSWARE

As in the three former years since establishment of the award by the Corning Glass Works, we are again recipients of the Steuben crystal trophy for outstanding sales of Pyrex laboratory ware.

We regularly list and stock more than 1,500,000 pieces of Pyrex ware —not including Tubing or Rod—and are therefore prepared to make immediate shipment of orders for either large quantities or varied assortments.

See our new 1961 catalog for current listings of the widest assortment of Pyrex laboratory glassware available from any single source.



ARTHUR H. THOMAS CO.

Laboratory Apparatus and Reagents

VINE STREET AT THIRD

PHILADELPHIA 5, PA.

More and More Laboratories RELY ON THOMAS

• A.O.C.S. Commentary

(Continued from page 4)

seed cake are extremely important in the agricultural field as nutritional farm-animal feed.

The Paint Division uses many other oils and fatty acids in the preparation of paints and resins. Tung oil, castor oil, dehydrated eastor oil, coconut oil and acids, tall oil, tall oil fatty acids, cottonseed oil and acids as well as many grades of fractionated fatty acids all find application in a variety of resinous products.

The research department of the Paint Division has conducted research in the processing and utilization of drying and semi-drying oils for many years. The furfural process for fractionating oils, such as soybean and linseed oil, was developed and operated commercially for many years. Soybean oil gave a superior food oil as a raffinate and a good drying oil as an extract. The fractionation of soybean oil is now uneconomic, but linseed oil is still fractionated.

NOTHER widely-used Pittsburgh process is the preparation of copolymers of cyclopentadiene and drying or semi-drying oils. Several licensees operate under the basic patent. As an off-shoot of the furfural fractionation, process work was also done on continuous liquid-liquid extraction of sterols and unsaponifiable matter from tall oil soaps, soybean soapstock, and related materials. A commercial plant operated for some time producing *beta*-sitosterol from tall oil distillation residue. The sitosterol was converted to testosterone by one of the drug companies. Steroids from Mexico eventually took over this market.

New work is in the conversion of the usual oil paintvehicle systems to water-dispersed or water-thinned systems for both trade sales and industrial uses. A continuing program in the utilization of oils and fatty acids in alkyd resins, copolymers, varnishes, bodied oils, and urethane oils for a host of end uses is always in progress.

The company's research work associated with fat and oil chemistry has been emphasized, but a substantial segment is also being performed in the area of polymer chemistry. The company has sold for many years a line of unsaturated polyester-styrene resins for diverse applications. Recently the preparation of thermosetting acrylic polymers, the Duracron ^(R) finishes, for industrial baking uses has been a major effort. In the trade sales line, synthetic latex preparation and the formulation of exterior house paint from latex have been active projects. Vegetable oils and polymers from petroleum-based monomers are competitive for many of the same end-uses in paint products. The company's Paint Division Research attitude is that work must be done on both to produce the best product regardless of the source of raw material.

Just as the company has been vigorously active in research and technological progress, so it has been a leading proponent for the proper use of paint and color in homes, factories, and commercial and institutional buildings. In stimulating the scientific use of color, Pittsburgh Plate developed a practical painting system known as Color Dynamics,^(R) which employs the energy in color to promote safety and efficiency in factories, to bring added beauty and comfort to homes, and to provide better environments in offices, schools, hospitals, and other institutions today. A color research laboratory also is maintained at Springdale.

As a result of its widely-diversified operations Pittsburgh Plate and its subsidiaries, approximating 33,000 people today, operate a total of 41 plants throughout the United States. In addition, the company has a wholly-owned subsidiary in Canada composed of glass and paint manufacturing facilities and merchandising branches and maintains interests in glass and paint operations in Central and South America and in Europe.

> R. M. CHRISTENSON Manager, New Products Research

• Industry Items

The Lynch Corporation, Anderson, Ind., announces the acquisition of Coblentz Dry Air Systems from the Lovell Manufacturing Company. Robert C. Coblentz, inventor of the systems, has joined Lynch.

Applied Science Laboratories Inc., State College, Pa., offers Neopentyl Glycol Adipate polyester for analysis of steroids, fatty acid esters, and other materials. Also available is Gas-Chrom P for column packings.

The Badger Manufacturing Company, Cambridge, Mass., has completed a plant in Richmond, Calif., for the California Chemical Company, a subsidiary of Standard Oil Company of California. It will produce phthalic anhydride, isophthalic acids, and other products derived from benzenes and xylenes.

Barnstead Still and Sterilizer Company, 165 Lanesville terrace, Boston, Mass., has introduced a new tin-lined gooseneck distilled water faucet for mounting on laboratory benches to maintain purity of distilled or demineralized water to point of use.

Fisher Scientific Company, 717 Forbes avenue, Pittsburgh, Pa., has become the exclusive source in the U.S. and Canada for the JEOL line of electron microscopes and microscope accessories, produced by Japan Electron Optics Laboratory Company Ltd.

Rapid-Saf Pipetter, a product of Labline Inc., Chicago, Ill., gives one-hand operation with finger-tip micrometer control, for dispensing, titrating, and decanting liquids.

Ohaus Scale Corporation, 1050 Commerce avenue, Union, N.J. has brought out Model 1600, an overhead beam type of balance that combines large capacity with high sensitivity.

Procter and Gamble Company, Cincinnati, O., announces that its French subsidiary has purchased a complete factory installation at Marseilles, France, from the Fournier-Ferrier group.

Redmanson Corporation, 630 Loucks Mill road, York, Pa., has developed a new line of polyethylene tanks with spigots for dispensing any type of liquid, except hydro-carbons, and many types of small, free-flowing granular solids.

E.H. Sargent and Company, 4647 West Foster avenue, Chicago, Ill., has introduced Model D, a new recording titrator for all potentiometric and pH titrations

ROTEX Screeners, a product of The Orville Simpson Company, 1230 Knowlton street, Cincinnati, O., gives quick cleaning and fast screen changes when necessary.

A.E. Staley Manufacturing Company, Decatur, Ill., opened a new research center for corn, soybean, and chemical product development on May 5 to serve paint, plastics, and other chemical industries.

A new continuous weigh feeder (Chemical Series CM 12), for bulk materials at high speed and accuracy, is available from the Thayer Scale Corporation, Thayer Park, Pembroke, Mass.

The Pure Oil Company, Palatine, Ill., announces construction of a unit to produce benzene, toluene, and xylene at Lemont, Ill.

Precision Scientific Company, Chicago, Ill., announces Model VP-1, for speedy, reliable solutions to routine gas and volatile liquid analysis problems.

Fluran F-5000 is the product of the U. S. Stoneware Company, Plastics and Synthetics Division, Akron 9, O.

Technicon Controls Inc., Research Park, Chauncey, N.Y., has introduced Technicon AutoAnalyzer, a new differential for continuous chemical analysis, with automatic blank or interference compensation. Waring Products Corporation, Winsted, Conn., a subsidiary of Dynamics Corporation of America, announces a new model of Blendor (Model LB-1) for commercial, medical, scientific, dietetic, and industrial use.

Applied Science Laboratories Inc., State College, Pa., has added ethyl oleate, ethyl stearate, ethyl palmitate, and ethyl caproate to its line of high-purity, fatty acid derivatives for use as gas chromatography standards.

A calibrated Griffin low-form beaker for general laboratory use has been developed by Corning Glass Works, Corning, N.Y.

Allied Chemical Corporation, 61 Broadway, New York, N.Y., announces that commercial production of polyethers for use in urethane plastics will begin at the Solvay Process Divisions' Baton Rouge, La., plant in July 1961.

Kimble Glass Company, a subsidiary of Owens-Illinois, Toledo, O., offers color-coding of two pipets for fool-proof identification of size.

Brinkmann-Desage Vacuum Desiccator for controlledrate, sample drying to constant weight is offered by Brinkmann Instruments Inc., 115 Cutter Mill road, Great Neck, L.I., N.Y.

The Penn Meter Company, 4110 Haverford avenue, Philadelphia 4, Pa., a newly formed corporation, announces the purchase of the Penn Instrument Division of Burgess-Manning Company for the continued manufacture of engineering and flow instruments and primary elements.

Purge Rotameters for indicating and manually controlling small fluid flows and a new ejector-venturi gas scrubberseparator for unusual efficiency and low liquid carry-over, are available from Schuette and Koerting Company, Cornwells Heights, Bucks County, Pa.

Rotron Controls Corporation, Woodstock, N.Y., offers three new Whirl-Flo flowmeters for accurate gas or liquid measurements.

(Continued on page 22)



we are pleased to announce that

PODBIELNIAK, INC.

is now a division of

DRESSER INDUSTRIES, INC.

In 1956, Podbielniak entered the fats and oils processing field, after almost ten years of research and development. As a result of this extensive work, Podbielniak introduced to the industry improved refining processes and equipment systems for continuous degumming, caustic refining and water washing of fats and oils. These fully continuous, automatic systems utilize the most modern techniques, processes and machine designs so far developed.

Now, association with Dresser Industries will expand and expedite future development and application of Podbielniak products. In addition, world wide sales and services are available.

SEND FOR TECHNICAL BULLETIN

Send for your free copy of Technical Bulletin VOR-1260, "Refining Processes and Equipment Systems for the Fats and Oils Industry." Describes and illustrates successful commercial installations for degumming, alkali refining and water washing. Write Podbielniak, Inc., Fats and Oils Division, 341 East Ohio Street, Chicago II, Illinois.

COMMERCIALLY PROVED CONTINUOUS SYSTEMS

Podbielniak, Inc. offers the fats and oils industry fully continuous systems, automatic in operation, utilizing the commercially proved HYDRAZON and DUOZON centrifugal machines, insuring you the most economical and versatile refining installation.

"Complete, packaged, custom engineered systems"

DOMESTIC SALES AND SERVICE OUTLETS CLARK BROS. CO. DIVISION OF DRESSER INDUSTRIES, INC. Olean, New York (And all Clark Sales Offices, in addition to other members of Dresser Industries, Inc., throughout the world.)



• News

Tells Plans for Chicago Meeting

LANS ARE progressing rapidly for the 35th annual fall meeting of the American Oil Chemists' Society in Chicago to be held at the Pick-Congress hotel on October 30-November 1, 1961.

At the first planning session held May 18 at the hotel, each chairman reported favorably on his plans and displayed much enthusiasm, according to the general chairman, A.A. Rodeghier of Durkee Famous Foods.

Early reports show that already 20 booths have been reserved and Donald P. Arndtsen, chairman of technical exhibits, reports that he expects to have the remaining 13 accounted for soon. Other planners are at work too: Andrew J. Schude is planning on a preregistration mailing to the membership with hotel reservation cards enclosed; Decatur B. Campbell Jr., says that tentative arrangements indicate that there will be a cocktail party, Monday, sponsored by Distillation Products Industries, and the traditional dinner dance on Tuesday is scheduled for the new Great Hall of the hotel.

Other Committee chairmen at work include:

- A.V. Gracie Jr., Wurster and Sanger Inc., co-chairman with Mr. Rodeghier, hotel arrangements W.C. Pritchett, National Dairy Products Corporation, Glen-
- view, program
- Mary Harmeson, Kraft Foods Company, ladies' entertain- \underline{ment}
- A.F. Kapecki, Wurster and Sanger Inc., publicity N.W. Ziels, Lever Brothers Company, Hammond, Ind.,
- treasurer

C.W. Hoerr, S.S. Fein, H.C. Black, and G.J. Stockmann, advisors.

Visits Office

The national office of the American Oil Chemists' Society had the honor of a visit by Fernando Gaudy on May 29. Dr. Gaudy, of the Faculty of Exact and Natural Sciences, National University of Buenos Aires, is a participant in the Foreign Leaders Program of the Office of Cultural Exchange of the U.S. Department of State. He has had a distinguished teaching career and has written many technical articles and books on research.

In France he studied that country's organization of higher education and visited industries and organizations for pure and applied research. He also visited in other European countries. His present purpose is to continue his study of higher education and research as practiced in public and private institutions in the United States.

President Sends Greetings

At the Meeting of the American Oil Chemists' Society, May 1-3 in St. Louis, president R.W. Bates read the following message from the President of the United States:

Please extend my greetings to your members and guests at the 52nd Annual Meeting of the American Oil Chemists' Society. Your organization, composed of dedicated scientists from more than 50 countries, aspires to important goals. By finding ways to reduce waste and achieve more complete utilization of natural resources, you help strengthen the economy of America and many other lands. By providing a forum in which scientific knowledge can be freely exchanged, you are contributing substantially to the advancement of our society in a vital technical area, and to international goodwill. Best wishes for a productive meeting.

JOHN F. KENNEDY

The Exact Weight Scale Company, 538 East Town street, Columbus 15, O., has brought out Model 1205-S, a new compact automatic checkweigher.



H.M. Teeter, assistant di-rector of the Northern Division of the Agricultural Research Service, Peoria, Ill., was awarded the U.S. Department of Agriculture's Superior Service Award, in cere-monies at Washington, D.C., recently. The silver medal was presented for outstanding contributions to science, agriculture and other industries, and to the public.

During the almost 20 years' research on vegetable oils including soybean and linseed, he published 61 papers in American and English journals and collaborated on 19 public service patents.

Official Referee Chemists, 1961-62

Certificates reading on cottonseed, oil cake and meal, and fatty oils

- *W.F. Beedle and F.C. Woekel, George W. Gooch Laboratories,
- Los Angeles, Calif. W.A. Bridges, Southern Testing & Research Laboratories, Wilson, N.C.
- P.D. Cretien, Texas Testing Laboratories, Dallas, Tex.
- G.G. Dickinson, Texas Testing Laboratories, El Paso, Tex.
- *E.R. Hahn, Hahn Laboratories, Columbia, S.C.
- J.H. Hamilton and B.C. White, Jr., Barrow-Agee Labora-tories, Inc., Shreveport, La. W.N. Kesler, Woodson-Tenent Laboratories, Little Rock, Ark.
- *T.C. Law, D.L. Henry, and G.C. Henry, Law and Company,
- Atlanta, Ga. *J.R. Mays, Jr., L.H. Hodges, and C.E. Worthington, Barrow-
- Agee Laboratories, Inc., Memphis, Tenn. Burt O. Pattison and D.H. Turner, Pattison's Southwest Lab-
- oratories, Harlingen, Tex. P.L. Phillips, Barrow-Agee Laboratories, Inc., Jackson, Miss. *R.C. Pope, Pope Testing Laboratories, Dallas, Tex. F.B. Porter and C.L. Manning, Fort Worth Laboratories, Fort
- Worth, Tex.
- *A.H. Preston, Houston Laboratories, Houston, Tex. F.G. Schmid, Texas Testing Laboratories, San Antonio, Tex.
- J.R. Southwell, Southwell Laboratory, Oklahoma City, Okla. *E.H. Tenent, Sr., E.H. Tenent, Jr., and P.F. Woodson, Wood-
- son-Tenent Laboratories, Memphis, Tenn. M.D. Tilson, Texas Testing Laboratories, Lubbock, Tex. P.C. Whittier, Law and Company, Montgomery, Ala.
- Certificates reading on cottonseed and oil cake meal
- R.H. Acock, Acock Laboratories, Austin, Tex.
- D.A. Bradham, Jr., Barrow-Agee Laboratories, Greenville, Miss.
- A.H. Grimes, Barrow-Agee Laboratories, Inc., Decatur, Ala.
- J.C. Lloyd, Alabama Testing Laboratories, Birmingham, Ala.
- E.S. Prevost, Law and Company, Wilmington, N.C.
- Certificates reading on oil cake and meal and fatty oils
- J.G. Bowling, Woodson-Tenent Laboratories, Des Moines. Ia.
- C.A. Lathrap, Curtis & Tompkins, Ltd., San Francisco, Calif. J.G. Lipps, Pan American Laboratories, Brownsville, Tex.
- C.E. McLean, Arizona Testing Laboratories, Phoenix, Ariz. *E.G. Williams, Edward G. Williams Laboratories, New
- Orleans, La.

Certificates reading on oil cake and meal

- H.M. Bulbrook, Industrial Laboratories, Fort Worth, Tex. W.A. Fix, Plains Laboratory, Lubbock, Tex.
- H.L. Hutton, Woodson-Tenent Laboratories, Clarksdale, Miss. J.E. MacMillan, MacMillan Laboratories, Atlanta, Ga.
- Philip McG. Shuey, Shuey and Company, Inc., Savannah, Ga. *F.P. Owens, Laucks Testing Laboratory, Inc., Seattle Wash. J.R. Simpson, Woodson-Tenent Laboratories, Cairo, Ill.

- Certificates reading on fatty oils

J.P. Henry, Iowa Testing Laboratories, Eagle Grove, Ia.

Certificates reading on tallow and grease

- P.C. Thionville, Southern Testing Laboratories, Inc., New Orleans, La.
- T.H. Williams, Northwest Laboratories, Seattle, Wash.
- Certificates for oil cake and meal likewise apply for protein concentrates
 - * Also certified for tallow and grease.

Lucy R. Hawkins Retires

Lucy Rogers Hawkins retired on May 31, 1961, as executive secretary of the American Oil Chemists' Society and managing editor of the Journal after 17 years of



e Journal after 17 years of creative service. The gratitude and appreciation of the Society was expressed at the spring meeting banquet in St. Louis when she was presented with a diamond wrist watch.

Mrs. Hawkins was employed by the Society in 1944 as associate editor of Oil and Soap. The next year she was appointed executive secretary of the Society and took over many of the duties formerly handled by the secretarytreasurer while continuing to serve as managing editor of Oil and Soap, now the Journal of the American Oil Chemists' Society. At this time she was the only paid employee.

During her 17 years with the Society the office staff in-

creased to seven in order to handle the volume of work created by the growth in membership from 950 to 2,701; the Journal circulation grew from 1,800 to 5,100; the advertising in the Journal increased from 171 to 294 pages a year, with a corresponding increase in the size of the Journal itself. Under her guidance the work was departmentalized and each member of the staff was trained in one or more duties such as advertising production, circulation management, and accounting.

When Mrs. Hawkins joined the Society she occupied a desk in the West Virginia Pulp and Paper Company office of John P. Harris. Soon after, a national headquarters office was established and moved into its own quarters in the Pure Oil Building at 35 E. Wacker Drive, Chicago, Illinois.

Among her first tasks as managing editor of the Journal was the hunting down of back issues of the Chemists' Section in the Cotton Oil Press, Journal of Oil and Fat Industries, and Oil and Soap, to form a permanent library of bound volumes. In a like manner she gathered and organized material for the Society's historical files. She supervised the standardizing of membership and circulation records and in 1946 the Journal was approved for membership in the Audit Bureau of Circulations.

membership in the Audit Bureau of Circulations. Mrs. Hawkins is 1st Vice President of the Board of Trustees of Mary Thompson Hospital; and a member of both the American Association of University Women and University of Wisconsin Alumni Club.

To Observe Centennial

An elaborate display of exhibits devoted to nutrition in humans and animals and to careers in agriculture will highlight the Centennial Nutrition Conference of the Midwest Feed Manufacturers' Association in Kansas City, Mo., October 21–25, 1961. The Association has scheduled the event in cooperation with eight Land Grant colleges to commemorate the 100th anniversary of the U.S. Land Grant colleges. A national observance of the centennial will be held in November.

Form New Group

Members of the American Society of Testing Materials, Committee D-1, Sub-committee VIII on Methods of Chemical Analysis of Paint Materials, recently voted to form a group on Chemical Analysis of Whole Paint and to meet in June in Atlantic City, N.J. Anyone interested may write to William V. Moseley Jr., Virginia Department of Agriculture, Division of Chemistry and Foods, Paint Laboratory, Room 14, State Office Building, Richmond 19, Va.

Cairo Lectures Given

S UMMARIES of four papers given under the sponsorship of the Soybean Council of America as a Fats and Oils Symposium in Cairo, Egypt, April 17–21, 1961, have been sent in by Andre Tawa, director of the Council in U.A.R. All speakers were from the Analytical Chemistry Department, Faculty of Pharmacy at Cairo.

Analytical Study of the Constituents of Native Lettuce Seed Oil, by F. El Said, M. Gamal El Din Ibrahim, and A.A. Said: It was stated that native lettuce seed oil is a semidrying oil and contains about 58% linoleic acid, 25–27% oleic acid, 12–15% saturated fatty acids, and 2.8 unsaponifiable matter. The unsaponifiable matter was analyzed and found to contain about 25% of its weight in β -sitosterol. Tocopherol content in lettuce seed oil was mainly a-tocopherol and was present in a percentage ranging from 0.3– 0.42%. Storage of the oil, even in a cooled place, resulted in the loss of a certain amount of tocopherol by oxidation. Therefore the data of extraction of oil must be reported on samples.

Separation of Long-Chain Saturated and Unsaturated Fatty Acids by Paper Partition Chromatography and Application of the Method for the Analysis of Some Native Vegetable Oils, by F. El Said, M. Gamal El Din Ibrahim, M.S. Karawya, and A.A. Said: A paper partition chromatography was adopted for the separation of long-chain saturated and unsaturated fatty acids, using Whatman paper No. 1 impregnated with paraffin as the stationary phase, and 90% acetic acid solution as the developer. The method was applied for the analysis of some native vegetable oils, namely, safflower, seed oil, and maize oil. The constants and fatty acid compositions of these oils were also determined.

The Effect of Gamma Radiation on the Analytical Constants of Fats and Fatty Oils, Part I, by F. El Said, M. Gamal El Din Ibrahim, and A.A. Said: Irradiation with gamma rays ranging from 1×10^6 rads up to 46×10^6 rads did not effect the physical or chemical constants of the fatty oils and fats. The presence of added metal palmitate or dla-tocopherol acetate caused no change to the constants during the analysis of these oils and fats. Storage of irradiated oils and fats, then exposure to air, did not cause any essential changes in their constants. A bleaching effect was noticed in the irradiated samples, and it was found that the bleaching was proportional to the amount of irradiation applied to the samples. It was proved that gamma irradiation had no noticeable effect on the pentadiene system of the unsaturated fatty acids. The peroxide values of the experiment and will be discussed in a following publication (Part II).

The effect of gamma Radiations on the Fatty Peroxide Compounds and on the Stability of Fats, Part II, by F. El Said, M. Gamal El Din Ibrahim, and A.K. Ahmed: The effect of gamma rays on the fatty peroxides and hydroperoxides was studied. In the absence of air, the peroxide compounds were decomposed, possibly polymerized. Metals, especially copper, catalyzes the decomposition of peroxides and hydroperoxides. Natural antioxidants and added tocopherol are destroyed. gamma Irradiation impaired the keeping quality of the oils and fats, and cold sterilization is not a safe method for fats and fatty foods.

Fat Congress to Meet in London

The 6th Congress of the International Society for Fat Research will be held in London, England, April 9-13, 1962, as the first visit to England. Previous meetings have been held in France, Italy, Spain, Austria, and Poland. The Congress is being organized under the auspices of the Society of Chemical Industry (Oils and Fats Group), 14 Belgrave Square, London, S.W.1. Congress president will be T. Malkin of Bristol University, and the joint organizing secretaries will be F. Bradley and H. Jasperson.

The program will cover the chemistry of oils and fats, fatty acids, and associated natural products; new research techniques, including analytical methods; and recent developments in the technology of oils and fats, including new processes, the utilization of new raw materials, and the exploitation of new outlets.