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NACOGDOCHES, TEXAS

Entries for Fatty Acid Award to Be in by August 1

MANUSCRIPTS submitted for the \$500 award competition established by the Fatty Acid Producers' Division of the Association of American Soap and Glycerine Producers Inc. and administered by the American Oil Chemists' Society must be in by August 1, 1956. Announcement of the winner will be made at the fall meeting of the Society in Chicago



A. R. Baldwin

at the Sherman hotel, September 24-26. Judges will be J. B. Brown, Ohio State University, Columbus; J. C. Cowan, Northern Regional Research Laboratory, Peoria, Ill.; and A. R. Baldwin, Cargill Inc., Minneapolis, Minn.

The award is to be given for work done in an educational institution in the United States or Canada while the individual is a candidate for a degree (bachelor, master or doctor) or on the staff of an educational institution within one year after receipt of such a degree.

Submission of a paper or thesis may take place within one year after the author is graduated. In respect to team authorship, at least one of the candidates must meet the requirement as set forth above, in which event the entire team shall be considered eligible for the award.

Research leading to new or improved products based on fatty acid chemistry is to be emphasized in entries. Properties and applications of fatty acid products are considered of prime importance. Preference will be given to studies having some relation to pure or commercial grades of fatty acids rather than to physiological or biochemical studies of their glycerides. Originality in extending the application of such fatty acids or their derivatives into new fields of usefulness will receive special consideration.

Copies of the official entry forms may be obtained from the American Oil Chemists' Society, 35 E. Wacker drive, Chicago 1, Ill.

New Book

ORGANIC SYNTHESIS, vol. 35, by T. L. Cairns, editor-in-chief (John Wiley and Sons Inc., New York; Chapman and Hall Ltd., London, 1955, 122 pp., \$3.75). This is the 35th annual publication in a series devoted to methods for preparing organic compounds. This particular volume includes methods of synthesis for 36 compounds with formulas, procedures, notes on special precautions, and references to alternative methods of preparation. Each preparation is checked by reliable investigators. Of particular interest to the fat technologist are the syntheses of two cholesterol derivatives, Δ^4 -cholesten-3-one and Δ^5 -cholesten-3-one.

The volume also includes a cumulative subject index of 19 pages for volumes 30-35. This type of index saves considerable time in the search for a particular entry. Each volume contains only a limited amount of information which is directly applicable to the fat and oil field. However the series is so comprehensive in scope that it represents an important addition to the chemical literature.

R. J. SIMS
Swift and Company
Chicago, Illinois

New Members

Active

Richard A. Albert, chemist, Pattison's Southwest Laboratories, Harlingen, Tex.
 Merlin J. Andera, fat and oil control chemist, Rath Packing Company, Waterloo, Ia.
 William J. Bailey, research professor of chemistry, University of Maryland, College Park, Md.
 Harry Alexis Batley, vice president, Nopeco Chemical Company, Harrison, N. J.
 Frank E. Cavadi, chemist, Armour and Company, North Bergen, N. J.
 Walter L. Dunkley, associate professor of dairy industry, University of California, Davis, Calif.
 Robert J. Evans, technical representative, Distillation Products Industries, Chicago, Ill.
 Eric W. Graebert, chemical engineer, Procter and Gamble Company, Cincinnati, O.
 Lester P. Hayes, research chemist, A. E. Staley Manufacturing Company, Decatur, Ill.
 Raymond Isbecque, manager, United Africa Company, Guttenberg, N. J.
 John C. Lowman, laboratory director, Columbus Coated Fabrics Corporation, Columbus, O.
 Cornelis A. Lugten, chemical engineer, Bird Machine Company, South Walpole, Mass.
 Garson Alvin Lutz, assistant chief, organic chemicals, Battelle Memorial Institute, Columbus, O.
 Thomas W. McGinnis, chemical engineer, Lever Brothers Company, Edgewater, N. J.
 William J. Mahan, assistant to research director, Kraft Foods Company, Chicago, Ill.
 Klaus L. Mai, development engineer, Procter and Gamble Company, Cincinnati, O.
 Glenn Joseph Miller, assistant professor, department of agricultural chemistry, University of Wyoming, Laramie, Wyo.
 Gerald W. Parker, control chemist, Lever Brothers Company, Whiting, Ind.
 Andrew Spence, president, Spence and Green Chemical Company, Crosby, Tex.

George Roger Wood, owner and director, Wood Laboratory, Vancouver, B.C.
 Donald Duane Woodring, chemist, Durkee Famous Foods, Chicago, Ill.
 William John Roberts, director of research, Pennsylvania Industrial Chemical Corporation, Chester, Pa.
 Miguel Saldana, chemical engineer, Industrias Unidas de Nuevo Laredo S. A., Nuevo Laredo, Tamps, Mexico.
 Charles Frederick Smullin, research supervisor, analytical department, Atlas Powder Company, Wilmington, Del.
 James F. Sullivan, chemist, Wilson and Company, 4200 S. Ashland avenue, Chicago, Ill.
 Joseph H. Topps, chemist, Armour and Company, Racine, Ill.
 Dillard H. Turner, chemist, Pattison's Southwest Laboratories, Harlingen, Tex.
 William M. Wagner, chemist, Swift and Company, Chicago, Ill.
 Roscoe O. Walker, control chemist, Archer-Daniels-Midland Company, Minneapolis, Minn.
 Karl T. Zileh, research chemist, Emery Industries Inc., Cincinnati, O.

Individual Associate

Roland B. Calhoun, president, Mills Engineering Sales Inc., Chicago, Ill.
 Irwin Cooper, chemist, Best Foods Inc., Bayonne, N. J.
 Clarence O. Gerbrandt, chief chemist, J. R. Short Canadian Mills Ltd., Toronto, Ont.
 George W. Kerse, president, ACOSA, Mexico, D. F.
 Charles R. Kretschmer, manager, Kretschmer Wheat Germ Corporation, Carrolton, Mich.

Corporation Associate

Hoffmann-La Roche Inc., George K. Parman, representative, Nutley, N. J.

Form Advertising Subcommittees

TWO SUBCOMMITTEES of the Journal Advertising Committee have been formed following a suggestion made at the meeting of the American Oil Chemists' Society in Philadelphia last fall, according to J. P. Harris, chairman. They will function as section committees and have been appointed by the presidents of the respective sections.

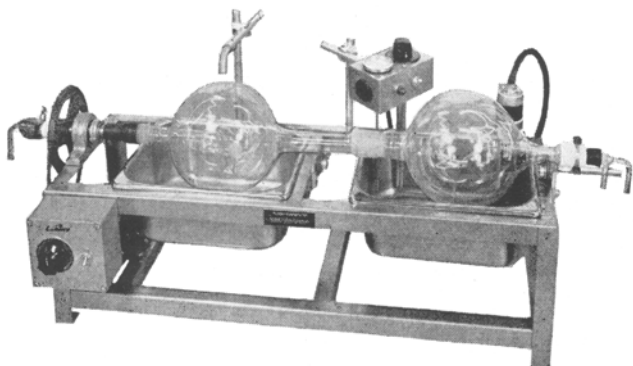
N. C. Ziels, president of the North Central Section, has asked Paul Soderdahl to serve as advertising chairman. Assisting him will be John W. Bodman, Lever Brothers Company, Hammond, Ind.; and Decatur B. Campbell, Eastman Chemical Products Company, Walter R. Prosch, Sharples Corporation, and R. H. Rogers Jr., Swift and Company, all of Chicago.

C. H. Haurand, president of the Northeast Section, has appointed two advertising co-chairmen, S. P. Taylor, E. F. Drew and Company, Boonton, N. J., and Frank G. Shea, C. F. Simonin's Son Inc., Philadelphia, Pa. Other members will be appointed at a later date.

The Journal Advertising Committee was established several years ago and now supplements the work of the advertising manager of the Journal, Harley L. Ward, through its 30 members. Chairmen in recent years have included Harold Ory, Henry Odeen, the late E. H. Chapin, Norman A. Ruston, and A. E. MacGee.

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Its rate of evaporation is approximately 1.2 liters of aqueous solution per hour at 50°C and 15-mm vacuum . . . four to five times as fast as conventional equipment.



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A.O.C.S. CALENDAR

1956
 Spring Meeting: Shamrock Hotel, April 23-25, Houston
 Fall Meeting: Sherman Hotel, Sept. 24-26, Chicago
 1957
 Spring Meeting: New Orleans
 Fall Meeting: Cincinnati, Sept. 30, Oct. 1-2
 1958
 Spring Meeting: Memphis, Apr. 21-23
 Fall Meeting: Chicago, Oct. 20-22

Reports on Frothing Studies

The first report on frothing and sewage treatment research sponsored by the Association of American Soap and Glycerine Producers Inc. was presented on January 27, 1956, at the association's annual meeting in New York by F. J. Coughlin, Procter and Gamble Company, Cincinnati, O., chairman of the technical advisory subcommittee on research. Members of the subcommittee are W. K. Griesinger, the Atlantic Refining Company, Philadelphia, Pa.; John Ross, Colgate-Palmolive Company, Jersey City, N. J.; E. R. Baker, Continental Oil Company, Ponca City, Okla.; P. M. Maxwell, Lever Brothers Company, Edgewater, N. J.; H. V. Moss, Monsanto Chemical Company, St. Louis, Mo.; and J. T. Rutherford, California Research Company, San Francisco, Calif. An abstract of the report follows:

Complete detergents as they are found in the package will contain surface-active agents and complex phosphates. Both are being considered in the research program. The most widely used surface-active agent is alkyl benzene sulfonate, commonly referred to as ABS. The association's technical committees are developing analytical tools to measure the minute traces of ABS and complex phosphates which may possibly be found in surface waters and sewage. A carefully checked new method for ABS in water will soon be ready for publication. The weaknesses of the older analytical methods in common use for ABS have only recently been recognized.

Frothing in sewage works, which had occurred before the advent of detergents, now is frequently attributed to them. Serious frothing at a plant in San Antonio in 1951 was eliminated by the expedient of increasing the amount of finely divided solids from activated sludge suspended in the aeration tanks where the frothing occurs. In studies there detergent added in relatively large quantities did not produce the froth once the solids level was controlled. In connection with the speculation that ABS might resist biochemical breakdown during sewage treatment, a study by the California Research Corporation, using radioactive ABS, indicates that decomposition of ABS would be just about as complete as for other sewage constituents. In connection with the speculation that ABS or the complex phosphates from detergents in domestic

sewage might have adverse effects on water treatment processes, there is insufficient evidence at the moment to draw any valid conclusions. Only research will establish the facts. It is pointed out that the frothing and other difficulties which occurred at the Wheeling, West Va., water works in 1953 and which were blamed on detergents from domestic sewage have not happened again and thus these troubles could well have been caused by other factors.

The Soap Association people have made their activities known and their information available wherever they have learned of any interest. They are working closely with the Ohio River Valley Water Sanitation Commission. The general opinion about detergents in sewage and water treatments seems to be that there is no cause for major concern and that additional facts should be obtained to answer the questions raised. Research projects are being supported at four universities. The Massachusetts Institute of Technology is studying the possibilities of biochemical degradation of detergent surface-active agents, the University of California is studying the fate of the ABS in sewage treatment using radioactive tracer techniques, the University of Wisconsin is studying the causes of frothing in sewage treatment plants, and the University of Illinois is determining if detergents have any effects in water treatment processes.

Problem Corner

October 19, 1955.

Question

We have written to the manufacturers of the Steinlite fat and oil tester which is advertised in your Journal, and they have supplied us with a brochure and price list. We are interested in buying, provided the instrument will give reproducible results, comparable with those obtained by the A. O. C. S. methods.

We have been unable to contact any user of this instrument, and we wonder if your Journal has ever published an article on it or if you could give us any opinion. As you will appreciate, we are a long way from technical conferences where chemists discuss technical instruments. As presumably we are the first potential South African user, we would be very glad to have an independent opinion.

We are interested in the oil content of peanuts, sunflower seed, and expeller cake from these.

FROM NATAL, SOUTH AFRICA

Answer

We do not happen to know of anyone who has correlated the results of the rapid Steinlite fat and oil tester with the official methods of the A. O. C. S. so we are not in a position to make recommendations from specific knowledge. However one of the leading authorities gives the following opinion: "The moisture tester is widely used and gives satisfactory results although not necessarily the same as those obtained by A. O. C. S. methods." The writer feels therefore that if you decide to purchase a rapid tester, you will have to work toward correlating it in your own laboratory with the A. O. C. S. methods.

Recently the Agricultural Marketing Service of the United States, which is located in Washington, D. C., published bulletin AMS-72, which describes a rapid method for measuring the oil content of cottonseed. We suggest that you may want to write to that agency direct to obtain a copy of the bulletin. While you are not interested in cottonseed determinations, it may still be of interest to you.

J. P. HARRIS

Acidless Tallow

easier with

POLITOL

	laboratory run 0.4% POLITOL S		plant run 0.18% POLITOL S	
	FFA	FAC	FFA	FAC
TALLOW:				
crude	5.5%	19	5.5%	19
neutralized & purified	0.3	13	0.15	11
bleached	0.38	3	0.3	1

POLITOL, developed specifically for the fats and oils industry as an aid in purification and refining, has simplified the preparation of acidless tallow.

Good soap stock separation is obtained without excess caustic soda, thus preventing fat breakdown. The result is stable free fatty acid content and high flash point, essential for acidless tallow.

POLITOL is also of value for clarification of tallow without free fatty acid reduction. Clear, bright fat, easily separable and filterable, and having a good clean odor results.

Send for samples of this new refining aid, and a copy of technical bulletin 501.



West Virginia Pulp and Paper Company

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In April 1921

Herbert C. Bailey, editor of the Chemists' Section of The Cotton Oil Press, reports that the Chemists' Section totalled 139 pages in 1920, with 45 authors contributing 75 original papers and 37 committee reports.

J. H. Shrader, chemical technologist for the Office of Drug, Poisonous, and Oil Plant Investigations, Bureau of Plant Industry, Washington, D. C., writes on "Relative Quality of Expressed and Solvent-Extracted Cottonseed Oil."

John R. Mays Jr., J. C. Burt, and E. G. Williams have qualified as referee chemists, according to David Wesson, chairman of the examining board.

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A set or individual Lovibond color glasses, prewar and standardized. Write to Ted Lair, chemical director, General Vegetable Oil Company, Box 118, Sherman, Tex.

POSITION WANTED

Technical director, age 35, M.S., thoroughly versed in all phases of edible fats and oils. Sound background in research and product development. Write to Box 268, American Oil Chemists' Society, 35 E. Wacker drive, Chicago 1, Ill.

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10. Cumulative 35-Year Index, each..... \$5

Send order with remittance to
AMERICAN OIL CHEMISTS' SOCIETY
 35 E. Wacker Drive, Chicago 1, Ill.

Meetings

The Gordon Research Conference on organic coatings, sponsored by the American Association for the Advancement of Science, will be held July 16-20, 1956, at New Hampton School, New Hampton, N. H.

The second symposium on "Foreign Chemicals in Foods," organized by the Netherlands Association for Nutritional Research under the auspices of the Commission Internationale des Industries Agricoles and the Bureau International Permanent de Chimie Analytique, will be held July 9-11, 1956, at Amsterdam, Holland.

"Research for Profit" is the theme of the National Industrial Research Conference, sponsored by the Armour Research Foundation of Illinois Institute of Technology, to be held April 18-19, 1956, at the Sherman hotel, Chicago, Ill.

An intensive program in infrared spectroscopy will be given August 6-17, 1956, during the summer session at Massachusetts Institute of Technology, Cambridge, Mass., by the Institute's spectroscopy laboratory and the department of chemistry.

The Institute will also present a two-week summer program on "Perspectives in Food Technology" from June 18-June 29, 1956.

Fatty Acids Drop

Production of fatty acids in December 1955 was 38.8 million lbs., approximately 0.5 million lbs. less than the previous month's total of 39.3 million lbs., but 6.9 million lbs. above the December 1954 figure of 31.9 million, according to the Association of American Soap and Glycerine Producers Inc., New York. Total annual production of saturated and unsaturated fatty acids during 1955 reached 418.9 million lbs., an increase of 12.8% over the 1954 figure of 371.5 million.

Total disposition for December was 38.0 million lbs., about 3.0 million lbs. less than November's level. This included some 2.2 million lbs. of sales within the industry so that actual disposition outside the industry is overstated to this extent. Stocks, including work in process, declined about 1.2 million lbs. to a level of 42.8 million lbs.

Production of fatty acids in January 1956 was 37.8 million lbs., approximately 1.0 million lbs. less than the previous month's total of 38.8 million lbs., but 4.1 million above the January 1955 figure of 33.7 million.

Total disposition was 39.3 million lbs., about 1.3 million lbs. above the December level. This included some 2.2 million lbs. of sales within the industry so that actual disposition outside the industry is overstated to this extent. Stocks, including work in process, increased about 2.6 million lbs., to a level of 45.4 million.

Referee Application

Second Notice. C. A. Leatherwood, Pan American Laboratory, 901 E. Madison street, Brownsville, Tex., has applied for a Referee Certificate on Cottonseed and Oil Cake and Meal. The chairman of the Referee Board will be happy to receive information relative to certification from interested parties. Please write to N. W. Ziels, chairman of the Referee Board, Lever Brothers Company, 1200 Calumet avenue, Hammond, Ind.

Obituaries

N. C. Hamner (1918), president of the American Oil Chemists' Society in 1932, died on February 15, 1956, after an illness of more than a year. He was vice president of the Southwestern Laboratories of Dallas, Tex.

J. A. Reynolds (1945) of the Riker Laboratories, West Los Angeles, Calif., died recently, according to word received from Riker.

Harold M. Barnett (1944), pioneer in carotene research and production, died February 20, 1956, in Long Beach, Calif., following a heart attack. He was owner-manager of Barnett Laboratories Inc., which he founded in 1936 after working in Cleveland as a research chemist. He had his Ph.D. degree in biochemistry from the University of Minnesota. R. C. Mosher, with the Laboratories for 19 years, has been appointed general manager.