

Toronto Technical Program Offers Unprecedented Depth, Detail

OVER the years, the announcement of the Technical Program has served to signal the culmination of the many months of activity which precede the convening of an American Oil Chemists' Society Meeting. On Monday morning, October 1, at the Royal York Hotel, Toronto, Ontario, this Society will institute the largest and most comprehensive Technical Program in its fifty-three year history. As has been reported in previous issues, this Technical Series will explore such subjects as the role of fats and oils in nutrition, biology and nutrition, chemicals and fatty acids, drying oils and paints, fats and oils, soaps and detergents, unit processes, industrial applications, technical safety and engineering and many others. In addition to the wide variety of subject matter, another factor serves

to further broaden the scope of the series. A number of nations will be represented among the speakers, and many additional nationalities will be represented among those attending this Series.

In the pages to follow, the reader may review over one hundred scheduled technical presentations which will be offered at the coming Fall meeting. It is to be noted that exact times have not been indicated, due to the fact that some rescheduling may be necessary when final conformation is received on the few presentations yet in the tentative stage at the time of this writing. A final technical program will be available at the Meeting, with complete information as to the exact times of the scheduled presentations.

Opening Technical Session

Monday, October 1—10:15 a.m.

Sven Young, Presiding
SOME PROBLEMS IN IMPROVING TROPICAL MATERIALS UTILIZED BY THE UNITED KINGDOM OIL MILLING INDUSTRY

W. D. Raymond, Tropical Products Institute, London, W.C. 1, England.
SOME ASPECTS OF THE EDIBLE FAT INDUSTRY IN THE U. K.

A. A. McKerrigan, Research Department, J. Bibby & Sons Limited, Liverpool, England.
FACTORS INFLUENCING THE COMPOSITION OF CANADIAN VEGETABLE OIL SEEDS

H. R. Sallans, Prairie Regional Laboratory, National Research Council, Canada, Saskatoon, Sask.

Panel Discussion

Monday, October 1—2:30 p.m.

F. H. Lehberg, Presiding
THE ROLE OF FATS AND OILS IN NUTRITION WITH PARTICULAR REFERENCE TO CHOLESTEROL METABOLISM

C. G. King, Nutrition Foundation, Inc., Moderator.
J. M. R. Beveridge, Queens University, Kingston, Ont.
Raymond Reiser, A. & M. College of Texas, College Station, Texas.

W. O. Lundberg, Hormel Institute, Austin, Minn.
K. F. Mattil, Swift and Co., Chicago, Ill.
F. H. Mattson, Procter & Gamble Co., Cincinnati, O.

J. D. Justice, Lever Bros. Co., Edgewater, N. J.

Technical Session A

Tuesday, October 2—9:00 a.m.

Symposium: In Vivo Antioxidants and Polyunsaturated Acid Metabolism

Raymond Reiser, Presiding
FUNCTION OF POLYUNSATURATED FATTY ACIDS AND LIPID ANTIOXIDANTS AT CELLULAR LEVEL

A. L. Tappel, Food Science and Technology, University of California, Davis, Calif.
DIETARY ANTIOXIDANTS IN YOUNG SWINE

E. G. Hill, The Hormel Institute, Austin, Minn.
METABOLIC EFFECTS OF SELENIUM AS RELATED TO VITAMIN E

J. S. Bieri, Laboratory of Nutrition and Endocrinology, National Institute of Arthritis and Metabolic Diseases, Bethesda, Md.

Technical Session B

Tuesday, October 2—9:00 a.m.

Symposium for Producers

Paul Sheffer, Presiding
PERSONNEL

F. W. Holm, Corn Products Co., Argo, Ill.
SANITATION AND HOUSEKEEPING

G. B. Wagner, Pillsbury Mills, Minneapolis, Minn.
DUST AND GAS EXPLOSIONS, STATIC ELECTRICITY,

FLAME PROPAGATION AND FIRE PREVENTION

Speaker to be announced
COMMUNICATIONS

R. T. Forrest, Lever Bros. Ltd., Toronto, Ont.

Technical Session C

Tuesday, October 2—9:00 a.m.

Structure and Composition

THREE NEW OILSEEDS RICH IN CIS-11-EICOSENOIC ACID

K. L. Mikolajczak, C. R. Smith, Jr., and I. A. Wolff, Northern Regional Research Laboratory, Peoria, Ill.
OCCURRENCE OF, TRANS, TRANS-10,12-OCTADECADENOIC ACID IN A SEED OIL

C. Y. Hopkins and Mary J. Chisholm, Division of Pure Chemistry, National Research Council, Ottawa, Ont.
5,11,14-EICOSATRIENOIC ACID IN *PODOCARPUS NAGI* SEED OIL

Toru Takagi, Prairie Regional Laboratory, National Research Council of Canada, Saskatoon, Saskatchewan and Department of Applied Chemistry, Faculty of Engineering, Nagoya University, Nagoya, Japan.

CIS-TRANS ISOMERIZATION OF OLEIC, LINOLEIC AND LINOLENIC ACIDS

Carter Litchfield, Mrs. J. E. Lord, Raymond Reiser and A. F. Isbell, Departments of Biochemistry and Nutrition and Chemistry, A. & M. College of Texas, College Station, Texas.

CORRELATION OF POLYESTER GAS-LIQUID CHROMATOGRAPHY RETENTION TIMES WITH THE STRUCTURES OF UNSATURATED FATTY ACID METHYL ESTERS

R. G. Ackman, Technological Station, Fisheries Research Board of Canada, Halifax, Nova Scotia.

STRUCTURAL ANALYSIS OF TRIGLYCERIDES AND LECITHINS

O. S. Privett and M. L. Blank, University of Minnesota, The Hormel Institute, Austin, Minn.

DIFFERENTIATION OF 1-2- and 1,3-DIGLYCERIDES BY NEAR-INFRARED ABSORPTION SPECTROSCOPY

H. Susi, T. E. Zell, and S. G. Morris, Eastern Regional Research Laboratory, Philadelphia 18, Penn.

INTRAMOLECULAR EFFECTS ON THE FUNDAMENTAL HYDROXYL STRETCHING VIBRATION IN DERIVATIVES OF FATS AND RELATED COMPOUNDS

C. R. Eddy, J. S. Showell, and T. E. Zell, Eastern Regional Research Laboratory, Philadelphia 18, Penn.

DETERMINATION OF THE POSITION OF THE DOUBLE BOND IN *cis*- and *trans*-n-FATTY ACID SALTS BY INFRARED SPECTROMETRY

Elizabeth M. Kirby, Marra J. Vader and Adele M. Brown, Department of Biochemistry, Ontario Research Foundation, Toronto, Ont.

Technical Session D

Tuesday, October 2—9:00 a.m.

General Session

H. K. Hawley, Presiding
QUANTITATIVE GAS-LIQUID CHROMATOGRAPHIC ANALYSIS OF BUTTERFAT TRIGLYCERIDES

(Continued on page 24)

Technical Program

(Continued from page 12)

A. Kuksis, M. J. McCarthy and J. M. R. Beveridge, Department of Biochemistry, Queen's University, Kingston, Ont.

THE SEPARATION OF TRIGLYCERIDES BY LIQUID-LIQUID PARTITION CHROMATOGRAPHY

B. C. Black and E. G. Hammond, Department of Dairy and Food Industry, Iowa State University, Ames, Ia.

FRACTIONATION OF TRIGLYCERIDES AS THEIR MERCURIC ACETATE ADDUCTS

J. A. Inkpen and F. W. Quackenbush, Department of Biochemistry, Purdue University, Lafayette, Ind.

A COMPARISON OF THE CUP REFINING LOSS AND NEUTRAL OIL DETERMINATIONS FOR EVALUATING CRUDE SOYBEAN OIL

T. J. Potts, Ralston Purina, St. Louis, Mo.
CONTINUOUS DEGLYCERINATION OF MONOGLYCERIDES

J. A. Monick, Colgate Palmolive, Jersey City, N. J.
"CONJOINED CRYSTALS." I. COMPOSITION AND PHYSICAL PROPERTIES

N. H. Kuhrt, R. A. Broxholm and W. P. Blum, Communication 293, Research Laboratories of Distillation Products Industries, Division of Eastman Kodak Co., Rochester, N. Y.

"CONJOINED CRYSTALS." II. APPLICATIONS
N. H. Kuhrt and R. A. Broxholm, Communication 294, Research Laboratories of Distillation Products Industries, Division of Eastman Kodak Co., Rochester, N. Y.

ANALYTICAL ESTIMATION OF SPAN 60 EMULSIFIER (SORBITAN MONOSTEARATE) IN CAKE MIXES AND BAKED CAKES

F. P. Wetteran, V. L. Olsanski, and C. F. Smullin, Chemical Research Department, Atlas Chemical Industries, Inc., Wilmington, Del.

A SATISFACTORY G.L.C. COLUMN FOR THE DETERMINATION OF EPOXYOLEIC ACID IN SEED OILS

S. F. Herb, P. Magidman, and R. A. Bradford, Eastern Regional Research Laboratories, Philadelphia, 18, Pa.

Technical Session E

Tuesday, October 2—2:00 p.m.

Symposium: In Vivo Antioxidants and Polyunsaturated Acid Metabolism (Cont'd.)

B. M. Craig, Presiding
THE BIOLOGICAL CONSEQUENCES OF FEEDING POLY-UNSATURATED FATTY ACIDS TO ANTIOXIDANT-DEFICIENT ANIMALS

L. J. Machlin, Monsanto Chemical Co., St. Louis, Mo.
EFFECTS OF IN VIVO ANTIOXIDANTS IN FEEDING MENHADEN OIL TO SWINE

J. E. Oldfield, Department of Animal Science, Oregon State University, Corvallis, Ore.

THE APPLICATION OF GAS CHROMATOGRAPHY TO THE DETERMINATION OF VITAMINS E AND K

P. P. Nair and D. A. Turner, Biochemistry Research Division, Sinai Hospital of Baltimore, Inc., Baltimore Md.
THIN LAYER CHROMATOGRAPHY (1600 ft. 16 mm. film)
Orville Privett, Hormel Institute, Austin, Minn.

Technical Session F

Tuesday, October 2—2:00 p.m.

Symposium for Producers (Continued)

TECHNICAL SAFETY
Harvey Marxhausen, Cargill, Inc., Minneapolis, Minn.

LABORATORY SAFETY
W. J. Johnson, Buckeye Cotton Oil Division, Memphis, Tenn.

INSTRUMENTATION
Walter Bollens, Swift and Co., Chicago, Ill.

CONTROLLING INDUSTRIAL PROCESSES BY DIGITAL COMPUTERS

Tod Frohman, International Business Machines, Chicago, Ill.

CONSTRUCTION
N. H. Moore, N. H. Moore and Associates, Memphis, Tenn.

UTILITY COSTS, EXTRACTION OPERATIONS; AND PROJECT CONTROL FOR DESIGN AND CONSTRUCTION OF EXTRACTION PLANTS

M. R. Wingard, The Austin Co., Chicago Heights, Ill.

Technical Session G

Tuesday, October 2—2:00 p.m.

Detergents

A. J. Stirton, Presiding
DETERMINATION OF SODIUM, POTASSIUM AND MAGNESIUM IN SURFACTANTS BY FLAME SPECTROPHOTOMETRY

E. C. Beck, K. J. Wilson and Eric Jungermann, Soap Research and Development Department, Armour and Co., Chicago, Ill.

TESTING OF DETERGENT TABLETS
Eric Jungermann, A. B. Herrick and J. R. Story, Soap Research and Development Department, Armour and Co., Chicago, Ill.

TWO-PHASE TITRATIONS
D. E. Herring, E. R. Howard Ltd., Stowmarket, Suffolk, England.

ANALYTICAL TECHNIQUES EMPLOYED IN THE STUDY OF BIODEGRADATION OF DETERGENTS
E. A. Setzkorn, R. C. Allred and R. L. Huddleston, Research and Development Department, Continental Oil Co., Ponca City, Okla.

LONG CHAIN ALKANESULFONATES AND 1-HYDROXY-2-ALKANESULFONATES: STRUCTURE AND PROPERTY RELATIONS

J. K. Weil, F. D. Smith, A. J. Stirton and R. G. Bistline, Jr., Eastern Regional Research Laboratory, Philadelphia, Pa.

RAPID METHOD FOR DETERMINATION OF UNSULFONATED OILS
L. E. Weeks and R. T. Haynes, Inorganic Chemicals Division, Research Department, Monsanto Chemical Co., St. Louis, Mo.

SOME ENGINEERING FACTORS IN THE SULFATION OF FATTY ALCOHOLS WITH CHLOR-SULFONIC ACID
J. W. McCutcheon, J. W. McCutcheon, Inc., Morristown, N. J.

REACTION OF EPOXIDES WITH ALCOHOLS: EFFECT OF REACTION CONDITIONS ON PRODUCT COMPOSITION
G. J. Stockburger and J. D. Brandner, Chemical Research Department, Atlas Chemical Industries, Inc., Wilmington, Del.

THE CHEMISTRY OF ALFOL ALCOHOLS
Mark Atwood, Continental Oil Co., Ponca City, Okla.

Technical Session H

Tuesday, October 2—2:00 p.m.

Chemical Reactions

REACTION OF MONOENES WITH CONJUGATED DIE-NOIC AND TRIENOIC ACIDS

J. P. Friedrich, R. E. Beal, E. W. Bell, and L. E. Gast, Northern Research Laboratory, Peoria, Ill.

VINYL ESTERS OF SOME AZELAALDEHYDIC ACID ACETALS AND POLYMERS THEREFROM

E. H. Pryde, D. J. Moore, and J. C. Cowan, Northern Regional Research Laboratory, Peoria, Ill.

PREPARATION OF PHOSPHORUS ESTERS OF LONG-CHAIN HYDROXY FATTY ACIDS

M. J. Diamond, T. H. Applewhite, R. E. Knowles and L. A. Goldblatt, Western Regional Research Laboratory, Albany, Calif.

METHANESULFONIC ACID CATALYZED ADDITIONS TO OLEIC ACID (AND CYCLOHEXENE) III. ADDITION OF ACIDS AND SUBSTITUTED PHENOLS

Abner Eisner, Theodore Perlstein and W. C. Ault, Eastern Regional Research Laboratory, Philadelphia 18, Pa.

PREPARATION AND ETHERIFICATION REACTION OF FATTY DICHLOROCYCLOPROPANES

H. E. Kenney, Daria Komanowsky, Linda L. Cook and A. N. Wrigley, Eastern Regional Research Laboratory, Philadelphia 18, Pa.

PREPARATION OF γ -STEAROLACTONE BY PERCHLORIC ACID ISOMERIZATION OF OLEIC ACID

J. S. Showell, W. R. Noble and Daniel Swern, Eastern Regional Research Laboratory, Philadelphia 18, Pa.

NITRATION OF METHYL OLEATE WITH ACETYL NITRATE: A SYNTHESIS OF METHYL AMINO-STEARATE

D. C. Malins and C. R. Houle, Technological Laboratory, Bureau of Commercial Fisheries, U. S. Fish and Wildlife Service, Seattle, Wash.

THE RITTER REACTION IN OILS AND FATS
J. Devine, Unilever Research, Port Sunlight, England.

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GLYCERINE

In terms of Absolute Glycerine (100% Basis) In Thousand Pounds

	1962			1961	
	June	May	Jan.-June Cumulative	June	Jan.-June Cumulative
Stocks at Beginning of Month (All Grades).....	64,000	65,900	69,300*	69,800	56,200*
Production (Crude Only) ^a	20,700	20,400	125,400	22,200	143,300
Imports.....	900	600	4,600	1,200	8,500
Exports.....	700	1,100	6,600	1,500	7,200
Stocks at End of Month ^b	65,200	64,000	65,200**	64,400	64,400**
Disappearance.....	19,700	21,800	127,400	27,300	136,500
Excess of Disappearance over Production.....	-1,000	+1,400	+2,000	+5,100	-6,800

^a Synthetic glycerine included on crude basis beginning June 1949.

^b Producers' stocks only, beginning July 1960, but stocks revised back through Dec. 1958.

* Stocks, beginning January.

** Stocks, end of June.

Fatty Acids Production Up ... Inventories Steady

June production of animal, vegetable and marine fatty acids, as classified under Categories #1-#11, totalled 36.1 million lb, up 1.1 million lb, from May, and up 1.0 million lb from June 1961. Tall oil acids put the total above 55 million lb.

Disposition of fatty acids classified under Categories #1-#11 amounted to 38.0 million lb, compared with 39.6 million lb in May and 36.6 million lb in June last year.

Finished goods inventories totalled 30.0 million lb on June 30th, up 1.1 million lb from the end of May. Work-in-process stocks were 10.6 million lb, versus 21.1 million lb on May 31st.

Technical Program

(Continued from page 24)

Technical Session I

Wednesday, October 3—9:00 a.m.

Biology and Nutrition

SOME EFFECTS OF FEEDING DIHYDROXYSTEARATE IN RATS

Hans Kaunitz, Department of Pathology, Columbia University, New York, N. Y.

STRUCTURE OF HIGH MELTING TRIGLYCERIDE FROM MILK FAT-GLOBULE MEMBRANE

D. P. Wolf and L. R. Dugan, Jr., Department of Food Science, Michigan State University, East Lansing, Mich.

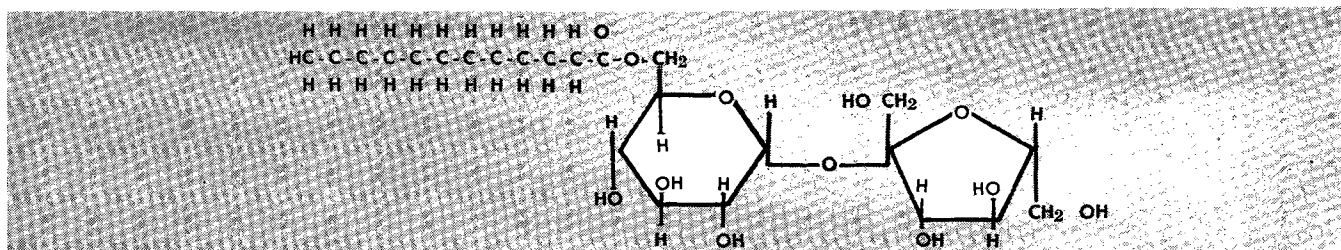
PHOSPHOLIPIDS OF MUSCLE TISSUE FROM MEAT ANIMALS. I. VARIATION IN HOG CARCASS

M. Kuchmak and L. R. Dugan, Jr., College of Agriculture,

(Continued on page 44)

Colonial SE Surfactants

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Technical Program

(Continued from page 41)

Department of Food Science, Michigan State University, East Lansing, Mich.

GAS-LIQUID CHROMATOGRAPHY OF FAT-SOLUBLE VITAMINS

K. K. Carroll, Collip Medical Research Laboratory, University of Western Ontario, London, Ont.

EFFECT OF DIET HANDLING ON NUTRITIONAL STUDIES WITH USED FRYING FATS

J. C. Alexander, The Procter and Gamble Co., Miami Valley Laboratories, Cincinnati 39, Ohio.

EFFECT OF LONG-TERM FEEDING OF SATURATED AND UNSATURATED FATS ON BLOOD COAGULATION IN MINIATURE PIGS

V. Mahadevan, E. Cubero, and W. O. Lundberg, University of Minnesota, The Hormel Institute, Austin, Minn.

THE EFFECT OF GERMINATION AND SUB-GERMINATION MOISTURE LEVELS UPON THE FAT OF THE SOYBEAN. II. SUB-GERMINATION MOISTURE LEVELS

B. E. Brown, E. M. Meade and Jean R. Butterfield, Department of Food Chemistry, University of Toronto, Toronto, Ont.

THE LIPIDS IN THREE CANADIAN WHEATS

M. E. McKillican and R. P. A. Sims, Food Research Institute, Canada Department of Agriculture, Ottawa, Ont.

Vernonia anthelmintica (L.) WILLD. ENZYMATIC STUDIES. PRODUCTION OF (+)-THREO-12,13-DIHYDROXY-OLEIC ACID

W. E. Scott, C. F. Krewson and R. W. Riemenschneider, Eastern Regional Research Laboratory, Philadelphia 18, Pa.

Technical Session J

Wednesday, October 3—9:00 a.m.

Hydrogenation

H. J. Dutton, Presiding

CATALYSTS FOR SELECTIVE HYDROGENATION OF SOYBEAN OIL. AN EXPERIMENTAL METHOD FOR EVALUATING SELECTIVITY

C. H. Riesz and H. W. Weber, Armour Research Foundation of Illinois Institute of Technology, Chicago 16, Ill.

CATALYSTS FOR SELECTIVE HYDROGENATION OF SOYBEAN OIL. COMMERCIAL AND EXPERIMENTAL CATALYSTS

C. H. Riesz and H. W. Weber, Armour Research Foundation of Illinois Institute of Technology, Chicago 16, Ill.

ANALOG COMPUTERS AND KINETICS OF HYDROGENATION

R. O. Butterfield, E. D. Bitner, C. R. Scholfield and H. J. Dutton, Northern Regional Research Laboratory, Peoria, Ill.

DEUTERIUM-HYDROGEN EXCHANGE DURING THE CATALYTIC DEUTERATION OF METHYL OLEATE

W. K. Rohwedder, E. D. Bitner, Helen Ven Horst, and H. J. Dutton, Northern Regional Research Laboratory, Peoria, Ill.

HOMOGENEOUS CATALYTIC HYDROGENATION OF SORBIC ACID

A. F. Mabrouk, H. J. Dutton and J. C. Cowan, Northern Regional Research Laboratory, Peoria, Ill.

ISOTOPIC EFFECTS DURING CATALYTIC HYDROGENATION

E. D. Bitner, E. Selke, and H. J. Dutton, Northern Regional Research Laboratory, Peoria, Ill.

PARTIAL HYDROGENATION AND WINTERIZATION OF SOYBEAN OIL

C. D. Evans, R. E. Beal, D. G. McConnell, L. T. Black and J. C. Cowan, Northern Regional Research Laboratory, Peoria, Ill.

SELECTIVE HYDROGENATION OF THE CYCLOPROPENE ACID GROUPS IN COTTONSEED OIL

T. L. Ward, Joao S. Tango, E. R. Cousins, and R. O. Feuge, Southern Regional Research Laboratory, New Orleans, La.

CHEMICAL REACTIONS INVOLVED IN THE CATALYTIC HYDROGENATION OF OILS. I. CHARACTERISTICS OF THE VOLATILE DECOMPOSITION PRODUCTS

S. S. Chang, Y. Masuda, and B. D. Mookerjee, Department of Food Science, Rutgers, The State University, New Brunswick, N. J.

Technical Session K

Wednesday, October 3—9:00 a.m.

Oxidation and Stability

THE IDENTIFICATION OF THE OXIDIZED-METALLIC AND GRASSY FLAVOR COMPONENTS OF AUTOXIDIZED MILK FAT

E. G. Hammond and F. D. Hill, Department of Dairy and Food Industry, Iowa State University, Ames, Ia.

EFFECT OF SILICONES ON THE HEAT STABILITY OF FRYING FAT

B. Weinberg, Canada Packers Ltd., Toronto, Ont.

FAT STABILITY TESTING WITH GAS CHROMATOGRAPHY

A. S. Henick and S. J. Bishov, Quartermaster Food and Container Institute for the Armed Forces, Chicago 9, Ill.

AUTOXIDATION OF FATTY MATERIALS IN EMULSION. II. FACTORS AFFECTING THE HISTIDINE-CATALYZED AUTOXIDATION OF EMULSIFIED METHYL LINOLEATE

J. E. Coleman, J. W. Hampson, and D. H. Saunders, Eastern Regional Research Laboratory, Philadelphia, Pa.

THE KINETICS OF METHYL LINOLEATE EMULSION AUTOXIDATION IN THE PRESENCE OF POLYHYDROXY COMPOUNDS

A. F. Mabrouk, American Meat Institute Foundation, University of Chicago, Chicago, Ill.

A RAPID OXYGEN BOMB METHOD FOR EVALUATING THE STABILITY OF FATS AND SHORTENING

W. D. Pohle, R. L. Gregory, and V. van Giessen, Swift and Co., Chicago, Ill.

MUSTARD SEED PROCESSING: IMPROVED METHODS FOR ISOLATING THE PUNGENT FACTOR AND CONTROLLING PROTEIN QUALITY

G. C. Mustakas, L. D. Kirk, and E. L. Griffin, Jr., Northern Regional Research Laboratory, Peoria, Ill.

Technical Session L

Wednesday, October 3—9:00 a.m.

General Session

PAPER CHROMATOGRAPHIC STUDIES OF FLAVONOID COMPOUNDS OF COTTONSEED OIL AND MEAL

Charles Pratt, S. H. Wender, and Idella Glover, Department of Chemistry, Savannah State College, State College Branch, Savannah, Ga.

PREPARATION OF HIGHLY PURIFIED FATTY ACIDS

O. S. Priovett and E. C. Nickell, University of Minnesota, The Hormel Institute, Austin, Minn.

PREPARATION OF PARTIAL GLYCERIDES BY DIRECT ESTERIFICATION

Audrey T. Gros and R. O. Feuge, Southern Regional Research Laboratory, New Orleans, La.

THE SYNTHESIS AND ANALYSIS OF PURE SYMMETRICAL MIXED ACID TRIGLYCERIDES

F. B. Padley, Unilever Research, Port Sunlight, England.

PHYSICAL AND CHEMICAL PROPERTIES OF ALUMINA BLEACHED COTTONSEED OIL

J. C. Kuck, W. A. Pons, Jr., and V. L. Frampton, Southern Regional Research Laboratory, New Orleans, La.

Technical Session M

Wednesday, October 3—2:00 p.m.

Biology and Nutrition (Cont'd.)

THE CONSTANCY OF RED BLOOD CELL LIPIDS IN MAN DURING EXTREME VARIATIONS OF DIETARY FAT INTAKE

J. G. Hill, A. Kuksis and J. M. R. Beveridge, Department of Biochemistry, Queen's University, Kingston, Ont.

THE FERMENTATION OF LONG-CHAIN COMPOUNDS BY TORULOPSIS MAGNOLIAE. III. PREPARATION OF DICARBOXYLIC ACIDS AND OTHER COMPOUNDS FROM THE FERMENTATION PRODUCTS

A. P. Tulloch and J. F. T. Spencer, Prairie Regional Laboratory, National Research Council of Canada, Saskatoon, Sask.

HEXADECENOIC ACIDS OF THE RAT

H. Schlenk, N. Sen, and D. M. Sand, University of Minnesota, The Hormel Institute, Austin, Minn.

THE IMPORTANCE OF SATURATED FATTY ACIDS IN THE RAT DIET

Joyce L. Beare, J. A. Campbell, C. G. Youngs and B. M. Craig, Department of National Health and Welfare, Canada, Food and Drug Directorate, Ottawa, Ontario, and the Prairie Regional Laboratory, National Research Council, Saskatoon, Sask.

INFLUENCE OF DIETARY FATS ON LIPOGENESIS AND COMPOSITION OF DEPOT FATS IN EXPERIMENTAL ANIMALS

B. M. Craig, Prairie Regional Laboratory, National Research Council of Canada, Saskatoon, Sask.

ESSENTIAL FATTY ACIDS

H. J. Thomasson, Unilever Research Laboratory, Vlaardingen, Holland.

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Technical Program . . .

(Continued from page 44)

DIETARY FAT AND ATHEROSCLEROSIS

H. J. Thomasson, Unilever Research Laboratory, Vlaardingen, Holland.

Technical Session N

Wednesday, October 3—2:00 p.m.

Hydrogenation (Continued)

THE INVESTIGATION OF RAPE OIL HYDROGENATION INHIBITORS

H. Niewiadomski, B. Drozdowski, and E. Mossakowska, Department of Fat Technology, Technical University in Gdansk, Poland.

HYDROGEN PEROXIDE OXIDATION OF TERTIARY AMINES

G. L. K. Hoh, D. O. Barlow, A. F. Chadwick, D. B. Lake, and S. R. Sheeran, E. I. du Pont de Nemours and Co., Inc., Wilmington, Del.

ION EXCHANGE RESIN IN THE EPOXIDATION PROCESS

D. O. Barlow, A. F. Chadwick, J. P. Fahey, B. Lake and S. R. Sheeran, E. I. du Pont de Nemours and Co., Inc., Wilmington, Del.

EFFECT OF SEED PREPARATION ON THE EFFICIENCY AND OIL QUALITY IN FILTRATION EXTRACTION OF RAPESEED

J. R. Reynolds, Saskatchewan Wheat Pool, Saskatoon, Sask., and C. G. Youngs, Prairie Regional Laboratory, National Research Council, Saskatoon, Sask.

DEVELOPMENT OF CONTINUOUS EXTRACTION

Lurgi Gesellschaft fur Warmetechnik.

SESAME OIL PRODUCTION IN MEXICO

Angel Abrego López, Industrias Gonzales, S. A., Monterrey, N. L., Mexico.

Technical Session O

Wednesday, October 3—2:00 p.m.

General Session

ABIETIC AND NEOABIETIC ACIDS IN TALL OIL

W. S. Vought, Jr. and A. J. Brunner, Armstrong Cork Co., Lancaster, Pa.

ACCELERATED CURES OF LINOLEUM USING POLYMETHYLOL PHENOLS

G. E. Graham, Plastics Flooring Department, Armstrong Cork Co., Lancaster, Pa.

ANALYSIS OF LINOLEUM BINDERS

J. S. Heckles, R. H. Reiff, and F. H. Byers, Armstrong Cork Co., Lancaster, Pa.

RIGID URETHANE FOAMS WITH IMPROVED STRENGTH FROM BLOWN CASTOR OILS

C. K. Lyon, Vilma H. Garrett and L. A. Goldblatt, Western Regional Research Laboratory, Albany, Calif.

QUANTITATIVE ANALYSIS OF I-OLEFINS BY PRO-

GRAMMED TEMPERATURE GAS CHROMATOGRAPHY

R. W. Poe and E. F. Kaelble, Inorganic Chemicals Division, Research Department, Monsanto Chemical Co., St. Louis, Mo.

CORRELATION AND PREDICTION OF VAPOR-LIQUID EQUILIBRIA IN THE HOMOLOGOUS SERIES OF COMMON FATTY ACIDS AND ALCOHOLS

Arthur Rose and R. B. Sumantri, The Pennsylvania State University and Applied Science Laboratories, Inc., University Park and State College, Pa.

OXIDATION OF UNSATURATED FATTY ACIDS WITH CHROMATE PYRIDINE

Toru Takagi and B. M. Craig, Prairie Regional Laboratory, National Research Council, Canada, Saskatoon, Sask.

SEPARATION OF CIS-TRANS ISOMERS OF FATS AND OILS

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Canada Establishes Food Research Institute

Canadian Agriculture Minister Alvin Hamilton announced that in an effort to intensify basic food research in Canada, the federal Department of Agriculture has established a new Food Research Institute within its Research Branch.

Hamilton said the Institute will provide basic research that will benefit producers, processors and consumers.

He said that in addition to developing new principles in food processing and preservation, stress will be placed on the introduction of new food items in Canada, giving better markets for agricultural products.

The Institute's terms of reference:

1. To develop new principles in food processing and preservation and new types of processed agricultural products with attention to their effect on the nutritional value of foods.

2. To conduct basic research on the characteristics of plant and animal products affecting food quality—for example, flavor, texture, color, odor, tenderness and purity.

3. To investigate the physical, chemical and biological changes resulting from the storage and processing of plant and animal products.

A Director will be named shortly to head up the new research group. Staff will include 17 research officers, 20 technicians and assistants, five administrative and clerical employees.

Certain groups now in existence will become a part of the new Canadian organization. These include the Dairy Technology Research Institute and the Food Processing and Storage Section of the Plant Research Institute.

Copra and Coconut Oil Exports from the Philippines, by Months
(In Long Tons)

	Copra			Coconut oil			Total as copra*		
	Total	To U. S.	Percent to U. S.	Total	To U. S.	Percent to U. S.	Total	To U. S.	Percent to U. S.
Annual:									
1957.....	988,366	290,314	29	93,016	81,085	87	1,136,011	419,020	37
1958.....	786,124	264,881	36	89,648	84,484	94	878,422	398,932	45
1959 ^a	526,153	279,305	53	55,481	50,079	90	614,218	358,795	58
1960 ^b	804,940	278,754	35	59,168	59,027	98	898,857	372,447	41
1961.....	640,745	226,752	35	72,775	72,428	99.5	756,259	341,716	45
1961:									
May.....	44,590	13,340	30	4,772	4,722	100	52,085	20,855	40
June.....	69,022	35,000	51	5,737	5,737	100	78,128	44,106	56
July ^c	67,490	18,850	28	6,857	6,857	100	78,374	29,734	38
August.....	60,305	21,350	35	10,033	10,033	100	76,230	37,275	49
September.....	73,063	24,186	33	8,454	8,282	98	86,482	37,332	43
October.....	82,071	37,681	46	12,463	12,463	100	101,853	57,463	56
November.....	48,931	19,665	40	5,729	5,729	100	58,025	28,759	50
December.....	47,393	26,880	57	4,332	4,332	100	54,269	33,756	62
1962:									
January.....	34,740	16,140	46	5,975	5,975	100	44,224	25,624	58
February.....	69,348	29,408	42	8,373	8,373	100	82,638	42,698	52
March.....	45,246	7,850	17	8,593	8,293	97	55,886	21,013	36
April.....	58,700	13,100	22	6,774	6,774	100	69,452	23,852	34
May.....	59,300	19,200	32	6,630	6,630	100	69,324	29,724	43
June.....	60,436	16,036	27	7,542	7,542	100	72,407	28,097	39

* Includes coconut oil converted to copra on the basis of 63%.

^a Official Philippine export figures; lower than 1959 annual figures formerly shown on this report, which were the total of January-December 1959 monthly figures compiled from Philippine trade sources. Data from Philippine trade source may have included unrecorded shipments.

^b Philippine trade source figures, but different from total of months for total coconut oil exports and for copra and coconut exports to U. S.

^c Copra figures questionable.

Source: Foreign Agricultural Service, U.S.D.A.

Coconut Oil CC-3
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