
American Oil Chemist's Society

61st

ANNUAL MEETING



PROGRAM



APRIL 26-30, 1970

Jung Hotel

New Orleans, Louisiana

MONDAY AFTERNOON—APRIL 27

2:00 P.M.—Terrace Suites 1-2

SESSION A—SYMPOSIUM: CARL M. LYMAN MEMORIAL SYMPOSIUM ON GOSSYPOL

Chairman—Carl M. Cater, Texas A&M University, College Station, Texas

2:00 INTRODUCTORY REMARKS

2:05 1. ACCOUNT OF DR. LYMAN'S RESEARCH ON GOSSYPOL AND ITS SIGNIFICANCE AND IMPACT ON THE COTTONSEED INDUSTRY
Garlon Harper, National Cottonseed Products Association

2:30 2. DETERMINATION OF STRUCTURE AND SYNTHESIS OF GOSSYPOL
J. D. Edwards, Jr., University of Southwestern Louisiana

3:00 3. THE EFFECTS OF DIETARY GOSSYPOL ON ANIMALS
F. H. Smith and A. J. Clawson, North Carolina State University

3:30 4. PRACTICAL SIGNIFICANCE OF GOSSYPOL IN FEED FORMULATION
Keith J. Smith, National Cottonseed Products Association

4:00 5. PREPARATION AND ISOLATION OF A GOSSYPOL-PEPTIDE COMPLEX
Carl M. Cater and C. M. Lyman, Texas A&M University

4:30 6. DETERMINATION OF GOSSYPOL: PAST AND PRESENT
Walter A. Pons, Jr., USDA, Southern Regional Research Laboratory

MONDAY AFTERNOON—APRIL 27

2:00 P.M.—Terrace Suites 4-5

SESSION B—BIOCHEMISTRY-METABOLISM

Chairman—Robert L. Ory, USDA, Southern Regional Research Laboratory, New Orleans

2:00 7. THE LIPID CHARACTERISTICS OF HUMAN OMENTAL TISSUE
Francis E. Luddy, S. F. Herb, Philip Skerrett and Joseph L. Rabinowitz, Eastern Regional Research Lab.

2:20 8. DIETARY REGULATION OF HEPATIC MICROSOMAL ENZYMES FOR GLYCERIDE SYNTHESIS
Rex D. Wiegand, G. A. Rao and Raymond Reiser, Texas A&M University

2:40 9. FATTY ACID COMPOSITION OF MONKEY MILKS

Suhadi Hardjo and Lloyd M. Smith, University of California, Davis

3:00 10. SEX DIFFERENCES IN PHOSPHOLIPID CONTENT OF SERUM, LIVER AND BROWN FAT FOLLOWING COLD-INDUCED LIPID MOBILIZATION
C. A. Olmsted, Kenneth J. Hardy and Yea-fhey Kuo, Gulf South Research Institute

3:20 11. PHOSPHOLIPID METABOLISM AND TRANSPORT IN TUMOR BEARING MICE
J. R. Terranova, K. J. Hardy and C. A. Olmsted, LSU in New Orleans

3:40 12. TUMOR LIPIDS: BIOSYNTHESIS OF PLASMA LOGENS
Randall Wood and Kathleen Healy, Oak Ridge Associated Universities

4:00 13. PLASMA LOGEN BIOSYNTHESIS IN EHRlich ASCITES CELLS GROWN IN TISSUE CULTURE
Randall Wood, Marva Walton, Kathleen Healy and R. B. Cumming, Oak Ridge Associated Universities

4:20 14. THE FATTY ACID COMPOSITION OF RAT HEARTS AS INFLUENCED BY AGE AND DIETARY FATTY ACIDS
Bernard F. Szuhaj and Richard L. McCarl, Central Soya

4:40 15. STRUCTURAL ANALYSIS OF TRIGLYCERIDES FROM HUMAN AORTIC PLAQUES
R. M. Caley, R. G. Jensen and R. E. Pitas, University of Connecticut

MONDAY AFTERNOON—APRIL 27

2:00 P.M.—Royal Salon

SESSION C—ANALYTICAL METHODOLOGY

Chairman—L. Dave McClung, CPC International, San Francisco

2:00 16. VISUALIZATION AND QUANTITATION OF THIN LAYER CHROMATOGRAMS BY AN IMPROVED CHAR TECHNIQUE
Theodore T. Martin and Marvin C. Allen, Continental Oil Company

2:20 17. SEPARATION AND QUANTITATION OF ALKENE AND HYDROXY ALKANE SULFONATES BY THIN LAYER CHROMATOGRAPHY
Marvin C. Allen and Theodore T. Martin, Continental Oil Company

2:40 18. FATTY ACID METHODOLOGY FOR HEAT ABUSED OILS
Arthur E. Wolkoff and Helen Zmachinski, CPC International

3:00 19. DETERMINATION OF RESIDUAL SOLVENT IN OILSEED MEALS AND FLOURS: III. ISOPROPANOL
S. P. Fore, E. T. Rayner and H. P. Dupuy, Southern Regional Research Lab.

3:20 20. A SIMPLE TECHNIQUE FOR DETERMINING THE GLC PROFILE OF VOLATILE COMPOUNDS IN VEGETABLE OILS
Kenneth T. Hartman, Lucien C. Rose and Raymond L. Vandaveer, Frito-Lay, Inc.

3:40 21. DETERMINATION OF PLASMA TOCOPHEROLS BY GAS LIQUID CHROMATOGRAPHY
Joanna Lehmann and Hal T. Slover, USDA, Human Nutrition Research Division

4:00 22. QUANTITATIVE DETERMINATION OF RICININE
G. Fuller and Haywood C. Smith, Jr., Western Regional Research Lab.

4:20 23. TRIMETHYLSILYL DERIVATIVES OF POLYOLS AND CARBOXYLIC ACIDS IN AQUEOUS SYSTEMS
Leonard H. Ponder, American Enka Corporation

4:40 24. TRINITROBENZENE SULFONIC ACID: A REAGENT FOR THE QUANTITATIVE ANALYSIS OF SPHINGOLIPIDS
A. N. Siakotos, Indiana University

MONDAY AFTERNOON—APRIL 27

2:00 P.M.—Imperial Salon

SESSION D—SYMPOSIUM: WATER POLLUTION

Chairman—C. Fred Gurnham, Gurnham and Associates, Inc., Chicago

2:00 INTRODUCTORY REMARKS

2:20 25. DELIBERATE BIODEGRADATION IN A CLOSED SYSTEM COOLING TOWER
E. K. Holt, Lever Brothers Co.

2:50 26. TABOOS VS. REALITIES REGARDING ANIMAL AND VEGETABLE OILS AND FATS IN MUNICIPAL SYSTEMS
G. N. McDermott, L. B. Polkowski, Procter & Gamble Company

3:20 27. JET AERATION OF WASTE WATER
Richard W. West, Houdaille Industries, Inc.

3:50 28. RECOVERY OF FATTY ACID LIGHTS FROM STILL VAPORS
C. T. Atwood and C. L. Woody, Lever Brothers Co.

4:20 29. PROGRESS TOWARDS EUTROPHICATION CONTROL
T. E. Brenner and R. C. Black, The Soap and Detergent Association

4:50 CLOSING REMARKS

MONDAY AFTERNOON—APRIL 27

2:00 P.M.—Presidential Salon

SESSION E—SYMPOSIUM: EPOXIDIZED OILS

Chairman—I. A. Wolff, Northern Regional Research Laboratory, Peoria, Illinois

2:00 INTRODUCTORY REMARKS

2:05 30. PERACID AND DERIVATIVES: A REVIEW AND COMPARISON OF PROCESSES FOR COMMERCIAL PRODUCTION
W. F. Goldsmith and C. A. Gibson, Union Carbide Corporation

2:35 31. EPOXY OILS FROM PLANT SEEDS

F. R. Earle, Northern Regional Research Lab.

3:05 32. NEW REACTIONS OF THE OXIRANE GROUP
Daniel Swern, Temple University

3:35 33. SELECTION OF PLASTICIZERS FOR OPTIMIZATION OF LOW TEMPERATURE AND PERMANENCE PROPERTIES OF VINYL SYSTEMS
W. J. Gaffigan and J. W. Harlan, Swift & Company

4:05 34. CHRONIC TOXICITY OF VERNONIA SEED OIL IN RATS
B. R. Zeitlin, S. F. Biscardi and M. N. George, General Foods Corp.

TUESDAY MORNING—APRIL 28

9:00 A.M.—Royal Salon

SESSION F—CHEMICAL REACTIONS

Chairman—Glen Lichtenwalter, Armour Industrial Chemical Company

9:00 36. SELECTIVE HYDROGENATION OF TRIPLE BONDS TO DOUBLE BONDS IN OCTADECADIENOIC AND SANTALBIC METHYL ESTERS
Steward G. Morris and Paul Megidman, Eastern Regional Research Lab.

9:20 37. INFLUENCE OF SOLVENT AND DEGREE OF ACYLATION ON THE FORMATION OF SU-CROSE ESTERS
T. J. Weiss, M. L. Brown, H. J. Zeringue, Jr. and R. O. Feuge, Southern Regional Research Lab.

9:40 38. PREPARATION OF EPIMINO STEARATES: COMPARISON OF METHODS
T. A. Foglia, G. Maerker and G. R. Smith, Eastern Regional Research Lab.

10:00 39. CYANOETHYLATION OF METHYL 9(10) KETO-STEARATE
H. E. Kenney, E. T. Donahue and G. Maerker, Eastern Regional Research Lab.

10:20 40. DIMER ACID STRUCTURES: CYCLIC STRUCTURES OF CLAY CATALYZED DIMERS OF CLAY CATALYZED DIMERS OF NORMAL LINOLEIC ACID, 9-CIS,12-CIS-OCTADECADIENOIC ACID
D. H. Wheeler, A. Milun and F. Linn, General Mills Research

10:40 41. THE REACTIONS OF NITRATE ESTERS: THE SYNTHESIS OF NITRILES
John C. Wetli, Lawrence W. Lehman and Erich J. Gauglitz, Jr., BCF Technological Lab.

11:00 42. SYNTHESIS OF THE COMPLETE SERIES OF ¹⁴C-LABELED CIS AND TRANS OCTADECENOIC ACIDS
J. K. G. Kramer and R. T. Holman, The Hormel Institute

11:20 43. HYDROLYSIS OF 2-IMIDAZOLINES
G. Barua, Mona Industries, Inc.

TUESDAY MORNING—APRIL 28

9:00 A.M.—Terrace Suites 1-2

SESSION G-1—SYMPOSIUM: LIPID TRANSPORT MECHANISMS

Chairman—J. F. Danielli, Center for Theoretical Biology, New York

9:00 INTRODUCTORY REMARKS

C. A. Olmsted, Louisiana State University

9:10 44. LIPID TRANSPORT MECHANISMS AT CELLULAR INTERFACES
J. F. Danielli, Center for Theoretical Biology

10:00 45. ESSENTIAL FATTY ACID DEFICIENCY AND LIPID MODIFICATIONS IN THE CENTRAL NERVOUS SYSTEM
Claudio Galli, Institute of Pharmacology, Milan, Italy

10:45 46. SERUM LIPID TRANSPORT SYSTEMS: RECENT ADVANCES
A. Lopez, LSU Medical School in New Orleans

11:30 47. ROLE OF PHOSPHOLIPIDS IN THE TRIGLYCERIDE CYCLE
C. A. Olmsted, Louisiana State University

TUESDAY MORNING—APRIL 28

9:00 A.M.—Terrace Suites 4-5

SESSION H—MICROBIAL BIOCHEMISTRY

Chairman—Arthur F. Novak, Louisiana State University

9:00 48. NORSOLORINIC ACID FROM A MUTANT STRAIN OF ASPERGILLUS PARASITICUS
Louise S. Lee and Joan W. Bennett, R. E. Lundin and L. A. Goldblatt, Southern Regional Research Lab.

9:20 49. THE USE OF MUTATIONS IN AFLATOXIN RESEARCH
Joan W. Bennett, Southern Regional Research Lab.

9:40 50. AFLATOXINS M₁ AND M₂: PREPARATION AND PURIFICATION
R. D. Stubblefield, G. M. Shannon and O. L. Shottwell, Northern Regional Research Lab.

10:00 51. EFFECT OF A SURFACTANT ON THE PRODUCTION OF AFLATOXINS BY ISOLATES OF ASPERGILLUS FLAVUS AND A. PARASITICUS
A. F. Schindler and Annette Noble, Food and Drug Administration

10:20 52. UPTAKE AND METABOLISM OF CHOLESTEROL IN RELATION TO REPRODUCTION BY FUNGI OF THE FAMILY PYTHACEAE
James W. Hendrix, University of Kentucky

10:40 53. FATTY ACID COMPOSITION OF PS. ANGLATA, PS. PHASEOLICOLA AND PS. TABACI
Paul Sacco, John J. McNeill, Peter D. Klein and Patricia Szczepanik, Xavier University College of Pharmacy

11:00 54. CHARACTERIZATION OF SPHINGOLIPIDS BACTEROIDES RUMINICOLA
Eugene Iannotti, Thomas Cook and Mark Keeney, University of Maryland

11:20 55. MINOR LIPID COMPONENTS OF CLOSTRIDIUM BUTYRICUM
P. O. Hagen and Merle L. Blank, Oak Ridge Associated Universities

TUESDAY MORNING—APRIL 28

9:00 A.M.—Presidential Salon

SESSION I-1—UNIT PROCESSES

Chairman—W. J. McPherson, Wurster & Sanger, Inc., Chicago

9:00 56. SELECTION OF HYDROGEN SYSTEMS
D. A. Tanner and James R. Goodwin, Howe-Baker Eng., Inc.

9:30 57. ELECTROLYTIC HYDROGEN GENERATORS—NEW DEVELOPMENTS
Alexander K. Stuart, The Electrolyser Corp., Ltd.

10:00 58. NEW DEVELOPMENTS IN HYDROGEN GAS GENERATION—MOLECULAR SIEVES
Max H. Priddy, Surface Combustion Division

10:30 59. THERMAL LIQUID HEATING
D. E. Roush, Monsanto Company

11:00 60. HIGH TEMPERATURE HEAT TRANSFER EQUIPMENT
E. E. Macnussen, Eclipse Boiler Division

TUESDAY MORNING—APRIL 28

9:00 A.M.—North Hall

SESSION J—SOAPS AND DETERGENTS

Chairman—Charles P. McClain, Purex Corporation, Ltd.

9:00 61. A NEW BROAD SPECTRUM SOAP GERMICIDE SYSTEM
Eric Jungermann and David Taber, Armour-Dial, Inc.

9:20 62. POLARITY INDEX—A RAPID MEANS OF CLASSIFYING SURFACTANTS
L. D. Metcalfe, Armour Industrial Chemical Company

9:40 63. COLD WATER DETERGENCY STUDIES USING RADIOLABELED SOILS
J. C. Illman, B. M. Finger, W. T. Shebs and T. B. Albin, Shell Development Company

10:00 64. MICROAEROPHILIC BIODEGRADATION OF TALLOW-BASED ANIONIC DETERGENTS IN RIVER WATER
E. W. Maurer, T. C. Cordon and A. J. Stirton, Eastern Regional Research Lab.

10:20 65. SOIL REMOVAL IN RELATION TO TOTAL WORK INPUT: CALORIMETRIC INVESTIGATIONS IN FULL-SIZE WASHERS
Leopold Loeb and Robert O. Shuck, General Electric Company

TUESDAY MORNING—APRIL 28

10:50 A.M.—North Hall

SESSION K-1—SYMPOSIUM: SURFACE ACTIVE AGENTS IN THE TEXTILE INDUSTRY

Chairman—J. C. Arthur, Jr., Southern Regional Research Lab., New Orleans

10:50 INTRODUCTORY REMARKS

11:00 66. BIODEGRADABLE LINEAR ALCOHOL SURFACTANTS FOR USE IN TEXTILE WET PROCESSING
H. T. Zika, Union Carbide Corporation

11:30 67. BINDING CHARACTERISTICS OF ANIONIC CELLULOSES
J. B. Lawton, P. J. Baugh and Glyn O. Phillips, University of Salford, Lancashire, England

TUESDAY AFTERNOON—APRIL 28

1:30 P.M.—Terrace Suites 1-2

SESSION G-2—SYMPOSIUM: LIPID TRANSPORT MECHANISMS

Chairman—C. A. Olmsted, LSU in New Orleans

1:30 INTRODUCTORY REMARKS

J. F. Danielli, Center for Theoretical Biology, New York

1:45 68. RECENT INVESTIGATIONS ON DRUG INTERACTION WITH LIPID TRANSPORT
Rodolfo Paoletti and Cesare Sirtori, Institute of Pharmacology, Milan, Italy

2:30 69. THE FUNCTIONING OF THE LIPIDS AND LIPOPROTEINS OF SARCOBUBULAR MEMBRANES IN CALCIUM TRANSPORT
E. J. Masoro and Byung Pal Yu, Woman's Medical College of Pennsylvania

3:15 70. CONTROL OF IMMUNOLOGICAL PHENOMENA BY INTRAVENOUS LIPIDS
R. J. Di Luzio, Tulane University School of Medicine

4:00 71. EFFECT OF EFA DEFICIENCY ON ACCUMULATION AND RELEASE OF TRIGLYCERIDES IN PERFUSED RAT LIVER
Toshio Fukazawa, O. S. Privett and Yoshiyata Takahashi, The Hormel Institute

TUESDAY AFTERNOON—APRIL 28

2:00 P.M.—North Hall

SESSION K-2—SYMPOSIUM: SURFACE ACTIVE AGENTS IN THE TEXTILE INDUSTRY

Chairman—J. C. Arthur, Jr., Southern Regional Research Lab., New Orleans

2:00 72. BUILT-IN LUBRICATION IN COTTON FABRICS
Ruth R. Benerito, J. B. McKelvey and R. J. Berni, Southern Regional Research Lab.

2:30 73. THE EFFECT OF LAUNDERING VARIABLES ON THE FLAME RETARDANCY OF COTTON FABRICS
R. M. Perkins, G. L. Drake, Jr. and W. A. Reeves, Southern Regional Research Lab.

3:00 74. THE USE OF SURFACE ACTIVE AGENTS IN TANNING OF LEATHER
Edward M. Filachione, Eastern Regional Research Lab.

3:30 75. THE INFLUENCE OF SURFACE ACTIVE AGENTS ON THE BEHAVIOR OF WOOL FIBERS UNDERGOING FELTING
Dirk Stigter, Western Regional Research Lab.

4:15 76. THE SELECTION OF EMULSIFIERS FOR USE IN FORMULATION OF "SPIN FINISHES" FOR MAN-MADE FIBERS
J. P. Redston, W. F. Bernholz and R. C. Nahta, Drew Chemical Corporation

TUESDAY AFTERNOON—APRIL 28

1:55 P.M.—Terrace Suites 4-5

SESSION L-1—STEROL SYMPOSIUM: STEROL BIOSYNTHESIS

Chairman—H. W. Kircher, The University of Arizona

1:55 INTRODUCTORY REMARKS

2:00 77. STUDIES OF THE ENZYMOLOGIC SYNTHESIS OF CHOLESTEROL
T. J. Scallan, M. W. Schuster, A. K. Dhar, the University of New Mexico School of Medicine

2:30 78. ISOLATION OF THE PARTICLE-BOUND ENZYMES OF STEROL BIOSYNTHESIS
J. L. Gaylor, N. J. Moir, R. W. Topham and W. L. Miller, Cornell University

3:00 79. REGULATION OF THE SEQUENCING IN STEROL BIOSYNTHESIS
William R. Nes, Drexel Institute of Technology

3:30 80. DEMETHYLATION OF LANOSTEROL: RECENT FINDINGS CONCERNING THE REMOVAL OF 4,4-METHYL SUBSTITUENTS
Raymond B. Clayton, Stanford University School of Medicine

4:00 81. BIOSYNTHETIC FORMATION SEQUENCE OF PUMPKIN STEROLS
Wolfgang Sucrow and Bernd Raduchel, Organisch Chemisches Institut, Technische Universität, Berlin Germany

TUESDAY AFTERNOON—APRIL 28

2:00 P.M.—Ball Masque

SESSION M—REACTIONS AND ANALYSIS

Chairman—C. L. Hoffpauir, Southern Regional Research Lab., New Orleans

2:00 82. CONJUGATION OF POLYUNSATURATED FATS: II. AS METHYL LINOLEATE WITH TRIS (TRIPHENYLPHOSPHINE) RHODIUM CHLORIDE
W. J. Dedarlais and L. E. Gast, Northern Regional Research Lab.

2:20 83. A SIMPLIFIED ASSAY FOR CHAIN-ELONGATION AND ITS APPLICATION TO THE ELONGATION OF 14:0 THROUGH 19:0
John R. Paulsrud, Gustav Graff, Sheila S. Stewart and Ralph T. Holman, The Hormel Institute

2:40 84. AUTOXIDATION OF LIPIDS IN ATMOSPHERES CONTAINING NITROGEN DIOXIDE AND OZONE
Jeffrey N. Roehm and Daniel B. Menzel, Battelle-Northwest Lab.

- 3:00 85. THERMAL DECOMPOSITION OF TRISTEARIN
G. P. Shulman and E. L. Evans, Jet Propulsion Lab.
- 3:20 86. MASS SPECTRAL STUDIES OF TRIGLYCERIDES
A. J. Aasen, W. M. Lauer and R. T. Holman, The Hormel Institute
- 3:40 87. SOME THERMAL PROPERTIES OF METHYL MALVALATE, METHYL STERCOLATE, AND THEIR DIHYDRO DERIVATIVES
John L. White, Sr., Zigrida Zarins and R. O. Feuge, Southern Regional Research Lab.
- 4:00 88. THE STRUCTURAL CONSTITUENTS OF CARNAUBA WAX
L. E. Vandenberg and E. A. Wilder, S. C. Johnson & Son, Inc.
- 4:20 89. ODOR AND FLAVOR RESPONSES TO ADDITIVES IN EDIBLE OILS
C. D. Evans, Helen A. Moser and G. R. List, Northern Regional Research Lab.
- 4:40 90. RANCIDITY OF SOYBEAN OIL BY GAS CHROMATOGRAPHY AND ITS RELATIONSHIP WITH PEROXIDE VALUE AND FLAVOR EVALUATION
P. K. Javri, G. D. Lee, D. R. Erickson and E. A. Burkus, Swift and Company

WEDNESDAY MORNING—APRIL 29

9:00 A.M.—Presidential Salon

SESSION I-2—UNIT PROCESSES

Chairman—W. J. McPherson, Wurster & Sanger, Inc.
Chicago

- 9:00 91. A NEW METHOD FOR EDIBLE OIL REFINING BY ADSORBING FREE FATTY ACIDS ON A BED OF AN ADSORBENT MATERIAL
Robert L. Husch, Interstate Foods Corp.

- 9:30 92. FUNDAMENTAL ASPECTS OF BLEACHING FATTY OILS
A. D. Rich, Bennett-Clark Company, Inc.

- 10:00 93. FILTERS AND FILTRATION SYSTEMS FOR THE VEGETABLE OIL INDUSTRY
Frank Passalacqua, Industrial Filter & Pump Mfg. Co.

- 10:30 94. STEAM JET EJECTORS
Richard E. Richenberg, Graham Manufacturing Co.

WEDNESDAY MORNING—APRIL 29

8:55 A.M.—Terrace Suites 4-5

SESSION L-2—STEROL SYMPOSIUM: STEROLS IN INSECTS

Chairman—Raymond E. Clayton, Stanford University
School of Medicine

8:55 INTRODUCTORY REMARKS

- 9:00 95. CHOLESTEROL TURNOVER IN INSECTS
Hugh E. Yroman and J. N. Kaplanis, Claflin University

- 9:30 96. UTILIZATION AND METABOLISM OF STEROLS IN THE SILKWORM, *BOMBYX MORI*
Toshio Ito, Yasuhiro Horie and Shotchi Nakasone, Saitokultural Experiment Station, Suginami-ku, Tokyo, Japan

- 10:00 97. UTILIZATION AND METABOLISM OF STEROLS IN *DROSOPHILA*
Henry W. Kircher and Kenneth Goodnight, University of Arizona

- 10:30 98. THE INHIBITIVE EFFECTS OF AZASTEROLS ON STEROL METABOLISM AND GROWTH AND DEVELOPMENT IN INSECTS WITH SPECIAL REFERENCE TO THE TOBACCO HORNWORM
J. A. Svoboda and W. E. Robbins, U.S. Department of Agriculture

- 11:00 99. STEROIDS OF MOULTING HORMONE TYPE FROM ANIMALS AND PLANTS, CHEMISTRY AND BIOCHEMISTRY
Hans Hoffmeister, Bundesgesundheitsamt, Berlin, West Germany

WEDNESDAY MORNING—APRIL 29

9:00 A.M.—Terrace Suites 1-2

SESSION N-1—SYMPOSIUM: BLOOD LIPIDS AND LIPOPROTEINS

Chairman—Gary J. Nelson, Lawrence Radiation Laboratory

9:00 INTRODUCTORY REMARKS

- 9:10 100. LIPIDS OF NORMAL HUMAN ERYTHROCYTES
George Rouser and John D. Turner, City of Hope Medical Center

- 9:50 101. THE COMPOSITION OF BLOOD LIPIDS IN NON-HUMAN, MAMMALIAN SPECIES
Gary J. Nelson, Lawrence Radiation Laboratory

- 10:30 102. LIPOPROTEINS AND PROTEINS OF ERYTHROCYTES
Bernard Shore and Virgie Shore, Lawrence Radiation Laboratory

- 11:00 103. LIPIDS OF NORMAL HUMAN PLASMA
John D. Turner and George Rouser, Baylor College of Medicine

- 11:30 104. SCREENING FOR GLYCERYL ETHERS IN HUMAN POPULATION
Jon J. Kabara, Storm Slavin and Karen Heatley, Michigan College of Osteopathic Medicine

WEDNESDAY MORNING—APRIL 29

9:00 A.M.—North Hall

SESSION O-1—SYMPOSIUM: HYDROGENATION

Chairman—E. N. Frankel, Northern Regional Research Lab., Peoria, Illinois

9:00 INTRODUCTORY REMARKS

- 9:10 105. THE SELECTIVE HYDROGENATION OF SOYBEAN OIL METHYL ESTER
John C. Bailar, Jr., University of Illinois

- 9:40 106. SOME RECENT DEVELOPMENTS IN THE HOMOGENEOUS CATALYZED HYDROGENATION OF OLEFINS
Robert L. Augustine and Jan Van Peppen, Seton Hall University

- 10:10 107. PLATINUM CATALYSTS
Paul N. Rylander, Engelhard Industries

- 10:40 108. THE EFFECT OF REACTION VARIABLES ON ISOMER DISTRIBUTION DURING PARTIAL HYDROGENATION OF TRILINOLEIN WITH COPPER CHROMITE CATALYST
Ehud Kirschner and E. R. Lowrey, The Procter & Gamble Company

- 11:00 109. HYDROGENATION OF UNSATURATED FATTY ESTERS WITH COPPER-CHROMITE CATALYST: KINETICS, MECHANISM AND ISOMERIZATION
Sambasivarao Koritala, Northern Regional Research Lab.

- 11:40 110. FLAVOR EVALUATION OF COPPER-HYDROGENATED SOYBEAN OILS
C. D. Evans, Helen A. Moser, G. R. List and J. C. Cowan, Northern Regional Research Lab.

WEDNESDAY MORNING—APRIL 29

9:00 A.M.—Ball Masque

SESSION P—PLANT BIOCHEMISTRY

Chairman—Dempsey Lee Thomas, LSU in New Orleans

- 9:00 111. THE UNSAPONIFIABLES OF *VERNONIA ANTHELMINTICA* SEED OIL

Joseph A. Fioriti, Michael G. Kolor and Rex J. Sims, General Foods Corporation

- 9:20 112. STEROLS IN SAFFLOWER AND OLIVE OILS
D. Firstone, C. W. Thorpe, N. L. Brown and R. P. Barron, Food and Drug Administration
- 9:40 113. CHLOROALKYL SULFATES EXCRETED BY ALGAE
Manuel Pousada and Thomas H. Haines, City College of the City University of New York
- 10:00 114. CYANOLIPIDS OF KOELEUTERIA PANICULATA LAXM. SEED OIL
K. L. Mikolajczak, C. R. Smith, Jr., and L. W. Tjarks, Northern Regional Research Lab.
- 10:20 115. A HYDROXY-EICOSADIENOIC ACID FROM LESQUERELLA AURICULATA SEED OIL
R. Kleiman, G. F. Spencer and F. R. Earle and A. S. Barclay, Northern Regional Research Lab.
- 10:40 116. SEPARATION AND CHARACTERIZATION OF THE BITTER COMPONENT FROM HEATED AVOCADO
M. Peled, A. Dolev and A. Letan, Department of Food & Biotechnology, Technion, Haifa, Israel
- 11:00 117. PHOSPHOINOSITIDES OF THE SEEDS OF GOSSYPIUM HIRSUTUM
C. B. Sharma, Marshall University

WEDNESDAY AFTERNOON—APRIL 29

1:55 P.M.—Terrace Suites 4-5

SESSION L-3—STEROL SYMPOSIUM: STEROLS IN PLANTS AND ANIMALS

- Chairman—William Nes, Drexel Institute of Technology
- 1:55 INTRODUCTORY REMARKS
- 2:00 118. SELECTIVE BINDING OF STEROLS IN CHLOROPLASTS AND IN FUNGI
Brian A. Knights, University of Glasgow
- 2:30 119. DISTRIBUTION OF STEROLS IN ALGAE
Glen W. Patterson, University of Maryland
- 3:30 120. THE INTERACTION OF STEROLS AND TETRAHYMENA PYRIFORMIS
Frank B. Mallory and Robert L. Conner, Bryn Mawr College
- 3:30 121. TRITERPENE BIOSYNTHESIS IN ECHINODERMS
L. J. Goad, A. G. Smith and T. W. Goodwin, University of Liverpool, United Kingdom
- 4:00 122. FUNCTIONS OF STEROLS IN PLANTS
Erich Heftmann, Western Regional Research Lab.

WEDNESDAY AFTERNOON—APRIL 29

2:00 P.M.—Terrace Suites 1-2

SESSION N-2—SYMPOSIUM: BLOOD LIPIDS AND LIPOPROTEINS

- Chairman—Gary J. Nelson, Lawrence Radiation Laboratory
- 2:00 123. DETERMINATION OF SERUM TRIGLYCERIDES
Robert F. Witter and Virginia S. Whitner, National Communicable Disease Center
- 2:40 124. INFRARED SPECTROPHOTOMETRIC METHODS FOR THE ANALYSIS OF BLOOD LIPIDS
Norman K. Freeman, University of California
- 3:20 125. ISOLATION AND ANALYSIS OF HUMAN SERUM LIPOPROTEINS
F. T. Lindgren, L. C. Jensen and F. T. Hatch, University of California
- 4:00 126. THE PROTEIN MOETIES OF THE LIPOPROTEINS OF HUMAN SERUM
Virgie Shore and Bernard Shore, Lawrence Radiation Laboratory

WEDNESDAY AFTERNOON—APRIL 29

2:00 P.M.—North Hall

SESSION O-2—SYMPOSIUM: HYDROGENATION

- Chairman—J. C. Cowan, Northern Regional Research Laboratory, Peoria, Illinois
- 2:00 127. EFFECT OF ISOMERISM UPON METABOLISM OF UNSATURATED FATTY ACIDS
Ralph Holman, The Hormel Institute
- 2:30 128. THE DEPOSITION OF FATTY ACIDS IN THE RAT FED PARTIALLY HYDROGENATED CORN OIL
Joyce L. Beare-Rogers, Food and Drug Research Laboratories, Ottawa, Canada
- 3:00 129. TRANSFER AND ADSORPTION FACTORS AFFECTING PARTIAL HYDROGENATION OF TRIGLYCERIDE OILS
Lyle F. Albright, Purdue University
- 3:30 130. THE EFFECTS OF HYDROGENATION PROCESS VARIABLES ON THE FORMATION OF TRANS UNSATURATION IN OILS
Robert R. Allen and Jesse E. Covey, Anderson Clayton Foods
- 4:00 131. TAILOR-MADE GLYCERIDES BY STEREOSELECTIVE HOMOGENEOUS HYDROGENATION WITH CHROMIUM TRICARBONYL COMPLEXES
E. N. Frankel, F. L. Thomas and J. C. Cowan, Northern Regional Research Lab.

WEDNESDAY AFTERNOON—APRIL 29

2:00 P.M.—Presidential Salon

SESSION Q—SYMPOSIUM: SAMPLING AND PROCESS CONTROL IN THE OILSEED INDUSTRY

- Chairman—John E. Heilman, Allied Mills, Inc., Chicago
- 2:00 132. SAMPLING AND MEASUREMENT IN THE PLANT
William M. Berger, French Oil Mill Machinery Company
- 2:25 133. ECONOMICS OF QUALITY CONTROL OPERATIONS
William T. Coleman, Anderson Clayton & Co.
- 2:50 134. QUICK PROTEIN ANALYSIS
D. C. Udy, Udy Analyzer Company
- 3:15 135. MEAL AND GRAIN SAMPLING
Bruce Wheaton, Carter Day Company
- 3:40 137. EXPLOSIVE GAS DETECTION AND APPLICATIONS
S. D. Delavne, Mine Safety Appliance Company
- 4:05 DISCUSSION

THURSDAY MORNING—APRIL 30

8:55 A.M.—Terrace Suites 4-5

SESSION L-4—STEROL SYMPOSIUM: CHOLESTEROL AND PREPARATIONS

- Chairman—James L. Gaylor, Cornell University
- 8:55 INTRODUCTORY REMARKS
- 9:00 138. THE METABOLISM OF CHOLESTEROL AND OTHER STEROLS BY BRAIN TISSUE
Robert B. Ramsey, S. H. Mujtaba Naqvi, John P. Jones and Harold J. Nicholas, St. Louis University School of Medicine
- 9:30 139. SOME PATHWAYS AND MECHANISMS IN LANOSTEROL-CHOLESTEROL CONVERSION IN MAMMALIAN TISSUES
R. Paolletti, G. Galli, E. Grossi Paolletti, A. Fiecchi and A. Scala, University of Milan, Italy
- 10:00 140. CHOLESTEROL TURNOVER IN RATS
Jacqueline Dupont, Colorado State University
- 10:30 141. PREPARATION OF TRITIUM-LABELED STEROLS
Malcolm J. Thompson, Otto W. Berngruber and Peter D. Klein, Argonne National Laboratory

11:00 142. RECENT STEREOCHEMICAL AND MECHANIS-
TIC STUDIES IN STEROL BIOSYNTHESIS
G. J. Schroepfer, Jr., B. N. Lutsky and J. A.
Martin, University of Illinois

THURSDAY MORNING—APRIL 30

9:00 A.M.—Ball Masque

SESSION R—ANTIOXIDANTS

Chairman—R. H. Bunnell, Hoffmann-LaRoche, Inc.,
Nutley, New Jersey

9:00 INTRODUCTORY REMARKS

9:10 143. EFFECT OF EXTRACTION PROCEDURE ON
STABILITY OF SAFFLOWER OIL
A. R. Kemmerer and F. U. Rosenstein, University
of Arizona

9:30 144. OXIDATION AT INTERMEDIATE MOISTURE
LEVELS
Theodore P. Labuza, Myron Silver and Miriam
Sokoloff, Massachusetts Institute of Technology

9:50 145. TRAPPED RADICALS IN PROTEIN MATRICES—
INTERACTION WITH ADDED ANTIOXIDANTS
William T. Roubal, Bureau of Commercial Fisheries,
USDI

10:10 146. RELATIONSHIP BETWEEN ANTIOXIDANT AND
ANTHEMOLYTIC ACTIVITIES OF VITAMIN E
DERIVATIVES
W. A. Skinner, R. M. Parkhurst and H. L. John-
son, Stanford Research Institute

10:30 147. BIO-ASSAYS FOR ANTIOXIDANTS
Samuel S. Epstein, Harvard Medical School

THURSDAY MORNING—APRIL 30

9:00 A.M.—Terrace Suites 1-2

SESSION S—BIOCHEMISTRY-NUTRITION

Chairman—C. A. Olmsted, LSU in New Orleans

9:00 148. NUTRITIONAL EFFECTS OF MILK SUBSTITUTES
IN MONKEYS AND RATS
Hans Kaunitz and Jaime Sanyar, Columbia
University

9:20 149. FATTY ACID COMPOSITIONAL STUDIES OF
CHILDREN IN NORMAL AND ABNORMAL
NUTRITIONAL STATES
John R. Paulsrud, Ralph T. Holman, Charles F.
Whitten, Leslie Pensler and William Krivet, Hor-
mel Institute

9:40 150. SOME EFFECTS OF EXOGENOUS CHOLES-
TEROL AND SATURATED FATTY ACIDS ON
LEPTEMIA
Antanas Butkus, L. Allen Ehrhart, Lena A. Lewis,
Abel L. Robertson and F. Merlin Bumpus, Cleve-
land Clinic Foundation

10:00 151. URINARY METABOLITES OF RETINOIC ACID
IN THE RAT
P. R. Sundaresan and H. N. Bhagavan, St.
Joseph Hospital

10:20 152. NUTRITIONAL STUDIES WITH CYCLOPRO-
PENOLDS INACTIVATED WITH FATTY ACIDS
D. T. Hopkins, R. Dahlgren, A. W. Munson and
H. P. Dupuy, Ralston Purina Co.

10:40 153. EFFECT OF COMMERCIAL DIETS ON THE
FATTY ACID COMPOSITION OF DEVELOPING
SALMON

James B. Saddler and Lynwood S. Smith, Uni-
versity of Washington

11:00 154. PHOSPHOLIPID COMPOSITION OF THE BOLL
WEEVIL, ANTHONOMUS GRANDIS BOHEMAN
Roger Henson, A. C. Thompson, R. C. Gueldner,
M. Petty and P. A. Hedin, Boll Weevil Research
Laboratory

THURSDAY MORNING—APRIL 30

9:00 A.M.—North Hall

SESSION T—SYMPOSIUM: GENERAL PROBLEM OF LABELING CONSUMER PRODUCTS

Organizer—Don P. Lynoff, Nation Paint, Varnish and Lacquer
Association, Washington, D.C.

Moderator—W. W. Vesterling, Davis Paint Company

9:00 155. INTRODUCTORY REMARKS

9:10 155. LABELING OF HOUSEHOLD PRODUCTS
UNDER THE FEDERAL HAZARDOUS SUB-
STANCE ACT
Dale C. Miller, Office of Associate Commissioner
for Compliance, Food and Drug Administration,
Washington, D.C.

9:40 156. HOW TO WRITE A LABEL AND LABEL COPY
CONTROL
Edward Hogan, Allied Chemical Corporation

10:10 157. INDUSTRY HOUSEHOLD LABELING PROBLEMS
AND THE FAIR PACKAGING AND LABELING
ACT
Dallas Sparrer, E. I. Du Pont de Nemours

10:40 GENERAL DISCUSSION