

ASSOCIATIONS FORUM

Ag and Food Division Announces 4 Symposia for ACS Meeting

FOUR SYMPOSIA have been arranged by the Division of Agricultural and Food Chemistry for the AMERICAN CHEMICAL SOCIETY's fall meeting in New York on Sept. 13 to 17. More than 70 papers will be delivered before the division during the five full-day sessions with the division breaking up into two sections on two days. All of the division's sessions will be held in the Hotel Statler, headquarters hotel for the meeting. The Division of Fertilizer and Soil Chemistry has scheduled a two-day program of 25 papers, including a symposium. Programs of both divisions are listed below.

In addition to those mentioned above, several other divisions will have papers and symposia of interest to agricultural and food chemists. The program of the Division of Biological Chemistry lists many papers on amino acids, proteins, metabolism, sterols, vitamins, nutrition, and enzymes. This division will also present a symposium on protein synthesis and will sponsor, jointly with the Division of Chemical Education, a symposium on some highlights of recent biochemical progress.

The Division of Carbohydrate Chemistry will present symposia on sources of

carbohydrate raw materials and on non-sugar constituents in commercial sugar liquors.

Some of the plant tours scheduled for the New York meeting include the Anheuser-Busch plant at Newark, the Boyce-Thompson Institute for Plant Research at Yonkers, the Brookhaven National Laboratory on Long Island, the General Foods plant and laboratories in Hoboken, and National Dairy Research Laboratories on Long Island.

Byron T. Shaw, head of USDA's Agricultural Research Service, will be the principal speaker at the luncheon of the Ag and Food Division, which is to be held Wednesday noon. Dr. Shaw is to speak on "Research—The Catalyst of American Agriculture," a continuation and enlargement of the topic he discussed in AG AND FOOD, July 7, page 725. The luncheon of the Division of Fertilizer and Soil Chemistry will be held on Wednesday with Edwin Cox as the principal speaker. His topic will be "Evolution or Revolution—Plant Food Research." The dinner of the Division of Carbohydrate Chemistry will take place on Wednesday in honor of Horace S. Isbell of the National Bureau of Standards.

DIVISION OF AGRICULTURAL AND FOOD CHEMISTRY

C. S. Boruff, *Chairman*
D. M. Doty, *Secretary*

Symposium on Radiation Sterilization of Foods and Pharmaceuticals

Joint with Division of Medicinal Chemistry

MONDAY MORNING (SEPT. 13)

Bruce H. Morgan, *Presiding*

BRUCE H. MORGAN. Introductory Remarks.

JOHN G. TRUMP. Sources of Ionizing Particles and Radiation.

W. D. BELLAMY. Some Microbiological Aspects of Radiation Sterilization.

MILTON BURTON. Principles of the Radiation Chemistry of Sterilization.

WARREN M. GARRISON, BOYD M. WEEKS, H. RALPH HAYMOND, AND JOSEPH G. HAMILTON. Irradiation of Aquo-Organic Systems with Cyclotron-Accelerated Particles.

EDWIN J. HART. Radiation Chemistry of Aqueous Formic Acid Solutions.

MALCOLM DOLE, C. D. KEELING, AND

D. G. ROSE. Mechanism of Irradiation Effects in Polyethylene.
Discussion.

MONDAY AFTERNOON

O. R. Woods, *Presiding*

O. R. WOODS. Introductory Remarks.

BERT M. TOLBERT AND RICHARD M. LEMMON. Radiation Decomposition of Pure Organic Compounds.

JAMES F. MEAD. Effects of Ionizing Radiations upon Essential Metabolites in Aqueous Media.

ARTHUR F. SCOTT AND ARTHUR H. LIVERMORE. Effects of Ionizing Radiations on Solutions of Cysteine and Inositol.

D. M. DOTY, B. S. SCHWEIGERT, AND C. F. NIVEN, JR. Chemical and Bacteriological Effects of Gamma Radiation on Meat.

SAMUEL A. GOLDBLITH AND BERNARD E. PROCTOR. Radiation Sterilization of Foods and Pharmaceuticals.

General Papers

TUESDAY MORNING (SEPT. 14)

C. S. Boruff, *Presiding*

RALPH F. KAMPSCHMIDT. The Effect of

the Wave Length of Light upon the Discoloration of Cured Meats.

EUGEN WIERBICKI, V. R. CAHILL, L. E. KUNKLE, AND F. E. DEATHERAGE. The Effect of Age of Castration on the Biochemistry and Quality of Meat.

RONALD R. JOHNSON, ORVILLE G. BENTLEY, AND A. L. MOXON. The Synthesis of Vitamin B₁₂ Active Substances by Rumen Microorganisms.

TRUMAN V. HERSHBERGER, ORVILLE G. BENTLEY, AND A. L. MOXON. Studies on the Conversion of Cellulose and Noncarbohydrate Substances to Short-Chain Fatty Acids by Rumen Microorganisms.

J. NAGHSKI AND C. O. WILLITS. Maple Sirup IX. Microorganisms as a Cause of Premature Stoppage of Sap Flow from Maple Tap Holes.

H. P. BROQUIST, A. R. KOHLER, AND W. H. MILLER. Retardation of Poultry Spoilage by Processing with Aureomycin (Chlorotetracycline).

ROGER JERNSTROM AND ROBERT H. KING. Nutritional Significance of DL-Methionine.

H. L. MITCHELL AND RALPH E. SILKER. Stability of Carotene in Dehydrated Alfalfa Meal. Effect of Type of Oil Used to Control Dustiness.

TUESDAY AFTERNOON

D. M. Doty, *Presiding*

E. M. BICKOFF, A. L. LIVINGSTON, JACK GUGGOLZ, AND C. RAY THOMPSON. Quinoline Derivatives as Antioxidants for Carotene.

N. V. LOVEGREN AND R. O. FEUGE. Permeability of Acetostearin Products to Carbon Dioxide, Oxygen, and Nitrogen.

T. HASSELSTROM, E. J. HEWITT, K. S. KONIGSBACHER, AND J. J. RITTER. Investigation of Malabar Black Pepper. II. Further Analysis of Pepper Oil.

J. ALLEN BRENT. Cathode Ray Irradiation of Orange Concentrate.

J. MITCHELL FAIN AND WILLIAM ROSENBLATT. Cigarette Butts as Filters of Nicotine from Smoke.

Symposium on Chemical Aspects of Flavor and Odor Perception

WEDNESDAY MORNING (SEPT. 15)

Dean Foster, *Presiding*

DEAN FOSTER. Introductory Remarks.

JAMES W. JOHNSTON, JR. The Question of Stimulation of the Olfactory Receptor.

HENRY EYRING AND F. WM. CAGLE, JR. Some Chemical Aspects of Odor and Flavor.

ARTHUR L. FOX. A New Approach to Explaining Food Preferences.

HUBERT W. FRINGS. Gustatory Stimulation by Ions and the Taste-Spectrum.

ROBERT B. WARFIELD. Taste and Molecular Structure.

Divisional Luncheon. B. T. SHAW, Agricultural Research Service, U. S. Department of Agriculture. Research—The Catalyst of American Agriculture.

WEDNESDAY AFTERNOON

Lucius W. Elder, *Presiding*

CARL PFAFFMANN. Sensory Mechanisms in Taste Discrimination.

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LLOYD M. BEIDLER. The Physiological Basis of Taste.

LOREN B. SJÖSTRÖM, STANLEY E. CAIRNCROSS, AND DOUGLAS E. MELZARD. Physico-Chemical Studies of Flavor Problems.

JAMES S. BLAIR, JAMES R. MARSHALL, AND P. W. HARDY. Some Questions About Vision and About Olfaction.

ROBERT W. MONCRIEFF. Classification and Identification of Odorants by Selectivity of Adsorption Characteristics. (To be read by LUCIUS W. ELDER).

Business Meeting, Division of Agricultural and Food Chemistry.

Fermentation Subdivision

J. M. Van Lanen, *Chairman*

J. C. Sylvester, *Secretary*

Symposium on Paper Chromatography of Biologically Active Fermentation Products

Joint with Division of Analytical Chemistry

TUESDAY MORNING

(SEPT. 14)

Marvin J. Johnson, *Presiding*

MARVIN J. JOHNSON. Introductory Remarks.

ELDON D. NIELSON. Paper Chromatography of Products of Steroid Fermentations.

GILBERT M. SHULL. Paper Chromatography of Steroid Fermentation Products.

RICHARD P. MILLER, N. E. DAVIS, AND HAROLD L. BIRD, JR. Paper Chromatography as an Aid in the Identification of Antibiotics.

THOMAS J. OLIVER, ARTHUR C. SINCLAIR, ROBERT J. THERIAULT, AND ANN V. ZEIGER. The Use of Paper Chromatography for Identification of Antibiotics in a Screening Program.

HENRY KOFFLER AND J. F. PAGANO. Paper Chromatography of Certain Basic Antibiotics and of Antibacterial Peptides.

TUESDAY AFTERNOON

Symposium on Physical Chemical Aspects of Fermentation, Havemayer Hall, Columbia University. Fermentation Subdivision members, and other interested registrants, are invited to attend this symposium which has been arranged by Columbia University's chemical engineering department in connection with the University's Bicentennial Celebration. E. L. Gaden, *Chairman*.

General Papers

WEDNESDAY MORNING

(SEPT. 15)

J. M. Van Lanen, *Presiding*

H. C. MURRAY, A. WEINTRAUB, D. H. PETERSON, S. H. EPPSTEIN, P. D. MEISTER, L. M. REINEKE, R. C. MEEKS, AND H. M. LEIGH OSBORN. Hydroxylation of Steroids by *Rhizopus*.

S. P. OWEN AND MARVIN J. JOHNSON. A Method for Conducting Continuous Aerobic Shaken Flask Fermentations.

LOUIS LAUFER AND SIDNEY GUTCHO. Preparation of Radioactive Compounds from Yeast.

ERIK G. M. TORNVIST AND WILLIAM H. PETERSON. Effect of Oil on Penicillin Production by Two New Strains of *Penicillium chrysogenum*.

BIJOY BHUVAN AND MARVIN J. JOHNSON. Corn Steep Liquor Substitutes in Penicillin Fermentation.

AUSTIN M. HANSON AND JULIAN CORMAN. Plant Scale Evaluation of the Northern Utilization Research Branch Fungal Amylase Process for Grain Alcohol Production.

Business Meeting, Fermentation Subdivision.

Pesticides Subdivision

L. G. Cox, *Chairman*

J. L. St. John, *Secretary*

Symposium on Pesticides in Tropical Agriculture

THURSDAY MORNING

(SEPT. 16)

Norwood C. Thornton, *Presiding*

NORWOOD C. THORNTON. Introductory Remarks.

JOHN S. NIEDERHAUSER AND DOUGLAS BARNES. Use of Pesticides on Basic Food Crops in the Tropics.

EDSON J. HAMBLETON. Factors Influencing the Demand for Pesticides in Tropical Agriculture.

EATON M. SUMMERS. Pesticides in Sugar Cane.

CLYDE F. RAINWATER AND JOHN T. PRESLEY. Pesticides for Cotton in the Tropical Americas.

RODRICO G. ORELLANA. Chemical Control of Pests and Diseases of Cacao.

FREDERICK L. WELLMAN. Rubber Diseases Controlled by Chemical Applications.

THURSDAY AFTERNOON

FREDERICK L. WELLMAN. Coffee Diseases, Insects, and Weeds Controlled by Chemicals.

E. M. CRALLEY AND F. E. WHITEHEAD. The Use of Chemicals for the Control of Rice Pests.

NORWOOD C. THORNTON. Pesticides in Banana Culture.

STEPHEN S. EASTER. Use of Pesticides for Stored Products in Tropical Countries.

A. F. CAMP. Citrus Pest Control Problems in Citrus Production in Tropical and Subtropical America.

T. J. MUZIK. Weed Control in the Tropics with Special Reference to Puerto Rico.

DIVISION OF FERTILIZER AND SOIL CHEMISTRY

J. D. Romaine, *Chairman*

G. L. Bridger, *Secretary*

Symposium on Fertilizer Technology

WEDNESDAY AFTERNOON

(SEPT. 15)

J. D. Romaine, *Presiding*

G. C. ELLIS AND R. L. FORMAINI. Colorimetric Determination of Biuret.

E. J. FOX AND W. A. JACKSON. Sorption of Surface Active Agents from Aqueous Solution by Phosphate Rock.

F. A. RETZKE, G. F. SACHSEL, AND R. B. FILBERT, JR. Evaluation of Surfactants for Use in Fertilizer Manufacture.

WILLIAM J. TUCKER. A Plant Scale Controlled Experiment Using Surface Ac-

H. H. SCHWARDT, J. G. MATTHYSSE, C. E. PALM, AND DONALD W. BAKER. Arthropod Parasites and the Diseases They Spread in the African and New World Tropics.

General Papers

FRIDAY MORNING

(SEPT. 17)

L. G. Cox, *Presiding*

L. G. COX. Introductory Remarks.

EUGENE P. ORDAS, VICTOR C. SMITH, AND CHARLES F. MEYER. Spectrophotometric Analysis of Technical Chlordan and Technical Heptachlor Residues on Food and Forage Crops.

JOSEPH M. GINSBURG. The Rate of Accumulation of DDT in Soils from Spray Practices.

A. S. PERRY, J. A. JENSEN, AND GEORGE W. PEARCE. Colorimetric and Radioassay Determinations of DDT and Its Metabolites in Resistant House Flies.

LEAVITT N. GARD, BLAINE O. PRAY, AND NOLAND G. RUDD. Isopropyl *N*-(3-Chlorophenyl)carbamate (CIPC) Residues in Various Crops.

JOSEPH F. TREON AND FRANK P. CLEVELAND. The Toxicity of Certain Chlorinated Hydrocarbon Insecticides with Special Reference to Aldrin and Dieldrin.

V. K. ROWE, R. L. HOLLINGSWORTH, AND D. D. MCCOLLISTER. Toxicity Study of a Grain Fumigant.

J. R. BEAUREGARD, T. W. TUSING, AND R. F. HANZAL. Toxicity and Antidotal Studies on an Anticoagulant Rodenticide, Pival (2-pivalyl-1, 3-indandione).

FRIDAY AFTERNOON

L. G. COX. Introductory Remarks.

ARNOLD M. MATTSO, JANET T. SPILLANE, AND GEORGE W. PEARCE. An Organic Phosphorus Compound Highly Toxic to Insects.

C. C. ALEXANDER. Chlorobenzilate, an Effective New Acaricide.

H. F. WILSON AND J. S. BARKER. Acaricidal Activity of α -Substituted Benzhydrols.

KENNETH MORGAREIDGE, HERBERT HELLWEGE, AND BERNARD M. BLANK. Estimation of 2,4-Dichlorophenoxyacetic Acid Residues in Banana Pulp.

PAUL A. GIANG, W. F. BARTHEL, AND S. A. HALL. Colorimetric Determination of *O,O*-Dialkyl 1-Hydroxyphosphonates Derived from Chloral.

Business Meeting, Pesticides Subdivision.

Agents in Mixed Fertilizer Manufacture.

RIKIO KUMAGAI AND JOHN O. HARDESTY. Some Effects of Surface Active Agents in Mixed Fertilizers.

G. L. BRIDGER AND H. A. BURZLAFF. Drying of Ammoniated Superphosphates and Mixed Fertilizers.

THURSDAY MORNING

(SEPT. 16)

G. L. Bridger, *Presiding*

W. L. HILL, J. H. CARO, AND G. A. WIECZOREK. Surface Area of Natural and Processed Phosphates.

C. E. WATERS, WILLARD W. ARNOLD, AND WILLIAM H. PAYNE. Effect of Particle Size Upon the Ammoniation of Superphosphate.

E. C. HOUSTON AND L. D. YATES. Pilot

Plant Production of Diammonium Phosphate Fertilizer from Wet-Process Phosphoric Acid.

PETER G. ARVAN AND ROBERT P. LANGGUTH. The Manufacture and Properties of Liquid Fertilizers.

Business Meeting.

Divisional Luncheon. EDWIN COX. Evolution or Revolution—Plant Food Research.

General Papers

THURSDAY AFTERNOON

George H. Serviss, Presiding

J. FIELDING REED. Chemical Basis for Soil Testing.

JACKSON B. HESTER. Essential Supplemental Tests for Soil and Plant Diagnosis.

H. P. COOPER. Difference in the Relative Response of Calcium Accumulating and Silicon Accumulating Crop Plants to Potash Fertilization.

A. A. NIKITIN AND JULIA P. GOODE. Problems Relating to Trace Elements.

JACKSON B. HESTER. The Value of Leaching Frames in Fertilizer Usage.

N. R. PAGE AND H. P. COOPER. Less-Soluble Boron Compounds for Correcting Boron Nutritional Deficiencies.

CHARLES H. KLINE. Liming with Molybdenum.

FRIDAY MORNING

(SEPT. 17)

J. D. Romaine, Presiding

W. H. MACINTIRE AND A. J. STERGES. Fluorine Retentions and Cation Effects from Hydrofluoric Acid Additions to Four Tennessee Soils.

W. H. MACINTIRE, W. M. SHAW, AND BROOKS ROBINSON. Fluorides of Potassium and Calcium in Soils. A Five-Year Lysimeter Comparison.

FRANK APP. The Application of Chemistry to Soils and Plants for Increased Efficiency of Crop Production.

JAMES M. O'DONNELL. EDTA in Crop Production, the Effect of High Level Applications of EDTA on the Metabolism, Trace Element Utilization, and Fertilizer Utilization of Crops in the Field.

EDWIN J. HAERTL, FREDERICK C. BERSWORTH, AND ARTHUR E. MARTELL. Synthetic Amino Acid Chelating Agents and Their Effects in Agriculture.

ALBERT E. FROST, FREDERICK C. BERSWORTH, AND ARTHUR E. MARTELL. Chelates and Trace Elements in Agriculture.

MARTIN RUBIN AND FREDERICK C. BERSWORTH. Synthetic Amino Acid Chelating Agents in Mineral Nutrition.

Refrigeration Congress

The Ninth International Congress of Refrigeration will be held in France (Paris), August 31st–September 15, 1955. Detailed information concerning arrangements for the Congress may be obtained from the General Secretariat of the International Institute of Refrigeration, 177, boulevard Malesherbes, Paris (17^e).

Fertilizer Section of National Safety Council

The fertilizer section of the National Safety Council will meet in Chicago, Oct. 18 and 19. Safety programs for small plants will be featured in the program.

Charles W. Nelson, Industrial Relations Center, University of Chicago, will discuss his work on a project aimed at discovering the learning habits of fertilizer workmen. W. C. Creel, Safety Director for the Department of Labor, North Carolina, will report on results of a

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formal state-wide safety program aimed at the small fertilizer plant operator in South Carolina.

In addition there will be round table discussions and discussions of safety problems of the fertilizer industry.

German Group Plans Lectures on Fat Technology

The lecture session of the German Society of the Fat Industry will be held in Hanover Oct. 24 to 29. Lectures and reviews in the fields of fats and their technology, including basic research, biology, nutrition-physiology, oilseeds, edible fats, and soaps and synthetics, will be on the program.

Packaging Machinery Makers To Meet at Asheville, N. C.

The Packaging Machinery Manufacturers Institute will hold its 22nd annual meeting at Grove Park Inn, Asheville, N. C., from Sept. 11 to 14. Business sessions will be held in the mornings with sports and other activities scheduled for the afternoons.

Symposium on Britain's Food Survey in London Nov. 20

The Nutrition Society of Great Britain will hold a symposium on the British National Food Survey on Nov. 20. The symposium will be held at The Middlesex Hospital Medical School in London. Some of the topics to be discussed are: the survey technique and methods, equivalent adult scales, the national diet after 14 years of rationing, diets of old people, diets of families with and without children, and general conclusions.

AOCS Plans 4 Symposia For Minneapolis Meeting

Symposia on new analytical methods for fats and oils, drying oils, and pollution and waste disposal in the fats and oils industry are scheduled for the meeting of the American Oil Chemists' Society in Minneapolis Oct. 11 to 13. Headquarters for the meeting will be the Hotel Radisson. Papers on such subjects as edible oil technology, newer aspects of antioxidant chemistry, lipids in cereals, market studies in the fields of fats and oils are also included on the program. A program of more than 80 papers is being planned.

Plant tours are being arranged to the Minnesota Linseed Oil Co., Minnesota Mining & Manufacturing Co., local flour mills, the grain exchange, and the Hormel Institute.

CALENDAR

American Phytopathological Society. Estes Park, Colo. Aug. 25–27.

American Soybean Association and National Soybean Processors Association. Hotel Peabody, Memphis, Tenn. Aug. 30–Sept. 2.

American Institute of Biological Sciences, Society for Industrial Microbiology. Gainesville, Fla. Sept. 6–8.

National Agricultural Chemicals Association. Spring Lake, N. J. Sept. 8–10.

American Chemical Society. 126th National Meeting. New York City. Sept. 12–17.

International Congress of Nutrition. Amsterdam, The Netherlands. Sept. 13–17.

Chemical Market Research Association. Manchester, Vt. Sept. 20–21.

American Oil Chemists' Society. Minneapolis, Minn. Oct. 11–13.

Association of Official Agricultural Chemists. Shoreham Hotel, Washington, D. C. Oct. 11–13.

National Chemical Exposition. Chicago. Oct. 12–15.

Association of American Feed Control Officials. Shoreham Hotel, Washington, D. C. Oct. 13–14.

Association of American Fertilizer Control Officials. Shoreham Hotel, Washington, D. C. Oct. 15.

Association of Economic Poison Control Officials. Shoreham Hotel, Washington, D. C. Oct. 16.

American Society of Agronomy and Soil Science Society of America. St. Paul, Minn. Nov. 8–12.

National Fertilizer Association. Hollywood Beach Hotel, Hollywood, Fla. Nov. 10–12.

Chemical Specialties Manufacturers Association. New York. Dec. 6–8.

North Central Weed Control Conference. Gardner Hotel, Fargo, N. D. Dec. 6–9.

American Institute of Chemical Engineers. New York. Dec. 12–15.