

# ASSOCIATIONS FORUM

## Ag & Food Division Schedules 40 Papers, 2 Symposia for ACS Kansas City Meeting

Awards, symposia, and plant tours of interest to agricultural and food chemists are scheduled for the 125th AMERICAN CHEMICAL SOCIETY meeting in Kansas City, March 23 to April 1. Half of the ACS divisions meet during the first week and the remainder during the second week. The Division of Agricultural and Food Chemistry meets during the first week, with sessions beginning on Wednesday, March 24, and lasting through Saturday, March 27. The Division of Carbohydrate Chemistry begins its session on Monday, March 29, and continues through Wednesday, March 31. Both divisions will meet in Kansas City's Municipal Auditorium.

In addition to the above mentioned divisions, there will be papers and symposia of interest in the programs of other divisions. The Division of Biological Chemistry has scheduled a Symposium on Amino Acids and the Division of Medicinal Chemistry, a Symposium on Diseases of Domestic Animals: Helminthiases.

Betty Sullivan, vice president and director of research for Russel-Miller Milling Co., will receive the Garvan Medal at the meeting and will present the medal address before the Division of Agricultural and Food Chemistry on the physical characteristics of gluten and the reactive groups involved in their change on oxidation. The Borden Award, for accomplishments in the chemistry of milk, will be presented to Donald V. Josephson of Pennsylvania State College. The Award address will also be made before the Division of Agricultural and Food Chemistry, on "Some Chemical Mechanisms Affecting Flavor Acceptability of Dairy Products." Alton Meister, National Cancer Institute, will be honored with the Paul-Lewis Laboratories Award in Enzyme Chemistry. His address, to be presented before the Division of Biological Chemistry, will be on the "Enzymatic Transfer of Alpha Amino Groups."

Charles G. King, Nutrition Foundation, will discuss "Foods—Facts, Fads, and Fancies" at the luncheon of the Division of Agricultural and Food Chemistry on Friday.

Included in the full schedule of plant tours arranged for the meeting are trips to Spencer Chemical's Jayhawk Works, Armour's meat packing plant, Corn Products Refining Co.'s plant, the

Kansas City Board of Trade and Flour Mills of America, Inc., M. K. Goetz Brewing Co., and Muehlebach Brewing.

Visitors to the Spencer plant, which is located 140 miles from Kansas City, will be taken by train on Saturday morning

### DIVISION OF AGRICULTURAL AND FOOD CHEMISTRY

C. S. Boruff, *Chairman*

D. M. Doty, *Secretary*

#### Pesticides Subdivision

L. G. Cox, *Chairman*

J. L. St. John, *Secretary*

#### General Papers

L. G. Cox, *Presiding*

#### WEDNESDAY AFTERNOON (MARCH 24)

WENDELL F. PHILLIPS AND MICHAEL E. DEBENEDICTIS. Determination of Micro-quantities of Organic Chloride Toxicants—A Sodium Reduction Technique.

ROBERT B. BRUCE, JOHN W. HOWARD, AND R. F. HANZAL. Determination of Cyanide, Thiocyanate, and Alpha-Hydroxynitriles in Biological Materials.

JACK HENSEL, ALLEN E. HEWITT, URGLE M. SHEETS, AND R. C. SCOTT. Micro-estimation of Demeton Residues.

JACK HENSEL AND THEODORE KESSLER. Method of Analysis for Demeton.

A. E. O'DONNELL, M. M. NEAL, F. T. WEISS, J. M. NANN, T. J. DECINO, AND S. C. LAU. Chemical Determination of Aldrin in Crop Materials.

B. I. SPARR AND C. V. BOWEN. A Method of Evaluating Emulsifiability of Emulsible Insecticide Concentrates.

JIRO K. KODAMA, HAMILTON H. ANDERSON, AND CHARLES HENRI HINE. Structure-Action Relationships of Organophosphorus Compounds in Laboratory Animals and Man.

#### Symposium on the Formulation of Pesticides

H. O. Thomas, Jr., *Presiding*

#### THURSDAY MORNING (MARCH 25)

H. O. THOMAS, JR. Introductory Remarks.

LOYD L. ISENHOUR AND GEORGE L. BROWN. Physical and Chemical Properties of Organic Pesticides as Related to Formulation and Application.

LYNN K. BRUNN AND ROBERT W. BEHRENS. The Role of Surfactants and Solvents in the Formulation of Liquid Pesticides.

JOHN F. LES VEAUX, HARRY WEST, CARROLL C. CASSIL, AND FRANK S. BLACK.

to the plant, where ammonia and ammonium nitrate are manufactured by the natural gas reforming process. At Corn Products, 33,000 bushels of shelled corn are converted each day to cornstarch, Karo sirup, gluten feed and meal for cattle, and corn germ.

Complete programs for the Divisions of Agricultural and Food Chemistry and Carbohydrate Chemistry are listed below.



C. S. Boruff

Formulation of Pesticide Dry Concentrates and Dilute Dusts.

MERWYN D. RIDDLE. Equipment for the Commercial Manufacture of Pesticide Formulations.

F. A. GUNTHER AND R. C. BLINN. Composition Analyses of Technical Grade Materials and Formulated Products Containing Pesticides.

#### THURSDAY AFTERNOON

N. F. HARDMAN AND H. O. THOMAS, JR. Pesticide Formulations as Related to Field Performance.

J. D. WILSON. Fungicide Formulations as Related to Field Performance.

L. W. HAZLETON. Problems Related to Toxicity Studies of Pesticides and Formulations.

WILLIAM R. BRADLEY. Industrial Hygiene Control in the Manufacture of Pesticides.

#### Symposium on Mechanical and Engineering Aspects of Pesticide Application

Joint with Division of Industrial and Engineering Chemistry

J. A. Kelly, *Presiding*

#### FRIDAY MORNING (MARCH 26)

O. I. BERGE. Some Aspects of the Deposition of Pesticides on Plants.

FRANK IRONS. Hydraulic Spray Equipment.

CLIFFORD O. EDDY. Ground Dusting Equipment.

JAMES P. CARR AND JOSEPH M. PATTERSON. Effective Application of Chemicals with Air Sprayers.

FRED E. WEICK. Aircraft Sprayers and Dusters.

## Associations Forum

WILLIAM H. ZEHNER. Equipment Problems and Materials of Construction.

**Divisional Luncheon.** C. G. KING AND HORACE L. SIPPLE. Subject: Foods—Facts, Fads, and Fancies.

Frank Irons, *Presiding*

### FRIDAY AFTERNOON

J. D. WILSON. Application of Fungicides by Concentrate Sprayers.

L. L. COULTER. Herbicide Application and Equipment.

L. E. CREASY, N. K. TALBERT, AND C. E. WILSON, JR. Some Equipment Aspects of the Pre-Emergence Application of Wettable Powder Herbicides.

**Business Meeting,** Pesticides Subdivision.

### General Papers

J. L. St. John, *Presiding*

### SATURDAY MORNING

(MARCH 27)

ROBERT H. DAINES AND T. W. REED. Reduction in Losses of Apples and Peaches

## DIVISION OF CARBOHYDRATE CHEMISTRY

Nelson K. Richtmyer, *Chairman*

Norman F. Kennedy, *Secretary*

### General Papers

Carl C. Kesler, *Presiding*

### MONDAY MORNING

(MARCH 29)

NELSON K. RICHTMYER. Introductory Remarks.

R. L. LOHMAR. The Structure of Alpha-Amylase-Modified Waxy Corn Starch.

R. M. SANDSTEDT, JAMES FLEMING, AND DON CARTER. The Structure of the Wheat Starch Granule as Revealed by Enzyme Action.

R. M. SANDSTEDT AND JAMES FLEMING. The Swelling and Enzyme Digestion of Mechanically Injured Wheat Starch Granules.

H. N. BARHAM AND B. A. SIMMONS. A Statistical Study of the Alkali Numbers of Various Starches.

H. N. BARHAM, R. R. HAHN, AND L. B. PAINE. The Aqueous Reaction of Chlorine with Alkali Starch.

F. E. HORAN AND G. V. CAESAR. Effect of Sulfur Dioxide, Sulfites, and Sulfates on the Pasting Properties of Wheat Starch.

EDNA M. MONTGOMERY AND M. A. QUINONES. A New Low Molecular-Weight Saccharide from an Enzyme Hydrolyzate of Waxy Cornstarch.

W. O. S. MEREDITH AND J. ANSEL ANDERSON. Relations Between Barley and Malt Gums.

### MONDAY AFTERNOON

WELKER G. BECHTEL. The Relationship of Starch to Bread Staling.

J. E. HODGE, B. E. FISCHER, AND C. E. RIST. Preparation and Properties of Crystalline Nitrogenous Reductions from the Reaction of Aldoses with Amines.

**Intermission of 10 Minutes.**

J. D. GEERDES AND F. SMITH. The Constitution of the Hemicellulose of the Straw of Flax (*Linum usitatissimum*, sp.).

R. MONTGOMERY AND F. SMITH. The Constitution of a Water Insoluble Hemi-

During Storage by the use of Fungicides Orchard Sprays.

S. S. BLOCK. Fungitoxicity of the Oxines.

FRANKLIN C. NELSON AND GEORGE W. FIERO. Pesticide Formulation in a Selected Aromatic Fraction Naturally Occurring in Petroleum.

E. D. WITMAN. Weed Control in Cotton with Chloro IPC (motion picture).

### General Papers

C. S. Boruff, *Presiding*

### FRIDAY MORNING

(MARCH 26)

H. YACOWITZ, V. D. CHAMBERLIN, A. R. WINTER, AND E. N. MOORE. Detergents and High Levels of Antibiotics in the Ration of Breeding Hens.

C. H. SULLENGER, D. B. PARRISH, P. E. SANFORD, AND J. S. HUGHES. Observations on Groups of Chickens Continuously Receiving Feeds Containing Five Different Levels of Vitamin A.

MERLE M. KRIDER AND MONROE E. WALL. Steroidal Sapogenins. XBIII. Partial Hydrolysis of Steroidal Saponins.



N. K. Richtmyer

cellulose of the Flour of Wheat (*Triticum Vulgare*).

CHEN-DHUAN TU, MIAJA LAKSTIGALA, AND KYLE WARD, JR. Formation of New Glucoside Linkages During the Hydrolysis of Cellulose Triacetate in Chloroform.

**Executive Committee Meeting.**

### Symposium on Dextran

(Continued from Chicago 1953 Meeting)

Frederic R. Senti, *Presiding*

### TUESDAY MORNING

(MARCH 30)

FREDERIC R. SENTI. Introductory Remarks.

N. N. HELLMAN, H. M. TSUCHIYA, S. P. ROGOVIN, B. L. LAMBERTS, R. TOBIN, C. A. GLASS, C. S. STRINGER, R. W. JACKSON, AND F. R. SENTI. Controlled Enzymatic Synthesis of Dextran Having Clinically Suitable Molecular Weight.

MYER M. FISHMAN. A Molecular Weight Distribution Technique for Dextran Solutions.

R. L. MELLIES, S. P. ROGOVIN, I. A. WOLFF, AND C. E. RIST. Partial Acid Hydrolysis and Fractionation of the Dextrans from *Leuconostoc mesenteroides* NRRL B-742 and *Streptobacterium dextranicum* NRRL B-1254.

R. J. DIMLER, H. A. DAVIS, G. J. GILL, AND C. E. RIST. Analytical Total Acid Hydrolysis of Dextrans.

JOHN C. RANKIN AND ALLENE JEANES. Evaluation of the Periodate-Oxidation

E. D. WALTER, G. R. VANATTA, C. R. THOMPSON, AND W. D. MACLAY. Alfalfa Saponin.

BETTY SULLIVAN. (**Garvan Medal Address**). The Physical Characteristics of Gluten and the Reactive Groups Involved in Their Change on Oxidation.

A. L. CURL AND G. F. BAILEY. The Polyox-ygen Carotenoids of Valencia Orange Juice.

D. M. Doty, *Presiding*

### FRIDAY AFTERNOON

H. L. MITCHELL, R. E. BEAUCHENE, AND RALPH E. SILKER. Stability of Carotene in Dehydrated Alfalfa Meal. Effect of Antioxidants, Oil, and Heat.

D. F. ROUSTON, I. R. HUNTER, ELIZABETH A. MCCOMB, AND E. B. KESTER. Deterioration of Stored Parboiled Rice—Changes in the Oil Fraction.

J. C. COWAN, P. M. COONEY, AND C. D. EVANS. Metal Inactivators and Synergism.

D. V. JOSEPHSON. (**Borden Award Address**). Some Chemical Mechanisms Affecting Flavor Acceptability of Dairy Products.

**Business Meeting,** Division of Agricultural and Food Chemistry.

Method for Structural Analysis of Dextrans.

J. W. VAN CLEVE, W. C. SCHAEFER, AND C. E. RIST. The Structure of NRRL B-512 Dextran. Methylolation Studies.

### General Papers

Nelson K. Richtmyer, *Presiding*

### TUESDAY AFTERNOON

NELSON K. RICHTMYER. Introductory Remarks.

CLINTON E. BALLOU AND HERMANN O. L. FISCHER. The Structure of Isopropylidene D-Inositol.

P. ANDREWS, L. HOUGH, AND J. K. N. JONES. Methylene Derivatives of 1-Rhamnose.

R. U. LEMIEUX, CAROL BRICE, AND G. HUBER. The Effect of Chlorine Substitutions at the C<sub>2</sub>-Acetoxy-Group on Some Properties of the Glucopyranose Pentaacetate.

R. W. JEANLOZ. Synthesis of 3,6-Di-O-Methyl-D-Glucosamine Hydrochloride.

**Divisional Dinner.**

### WEDNESDAY MORNING

(MARCH 31)

EMMANUEL ZISSIS AND NELSON K. RICHTMYER. Methylene Derivatives of D-Arabitol (Synonym, D-Lyxitol).

V. R. DEITZ, F. G. CARPENTER, W. V. LOEBENSTEIN, AND N. L. PENNINGTON. A Simplification in the Color Evaluation of Commercial Sugar Liquors.

D. P. LANGLOIS AND L. H. ALVESON. Solubility of Dextrose, Maltose, and Sucrose in Three Component Systems.

ROY L. WHISTLER AND H. E. CONRAD. Oligosaccharide Fragments from Okra Mucilage.

## Soap Producers Sponsor Fatty Acid Research

A fellowship in the USDA to study industrial application of fatty acids has been announced by the Association of American Soap & Glycerine Producers. The research fellowship, which will pro-

vide for a junior and senior fellow to be supervised by the USDA's Eastern Regional Research Laboratory, is to be sponsored by the association's fatty acid division.

In the research program already under way at the ERRL special emphasis has been placed on new industrial applications for domestic fats. Increased production and lower consumption of fats and oils in recent years has resulted in amounting surplus of these products (AG AND FOOD, July 8, 1953, pages 552-59). Surplus animal fats amounted to about 700 million pounds in 1952.

### **Pan-American Agronomy Congress Meets in Brazil in March**

The second Pan-American Congress of Agronomy will be held March 29 to April 6 in Sao Paulo, Brazil. The congress will be part of the commemoration of the 400th anniversary of the founding of Sao Paulo.

The congress will be divided into 16 sections: teaching and profession questions; soil, fertilizers, and rotation; agricultural engineering and soil protection; agricultural products technology; botany; phytopathology; entomology; economics and rural organization; genetics and breeding; field experimentation and statistics; field crops; forestry and fruitculture; vegetables and ornamental plants; pastures and forage crops; animal nutrition; and livestock.

Further details can be obtained by writing the American Society of Agronomy, 2702 Monroe St., Madison 5, Wis.

### **Distillers Feed Conference In Cincinnati March 10**

New information regarding the use of distillers feeds for all classes of livestock will be presented for feed executives and research workers at the Distillers Feed Conference, which is to be held in Cincinnati on March 10. Sessions will be held at the Sinton Hotel. On the day after the conference, registrants will be taken on a tour of a distillery of their choice in the Cincinnati area.

The conference, program of which is printed below, will conclude with a social hour and banquet in the evening. Herrell DeGraff, Babcock professor of food economics at Cornell University, will address the banquet.

WILLIAM T. DIAMOND. What's the Score for '54.

C. F. HUFFMAN AND F. H. NOLLER. Distillers Dried Solubles in Milk Replacers.

W. P. GARRIGUS. Distillers Dried Grains with Solubles as a Protein Supplement for Fattening Steers in Drylot.

L. C. NORRIS. Unidentified Chick Growth Factors in Distillers Dried Solubles.

## **CALENDAR**

**Canadian Agricultural Chemicals Association.** Royal York Hotel, Toronto, Ont. Feb. 19.

**Midwest Soil Improvement Association.** Palmer House, Chicago, Ill. Feb. 19.

**American Chemical Society,** 125th Annual Meeting. Kansas City, Mo. March 23-April 1. (Division of Agricultural and Food Chemistry, March 24-27. Division of Carbohydrate Chemistry, March 29-April 1.)

**National Agricultural Chemicals Association.** Shamrock Hotel, Houston, Tex. March 24-26.

**Pan-American Congress of Agronomy.** Sao Paulo, Brazil. March 29-April 6.

**Forest Products Research Society.** Grand Rapids, Mich. May 5-7.

**American Association of Cereal Chemists.** Cosmopolitan Hotel, Denver, Colo. May 23-27.

**American Plant Food Council.** The Homestead, Hot Springs, Va. June 10-13.

**National Fertilizer Association.** Hotel Greenbrier, White Sulphur Springs, W. Va. June 14-16.

**Institute of Food Technologists.** Hotel Biltmore, Los Angeles, Calif. June 27 to July 1.

**Pacific Northwest Regional Fertilizer Conference.** Klamath Falls, Ore. July 20-22.

## **Associations Forum**

R. A. RASMUSSEN. Growth Stimulants in Distillers Dried Solubles.

H. A. CONNER. Determination of Fiber in Distillers Feeds.

J. R. COUCH. Distillers Dried Solubles for Growth and Hatchability.

D. V. CATRON. Distillers Dried Solubles in Starter Rations for Baby Pigs.

J. K. LOOSLI AND R. G. WARNER. Review of Four Years' Work on Distillers Feeds for Milk Production.

GEORGE M. BRIGGS. Recent Advances in Poultry Nutrition.

E. I. ROBERTSON, moderator of panel discussion.

### **W. C. Shaw Elected Head Of Southern Weed Conference**

Warren C. Shaw of USDA's Agricultural Research Service has been elected president of the Southern Weed Conference. He succeeds W. B. Ennis, also of USDA. New vice president is G. C. Klingman of the North Carolina State College of Agriculture and Engineering. E. G. Rodgers of the University of Florida is secretary-treasurer.

### **Soybean Association Meeting in Memphis**

The 34th annual convention of the American Soybean Association will be held in Memphis, Tenn., Aug. 30 and 31, and Sept. 1, it has announced.

Convention headquarters will be Hotel Peabody.

### **Sugar Beet Technologists Elect New Officers**

At the recent meeting of the American Society of Sugar Beet Technologists in Denver, announcement was made of the election of Phillip B. Smith (left), Great Western Sugar Co., as new president of the group. F. V. Owen (right), principal geneticist, USDA, was elected vice president. James H. Fischer, Sugar Beet Research Foundation, was re-elected secretary-treasurer. The next general meeting of the society will be held in San Francisco, Calif., in February 1956

