

built at Long Beach and phosphoric acid facilities will be enlarged at Trenton. Expansion of units for sodium tripolyphosphate and new facilities for tetrasodium pyrophosphate will be undertaken at St. Louis. A new acid burner is scheduled for the Monsanto, Ill., plant.

Dieldrin Soon to Be Sold for Household Use

Shell Chemical has announced that its insecticide dieldrin will soon be available for use in homes. Until now, its use has been mostly on farms, ranches, and lawns. USDA has granted label acceptance for the use of dieldrin as a spray or dust in households for controlling roaches, ants, silverfish, ticks, carpet beetles, paper nest wasps, and mud daubers.

IM&C Acquires Refractory Plant

International Minerals & Chemical Corporation has acquired Sonsel Refractories Corporation at Brighton, Mich. The newly acquired plant will continue production of zirconium refractories under a patented process and other special refractories on an expanded scale as part of International's industrial minerals division.

C&I Acquires Rights to License Stengel Process

The Chemical & Industrial Corp., Cincinnati, Ohio, has recently acquired the right from Commercial Solvents Corp. to license the Stengel process for ammonium nitrate production. This process makes it possible to produce granular ammonium nitrate in almost a single step from nitric acid and ammonia. The Stengel process will produce ammonium nitrate solutions or a dry, molten salt. Chemical & Industrial Corp. is prepared to design and erect plants using this process.

Research

Peat Soil Conditioner Developed in Holland

A soil conditioner and fertilizer based on black peat has been developed in Holland. Intermittent reduction and oxidation of peat in an autoclave using ammonia and oxygen produces the product known as X2. Field tests showed X2 to give increases in crop yields of up to 25%. Investigations at Wageningen Agricultural University were reported during the recent International Peat Symposium at Dublin.

"Maneb" Selected Name for Fungicidal Chemical

The coined name maneb has been selected by the Interdepartmental Committee on Pest Control for the fungicidal chemical manganese ethylenebis(dithiocarbamate). The American Phytopathological Society, the American Medical Association, and the American Chemical Society have also agreed to the selection. The Interdepartmental Committee is made up of representatives of the Departments of Agriculture, Interior, Army, Navy, Air Force, and Health, Education, and Welfare.

The chemical has previously been known by its chemical name and also as manganese EBD, MnEDB, and MED. The name maneb refers to the pure chemical and technical grade should indicate the percentage of the pure chemical present.

Atomic Agriculture in Canada

Chalk River, Canada's Oak Ridge is serving as a source of isotopes for agricultural research for Canadian researchers investigating a variety of agricultural problems. Studies as diverse as measurement of soil moisture habits of cutworms and production of humus are under way.

At Saskatchewan University phosphorus-32 has been used as a tracer to study the uptake of phosphorus by wheat and barley seeds and seedlings. More than 90% of the phosphorus is apparently absorbed by the grain and seedlings within the first 13 days after germination. To study the movement of cutworms and other underground insects, pieces of radioactive wire were cemented to the larvae. The movements and activities of the larvae underground could then be followed with radiation detection devices.

The effects of phosphate fertilizers on high lime soils is being studied with radioactive phosphorus at Ontario Agricultural College. Workers there are also investigating the amount of available phosphorus occurring naturally in the soil with isotopes.

Carbon-14 has been used to test soil conditioning chemicals and to tag amino acids in plants to determine how organic materials affect production of humus in plants.

BHC Found to Cause Off-Flavor in Olives

Musty off-flavor of olives, reported from three different areas of California recently, has been traced to certain insecticides by University of California Research scientists.

Food technologist Reese H. Vaughn and Pomologist Hudson T. Hartmann, on the Davis Campus, found that the unusual musty flavor in canned ripe olives is caused by benzene hexachloride.

Tests at the University's Wolfskill experiment orchard in winters show that when the chemical is sprayed on the leaves, applied to soil under the trees, or painted on fresh pruning cuts, the off-flavor may develop in processed fruits. Lindane, a purified form of benzene hexachloride, also produced the off-flavor.

If the insecticide drifts into olive groves from nearby crop fields, it will flavor the fruit, the researchers warned.

Education

Award for Agricultural Bibliographies

Entries are being accepted now for the Oberly Memorial Award made every two years by the American Library Association for the best bibliography in the field of agriculture or the natural sciences.

Further information about entries is available from J. Richard Blanchard, librarian, University of California Library, Davis, Calif., who is chairman of the Oberly Memorial Fund Committee.

Points to be considered in judging the bibliographies, according to Blanchard, are: accuracy, scope, usefulness, format, and special features such as explanatory introductions, annotations, and indexes.

Research Fellowship Set Up as Memorial to Sir Jack Drummond

The appeal for funds for the Sir Jack Drummond Memorial has closed and the trustees of the fund have announced that more than \$750,000 has been received. A research fellowship has been established for work in nutrition and the fellowship will be available for work in any research institute in Britain or overseas.

Headquarters for administration of the trust will be in the University College, London.

People

Culpepper Replaces Riley As Spencer VP for Sales

Joe E. Culpepper has been elected vice president and will continue to serve as general sales manager for Spencer Chemical. J. R. Riley, Jr., vice president in charge of sales for the company, has resigned but will continue to be active as a director, member of the executive

committee, and consultant. Other personnel changes in the Spencer sales set-up include:



J. E. Culpepper

Harold R. Dinges, from director of product sales to assistant general sales manager; **George V. Taylor**, from director of sales development to director of product sales; and **E. W. Segebrecht**, from assistant to the general sales manager to director of sales development.

Ritner W. Tomlinson, superintendent of Pennsalt's Calvert City, Ky., plant, will succeed **Frank J. Power** in a similar capacity at the Cornwells Heights, Pa., plant. Mr. Power will replace the late **George Boyce** as area supervisor at the Wyandotte, Mich., works.

J. P. Middleton, former production superintendent of Velsicol's insecticide manufacturing, has been appointed administrative assistant at the company's Memphis plant.

Charles A. Joyce, former sales manager of Glidden Co.'s feed mill division, has been appointed executive assistant to the general manager of the Durkee Famous Foods Division.

Robert A. Staniforth, director of research for Monsanto's Mound Laboratory, assumes new duties on Sept. 1 as manager of chemical development in the development department, inorganic chemicals division, Monsanto.

Wendell H. Tisdale, plant pathologist and a technical advisor on agricultural subjects in Du Pont's Grasselli chemicals department, retired July 31 after 27 years with the company. While with the company, Dr. Tisdale was instrumental in developing dithiocarbamate and thiuramsulfide fungicides and cerasan seed disinfectant. He is also credited with developing lignasan fungicide. He joined Du Pont as a researcher for the organic chemicals department and in 1930 was put in charge of its research on insecticides and fungicides. In 1937, he became manager of the pest control research section in the new Grasselli department. Since 1949, he has been technical advisor in the Grasselli chemicals department, working on control measures for plant diseases, insects, and weeds in Latin America.



H. O. Kauffman, technical director

for Buffalo Electro-Chemical, has been appointed to the company's board of directors.

Russell F. Jagoditsh has been promoted chief chemist and **Jack W. Means** to assistant chief chemist of Chase Bag Co. **Allen Daniels** succeeds Mr. Jagoditsh as head of the paper mill quality control department.

Paul S. Gerot, president of Pillsbury Mills, Inc., and **Kenneth A. Spencer**, president of Spencer Chemical, have been elected to the board of trustees of the committee for economic development.

Robert W. Wert has been appointed to head the technical sales and service staff handling agricultural chemical products for the Attapulugus division of Minerals & Chemicals Corp. of America. He succeeds **W. M. Jarnagin**, who has been assigned to a development project apart from agricultural chemicals sales.

Bernard Wolnak has resigned his position as research and consulting chemist with the Miner Laboratories in Chicago to open the Mid-West Laboratories, Chicago, Ill. These laboratories will be devoted to research, development, and consulting in the fields of industrial biochemistry, fermentation, by-product utilization, and waste disposal problems.

John D. Zigler has been promoted to the newly created position of operating manager of International Minerals & Chemical's plant food division, effective Sept. 1. In this capacity he will have authority over 8 area managers in the field and responsibility for production and sales of the division's 26 fertilizer plants. He has been area manager at Chicago Heights, Ill. **F. S. Walters** has been named acting production manager of the division and **Don W. Allison** as industrial engineer supervisor.

William E. Collins, recent recipient of a Ph.D. in entomology at Rutgers, has joined the technical staff of Diamond Alkali's chlorinated products division to work on development and technical service of agricultural chemicals.

Ernest H. Heath, Jr., has been appointed sales manager of the newly created flexible packaging division of Arkell & Smiths. He has been associated with Dobeckman Co.

John L. Barnhart, technical director of the Dairy Industries Supply Association, is on a limited leave of absence to advise the Puerto Rican government on its dairy by-products plant project.

Hugh W. Sloan, vice president of St. Regis Paper Co. (Canada) Ltd. has been appointed to direct the company's operations, succeeding **Thomas H. Cosford**,

who was managing director of the Canadian company until his retirement in June.

A. A. Alber, **Harold Boardman**, **David S. Breslow**, **George E. Hulse**, **Charles W. Gould**, **Gerald I. Keim**, **Arthur F. Martin**, and **Robert S. Voris** have been promoted by Hercules Powder to the rank of senior research chemists, the first so named in the last six years.

Directors of Smith-Douglass Co., Inc., announced the appointment of **W. B. Copeland** as executive vice president of the firm, after their quarterly meeting held in Norfolk in July 21. Copeland has been a vice president of the company since October 1948. The executive vice president post is a newly created position. **S. L. Lott**, controller and assistant treasurer, at the same time was named treasurer of the company by the directors. Previously, **Ralph B. Douglass**, president of the firm, also held the post of treasurer.

G. S. Schaffel has been appointed manager of research for Brea Chemicals. Dr. Schaffel served 4 years at the research laboratories of Westinghouse, leaving there in 1946. He was in the research and production departments of General Tire & Rubber Co.

Jack K. Lindsey, formerly district sales manager of International Minerals & Chemical Corp.'s plant food division, Cincinnati, Ohio, has been appointed district sales manager, potash division, Shreveport, La. Mr. Lindsey, who has been with International since July 1952, was formerly sales manager for the Buhner Fertilizer Co. of Danville, Ill.

James H. Wakelin, former director of research of Textile Research Institute, has been named a consultant to Stanford Research Institute. Dr. Wakelin joined the Princeton, N. J., textile study center in 1948 to direct research in various natural and synthetic fibers.

Among those retiring from the University of California's college of agriculture on July 1 were: **James P. Bennet**, professor of plant physiology and plant physiologists at the experiment station; **Arthur D. Borden**, lecturer in entomology and experiment station entomologists; **William V. Cruess**, professor of food technology and experiment station biochemists; **Edward O. Essig**, professor of entomology and experiment station entomologist; **Agnes Fay Morgan**, professor of home economics, chairman of the department, and biochemist in the experiment station; **Ben A. Madson**, professor of agronomy, director of field stations, and agronomist in the experiment station; **Frank J. Veihmeyer**, professor of irrigation, chairman of the department, and irrigation engineer in the experiment station.