0.05%. For laboratory determinations, the thermistor bridge is inferior to use of Karl Fischer reagent, although it can be adapted for continuous monitoring when used in conjunction with an automatic sampling system.

"Volume sampling instead of conventional weighing has enabled our control chemists to shorten Karl Fischer procedures from 10 minutes down to 5 minutes," declared Englebrecht, "and we are now using this method successfully in plant monitoring."

Industry

Phillips Sets Up Pasture Demonstration Farm

Phillips Petroleum Co. has established an agricultural demonstration project four miles north of Foraker, Okla. Studies involving the feasibility of nitrogen and phosphate fertilizer on native and introduced grasses and legumes will be conducted. Also under study will be the economics of revegetating areas previously cultivated, range land conservation and management, and the adaptability of various plant species and selected varieties in pasture improvement.

Chemical Enterprises Earnings Increase 27% for Fiscal year

Net sales of Chemical Enterprises, Inc., and affiliates in the fiscal year ending June 30 amounted to \$7,389,000 compared with \$6,513,000 in the preceding fiscal year, an increase of 13%, according to the company's annual report. Net profit after taxes was \$224,000 compared with \$177,000 in the 1953 fiscal year, an increase of 27%. The parent company's share in these earnings for 1954 was \$196,000. Comparisons of operating results are based on proforma statements.

Chemical Enterprises, Inc., distributes agricultural supplies, principally anhydrous ammonia, through its affiliated companies in key agricultural areas of the United States. During the year the company acquired 10 companies operating in Louisiana, Texas, and Washington and a 50% interest in the Southeastern Liquid Fertilizer Company of Georgia.

The number of anhydrous ammonia stations controlled by the affiliated companies increased from 97 in June 1953 to 193 in June 1954. In addition the companies control 120 outlets for other materials, principally in the Midwest. The parent company presently comprises 21 affiliated companies with 15 subsidiaries. They serve agricultural communities in 19 states whose major crops include cotton, corn, sugar beets, wheat, and other small grains.

Union Carbide Moves Offices To New Building in Cleveland

Union Carbide & Carbon Corp. has consolidated its Cleveland offices in a new, two-story building. Previously, the company's Cleveland offices were scattered in five different buildings. The new building is at 1300 Lakeside Ave.

Dole Consolidates Offices in San Jose, Calif.

Dole Hawaiian Pineapple has consolidated its sales and California production divisions into a new office and warehouse building in San Jose, Calif. The sales division was formerly located in San Francisco, only the company's mainland purchasing office remaining there.

People

Field Named Carbide & Carbon VP

John A. Field, former assistant manager of the fine chemical department of Carbide & Carbon, has been appointed vice president of the division. He will be responsible for sales development and related activities.

H. B. Vickery of the Connecticut Agricultural Experiment Station has been presented with the Cigar Industry Annual Research Award in recognition of his outstanding contributions to the chemistry of the tobacco plant.

Henry W. Gadsden has been named vice president of Merck & Co. and John G. Bill has been named vice president and general manager of the Sharpe & Dohme division of Merck.

W. N. Brock, vice president and general sales manager of Chase Bag Co., has been elected president of the Chicago Feed Club.

Bryce L. Rhodes, formerly vice president of Synthron, Inc., has been named development manager of the phosphate chemicals division of International Minerals & Chemical. H. Clair Dyer has been promoted from an assistant sales manager in the phosphate minerals division to eastern area sales manager for the phosphate chemicals division's special products department.

L. R. Modlin, Jr., has been named field sales manager of B. F. Goodrich Chemical's general chemical sales department.

Fred A. DeMaestri, formerly technical supervisor of Ehret Magnesia Mfg. Corp., has been elected vice president in charge of operations of Michigan Chemical.

M. J. Swortfiguer has been named to a permanent position on the bakery service staff of the American Dry Milk Institute. He has been working on special assignments for the institute during the last six months and was formerly production supervisor for the Kroger Co. bakeries.

John A. Coleman has been named assistant laboratory director in product evaluation at the central laboratories of General Foods. He was formerly marketing research associate.

Lee A. Keane, vice president of the USI division of National Distillers Products Corp., has been named director of chemical sales for all of National Distillers. Robert H. Cornwell becomes director of production for all of the company's chemical plants. Stuart Schott, new director of research, will be in charge of the research division for the entire corporation and its subsidiaries.

John J. B. Fulenwider, general manager of Hercules Powder's cellulose products department and a member of the board of directors since 1945, has been elected a vice president and member of the executive committee. Elmer F. Hinner will succeed him as general manager of the cellulose department and Edward G. Crum replaces Mr. Hinner as general manager of the Virginia cellulose department.

Fred A. Manske has been elected to the newly created position of executive vice president of National Gypsum. Wells F. Anderson was elected vice president in charge of operations and manufacturing, the position formerly held by Manske. William M. North was elected vice president to assist the chairman of the board. Clifford F. Favrot was elected to the board.

Carl C. Kesler, research and development director of Penick & Ford, Inc., has been elected chairman of the Division of Carbohydrate Chemistry of the ACS, succeeding Nelson K. Richtmyer, principal chemist at the National Institutes of Health. John C. Sowden, associate professor of organic chemistry at Washington University, was named chairmanelect.

John R. Sargent has been elected vice president in charge of sales for Federal Chemical Co. Sam E. Shelby was elected vice president in charge of production. Sargent has been general sales manager of the company for the past eight years and Shelby has been general production manager for the past two years.