



Deere's Ammonia Plant Nears Completion in Oklahoma

Aerial view of Deere & Co.'s \$20 million nitrogen plant in final stages of construction near Pryor, Okla. The plant to produce anhydrous ammonia and urea will be the first production facility of Deere's Grand River Chemical Division. Ammonia production is expected to begin in June, urea production is scheduled for a later date. The plant has a rated daily capacity of 180 tons anhydrous ammonia, the majority of which will be used for synthesis of fertilizer grade urea which Deere will market as an adjunct to its traditional farm equipment business. L. A. Rowland, general manager of Deere's chemical division says, "The plant will serve the growing nitrogen demands in the broad central belt of the U. S. A tremendous fertilizer potential exists in this area which promises rapid development"

technology subjects as food chemistry and nutrition, effects of microorganisms on foods and food products, control of chemical changes in foods, flavor and food acceptance, unit operations, equipment, packaging, fermentation, and the like.

In the third week, participants may elect to participate in any one of four fields of specialization, including sanitation, nutritional evaluation of food processing, food acceptance and flavor evaluation, or radiation sterilization.

Tuition for the course is \$150. Further information and application forms can be obtained from Ernest H. Huntress, director of the Summer Session, MIT, Cambridge 39, Mass.

Research

Configuration in Relation to Structure of Insecticide

The development of a practical technique for the synthesis of pyrethrin type compounds has resulted in the accumulation of evidence that the molecular configuration of the pyrethrin molecule may be important in the insecticidal action.

A paper reporting on the relative toxicity of the four stereoisomers of DL-allethrolone and the significance with respect to configuration has recently been published in the *Journal of Economic Entomology*, Vol. 45 (5), pp. 849-50 (1953) by W. A. Gersdorff and William Mitlin.

Briefly the principal conclusions of the paper are as follows:

The L-allethrolone D-trans chrysan-

themumic acid ester, the DL ester, the LL ester, and the DD ester are, respectively, 0.579, 0.138, 0.0224, and 3.37 as toxic to house flies as allethrin.

Two generalizations are made. With the same acid component the change from the L to the D form of the allethrolone component is accompanied by a six-fold increase in toxicity of the ester. With the same allethrolone component the change from the L to the D form of the acid component is accompanied by a 25-fold increase in toxicity of the ester.

The change in each component simultaneously from the L to the D form is accompanied by the product of the separate effects.

On The Cover

The Modern Medicine Man

DESPITE THE EFFORTS of government agencies and private organizations to prevent and control false and misleading advertising, food faddists sell their wares by making wild and unsubstantiated claims for their products. These food faddists have become the modern medicine men. Although the products in themselves may be safe, harm results in the buyer's belief in their claims and the consequent neglect of proper nutrition. Public education is a problem for nutritionists and food processors, as it is for so many other scientists and reputable manufacturers.

Cover drawing from original by Ray Hight in "Trail Blazers in Advertising" by Chalmers Lowell Pancoast

People

Sandstedt to Receive Osborne Medal in Cereal Chemistry

Rudolph M. Sandstedt of the University of Nebraska has been selected by the American Association of Cereal Chemists to receive its highest award, the Thomas Burr Osborne Medal, for his



"distinguished contributions to cereal chemistry." The medal, founded in 1926 but awarded only eight times since then, will be presented to Prof. Sandstedt at the AACC's annual meeting in Denver

in May (see page 380). Study of wheat and its components has been his major research interest, including the development of cereal laboratory equipment and analytical methods for evaluating flour properties. In addition, he has conducted long-term research on proteolysis of doughs. Recently he has been working in starch chemistry, a phase of which has been the use of lapsed-time photomicrographic techniques to study raw starch digestion. He is the author of over 70 publications and has produced eight photomicrographic motion pictures to date. He was managing editor of *Cereal Chemistry* 1944-48 and president of the AACC in 1947-48.

George S. Wheaton, assistant vice president of American Potash & Chemical Corp., has been named head of the company's Eston Chemicals Division.

Russell L. Jenkins has been appointed associate director of inorganic chemical research in Monsanto's Research and engineering division. John M. Butler and Milton Kosmin have been named assistant directors of the chemical research department. W. H. Yanko was named a group leader in the department.

Donald A. Schallock has left the post of assistant professor of agronomy at the University of Rhode Island to become extension agronomist in farm crops at Rutgers University. He will have responsibility for grain crops, succeeding Rodney Briggs. Curtis M. Wilson, a recent Ph.D. graduate of the University of Wisconsin, has been named assistant professor of plant physiology at the Rutgers college of agriculture.

Henry J. Peppler has been appointed assistant director of research and development for Red Star Yeast and Products Co. He has been director of the biochemistry laboratory since 1950.