

the late Sir Grafton Elliot Smith to University College, London, and to the advancement of anatomical and anthropological teaching and research, it is proposed that a bust of him should be modeled in bronze by A. H. Gerrard, of the Slade School, and placed in

the Thane Library of the college. Contributions towards the cost of the bust, made payable to "The Elliot Smith Memorial Fund," should be sent to Professor J. P. Hill, University College, Gower Street, London, W.C.1.

SCIENTIFIC EVENTS

JOINT MEETING ON AGRICULTURAL PROCESSING

THE American Society of Agricultural Engineers and the Process Industries Division of the American Society of Mechanical Engineers and Farm Chemurgic Council held a one-day meeting on agricultural processing, at Rutgers University, on February 26.

This meeting was planned to bring together the chemists and physicists who originate processes of making new useful products from various farm-grown materials; the processing engineers who develop and apply the processes on a commercial scale, and the agricultural engineers who are interested in enabling farmers to deliver the basic materials to processing plants within the required limits as to cost, physical condition and time and quantity of delivery.

L. F. Livingston, past-president of the American Society of Agricultural Engineers and manager of the agricultural extension section of the E. I. du Pont de Nemours and Company presided at the morning session which opened at 10 o'clock. Papers read at this session included "Processing Research in Agriculture," by John F. Ferris, acting director of the agricultural industries division of TVA; and "Hemp and Flax from the Seed to the Loom," by George A. Lowry, of Lowry and Grant.

A "research luncheon" was held at the Elks Building at 1:00 P. M. Dr. W. H. Martin, director of research at Rutgers University, addressed the group on "Agricultural Research Work," and Dr. Paul L. Hoover, director of the New Jersey Engineering Experiment Station, spoke on "Engineering Research."

Victor Wichum, chairman of the Process Industries Division of the American Society of Mechanical Engineers, presided at the afternoon session. In the afternoon Mr. Livingston gave an address on "Processing Engineering in Agriculture." He was followed by C. E. Thomas and A. Weisselberg, of the drying committee of the Process Industries Division, with a paper on "Drying of Agricultural Products—The Technical and Economical Aspects."

R. C. H. Heck, of the department of mechanical engineering, and E. R. Gross, head of the department of agricultural engineering, Rutgers University, were in charge of local arrangements for the meeting.

COSMIC RAY RECORDING STATION IN MEXICO

DR. ARTHUR H. COMPTON, of the University of Chicago, accompanied by Professor M. S. Vallarta, of the Massachusetts Institute of Technology, established during his recent visit to Mexico a permanent cosmic ray recording station, the fifth of the series that he is using for the measurement of the rays. Dr. Joaquin Gallo, director of the Mexican National Magnetic Observatory, and Dr. Mongez Lopez, director of the study of physical sciences of the National University of Mexico, of which the observatory is a part, are cooperating in the work.

The cosmic ray observatory is a small frame building erected on the grounds of the National Magnetic Observatory at Teoloyucan, thirty miles north of Mexico City at an altitude of about 7,500 feet in a region far from any high mountains or buildings. The building is constructed with good thermal insulation so that both the diurnal and annual temperature variations are very small, amounting to a maximum of about 5° C.

The cosmic ray meter is one of the "Model C" meters of the type prepared for the Carnegie Institution of Washington. Its ionization chamber consists of a 20-liter steel sphere filled with argon at 40 atmospheres. The ionization by the cosmic rays is normally balanced by that due to the beta rays from a uranium rod, which enter an auxiliary chamber. This balance is unaffected by changes in temperature or pressure of the gas. The sensitivity is so adjusted that the maximum changes in the cosmic rays give variations in the reading of the meter which remain on the scale of the instrument. The records are made continuously on photographic paper and are being analyzed at Chicago.

A feature in connection with the operation of an observatory at this site is that because of the high altitude the cosmic ray bursts are more frequent than at sea level. For this reason the variations in the cosmic rays are greater and the sensitivity at which the meter operates must be lowered in order that the deflections of the meter shall remain on the scale. The immediate program is one of study of the diurnal and seasonal variations over a period of eighteen months. It is hoped, however, to continue the records for a longer time.