

Permanent cosmic ray meters have been installed in Chicago, Washington, D. C., at Huancaayo, Panama, and at Christ Church, New Zealand. Another meter has been installed on the *S. S. Orangi*, a steamship which plys the route from Vancouver to Australia. On each voyage, the meter readings give the difference in incidence of rays between the northern and southern hemispheres. The Chicago station is to be placed on Mt. Evans, Colorado, and another, temporarily located at the Massachusetts Institute of Technology, will be shifted to Greenland. There are only two other stations, those of Hess and Schonland, both of these having been made by E. Steinke, the German physicist.

SCIENTIFIC MEETINGS AT LANCASTER, PENNSYLVANIA

THE Pennsylvania Academy of Science, the Junior Academy, the Pennsylvania Conference of Teachers of College Physics and the Lancaster Branch of the American Association for the Advancement of Science will hold a joint session at the time of the annual meeting of the academy at Lancaster on March 26 and 27. The Lancaster Branch and Franklin and Marshall College are to be hosts. All scientific activities will be held on the college campus. Friday morning and afternoon, March 26, will be devoted to general sessions divided into subject groups, physics, biology, miscellaneous papers and the Junior Academy. Exhibits will supplement the sessions. The annual dinner has been scheduled for Friday evening at the Hotel Brunswick. This is to be followed by an address by Dr. F. R. Moulton, distinguished for his work in mathematics and astronomy, permanent secretary-elect of the American Association for the Advancement of Science. Dr. Moulton will speak on "Science."

Saturday's session is to commence with a brief business meeting at nine in the morning, followed by short invited papers as follows: "The Birds of Lake Ontelaunee, Berks County," Earl L. Poole, Reading Public Museum; "The Status of the Upland Plover in Pennsylvania," Professor Herbert H. Beck, Franklin and Marshall College; "Reminiscences of Professor William S. Franklin," Professor R. L. Charles, Franklin and Marshall College; "Effects of Pressure and Temperature on the Germination of Seeds," Dr. R. B. Dow and Dr. Rafael Rivera, Pennsylvania State College; "Measuring Gravity at Sea," Professor Maurice Ewing, Lehigh University; "The Origin and Occurrence of Earthquakes," Professor H. Landsberg, Pennsylvania State College; "Some Biological Effects of Sounds of High Intensity," Dr. L. A. Chambers, Johnson Foundation for Medical Physics, University of Pennsylvania.

The sessions will conclude at noon on Saturday. Buffet lunches are to be served at the college. Those planning to stay over night are requested to make their

own hotel reservations. Inquiries may be addressed to Professor Wheeler P. Davey, State College, Pa., representing the Conference of Teachers of College Physics; Dr. V. Earl Light, Lebanon Valley College, Annville, Pa., secretary of the Pennsylvania Academy of Science; Dr. Karl F. Oerlein, State Teachers College, Indiana, Pa., representing the Pennsylvania Junior Academy of Science, or Jaques Cattell, Science Press, Lancaster, Pa., representing the Lancaster Branch, American Association for the Advancement of Science.

THE NORTH CAROLINA MEETING OF THE AMERICAN CHEMICAL SOCIETY

THE ninety-third meeting of the American Chemical Society will open for a four-day session at the University of North Carolina on April 12. Fifteen divisions of the society will conduct symposia in various fields of research and a group of foreign scientific men will report on their work.

On Monday, April 12, the meeting will be opened by Dr. E. R. Weidlein, director of the Mellon Institute of Industrial Research in Pittsburgh, president of the society. Among those who will give addresses on the first day of the meeting will be Dr. Robert R. Williams, chief chemist of the Bell Telephone Company Laboratories in New York and a research associate at Columbia University, whose discovery of the chemical structure of vitamin B led to synthesis of the vitamin.

Dr. Williams's work and subsequent experiments made possible by them will play an important part in a symposium on Vitamin B, which will be held on the second day of the meeting, in which the Divisions of Agricultural and Food Chemistry, Biological Chemistry and Medicinal Chemistry will cooperate. On the following day these same divisions will work together in a symposium on other vitamins.

Cellulose chemistry, synthetic plastics and the chemistry of solid surfaces will be discussed in other symposia to be given in division meetings. The Cellulose Division will devote Tuesday to a general symposium on cellulose developments, and on Wednesday will hold two sessions for the presentation of general papers. On Wednesday morning the Division of Paint and Varnish Chemistry, under the chairmanship of Dr. Gordon M. Kline, will hold a plastics symposium, and the Division of Physical and Inorganic Chemistry will report work in the chemistry of solid surfaces.

Studies of sugars, starches and related products, including a report on the bacteriological analysis of more than 1,000 different sugars, will be taken up at the meetings of the sugar division. The division of microchemistry will present papers on the stability of cellulose nitrates and other explosives, and reports on the latest advances in the design of laboratories and equipment.