Permanent cosmic ray meters have been installed in Chicago, Washington, D. C., at Huancayo, 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.

Papers on high-speed vulcanizing to step up the production rate of rubber-insulated wire, tests of the efficiency of various types of rubber as vibration absorbers and a new type of hammer test for the elasticity of soft rubbers will be presented to the Rubber Division. The behavior of emulsions and the surface tensions of various liquids and their effect on each other will be among the subjects taken up at the meetings of the colloid division.

Other fields to be covered in divisional sessions through symposia and general papers are chemical education, gas and fuel developments, industrial and engineering progress, organic chemistry and water, sewage and sanitation chemistry.

Dr. Frank K. Cameron, professor of chemistry at the University of North Carolina, has been designated honorary chairman of a local committee to make arrangements for the convention. The general chairman is R. M. Grumman, of the university, and E. C. Markham will act as secretary-treasurer. Other committee members are: Housing, J. S. Bennett; meeting rooms, H. D. Crockford; registration and information, G. M. Hill; group dinners and luncheons, Haywood Duke; transportation, Herman Schnell; entertainment, Harry Comer; plant visits and sightseeing trips, J. Maryon Saunders; publicity, R. W. Madry; golf and tennis, R. B. Lawson; safety, P. L. Burch; women's activities, Mrs. Edward Mack, Jr.; women chemists, Miss Frances Brown.

THE JOHN SCOTT AWARDS

As has been already recorded in SCIENCE, Dr. W. D. Coolidge and Dr. Irving Langmuir, director and associate director, respectively, of the Research Laboratory of the General Electric Company in Schenectady, and Dr. Evarts A. Graham, of the School of Medicine of Washington University in St. Louis, were recipients of the John Scott 1937 awards granted by the City Trusts of the City of Philadelphia at a dinner of the American Philosophical Society on March 5. With each award went a certificate, a copper medal and $1,000 in cash.

The award to Dr. Coolidge was based on his application of a new principle in x-ray tubes; to Dr. Langmuir for his physical and chemical discoveries resulting in improved gas-filled incandescent lamps, and to Dr. Graham for his application of the x-ray to the study and diagnosis of gall bladder conditions.

In making the presentations, Ernest T. Trigg, chairman of the Board of City Trusts, explained that history had made but scant recordings of John Scott, the donor of the fund, and his reason for bequeathing to the City of Philadelphia in 1816 the sum of $4,000, the income from which was to be "laid ont in premiums to be distributed among ingenious men and women who make useful inventions." It was originally stipulated that no award was to carry a cash premium of more than $20 and the medal was to be inscribed "To the most deserving."

John Scott was a chemist in Edinburgh, Scotland, and why he chose Philadelphia for his grant is a mystery. It is thought his attention had been drawn to the city either through the American Philosophical Society or his admiration of Benjamin Franklin, whom he may have met when Franklin visited Scotland in 1769. When the fund was taken over by the newly created Board of City Trusts, the principal had grown to $21,000, and in 1917, or 100 years after the original grant, it amounted to $100,000. At this time the board appealed to the courts and received permission to increase the amount of the awards to a maximum value of $2,000, but none has been for any amount greater than $1,000.

In the period between 1920 and 1937, inclusive, 73 awards have been made to scientific men and inventors in all parts of the world, including Japan, Holland, England, France, Italy and South America. Among the recipients have been Madame Curie, Reginald A. Fessenden, Orville Wright, Lee de Forest, Thomas A. Edison, Guglielmo Marconi, Samuel M. Vauclain, W. L. R. Emmet, Nikola Tesla, Charles F. Kettering and Edward G. Budd.

SCIENTIFIC NOTES AND NEWS

DR. SIMON FLEXNER, director emeritus of the Rockefeller Institute for Medical Research, New York, was elected a foreign associate of the Academy of Sciences, Institute of France, at a meeting held in Paris on February 22. He succeeds the late Emanuele Paterno, Marquis di Sessa, of Palermo, Sicily.

DR. CARL G. HARTMAN, of the department of embryology of the Carnegie Institution of Washington, has been elected to membership in the International Institute of Embryology at Utrecht.

DR. REUBEN L. KAHN, since 1928 director of laboratories, University Hospital, and assistant professor of bacteriology at the University of Michigan Medical School, was recently presented with a gold medal by the Phi Lambda Kappa fraternity for his research work in tissue immunity. The presentation took place at the annual meeting of the fraternity in Detroit.

THE 1936 Manly Memorial Medal recently awarded to Raymond W. Young, assistant engineer of the Wright Aeronautical Corporation, Paterson, N. J.,