from Europe, and a fourth from Canada. Among natural scientists, the proportion coming from both Europe and Canada was lower than among engineers. New York, California, and Illinois were the most popular choices of this group as destinations.

## Antarctic Meteorological Report

Herfried Hoinkes, an Austrian meteorologist who has been conducting research in the Antarctic as part of the U.S. International Geophysical Year program, reports that although the South Pole receives more sun than any place on earth during December, its midsummer, most of this energy is reflected by the ice cover. Approximately 89 percent of solar energy received in the Antarctic is lost through such reflection. Absorption of radiant heat is slow because of the fine grain of the top layer of snow. This layer is so hard that quite often footprints do not show on it. When prints are left, they remain sharp for weeks, indicating the small amount of evaporation.

Hoinkes made 3664 temperature observations over a 5-month period at the IGY Little America Station. These indicated that under the most common wind conditions, southeasterlies of 19 knots, temperature difference between the surface and 50 feet above was only 1 to 3 degrees. The maximum temperature inversion occurred under clear skies and calm wind conditions because of the strong long-wave radiation from earth to sky. When a cloud cover moves in to block heat loss from the earth and at the same time emit the heat it has collected, a rapid warming of the surface takes place even in winter.

Minimum possible Antarctic temperatures of  $-108^{\circ}F$  have been calculated from observed radiation loss by both Soviet and American meteorologists participating in the IGY program. Actual minimum observation at the U.S. South Pole station in 1957 was  $-102^{\circ}F$ .

Other findings by Hoinkes included an estimate that Antarctic snow dunes move at a rate of 6½ feet an hour, and that moraines of rock and other fill deposited by glaciers are 10,000 years old, compared with hundreds of years for some European and North American moraines, indicating that only very long climatic cycles affect movement of Antarctic glaciers.

Hoinkes is chief glacial meteorologist for the Arctic Institute of North America, which is performing research sponsored by the IGY Committee of the National Academy of Sciences. The IGY Antarctic program in which Hoinkes participated receives logistic support from U.S. Navy Task Force 43, commanded by Admiral George Dufek.

# Yale's Heavy Ion Accelerator

A new heavy ion linear accelerator has gone into operation at Yale University. It is accelerating beams of ions of oxygen (oxygen 16) to energies of 160 million electron volts. The first beam was detected on 15 March. Other ions, such as nitrogen, neon, and carbon, can be accelerated in the new facility to energies of 10 million electron volts per nucleon.

Only one other high-energy heavy ion accelerator exists in the United States. This is now in operation at the University of California Radiation Laboratory. These two accelerators were designed jointly by Yale and University of California scientists under the auspices of the Atomic Energy Commission. However, research emphases at the two institutions are different. While the Berkeley scientists are giving priority to chemical transmutation experiments, Yale's emphasis is on the study of nuclear structure.

Director of the Yale project is Edward R. Beringer, professor of physics. He headed a Yale team that began working with University of California scientists in February 1954 to design the two identical linear accelerators.

#### Tariffs on Instruments

The American Council on Education has endorsed HR 9349 and S 3155, which are intended to remove the tariff barriers on scientific equipment and apparatus for educational institutions. A Council statement reads:

"As a means of assisting American institutions to improve their scientific programs, the Commission on Education and International Affairs (of the A.C.E.) on February 21 gave strong endorsement to the following pending legislation which would permit tax-exempt institutions to import scientific and laboratory apparatus duty free: HR 9349—Congressman Antoni N. Saklak (now under consideration by the Committee on Ways and Means of the House of Representatives); and S 3155—Senator Ralph E. Flanders (now under consideration by the Committee on Finance of the Senate).

"The Commission expressed the conviction that in these critical times when the United States is taking unprecedented steps to further our scientific interests in order to protect our national security and maintain our world standing, every effort should be made to supplement and diversify existing sources of supply of scientific teaching apparatus. The proposed legislation would eliminate the present tariff, on scientific instruments and apparatus imported for

educational purposes, of 40 per cent on the average and 50 per cent on optical goods. This tariff prevents many educational institutions from importing specific items which are not readily available domestically."

#### Scientists in the News

MARGARET MEAD, RAYMOND A. DART, and JAMES B. GRIFFIN have received the 1957 Viking Fund medals of the Wenner-Gren Foundation for Anthropological Research. Mead was selected as the medalist in general anthropology by the American Anthropological Association; Dart was elected by the American Association of Physical Anthropologists as medalist in physical anthropology; and Griffin was the candidate of the Society for American Archaeology for the archeology medal.

Mead, associate curator of ethnology at the American Museum of Natural History and a member of the AAAS board of directors, has done more than any other single individual to introduce anthropology to the American public. Among her most popular books are Coming of Age in Samoa, Growing Up in New Guinea, Male and Female, and New Lives for Old. Dart, dean of the faculty of medicine at the University of the Witwatersrand, Johannesburg, is recognized as the discoverer of the earliest known human being. Griffin, director of the Museum of Anthropology and professor of anthropology at the University of Michigan, was cited for his great influence in promoting the aims of scientific archeology, and for his knowledge of the form, range, and distribution of artifact styles in North America.

T. E. F. CARR, member of the Medical Research Council's Radiobiological Research Unit at the Atomic Energy Research Establishment, Harwell, England, is visiting the United States till about the end of July. He has been given a leave of absence to take up a temporary appointment with the United Nations for approximately 6 months. He will be in New York first, then he will go to Geneva, Switzerland, to act as biological secretary for the International Conference on the Peaceful Uses of Atomic Energy, 1–13 September.

WILLIAM H. STEWART has been appointed assistant program operations officer of the Public Health Service. He will serve as assistant to ARNOLD KURLANDER, who was recently appointed to the newly created post of Assistant Surgeon General for program operations. Stewart has been an assistant to the Surgeon General for the past 10 months.

SAMUEL J. AJL, assistant chief, department of bacteriology, Walter Reed Army Institute of Research, has received a National Science Foundation senior postdoctoral fellowship for research at the Hebrew University in Jerusalem and at Oxford University, where he will work in the laboratories of Hans A. Krebs. During his stay in Europe, Ajl will attend the International Congress of Microbiology at Stockholm and participate in a symposium on the "Metabolism of C<sub>2</sub> Compound in Microorganisms" convened by Krebs at the International Congress of Biochemistry in Vienna.

WILLIAM F. MAYES has been appointed chief of the Division of General Health Services, Bureau of State Services, of the Public Health Service. He will have special responsibility for programs concerned with research in public health practice and with the training of public health personnel. Before joining the PHS in September 1957, Mayes was associate professor and acting head of the department of public health practice at the Harvard School of Public Health.

Six physicians from the United States and abroad have been named as recipients of Purdue Frederick Medical Achievement Travel Awards for outstanding medical and scientific activities. The awards enable the winners to attend medical meetings of their choice here and in Europe, thereby "furthering the international exchange of medical ideas and information on a physician-to-physician basis."

The two award winners from the United States are both cardiologists at the University of Minnesota: C. W. LIL-LEHEI of the School of Medicine, and EDGAR V. ALLEN, professor of medicine at the Mayo Foundation Graduate School. The winners from abroad will visit medical research and teaching centers and hospitals here and attend symposiums during April and May. Scheduled to participate in the Fifth International Congress on Internal Medicine in Philadelphia, Pa., are: R. B. HUNTER, department of pharmacology and therapeutics, Queens College, Dundee, Scotland; and HAQVIN MALM-ROS, professor and director, department of medicine, University of Lund, Sweden.

Recipients planning to attend the World Congress of Gastroenterology in Washington, D.C., are: E. C. FAUST, department of medicine, University of Valle, Cali, Colombia; and ANDRE CHARBONNIER, Paris, of the French National Society of Gastroenterology. Each of the award winners was cited by the Council for active and promising research work in disease treatment and prevention within his medical specialty.

MARCUS M. RHOADES, professor of botany, University of Illinois, Urbana, is delivering this year's Jesup Lectures of the department of zoology, Columbia University. The last two of his six presentations on "The Cytogenetics of Maize" are scheduled for 22 and 24 April.

R. ELSDON-DEW, director of the Amoebiasis Research Unit in Durban, Union of South Africa, has been nominated president-elect of the South African Association for the Advancement of Science for the year 1958–59. He will visit California, Boston, Mass., New Orleans, La., and Washington, D.C., in May 1958.

DONALD O. HEBB, professor of psychology at McGill University, will deliver McGill's annual Hughlings Jackson Memorial Lecture on 14 May at the Montreal Neurological Institute.

ROBERT A. MOORE will be inaugurated as the first president of the State University of New York Downstate Medical Center on 2 May. The ceremony will take place at 2:30 P.M. under a marquee behind the center's Basic Sciences Building at 450 Clarkson Ave., Brooklyn.

ISADORE KATZ, assistant chief of radiology and chief of the x-ray department at the Brooklyn Veterans Administration Hospital, Brooklyn, N.Y., has been named associate professor of radiology at the State University of New York Downstate Medical Center in Brooklyn.

PAUL P. EWALD, professor of physics and retired head of the physics department at the Polytechnic Institute of Brooklyn, has been elected a fellow of the Royal Society (London).

### Recent Deaths

DOROTHY L. ASHTON, Philadelphia, Pa., 70; retired professor of gynecology and obstetrics at the Woman's Medical College of Pennsylvania; 19 Mar.

WALTER BARTKY, Chicago, Ill.; 56; vice president in charge of special scientific projects at the University of Chicago; professor of mathematics; 19 Mar.

ERNEST G. BEINHART, Wyndmoor, Pa.; 71; retired in 1957 as tobacco technologist for the U.S. Department of Agriculture and the International Cooperation Administration; 19 Mar.

GEORGE A. BENNET, Philadelphia, Pa.; 53; dean of the Jefferson Medical College since 1950; professor of anatomy and director of the Daniel Baugh Institute of Anatomy since 1948; 27 Feb.

KENNETH S. M. DAVIDSON, Paris, France; 60; engineer and former director of the experimental towing tank at Stevens Institute of Technology; until recently, scientific adviser to Gen. Lauris Norstad, Supreme Allied Commander in Europe; 19 Mar.

FRANCISCO DURAN - REYNALS, New Haven, Conn.; 58; internationally known cancer researcher and faculty member of the Yale University School of Medicine; in 1930 discovered the enzyme hyaluronidase; first to advance the theory that cancer may be caused by viruses; 27 Mar.

LINCOLN ELLISON, Ogden, Utah; chief of the division of Range Management Research, Intermountain Forest and Range Experiment Station; chairman of the Intermountain Section of the Society of American Foresters; chairman of the Western Section of the Ecological Society of America; president of the Utah Academy of Sciences, Arts, and Letters; 9 Mar.

ERNEST H. KUSCH, Tampa, Fla.; 63; psychiatrist at Manhattan State Hospital, New York, for 30 years; lectured at New York University and City College; conducted research in malaria treatment for general paresis and group psychotherapy; 22 Mar.

L. MARY MOUNCH, White Plains, N.Y.; 66; practicing physician and instructor in medicine at the Cornell Medical School in New York; member of the staff at New York Hospital and at White Plains Hospital; former associate and an instructor in medicine at the Mayo Clinic; 27 Mar.

ALBERT G. PARKER, Madison, Ind.; 65; president of Hanover College since 1929 and a Presbyterian minister; in 1919 went to China for 8 years to serve as head of the social science department at Shantung Christian University; 22 Mar.

VICTOR J. PEISSACHOWITZ, Long Island, N.Y.; 72; retired in 1955 as associate professor of chemistry at Long Island University; 24 Mar.

JOHN V. QUARANTA, Blauvelt, N.Y.; 35; chairman of the psychology department at Marymount College, Tarrytown; 23 Mar.

DANIEL P. QUIRING, Cleveland, Ohio; 63; associate professor of biology at Western Reserve University; head of the anatomy department at the Frank E. Bunts Educational Institute; 26 Mar.

CLEMENT STAFF, New York, N.Y.; 47; member of the faculty of the National Psychological Association for Psychoanalysis school and first vice president of the association when it was founded in 1948 by Theodor Reik; author of articles on the social and cultural aspects of psychoanalysis; 25 Mar.