neutron-flux test reactor and supporting laboratories. The Nuclear Test Center Study Group has established headquarters at 1625 I St., NW, Washington, D.C., under the direction of R. M. Jones of ACF Industries.

Seismological Coordinates for Underground Nuclear Test

The Atomic Energy Commission has released the following seismological information about the underground nuclear explosion that took place at the Nevada Test Site on 18 Sept. [*Science* **126**, 200 (2 Aug. 1957)]. Seismologists can establish the position of the blast by using the following: latitude 37° 11.7′ north, longitude 116° 12.2′ West; altitude 6611.43 feet above mean sea level.

CERN Synchrocyclotron Operating at Full Energy

The synchrocyclotron, first of the two high-energy accelerators being built by the European Organization for Nuclear Research (CERN) in Geneva for the use of European scientists, is now working at its full energy, according to C. J. Bakker, director-general of CERN. After little more than 2 years of work at the CERN laboratory center, the staff of the synchrocyclotron division, which is under W. Gentner, was recently able to conduct test runs with the machine at its peak output energy of 600 million electron volts. The internal current during the first runs was about 0.1 microampere. Later the current of high-speed nuclear particles is expected to be increased.

The CERN synchrocyclotron is the third biggest of its kind in the world. Slightly bigger machines are in operation at the Radiation Laboratory, University of California, Berkeley (U.S.A.), and at the Joint Institute for Nuclear Research at Dubno near Moscow (U.S.S.R.).

The other machine being built by CERN, the 25,000-million electron volt proton synchrotron, is still under construction. This accelerator is expected to be completed by late 1960.

Geographic Field Research Abroad

In 1958 the National Academy of Sciences–National Research Council will conduct, under the financial sponsorship of the Office of Naval Research, its third annual program of geographic field research in foreign areas. Since 1955, awards have been made to 18 young Americans to carry out field research on topics of their own choosing for periods ranging up to 14 months.

The objective of the program is to strengthen American geography by stimulating greater participation by young Americans in field research in areas outside of the United States. Support will be made in related fields, such as geomorphology, climatology, ecology, and pedology.

The program is designed primarily for graduate students who wish to conduct field research in connection with their doctoral dissertations, but investigators who have received the doctorate within the last few years are also eligible. More mature scholars may submit research proposals to the Geography Branch, Office of Naval Research, Washington 25, D.C.

The extent of financial assistance will vary according to need. The intent is to provide adequately for travel, field, and living expenses. Usually there is no stipend. A preference will be shown for field investigations of at least 6 months' duration. Recipients of support must agree to submit a detailed report of their investigations, suitable for publication, to the Division of Earth Sciences, NAS–NRC.

Applications for support of field work to be initiated before 1 Apr. 1959 must be submitted *before 1 Dec.* All applications or requests for further information should be addressed to: Foreign Field Research Program, Division of Earth Sciences, 2101 Constitution Ave., Washington 25, D.C.

Arctic Institute

The Arctic Institute of North America is offering field research support in 1958 for scientific investigations dealing with the arctic and subarctic regions of North America. Applications are invited by those who have demonstrated their ability to conduct research work of superior quality in some field of science.

Priority will be given to field investigations, although studies at one of the institute offices will be accepted. Proposals in the broad field of the earth sciences, in marine biology, and in physiology are especially desired. Facilities of the Arctic Research Laboratory at Barrow, Alaska, are available for a limited number of investigators for both summer and winter programs. The facilities include both housing and equipment.

Application forms may be obtained from the Arctic Institute of North America, 3485 University St., Montreal 2, P.Q., Canada, or 1530 P St., NW, Washington 5, D.C. Completed applications should be received *before 1 Nov.* Late applications will be considered in special circumstances only, if additional research funds become available.

The Institute is also in a position to award grants from funds provided by the trustees of the Banting Fund primarily to encourage Canadians, particularly recent graduates, in northern studies. Inquiries should be addressed to the Arctic Institute's Montreal office.

Geomorphology Journals

Publication of two leading journals in geomorphology, both of which were discontinued during World War II, has been resumed with the appearance of the *Zeitschrift für Geomorphologie,* under the editorship of Hans Mortensen of Goettingen, and the *Revue de Geographie Physique et de Geologie Dynamique,* under the editorship of J. H. Brunn of Paris. Each starts with a new series and initial volume for 1957.

More Animal Study Urged

The Institute of Laboratory Animal Resources has passed the following resolution urging the study of animal diseases:

"The Institute of Laboratory Animal Resources, cognizant of the need for a broader understanding of animal diseases, both for the practical purpose of providing medical and biological research with the best possible investigative animal materials and for the broader purpose of promoting research on animal diseases for a better understanding of biological and pathological phenomena in general, strongly urges the intensification of basic research in the field of animal pathology and, in particular, of the diseases of animals used in laboratory investigations and testing."

NBS Summer Program

The 1957 Summer Student Program at the National Bureau of Standards began on 2 July with the largest enrollment on record, 238 students in the Washington, D.C., area and 25 students at Boulder, Colo. This program, an integrated plan of laboratory work assignments, orientation, and special training, is designed and administered for the purpose of acquainting young physical scientists and engineers with the career opportunities and contemporary activities at NBS.

Of the 263 students, 120 were returnees from previous years and the remainder were new students. Eighty of the group are graduate students, combining summer-work assignments at the bureau with their advanced degree programs. Sixty colleges and 25 states were represented by the new group, with men outnumbering the women 8 to 1. In ad-

dition to special training and the opportunity for supplementing college courses with work in a professional laboratory, students obtain both academic and career guidance through contact with professional men and women.

Antarctica a Group of Islands?

G. A. Avsyuk, who is in charge of the glaciological investigations of the Soviet International Geophysical Year Committee, recently told a Tass correspondent that Soviet scientists suspect that Antarctica is not an ice-capped continental land mass but a group of islands. Exchanges with American, British, Norwegian, and Swedish expeditions in other parts of the Antarctic have confirmed that the ice cap in several places is below sea level.

Scientists in the News

ROBERT B. CASADY, formerly associate professor in animal industry and zoology at North Carolina State College, has been appointed director of the U.S. Rabbit Experiment Station, Fontana, Calif., succeeding GEORGE S. TEMPLETON, who has retired after 23 years of service.

JEROME ROTHSTEIN has joined Edgerton, Germeshausen and Grier, Inc., of Boston, Mass., as a senior scientific executive. He will be responsible for the execution of research and development projects. Rothstein has for the past 15 years conducted research at the U.S. Army Signal Corps Laboratory, Fort Monmouth, N.J. His work has included the design of the reentrant annode seal for high-power thyratrons and the use of titanium hydride as a reservoir material to replenish hydrogen in high-power thyratrons. Both of these developments are now standards for industry.

CHARLES W. SHEPPARD has joined the department of physiology at the University of Tennessee Medical School as an associate professor. Formerly he was associate director of the Biology Division, Oak Ridge National Laboratories. Sheppard is conducting investigations in cardiovascular physiology, especially dye mixing in the circulating blood.

HORACE A. HOLADAY, who has been with E. R. Squibb and Sons for 37 years, has retired from active service. Holaday graduated from the University of Colorado. He then taught chemistry there and later at the University of Idaho. He took graduate work at the Universities of Colorado, Idaho, Columbia, North Dakota, and Chicago. After serving in the Army in World War I, he returned to Columbia University and then went to North Dakota College, where he became head of the division of food and physiological chemistry.

In 1920, Holaday joined Squibb as director of biochemical research. His most recent post was that of assistant to the vice president and director of manufacturing operations.

RICHARD T. SCHLICK, formerly on the development staff of Leeds and Northrup, has been appointed chief chemist, instrumental methods, for Fisher Scientific Company, Pittsburgh, Pa.

ERNEST HAVEMANN, magazine writer, is the first winner of the American Psychological Association's newly established $500 award for distinguished science writing in the field of psychology. He was honored for a five-part series in *Life* magazine, 7 Jan. 1957 to 4 Feb. 1957, on psychology and psychiatry in American life today.

ERNEST O. LAWRENCE, Nobel laureate and professor of physics at the University of California, has been named winner of the first Sylvanus Thayer award of the Association of Graduates of the United States Military Academy. The presentation will take place at West Point next March.

The award is named for the superintendent of the academy from 1817–33. It is to be given annually to an American citizen whose service and accomplishments in the national interest exemplify the principles expressed in West Point's motto—"Duty, Honor, Country."

WILLIAM H. PEARLMAN, biochemist and specialist in steroid hormone action in relation to problems in human reproduction and cancer, has returned from 3 years of work at Guy's Hospital Medical School in London to join the staff of the Waldemar Medical Research Foundation, Port Washington, L.I., as associate scientific director.

K. E. MARPLE, manager of the Denver Agricultural Research Laboratory of the Shell Development Company, has been named director of the company's Agricultural Research Division. The division's laboratories at Denver, Colo., and Modesto, Calif., are being consolidated in new facilities now under construction at Modesto. Marple will assume his new duties there on 15 Nov. He replaces S. H. McALLISTER, who has been appointed manager of Shell Chemical Corporation's Agricultural Chemical Sales Division, head office, New York.

T. R. HANSBERRY, manager of the Modesto laboratory, has been named assistant director of the division and will be in charge of the biological sciences.

MARY M. PORTER has been named chairman of a new department of clinical pathology at the Woman's Medical College of Pennsylvania. Two new faculty appointments have also been announced: IRVIN J. PINCUS is associate professor in the department of medicine, and ANTHONY L. PIETROLUONGO is associate professor in the department of pathology.

JASON J. NASSAU, head of the astronomy department at Case Institute of Technology, was honored on 7 Sept. when the institute's new astronomical station in Geauga County was dedicated in his name. Case's 36-inch Schmidt-type telescope, one of the largest instruments of its kind in the world, has been moved to the station from the Warner and Swasey Observatory on Taylor Road. The Warner-Swasey Company is completing work on another 36-inch reflecting telescope that will replace the Schmidt instrument at the Taylor Road observatory. This will be installed in 2 months and dedicated on 15 Dec.

JAMES S. BRIERLEY has been named to the newly created position of chief engineer, research planning, coordination, and administration for the Chrysler Corporation, Detroit, Mich. He will be responsible for establishing research program objectives, preparing technical research plans, and coordinating programs within the research organization as well as with other areas in the Engineering Division. Since joining the division in 1955, Brierley has been associated with the nuclear research program.

ARTHUR CHERKIN, chemist and vice president and director of research at Don Baxter, Inc., pharmaceutical house in Glendale, Calif., has been chosen to head the company's new international division. Also at Baxter, WILLIAM H. CORCORAN, formerly professor of chemical engineering at the California Institute of Technology, has accepted a post as head of the newly formed scientific division. He joined the company on 1 Sept. as vice president and scientific director.

JOHN H. MANHOLD, JR., has been promoted to full professor and director of the department of oral pathology and diagnosis of Seton Hall College of Dentistry. In addition, he will serve as coordinator of research for the dental school. Manhold joined Seton Hall last