number of journal pages published annually has increased more than four times.

Conversion of the new headquarters will start in December and operations will be transferred by 1 June 1957. Paul E. Klopsteg, associate director of the National Science Foundation and professor emeritus of applied science at Northwestern University, has been appointed chairman of the American Institute of Physics Development Fund Committee.

The half-million dollars being sought will be allocated as follows: $250,000 for conversion of the building on 45 St. for use as AIP headquarters; $200,000 for new and improved technical journals of physics to speed the flow of research information; and $50,000 for more effective work to attract and train more and better physicists. Of the $500,000, $350,000 is being requested from industry and the remaining $150,000 from members of the AIP.

The publishing crisis facing the field of physics, and for which funds are being sought, arises from the fact that even though almost 19,000 pages appeared in journals published by the AIP last year, another 5000 pages are needed now to take care of reporting new research. These new pages may be added to existing journals or used as the basis for one or more new scientific journals. Examples of special fields in which the demand for more publication space is rising are chemical, mathematical, and fluid physics.

The shortage of physicists, perhaps one of the most critical in the scientific manpower field, will be attacked by a "future physicists fund." This fund will be used to publish and distribute vocational information and to work for improved teaching and educational facilities at all school and college levels.

Engineering Center To Be in New York

United Engineering Trustees, Inc., the joint corporate agency of the four major national engineering societies, has announced that a contract has been signed for preliminary architectural plans and studies for a new Enginering Center in New York, N.Y. The announcement is the first formal notice that all the four member societies of UET, and a fifth that is expected to become a member, had voted, through their governing boards, to remain in New York. Several other cities had tried to obtain the center.

The present 16-story quarters, known as the Engineering Societies Building, houses the four "founder societies"—the American Society of Civil Engineers, the American Institute of Mining, Metallurgical and Petroleum Engineers, the American Society of Mechanical Engineers, and the American Institute of Electrical Engineers. A fifth prospective founder society, the American Institute of Chemical Engineers will be included in the center project.

Occupants of the Engineering Societies Building include the Engineers Joint Council, which is composed of ten major national engineering societies, including the five in the founder group. It is believed that preliminary plans for the center will be completed early next year.

Darwin Centennial Expedition

The Darwin Anniversary Committee, Inc., has announced that Charles Darwin's historic round-the-world trip, which helped him formulate his theory of evolution, will be retraced in 1958. The year 1958 was chosen because it will be the centennial of Darwin's presentation of his paper to the Linnaean Society in London outlining his theory of evolution. Julian S. Huxley, the biologist, is honorary cochairman of the planning committee. Lady Nora Barlow, a descendant of Darwin, is the other cochairman.

Darwin sailed in the British ship *Beagle* as official naturalist on a surveying trip. The expedition, which took place between 1831 and 1836, visited islands in the Atlantic, the coast of South America and adjacent islands, and islands of the western Pacific. The Darwin committee plans to cover the same areas in a year's time, using a 100 to 150-foot sailing ship with auxiliary engines.

On his trip Darwin studied native people and the flora and fauna of the areas. The modern voyage will compare ecologic conditions today with those of 125 years ago. The 1958 trip also will seek to determine if any species of flora and fauna are in danger of becoming extinct.

In the next few months about 20 scientists, both men and women, will be selected as Darwin fellows to sail on the expedition. Others probably will be flown to the research areas.

IGY Observations of the Ionosphere

A group of scientists has left the Boulder Laboratories of the National Bureau of Standards for a year in the Antarctic, where they will operate five widespread research stations. The men at each post will collect continuous data with the C-4 ionosphere recorder, an instrument that beams short pulses into the upper atmosphere, measuring the time required for them to travel there and back. A range of from 1 to 25 megacycles is covered in 15 seconds. A reading will be made automatically at least every 15 minutes.

The same kind of ionospheric observations will be carried out by scientists working simultaneously in more than 75 such stations located throughout the world as part of the International Geophysical Year program. By analyzing the total data, scientists expect to learn much about the height and characteristics of the upper air layers, which change from hour to hour, day to day, and season to season.

Supervising the ionospheric operations in the Antarctic is Hans J. Bengaard, former electrical engineer with the Danish Post and Telegraph Administration, who will also be in charge of the Little America station. His assistant will be Lt. Col. Carl O. Wyman, Philadelphia, Pa., retired communications and electronics officer in the U.S. Marine Corps.

Virgil Barden, Colorado Springs, Colo., formerly radio technician at the White Sands Proving Ground ionospheric station, will be at Byrd Base in charge of ionospheric observations.

John B. Brown, former physicist with E. I. duPont de Nemours, Inc., Bloomington, Del., will be at the Weddell sea station, where he will be accompanied by Donald Skidmore, former electronic engineer with the National Company, Malden, Mass.

Garth Stonehocker, previously physicist with the Glenn L. Martin Company, Baltimore, Md., and his assistant, Robert Long of Rochester, N.Y., will be at the Knox station.

William S. Hough, electronic engineer at the NBS Boulder Laboratories, will make observations from the South Pole station, located at the exact geographic bottom of the world.

PHS Aging Research Center

The U.S. Public Health Service has established a Center for Aging Research in the National Institutes of Health. G. Halsey Hunt, at present associate chief of the PHS Bureau of Medical Services, has been appointed director of the center, which has been set up to deal with the special health problems of the more than 12 million people in this country who are over the age of 65. By 1970, there will be more than 18 million such people.

The primary objective of the new program is to encourage and support additional research into the mechanisms involved in aging. The program will assist universities and other research institutions in establishing a broad research program that will bring the full range of biological, psychological, and social sciences to bear on the problem. A first activity will be to aid universities, medi-

cal schools, and other research organizations in establishing comprehensive research centers on aging, to be supported in part by NIH research grants.

Scientists in the News

ROBERT B. LIVINGSTON, professor of physiology and anatomy at the University of California School of Medicine, Los Angeles, is on a leave of absence to serve as scientific director of the combined basic research programs of the National Institute of Mental Health and the National Institute of Neurological Diseases and Blindness in Bethesda, Md. He assumed his new position on 15 Nov., when he succeeded SEYMOUR S. KETY, who had asked to be relieved as scientific director in order to devote full time to research in cerebral blood flow.

Livingston has just returned from Sweden, where a special NINDB fellowship enabled him to conduct studies on the influence of vestibular mechanisms on brain-stem and spinal motor systems. In recent years, Livingston has been particularly interested in the neurophysiological basis of behavior, and especially in the function of reticular formation in regulating sensory input to the brain.

TRYGVE RAMBERG, journalist for the Norwegian newspaper *Aftenposten* is touring this country for 6 months to observe U.S. science and to study science writing. He will spend January and February at the Northwestern University School of Journalism. Ramberg's trip is supported by the Joint Committee of Norwegian Research Councils.

JAMES H. DOOLITTLE, a vice president and director of the Shell Oil Company, has been named chairman of the National Advisory Committee for Aeronautics, the nation's principal aeronautical research agency. He succeeds J. C. HUNSAKER, chairman of the NACA for the past 15 years. LEONARD CARMICHAEL, secretary of the Smithsonian Institution, was reelected vice chairman.

KARL TERZAGHI, professor emeritus of civil engineering at Harvard University and a specialist in soil mechanics, has been appointed lecturer and research consultant in soil mechanics for the current academic year at Massachusetts Institute of Technology. Terzaghi taught at M.I.T. in the late 1920's as a special lecturer in soil mechanics, and as associate professor of foundation engineering. He developed at M.I.T. the first courses in soil mechanics to be given in the United States.

ALFRED O. C. NIER, chairman of the University of Minnesota's school of physics, and ARTHUR HOLMES, geologist at the University of Edinburgh, were honored at the recent meeting of the Geological Society of America for their outstanding work in the age determination of the earth. At special ceremonies, the society awarded its Arthur L. Day medal to Nier and its Penrose medal to Holmes. Because of illness Holmes was unable to attend the meeting.

The American Geographical Society awarded gold medals to the following men.

J. RUSSELL SMITH, professor emeritus of economic geography at Columbia University, received the Cullum geographical medal. He is the author of several books on North America that have become classics in their field.

RAOUL BLANCHARD, one of the elder statesmen of the French geographical school, long associated with the University of Grenoble, received the Charles P. Daly medal. Blanchard's work on the Alps is about to be completed with the appearance of the 12th volume this fall.

GEORGE McCUTCHEON McBRIDE, professor emeritus of geography at the University of California at Los Angeles, received the David Livingstone centenary medal. McBride is internationally recognized as an authority on problems of economic and cultural geography in Latin America.

The American Society for Horticultural Science has made the following awards:

GARTH A. CAHOON, Citrus Experiment Station, Riverside, Calif., and DUANE O. CRUMMETT, Los Angeles County Tuberculosis and Health Association, Los Angeles, Calif., received the Alex Laurie award in floriculture and ornamental horticulture.

E. M. RAHN, Delaware Agricultural Experiment Station, Newark, Del., received the Charles G. Woodbury award in raw products research.

C. H. HENDERSHOTT, c/o Arkansas Agricultural Mission, Ancon, Canal Zone, and LOWELL F. BAILEY, University of Arkansas, received the Joseph Harvey Gourley award in pomology.

A. A. PIRINGER, JR., University of Minnesota, and NEIL W. STUART, U.S. Department of Agriculture, Plant Industry Station, Beltsville, Md., received the Leonard H. Vaughan award in floriculture and ornamental horticulture.

H. C. MOHR, H. T. BLACKHURST, and E. R. JENSEN, Texas Agricultural Experiment Station, College Station, Tex., received the Leonard H. Vaughan award in vegetable crops.

ROBERT R. WHITE, professor of chemical engineering at the University of Michigan, will receive the 1956 professional progress award in chemical engineering of the American Institute of Chemical Engineers during the institute's annual meeting in Boston, Mass., 9–12 Dec. The award consists of $1000 and a certificate.

DAVID E. GREEN of the Institute for Enzyme Research, University of Wisconsin, has been invited by the Indian Science Congress and the Government of India to attend the annual meeting to be held in Calcutta 14–20 Jan. He will deliver a lecture before the Indian Society of Biological Chemists and will visit and lecture at various universities and research institutions throughout the country that are active in biochemical research and training.

R. G. WILSEY, D. H. STRANGWAYS, (deceased), and G. M. CORNEY have received the Coolidge award, which is given by the Society for Nondestructive Testing in cooperation with the General Electric Company's x-ray department. They were honored for their studies on the need for better methods of minimizing the amount of radiation received by personnel in the industrial x-ray field.

Wilsey, a physicist, has for the past 25 years been an instructor in the department of radiology at the University of Rochester School of Medicine and Dentistry. He was formerly with Kodak Research Laboratories and U.S. Bureau of Aircraft Production. Strangways was a physicist with Kodak Research Laboratories and, prior to that, an electrical engineer with Northern Electric Company, London, Ont. Corney has been physicist with Kodak Research Laboratories for the past 19 years.

RAY W. GRIM has joined the staff of the National Library of Medicine to serve in the capacity of executive officer in the office of the director. Grim, who has been in the U.S. Public Health Service since 1934, was formerly program management officer in the Division of Dental Public Health, Bureau of State Services.

HAROLD D. GREEN, director of the department of physiology and pharmacology at the Bowman Gray School of Medicine, delivered the 40th Mellon lecture before the Society for Biological Research of the University of Pittsburgh School of Medicine.

FRITZ LIPMANN has been appointed a member of the Rockefeller Institute. Lipmann, who received the Nobel prize for medicine and physiology in