of time, but that he believed the "thousands of millions being spent by the United States and Russia to get a man into space is not warranted. He said, further: "Space travel will not be of great use to humanity. I think there will be great difficulty in getting such a spaceman back to earth safely."

Summer Program for High-School Students

The National Science Foundation has announced that this summer it will support 112 Secondary-School Student Training Programs at 105 colleges, universities, and nonprofit research organizations in 35 states, the District of Columbia, and Puerto Rico. This program is designed to provide secondary-school students of high ability with college-level summer work in science, mathematics, and engineering that is designed especially for them. As a result of successful experimental programs last year, the NSF 1959 summer program has been expanded to include additional institutions and represent wide geographic areas. In most instances the sponsoring institutions bear some of the costs. Total outlay by the foundation for this work this year will be approximately \$1.6 million.

Grants, Fellowships, and Awards

Neurology. The Public Health Service's National Institute of Neurological Diseases and Blindness recently reported on the status of its Special Traineeship Program in neurological and sensory disorders and called attention to additional opportunities for advanced study and research training. Since the inception of the program less than 3 years ago, 163 persons have received from 1 to 3 years of training at 48 institutions in the United States and 16 institutions in seven foreign countries.

To qualify for an award, a candidate should have an M.D., Ph.D., or other equivalent degree, and at least 3 years of training or experience pertinent to the training for which he seeks support. The applicant either must be an American citizen or must have filed a Declaration of Intent. Traineeship awards generally are made for not less than 9 months and not more than 1 year. However, all awards are subject to renewal for periods up to 5 years. Stipends are determined individually and may range from \$6500 to \$17,500 a year.

Requests for information about the Special Traineeship Program and application forms should be addressed to: Chief of Extramural Programs, National Institute of Neurological Diseases and Blindness, National Institutes of Health, Bethesda 14, Md.

Science teaching. As a part of the AAAS Science Teaching Improvement Program, recently extended under a new grant to AAAS from the Carnegie Corporation of New York, a limited number of grants for research projects, averaging \$1000 each, will be made to science staff members of small colleges and teachers colleges. Consideration will be given only to proposals in which preservice science teachers will be involved in the research project. The first grants will be made early in June. For additional information, write to J. R. Mayor, Director of Education, AAAS, 1515 Massachusetts Ave., NW, Washington 5, D.C.

News Briefs

The complete works of the late Irving Langmuir are being collected for publication as a set of six volumes by Pergamon Press, Inc., of London and New York. Langmuir, who was associated with the General Electric Research Laboratory from 1909 until his death in 1957, was the first American industrial scientist to receive a Nobel Prize. A group of 29 scientists from many different countries will serve as members of an editorial advisory board, which will be under the chairmanship of Guy Suits, vice president and director of research at General Electric. Peter Debye of Cornell University and Sir Eric Rideal of the Imperial College of Science and Technology, London, are deputy chairmen of the editorial group.

The National Aeronautics and Space Administration has announced that the first two space sciences working groups have been formed and 13 government, university, and industrial scientists have accepted membership on them. The new groups are Orbiting Astronomical Observatories, to be headed by Nancy Roman of the NASA Office of Space Sciences, and Satellite Ionospheric Beacons, with J. C. Seddon of the NASA Space Projects Center as chairman. A number of such NASA groups are being planned under a program that is directed by Homer E. Newell, Jr., NASA assistant director for space sciences.

The first issue of the Bulletin of the International Atomic Energy Agency was released last month. The new publication is available in English, French, Russian, and Spanish; it will appear quarterly. The purpose of the bulletin is to disseminate information about IAEA in layman's language. Effective dissemination will depend on the extent to which the material presented is suitably reused,

for the bulletin itself will not have a mass circulation. For information write to the Division of Public Information, IAEA, Vienna, I, Kärntnerring, Austria.

Massachusetts Institute of Technology has received from Mr. and Mrs. Cecil H. Green of Dallas, Tex., a gift of \$2,527,500, for the creation of a Center for Earth Sciences. The proposed building will house laboratories for work in geophysics, meteorology, oceanography, and related fields. Green, an M.I.T. alumnus, is a vice president of Texas Instruments, Inc.

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A generally downward trend in rates of mortality from heart disease among persons in middle life in the United States is reported for the 8-year period 1949 through 1956 by the Metropolitan Life Insurance Company. This is in sharp contrast to the generally upward trend prior to 1949. Heart disease, however, continues to be the most serious health problem among people in the 45-64 age group, accounting for twofifths of the total number of deaths and constituting a major cause of sickness and prolonged disability. The death rate from heart disease in the United States during 1955-56 for individuals in that age group averaged 6.8 per 1000 for white males and 2.4 for white females, a ratio of nearly 3 to 1.

A ground-breaking ceremony will be held on the site of the new National Library of Medicine building on the grounds of the National Institutes of Health, Bethesda, Md., on 12 June. Arthur S. Flemming, Secretary of the Department of Health, Education, and Welfare, will deliver a short address. Senator Lister Hill, coauthor of the National Library of Medicine Act, will turn the first spadeful of earth. The chairman of the Board of Regents of the National Library of Medicine, Champ Lyons, will be the chairman of the proceedings.

The United Nations has announced the extension of the prepublication period for the Spanish edition of the Proceedings of the Second United Nations International Conference on the Peaceful Uses of Atomic Energy to 30 June 1959, during which time complete sets may be ordered at the special price of \$166. It is further announced that the Spanish edition of the proceedings will consist of 13 volumes, rather than the previously announced 15 volumes.

The Engineers Joint Council, representing more than a third of the nation's engineers, backed the creation of a Cabinet-level Department of Science and Engineering in a statement before the Subcommittee on Reorganization and

International Organizations of the Senate Committee on Government Operations at a Washington hearing on 16 April. Enoch R. Needles is president of the organization, which is a federation of 21 societies of professional engineers with an aggregate membership of 300,000.

Scientists in the News

OTTO STRUVE has been named the first director of the National Radio Astronomy Observatory at Green Bank, W.Va. The National Science Foundation is supporting the construction and operation of the observatory through a contract with Associated Universities, Inc., which is headed by Lloyd V. Berkner. Struve has been professor of astronomy at the University of California, and director of its Leuschner Observatory, since 1950. He will assume his new post on 1 July. An astronomer of international reputation, Struve has published approximately 1000 papers concerned with the problems of stellar spectra and other aspects of astrophysics.

The National Radio Astronomy Observatory was established to supplement the facilities for research astronomers by providing large and precise radio telescopes not hitherto available. Among these new instruments are the 85-foot Howard E. Tatel precision radio telescope recently put into operation, the 140-foot radio telescope now under construction, and a variety of auxiliary devices for radio astronomy. The observatory is operated by a small permanent staff in cooperation with an increasing number of visiting scientists from both American and foreign institutions.

Struve was born in Kharkov, Russia, in 1897, and received a diploma of first rank at the University of Kharkov in 1919. He came to the United States in 1921 as a graduate student and an assistant in stellar spectroscopy at the Yerkes Observatory of the University of Chicago. He became a naturalized American citizen in 1927. After ascending through the various ranks from instructor to full professor at the University of Chicago, he was appointed director of the Yerkes Observatory in 1932. He also organized and founded the McDonald Observatory of the University of Texas, which was operated by the University of Chicago, and served as director of both observatories from 1932 to 1947.

Struve was managing editor of the Astrophysical Journal from 1932 to 1947; president of the American Astronomical Society from 1947 to 1950; and president of the International Astronomical Union from 1952 to 1955. The long list of honors, both national and international, that have been conferred



Otto Struve

on him include membership in the National Academy of Sciences, the American Philosophical Society, the Royal Society of London; corresponding membership in the French Academy of Sciences; and foreign membership in the academies of the Netherlands, Denmark, Norway, and Sweden.

The new appointment continues a tradition, for Struve is a member of a renowned family of astronomers. His great-grandfather, Friedrich George Wilhelm Struve, built and became the first director of the famous observatory at Pulkovo, Russia, a post that passed to his son upon his death. His uncle moved and completely remodeled the old observatory of Berlin, Germany. His father was professor of astronomy at the University of Kharkov.

The following scientists received awards during the 96th annual meeting of the National Academy of Sciences-National Research Council, which took place at the academy's headquarters in Washington at the end of April.

MARTIN W. JOHNSON of the Scripps Institution of Oceanography received the Agassiz Medal for contributions to oceanography.

CHARLES H. TOWNES, professor of physics at Columbia University, received the Comstock Prize for his investigations in microwave spectroscopy and his pioneering work on the maser.

HERBERT FRIEDMANN, acting head curator, department of zoology, U.S. National Museum, Smithsonian Institution, received the Daniel Giraud Elliot Medal for his book, *The Honey-Guides*.

TRACY M. SONNEBORN, distinguished service professor of zoology at Indiana University, received the Kimber Genetics Award for his fundamental contributions to the study of the genetics of microorganisms.

EUGENE L. OPIE, member of the Rockefeller Institute, received the Jessie Stevenson Kovalenko Medal for outstanding contributions to the medical sciences.

ROMAN KOZLOWSKI, department of paleontology at the University of Warsaw, Poland, received the Mary Clark Thompson Medal for his fundamental contributions to paleontology.

The election of 30 new members was also announced at the annual meeting. Election to membership in the academy is considered to be one of the highest honors which can be visited upon an American scientist. The new members follow.

PHILIP H. ABELSON, director of the geophysical laboratory of the Carnegie Institution of Washington.

WALKER BLEAKNEY, Brackett research professor at Princeton University.

DAVID M. BONNER, professor of microbiology at Yale University.

TOM W. BONNER, professor of physics at Rice Institute.

WALTER H. BRATTAIN, research physicist at Bell Telephone Laboratories and winner of the Nobel prize in physics in 1956.

LEO BREWER, professor of chemistry at the University of California, Berkeley.

FRANK BRINK, Jr., dean of graduate studies at the Rockefeller Institute.

JENS C. CLAUSEN, professor of biology at Stanford University.

SAMUEL EILENBERG, professor of mathematics at Columbia University. JOHN D. FERRY, professor of chemistry at the University of Wisconsin.

KURT O. FRIEDRICHS, professor of applied mathematics at New York University.

H. BENTLEY GLASS, professor of biology at Johns Hopkins University.

MELVILLE J. HERSKOVITS, professor of anthropology at Northwestern University.

HERMAN M. KALCKAR, professor of biochemistry at Johns Hopkins University

KONRAD B. KRAUSKOPF, geologist with the U.S. Geological Survey.

I. MICHAEL LERNER, chairman of the department of genetics at the University of California, Berkeley.

RUDOLPH L. B. MINKOWSKI, research associate at the California Institute of Technology.

HARRY F. OLSON, acoustic research director at the laboratories of the Radio Corporation of America.

CARL PFAFFMANN, professor of psychology at Brown University.

RICHARD J. RUSSELL, professor of physical geography at Louisiana State University.

JOHN A. SIMPSON, professor of