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.

RÚDOLPH 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

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physics at the Institute for Nuclear Studies of the University of Chicago.

DEAN S. TARBELL, professor of organic chemistry at the University of Rochester.

HENRY TAUBE, head of the chemistry department at the University of Chicago.

JAMES A. VAN ALLEN, head of the department of physics at Iowa State University.

CECIL J. WATSON, head of the department of medicine at the University of Minnesota.

GREGOR WENTZEL, professor of physics at the University of Chicago.

FRED L. WHIPPLE, director of the Smithsonian Astrophysical Observatory, Cambridge, Mass.

WILLIAM B. WOOD, JR., vice president for medical affairs and professorelect of microbiology at Johns Hopkins University School of Medicine.

CLARENCE M. ZENER, director of the Westinghouse Research Laboratories.

RAYMOND E. ZIRKLE, professor of radiobiology at the University of Chicago.

ETHAN A. H. SHEPLEY, chancellor of Washington University, received the second Alexander Meiklejohn Award for Academic Freedom at the 45th annual meeting of the American Association of University Professors in Pittsburgh, Pa. The award was established last year in honor of Alexander Meiklejohn, former president of Amherst College, through a gift by alumni and former faculty members of the Experimental College at the University of Wisconsin, which Meiklejohn directed from 1927 to 1932.

JAMES G. ZOBIAN, chairman of the science department of Roslyn High School, New York, and president of the Science Teachers' Association of New York State, has received the \$1000 Nichols Foundation Chemistry Teacher Award for 1959. The presentation took place at the annual meeting of the American Chemical Society's New York section.

STANLEY B. FRACKER, retired scientist of the U.S. Department of Agriculture, has been awarded the German Order of Merit, first class, for outstanding work as secretary to the Committee on German-American Cooperation in agricultural research. The committee arranges German-American student exchanges.

JOHN P. HAGEN, former chief of the Vanguard Division of the National Aeronautics and Space Administration, has been appointed assistant director for program coordination. ARNOLD K. BALLS, professor emeritus of biochemistry at Purdue University, received the McCollum Award at a dinner during the recent annual meeting of the American Society of Biological Chemists. The \$1000 award is made in recognition of research work in biochemistry carried out after the age of 60.

Scientific visitors to the United States from the United Kingdom are as follows:

G. A. W. FRANCE, experimental officer, Department of Scientific and Industrial Research, London, arrived on 23 April for about 16 weeks. He will spend 12 weeks at the University of California and 2 weeks at other universities.

L. GRUNBERG, senior principal scientific officer and acting head of the Lubrication and Wear Division, Mechanical Engineering Research Laboratory, Glasgow, Scotland, will arrive on 20 May. He will attend the 5th World Petroleum Congress in New York 30 May-5 June. Itinerary: Tennessee, Illinois, New York, Massachusetts, and Washington, D.C. (20-24 May).

Washington, D.C. (20-24 May). J. F. MARTIN, principal scientific officer, National Chemical Laboratory, Teddington, arrived on 1 May for about 9 weeks. He will spend 1 month as a member of a team engaged in the study of specific heat calorimetry at the thermodynamics laboratory of the U.S. Bureau of Mines in Oklahoma, and 2 weeks at the thermal laboratory of the Dow Chemical Company in Midland, Michigan.

RICHARD E. HORNER, assistant secretary of the Air Force for research and development, has resigned, effective 1 June to accept the newly established position of associate administrator of the National Aeronautics and Space Administration.

BERNARD L. HORECKER, formerly chief of the laboratory of biochemistry and metabolism, National Institute of Arthritis and Metabolic Diseases, Bethesda, Md., has been appointed professor and chairman of the department of microbiology at New York University's College of Medicine. He succeeds ALWIN M. PAPPENHEIMER, Jr., who has become chairman of tutors in the department of biological chemistry at Harvard University Medical School.

C. S. DRAPER, head of the department of aeronautics and astronautics at Massachusetts Institute of Technology and an inventor of inertial guidance systems for aircraft, missiles, and submarines, has been appointed chairman of the National Inventors Council. He succeeds Charles F. Kettering, who held the post from the establishment of the council in 1940 until his death in November 1958. HOMER H. EWING, staff member of Du Pont Company's development department, will serve as secretary.

LEWIS B. SWIFT, chairman of the board of directors of Taylor Instrument Companies, Rochester, N.Y., received the Scientific Apparatus Makers Association Award at the association's 41st annual conference in Chicago, Ill.

Recent Deaths

FRANK H. BETHELL, Ann Arbor, Mich.; 56; professor of internal medicine at the University of Michigan and director of the Thomas Henry Simpson Institute for Memorial Research; specialist in hematology; 22 Apr.

JOHN J. DONLEAVY, Montclair, N.J.; 63; general consultant in organic chemistry for the research laboratories of the Allied Chemical Corporation's general division; technical director of the division, 1941–51; assistant professor of chemistry at Yale University, 1924–39; 16 Apr.

HOWARD W. HAGGARD, Fort Lauderdale, Fla.; 71; retired in 1956 as director of Yale University's Laboratory of Applied Physiology; founder of the Center of Alcohol Studies at Yale and editor of the Quarterly Journal of Alcohol Studies; author of a number of popular books, including Devils, Drugs and Doctors, published in 1929; 22 Apr.

GEORGE H. HOXIE, Berkeley, Calif.; 86; specialist on tuberculosis; former dean of the University of Kansas Medical School; 10 Apr.

ERNEST A. JOHNSON, Chicago, Ill.; 64; president of Lake Forest College since 1943; successfully persuaded industrialists to support liberal arts education; a pioneer in the campaign for faculty salary increases; 13 Apr.

WALTER G. RYAN, Nutley, N.J.; 68; director of the guidance center and lecturer in psychology at Seton Hall University since 1951; former chief of the Veterans Administration guidance center at the Newark College of Engineering, where he was associate professor of personnel relations, 1946–51; 22 Apr.

JULIUS SCHUELEIN, New York; 77; chemist and partner in the Vegex Company, New York; pioneer in the development of food products and vitamin preparations derived from brewers' yeast; a native of Germany, he headed companies throughout Europe and, in this country, established facilities for Standard Brands, Inc., for manufacture of the products he developed; 20 Apr.

GUSTAV F. SIEMERS, Montclair, N.J.; 63; technical director of the vitamin division of Hoffmann-La Roche, Inc., for 19 years; 13 Apr.