within the Department of Defense or through the establishment of an independent agency."

Eisenhower on space control. On 12 January President Eisenhower wrote to Premier Bulganin: "I propose that we agree that outer space would be used only for peaceful purposes. We face a decisive moment in history in relation to this matter. Both the Soviet Union and the U.S. are now using outer space for the testing of missiles designed for military purposes. The time to stop is now. . . . If indeed it be the view of the Soviet Union that we should not go on producing ever newer types of weapons, can we not stop the production of such weapons which would use or, more accurately, misuse, outer space, now for the first time opening up as a field for man's exploration? Should not outer space be dedicated to the peaceful uses of mankind and denied to the purposes of war? That is my proposal. . . ."

National Federation of Abstracting Services

A National Federation of Science Abstracting and Indexing Services was formed last month at a 3-day meeting in Philadelphia (see editorial, "Strength through Union," in 14 February issue). The conference, which was organized by *Biological Abstracts* and supported by the National Science Foundation, was attended by 34 representatives of 14 United States abstracting and indexing services and 11 representatives of the following organizations: the AAAS, the NSF, American Geological Institute, the American Geophysical Union, UNESCO, and the U.S. Joint Publications Research Service.

The new federation will endeavor through cooperative measures, education and research to improve the abstracting, indexing and analysis of scientific information so that such information will be more readily available to all scientists and technologists in this country and throughout the English-speaking world.

The opening session of the conference was addressed by Detlev W. Bronk, president of the Rockefeller Institute and president of the National Academy of Sciences. He commented that the conference provided an example of American institutions working at their best, the participants having come together in an informal way to see how by cooperation they could improve their services and work together toward common goals. He deplored the growing tendency to believe that large and difficult tasks should be relegated to the Federal Government.

In the area of scientific information services, Bronk said that he does not think it necessary to create a large national scientific information center just because the Soviet Union has such a center.

The objective of the newly formed federation is to improve the documentation (abstracting, indexing, and analyzing) of the scientific and technological literature of the world in such a manner as to make it readily available to all scientists and technologists: (i) by encouraging the development of abstracting and indexing for those specialized subject fields not at present covered by such services, and the further development of existing services; (ii) by seeking greater uniformity in such matters as journal citations and abbreviations, and transliteration of foreign language titles; (iii) by cooperation, education, research, and the pursuit of mutually useful enterprises, to strive for the best possible research information services for science and technology in the United States and abroad.

Each of the abstracting and indexing services represented at the conference will name a representative to a temporary council to serve until the new federation is formally organized, at which time other eligible abstracting and indexing services will be invited to join. An interim executive committee of three will act for the temporary council in taking the necessary steps leading to the formal organization and incorporation of the federation. The members of the executive committee are G. Miles Conrad of Biological Abstracts, chairman; Dale B. Baker of Chemical Abstracts; and John C. Green of the Office of Technical Services, U.S. Department of Commerce. Funds for setting up a secretariat of the federation will be contributed on a voluntary basis by services represented at the conference as an expression of their interest in the development of the new organization. It is expected that grants and donations will help to maintain and to expand the activities of the federation.

Grants, Fellowships, and Awards

Cardiology. The American Heart Association has received a special grant from the National Heart Institute to permit a limited number of research scientists in the cardiovascular field to attend the third World Congress of Cardiology in Brussels, Belgium, 14–21 September. The funds will provide for round-trip air travel from New York to Brussels plus a per diem allotment during the Congress. Younger investigators who would otherwise be likely to experience difficulty in obtaining funds for this purpose will be given preference. Requests for application blanks should be sent *immediately* to the Assistant Medical Director for Research, American Heart Association, 44 23rd St., New York 10, N.Y.

Secondary School Teaching. The National Science Foundation has announced that it will accept proposals from universities and colleges interested in sponsoring in-service institutes for secondary school teachers of science and mathematics to be held during the academic year 1958–59. These especially designed in-service institutes will be held outside regularly scheduled school hours so that teachers may attend while still teaching full time in their schools. Foundation support to some 25 institutes will cover all tuition and fees, plus any other direct costs to the college or university directly attributable to the program. Though the foundation does not provide stipend support for participants in the in-service program, the NSF grants provide funds to underwrite travel expenses in connection with attendance at the institutes. Deadline for submission of completed proposals to the foundation is *15 March.* Directions for preparing proposals may be obtained from the Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C.

Scientists in the News

NORMAN F. RAMSEY, professor of physics at Harvard University, has been appointed science adviser to Paul-Henri Spaak, Secretary General of the North Atlantic Treaty Organization. In the post, established by the NATO heads of government at their meeting in December, Ramsey will advise on all aspects of NATO activity in research, applied science, and the production of scientific manpower. He will act as chairman of the Science Advisory Committee, which is composed of scientific representatives from each of the NATO countries. This group was also established at the December meeting. At that time, the principal argument advanced in favor of closer scientific collaboration among the NATO powers was that the present compartmented national programs resulted in waste and duplication of effort. Ramsey will go to Paris in March to begin his new job.

The appointment of ADEN B. MEINEL as director of the new National Astronomical Observatory has been approved by the National Science Foundation. Meinel's appointment as first director of the observatory was recommended by the Association of Universities for Research in Astronomy, Inc., which is under contract to the National Science Foundation for the estab-

lishment and operation of a national astronomical observatory at a site to be selected in Arizona. Meinel has been associate director of the Yerkes and McDonald Observatories since 1953, but recently he has been on leave to work on the program for the new observatory.

Early in the spring of 1955 he began field work for the selection of possible sites for an astronomical observatory in the southwestern area. Assisted by H. A. Abt, Meinel made a comprehensive examination of the entire geographic region bounded by the Rio Grande on the east, the 36th parallel on the north, and the geographical limits of the United States on the south and west. All available rocket high-altitude photographs were carefully examined. The two scientists flew thousands of miles in a small plane and traveled great distances by car and jeep in the course of their examination of every possible site. Meinel will continue to direct work on the observatory from his present field office in Phoenix, Ariz., until such time as a site has definitely been selected.

CONRAD A. ELVEHJEM, biochemist and dean of the University of Wisconsin's Graduate School since 1946, has been elected 13th president of the university, effective 1 July. He succeeds EDWIN B. FRED, who will become president emeritus and emeritus professor of bacteriology. Elvehjem gained international prominence late in the 1930's when he isolated nicotinic acid, which led directly to the cure for human pellagra. He has been a leader in research in nutrition and vitamin B complex work.

PAUL M. FYE, associate technical director for research at the Naval Ordnance Laboratory, Silver Spring, Md., and special adviser for the Polaris Missile Program, has been named director of the Woods Hole Oceanographic Institution. He succeeds COLUMBUS O'S. ISELIN, who has been director of the institution since 1956, and who also served as director from 1940 to 1950. Iselin will continue to be associated with the institution and has been elected to be the first Henry Bryant Bigelow oceanographer, a chair founded recently by the board of trustees.

The National Academy of Sciences–National Research Council has announced that ERNEST H. VOLWILER is chairman-designate of its Division of Chemistry and Chemical Technology. Volwiler, president and general manager of Abbott Laboratories, will succeed FREDERICK D. ROSSINI on 1 July. Rossini, head of the department of chemistry at Carnegie Institute of Technology, has served as division chairman since 1 July 1955.

The first David Sarnoff Outstanding Achievement Awards in Science and Engineering are to be presented to ALBERT ROSE of the technical staff of RCA Laboratories, and DAVID K. BARTON of the engineering staff of RCA Defense Electronic Products. Rose is being cited "for basic contributions to the understanding and utilization of photoelectronic phenomena," and Barton for "important contributions to precise tracking radars."

The two awards, to be made annually to the outstanding scientist and the outstanding engineer of the Radio Corporation of America, were established in September 1956 to commemorate the 50th anniversary in radio of DAVID SARNOFF, chairman of the board of RCA. The medals will be presented to both men by Sarnoff early in March.

CHARLES H. TOWNES, professor of physics at Columbia University, has received the $2500 Research Corporation Award for his work in microwave spectroscopy. Townes' research has: (i) provided a new order of accuracy in the measurement of time—a ± 1-second deviation every 300 years; (ii) produced amplifiers some 100 times more sensitive than previously known types, thus expanding the range of radio astronomy; (iii) gained detailed information, previously unknown, on the structure of molecules by measuring the frequencies to which they respond.

NICOLAAS BLOEMBERGEN, Gordon MacKay professor of applied physics at Harvard University, was awarded the $1000 Oliver E. Buckley Solid State Physics Prize by the American Physical Society at its recent annual banquet. He was honored "for his studies of magnetic resonance both nuclear and electronic and of its uses in the investigation of solids, liquids and gases." The Buckley prize was endowed by Bell Telephone Laboratories in honor of the Laboratories' former president, who retired in 1952.

HERBERT FEIGL, director of the Minnesota Center for Philosophy of Science and professor of philosophy at the University of Minnesota, is serving as Carnegie visiting professor at the University of Hawaii in Honolulu from 4 February to 5 June. He is offering courses and seminars in the philosophy of science.

ALAN R. GRUBER has been appointed assistant chief engineer to head nuclear systems research in Astro, a division of the Marquardt Aircraft Company, Van Nuys, Calif. Gruber was formerly manager of the engineering department for the Nuclear Development Corporation of America, White Plains, N.Y.

LOUIS M. LAUSHEY, since 1954 professor of civil engineering and department head at Norwich University, Northfield, Vermont, will assume the corresponding post at the University of Cincinnati, effective 1 September.

RAYMOND J. EMRICH, professor of physics at Lehigh University, has been named head of the department of physics. He succeeds FRANK E. MYERS, who has been granted a 2-year leave of absence to accept appointment as associate director at Argonne National Laboratory, Lemont, Ill.

The Very Rev. MICHAEL P. WALSH has been appointed 22nd president of Boston College. He will succeed the Rev. JOSEPH R. N. MAXWELL, who has been president since 1951. Walsh has been chairman of the department of biology and director of premedical students at the college.

Recent Deaths

ALICE BRONFENBRENNER, Minneapolis, Minn.; 31; research investigator in the department of pediatrics, Variety Club Heart Hospital, University of Minnesota; 16 Jan.

ANDRE CROTTI, Columbus, Ohio; 84; physician and surgeon, world-famous for goiter surgery; at his retirement 3 years ago he had performed 16,000 thyroid operations; 31 Jan.

ERNST HEINKEL, Stuttgart, W. Germany; 70; aeronautical engineer and airplane manufacturer; jet aircraft pioneer; 30 Jan.

ALBERT E. HENNINGS, Vancouver, B.C., Canada; 78; professor emeritus of physics at the University of British Columbia; 13 Jan.

NEWMAN HOOPINGARNER, Halesite, N.Y.; 66; professor emeritus of business psychology at New York University's School of Commerce, Accounts and Finance; 27 Jan.

ALFRED E. HUDD, London, England; 75; inventor of a system of automatic train control; 3 Feb.

ERNEST H. KOCH, JR., Philadelphia, Pa.; 82; for 20 years before his retirement in 1942 he had been associated with the Brooklyn New York Technical High School as a teacher, vice principal, and dean; 28 Jan.

MAURICE STRAUSS, New Haven, Conn.; 65; clinical professor emeritus of dermatology of the Yale University School of Medicine; 3 Feb.

SAM F. TRELEASE, New York, N.Y.; 65; Torrey professor of botany at Columbia University; 1 Jan.